

Determinants of Millennials' Behaviors Toward Peer-to-Peer Lending Investment

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Abstract. Financial technology grows quite rapidly in Indonesia. One of fintech products peer to peer lending (P2P Lending) reached Rp.54.715 Trillion by August 2019, increased of 141,40% from previous years. P2P Lending characteristics which are user friendly and practical is suitable for millennials who are internet addict, confident, high self-esteem, open minded, tolerant of change, have flexible work schedules, as well as for career advancement. This research aims to determine what are the impacts that affect investment intentions of millennials toward peer-to-peer lending investment in Indonesia, according to Theory of Planned Behavioral, which consists of Attitudes Toward Behavior, Subjective Norms, dan Perceived Behavioral Control. This research uses literature study approach as a method to analyze the factors that influence the intentions of millennials toward investment and descriptive analysis to give assessment and show the connection among different results from existing research. Literature study from previous research indicate that investment intention is influenced by behavioral attitude, subjective norms, perception of behavioral control, and financial knowledge. Other than that, there is an indirect effect of convenience and security variables on investment intention.

Keywords: *Millennials, Investment, Peer to Peer Lending*

1 Introduction

Indonesia has a positive trend related to the development of financial technology. The rapid growth of this technology can be seen from many fintech users among the public through the use of *smartphones* or smart growing from previous years. This fact has great potential for Indonesia to develop the financial sector through business opportunities through mobile applications and technology platforms to explore these opportunities. But this has certainly been accompanied by a rapidly increasing threat to mobile application security and has become a challenge for Fintech users and innovators [1]. According to Goldstein and Karolyi [2] fintech is a combination of finance and technology. Of course technology will always influence the financial services industry in its development and change the way the financial industry operates [3]. Financial

information will also be more easily accessed using fintech, because by using fintech the quality of human life can increase along with increasing transparency, reducing costs and reducing the role of intermediaries. The development of fintech helps financial services to provide mobility, ease of use, speed, and cost reduction [4].

Some of well-known fintech products in Indonesia are financing (digital wallets, P2P payments), investment (equity crowdfunding, Peer to Peer Lending), financing (crowdfunding, microloans, credit facilities), insurance (risk management), cross process (big data analysis, predictive modeling), and infrastructure (security) [5]. One type of fintech that is growing quite rapidly and getting public attention and having regulators from the OJK and BI is *Peer to Peer Lending* [4]. Based on Muhammad Doddy's [6] research, *P2P Lending* is an investment model that is developing in various countries, including Indonesia, this investment model has many advantages in terms of effectiveness so that it can make it easier for users to apply it. Some of its excellences are the yields which offered at interest rates starts from 18% per year meanwhile for the deposit is only 6%-8%. In P2P Lending, the activity carried out online through website platform from various P2P Lending [7]. P2P Lending in carrying out its loan mechanism uses a different collateral-free method from banks [8]. Such a system can help the community in terms of business capital and ultimately investing will help promote equitable economic growth in Indonesia.

During the last three years from December 2017 to August 2019 *Lender* than accounts *Borrower* development of this sector has increased significantly. This increase was felt by all regions of Indonesia and even abroad every year with the accumulated number of accounts *Lender* in August 2019, namely 530,385 entities, increasing by 155.60% ytd. The number of Borrower accounts until August 2019 was 12,832,271 entities, an increase of 194.36% ytd [9]. This indicates that *P2P Lending* will grow rapidly and will continue to increase in Indonesia. This growth indicates P2P Lending will rapidly developed and will always increased in Indonesia. Observing from the amount of loan disbursement accumulation per 31 August 2019 as Rp. 54.715,55 trillion increased as 141,40% from last year. From the perspective of financial inclusion, this development is quite significant, and if this development is not accompanied by technological developments and adequate human resource capabilities, it cannot be said to be good. Indonesia does have a positive trend in terms of the development of companies *start-up*, but on the other hand, the management of human resources that cannot keep up with existing developments can be a separate problem for the development of the financial world in Indonesia.

P2P Lending investment is becoming an increasingly popular investment alternative, especially millennials, as evidenced by research [9] which states that

66% of respondents are under 25 years of age. Indonesia has a large market with a population of 262 million and penetration of internet users reaching 143.26 million. Some of the internet users aged 19-34 years with a percentage of 50.08 percent own a smartphone, 44.16 use a smartphone to access the internet and 26.47 percent use the internet more than 7 hours per day [10]. The characteristics of P2P Lending are user friendly and practical with millennials who are addicted to the internet, self-confidence, high self-esteem, more openness, tolerance for change, flexible work schedules, and career advancement as important factors for the millennial generation [11]. Likewise, there are 7 characteristics of millennials generation: have a great motivation to become successful, easy to practice and behave instantly, love freedom and have a big desire to get recognition, and be proficient in using technology and information [12].

Millennials are very attractive because they grew up in an environment where technology provides a *platform* for personalization. Millennials also tend to use the *web* and network *socialFacebook* to spend their income quickly, millennials are also more interested in virtual advertising as coupons and discounts [13]. However, as far as the authors know, there are still few who have researched the factors that influence the intentions of millennials, as technology users, to invest or lend using P2P Lending technology. This is an important issue because these young people have a future in the financial sector which is expected to drive economic growth in this country.

According to data from the OJK Financial Literacy Index (2013-2016) is still 29.66%. Based on the research of Sivaramakrishnan [14] Everyone who is going to invest must understand financial knowledge in order to make the best investment decisions for themselves. Financial knowledge basically consists of knowledge of current financial products and services, financial management, financial education and one's perceptions and opinions on financial products and services. According to Hidajat [15] a higher level of financial inclusion shows that many people use financial services without being based on sufficient financial knowledge. This reflects the state of minimal knowledge in Indonesia.

Previous research has used the theory of planned behavior (TPB) a lot. This model is based on an approach to intention that can encourage certain behavior through characteristics, qualities and attributes based on the information they have which then forms an intention for individuals to behave [16]. The TPB approach is specific to specific behaviors performed by individuals and can be used for all behaviors in general. The determinants of the intention of the TPB model consist of 3 aspects, namely attitudes towards behavior (*attitude towards the behavior*), subjective norms, and *perceived behavior control* by individuals.

2 Research Design

The literature review method (literature survey) is used to analyze the factors that influence the investment intentions of millennials in Indonesia. This literature review method provides a summary assessment, provides conclusions and shows the relationship between different results from several studies so that new examinations or generalizations. Literature review on research emphasizes the results of previous research as a source of study, so this research focuses more on using specific reference sources such as journals, research bulletins, dissertations, theses and theses. The use of this literature review method also takes into account the criteria for selecting sources in analyzing the factors that influence the investment intentions of millennials in Indonesia. The sample consists of reviews of journal articles published from 2014 to 2020 (the last 6 years). Articles compiled from google scholar search and specialized web journals. The keywords used are investing behavior, peer to peer lending, millennial and fintech in article searches. This search generated more than 150 articles based on a cursory reading based on relevance to the keywords investment behavior, peer to peer lending, millennial and fintech. After being reviewed and followed, only 38 articles were relevant to the research topic and the objectives taken.

3 Results

Fintech in Indonesia is a new innovation technology that provides alternative solutions for the society, especially for the Small Medium Enterprises (SMEs) to obtain financing through P2P Lending loans [17]. Fintech also offers various new options for its customers such as making payments, sending money and investing [8]. Some articles aim to analyze the factors that influence the interest of millennials in Indonesia to invest in P2P Lending. Millennials' characteristics studied are convenience and security factors which indirectly influence the attitudes towards behavior, subjective norms, perceived behavioral control and financial knowledge as the factors that influence investment intention and investment intention itself affects the behavior of investment decision making.

According to literature studies, there are two external factors that influence attitudes toward investment intentions. Both factors are the convenience factor and the security factor that indirectly influence investment intention. Below is a list of external factors that relevant to some existed researches:

Table 1. External Factors List (Convenience and Security Factors)

No	Factors List	Influence	Researchers
1	Convenience of User	Significant to investment intention	Kurniawan [18], Ichwan and Kasri [9], Salciuviene <i>et al.</i> , [19]
2	Data Security	Significant to investment intention	Stewart [1], Ryu [20]; Salciuviene <i>et al.</i> , [19]

Source: Processed data

According to the results from literature studies, the convenience and safety factors significantly influence one's intention. In some studies the variables that are oftenly used to see one's intention are convenience and safety variables. The results of Kurniawan's [18] research show that user service have a significant intention of choosing fintech loans. In line with an existed research Moreno [13] millennials believe that investment using P2P Lending makes it easier for someone who needs capital but is not interfered by the bank and this can be accounted for because it has a good security transaction assurance in accordance with what they have promised. According to Ichwan and Kasri [9] user's perceptions significantly influence investment intention. The ease in this P2P Lending method of dealing can be learned as that simple because every millennials nowadays has digital as a lifestyle [21]. Transaction security becomes the first highlight because existing personal data cannot be published to public because it is privacy so we need clarity about the regulation of our personal datas and in Indonesia itself there is no legal law that accommodate it [13]. Stewart's [1] research data security significantly affects the intention to adopt fintech services. Just like the research above, the user's convenience and security affect customers' intentions [19]. Therefore, it can be concluded that the convenience and security factors are indirectly influencing the attitudes towards millennials' behaviours who have intentions to invest. Below is a list of factors according to TPB theory which influence individual's investment in P2P Lending that relevant to previous studies:

Tabel 2. Factors List According to Theory of Planned Behavior (TPB)

No	Factors List	Influence	Researchers
1	Attitudes Toward Behaviour	Significantly influencing the investment intention	Ichwan and Kasri [9], Raut [22], Akhtar and Das [23], Sondari and Sudarsono [24], Syarfi and Asandimitra [24]

2	Subjective Norms	Significantly influencing the investment intention	Raut [22], Akhtar and Das [23], Sondari and Sudarsono [24]
3	Percieved Behavioural Control	Significantly influencing the investment intention	Kurniawan [18], Ichwan and Kasri [9], Raut [22], Akhtar and Das [23], Abidat <i>et al.</i> , [23]
4	Financial Knowledge	Significantly influencing the investment intention	Ichwan dan Kasri [9], Akhtar and Das [23], Brodmann <i>et al.</i> , [25]
5	Investment Intention	Significantly influencing the investment intention	Raut [22], Sivaramakrishnan <i>et al.</i> , [14]

Source: Processed data

According to table 2, Theory of Planned Behavior (TPB) consists of 4 aspects that influence investment intentions of millennials including attitudes toward behavior, subjective norms, perception of behavior control and financial knowledge [16]. According to Ichwan and Kasri [9], showing the intention to invest in P2P Lending is positively correlated and is influenced by attitude variables, which itself determines the factors including user's perception, knowledge and trust in P2P lending [9]. Similar to Raut [22] on investment behavior, investment intention in the capital market is influenced by attitudes toward behavior, subjective norms and perceptions of behavioral control [22]. Further research is in line with research Ichwan and Kasri [9] dan Raut [22] research which conducted by Akhtar and Das [23] examines investor's behavior in the Indian stock market with attitudes, subjective norms and financial knowledge (substitute for behavioral control) that positively effects the investment intention [23]. Similar to the research above according to Sondari and Sudarso [24] shows that investment interest is influenced by the attitudes toward investment and subjective norms [24]. Furthermore, research that conducted by Kurniawan [18] shows the perception of behavioral control (trust) variables influence the intention to choose fintech loan services [18]. Whereas a research by Syarfi and Asandimitra [26] shows only attitudes toward behavior variables that significantly influence investment intention [26]. Subjective norms and perceptions of behavioral control do not affect investment intention. According to Raut [22] Investment intention significantly influences an investor's behavior on decision making. Further research by Brodmann [25]

found financial knowledge that is perceived has a positive relationship related to stock investment. From the studies above it can be concluded that the Theory of Planned Behaviour (TPB) can be used for every behaviors generally by forming an intention for individuals to behave.

P2P Lending investment is millennials' favorites as evidenced by a research from Ichwan and Kasri [9] which states that 66% of respondents are under 25 years. Half of the internet users are aged between 19-34 years old with 50.08 percent of them have a smartphone, 44.16 percent of them use smartphone to access the internet and 26.47 percent of them use the internet more than 7 hours per day [10]. It's said that Millennials are the people who were born in the year of 1980 to 2000 or currently aged 20-40 years. Here is the result of descriptive analysis test on Indonesian millennials as table 3 below:

Table 3. Respondent Demographics

	Characteristis	Frequency	%
Gender	Male	98	56,6%
	Female	75	43,4%
Age	<20 y.o.	22	12,7%
	21-30 y.o.	134	77,5%
	31-40 y.o.	15	8,7%
	41-50 y.o.	2	1,2%
Education	High school	62	35,8%
	Diploma	5	2,9%
	Bachelor	93	53,8%
	Magister	13	7,5%
Occupation	Student	78	45,1%
	Civil servant	9	5,2%
	Privat employee	57	32,9%
	Entrepreneur	15	8,7%
	Others	14	8,1%
Monthly income	<Rp.4.000.000	102	59%
	Rp.4.000.000- Rp.6.000.000	31	17,9%
	Rp.6.000.000- Rp.10.000.000	18	10,4%
	Rp.10.000.000- Rp.30.000.000	17	9,8%
	>Rp.30.000.000	5	2,9%

Source : Abidat [27]

According to table 3, the characteristics of these respondents were processed using structural equation modeling (SEM) with SmartPLS software. According

to Chen [28] shows that the behavior of lenders is influenced by the respondents' characteristic. From the data above shows that men dominate more than women. Ages 21-30 years have the largest percentage of 77.5% and are categorized as millennials. Seen from the level of education, the characteristics of Bachelor (53.8%) and high school (35.8%) have the largest percentage. Employment status is dominated by students as 45.1% and private employees 32.9%. It can be concluded that P2P Lending investors in Indonesia are dominated by the age of 20-31 years. Below is the result of the all generations' characteristics and are segmented by Millennials, Generation X, and Baby Boomers for respondents in the survey as following table:

Table 4. Responses by Generation in US

Table I: continued:
Panel B: Responses by generation

	Millennial Generation	Generation X	Baby Boomer
Respondents Characteristics			
<i>Industry</i>			
Non-profit Sector	14.04%	14.91%	9.52%
For-profit Sector	53.19%	54.39%	51.19%
Government/Public Sector	14.47%	14.04%	17.86%
Other	18.30%	16.67%	21.43%
<i>Job Level</i>			
Entry-level	58.08%	25.00%	25.93%
Mid-level	33.08%	50.83%	48.15%
Divisional Management	5.38%	14.17%	14.81%
Upper-level Management	1.92%	5.00%	8.64%
C-suite Executive	1.54%	5.00%	2.47%
<i>Level of Education</i>			
High School	6.45%	1.72%	1.94%
Some College	4.95%	3.01%	1.29%
Associate's Degree	21.51%	8.82%	5.81%
Bachelor's Degree	58.06%	79.35%	84.95%
Master's Degree	6.88%	4.95%	3.23%
PhD	2.15%	2.15%	2.80%
<i>Marital Status</i>			
Single	60.38%	30.58%	14.29%
Domestic Partnership	10.77%	10.74%	5.95%
Married	28.08%	47.11%	48.81%
Divorced/Widowed	0.77%	11.57%	30.95%
<i>Annual Income (thousands)</i>			
Below 25,000	34.78%	22.69%	26.51%
25,001 - 50,000	32.81%	27.73%	18.07%
50,001 - 75,000	19.76%	25.21%	22.89%
75,001 - 100,000	5.93%	14.29%	10.84%
Above 100,001	6.72%	10.08%	21.69%
<i>Student Loan (Across Sample)</i>	55.20%	28.40%	16.40%

Source : Brodmann [25]

According to table 4, the result of this survey shows the characteristics of respondents in the industry section is dominated by non-profit sector and the percentage of millennials generation is dominating. This sector is a sector that grows rapidly and plays a role in economic and social development in various countries in the world for the last twenty years. One of the leading sector research centers in US, shows that this sector is making a new economic power. From the level of work the largest percentage is dominated by the initial level and at the level of education is dominated by the Bachelor's degree which means that respondents are categorized as young people (Millennials). In marital status the largest percentage is single with annual income under \$ 25,000. The student loans percentage is dominated by millennials as 55.20%. It can be concluded that the role of this millennials generation greatly influences the growth of and development for the economy in each country because if it is viewed from the industrial sector the largest percentage is dominated by millennials generation. Research with a sample of this millennials generation must be done a lot because this generation can be the economy spearhead in developing countries like Indonesia.

4 Conclusion

Previous literature studies have examined the P2P lending problem including those conducted by Tao [29], Lenz [30], Gimpel [21], Stern [31], Andriana and Dhewantoa [32], Ding [33], Zhu [34], Liu [35], Gibilaro and Mattarocci [36]. However, this study does not analyze factors that influence investment intention and factors that influence investment decision-making behavior. The difference from previous literature studies focuses more on analyzing the borrower's perspective. But the information from the results of previous literature studies can be considered as a consideration special, especially from the perspective of the lender, about what is actually expected from the P2P Lending service. This can be a consideration for an investor in investing in P2P Lending services before investing the amount of funds, and can choose which companies are registered with the Financial Services Authority (FSA).

This study tries to see individual intentions in investing by using TPB in previous studies. The aspects observed in the basic construction of TPB are attitudes towards behavior, subjective norms, perceptions of behavioral control and financial knowledge. There are convenience and security variables that indirectly influence investment intentions. This study also proves that the four aspects according to the basic construction of TPB affect an investor's

investment intention. Convenience and safety factors become external factors in influencing investment intentions. Meanwhile, this study aims to increase knowledge about previous studies that focus on the analysis of factors that influence individual investment intentions.

This P2P Lending investment has a simple financing service, quick and does not even require a guarantee in its use. Only by using smartphones we can use this service because it has been developed based on the use of information technology. If it is compared with conventional financing, this service process is faster, cheaper and discriminatory [30]. However, in terms of security, many people, especially millennials are still doubtful about the consumer's protection which until now there are still no comprehensive policies regarding the protection of consumer's data [37]. This is also a problem for some people because of the rapid growth of sustainable fintech. Whereas if you look at other countries the policies on fintech security have already been made. Apart from that, however, these young people still have a greater tendency to choose this service than not using it. There are several researches that show the results of their researches and state that these factors significantly influence attitudes towards one's behavior on their investment intentions Kurniawan [18]; Ichwan and Kasri [9]; Stewart [1]; Ryu [20]. The factors above indirectly affects one's investment intention due to user's convenience as one of important factors considered by investors on making the investment. In the previous literature study also explained that data security affects individual's intention positively, which shows that privacy data is very important and it is necessary to have more comprehensive legal protection.

The TPB model is widely used by previous researches relating to any certain behaviors, and literature studies that relate to this investment behavior research are still limited, for example Ichwan and Kasri [9] shows the intention to invest in P2P loans is positively correlated and is influenced by attitude variables, which itself determines the factors including user's perception, knowledge and trust in P2P loans. Research by Brodmann [25] also shows the perception of financial knowledge influences Millennials' interests. On the investment behavior, according to Raut's [22] research that investment intention in the capital market is influenced by attitudes toward behavior, subjective norms and perceptions of behavioral control. Akhtar and Das [23] examine investor's behavior in the Indian stock market with attitudes, subjective norms and financial knowledge (substitute for behavioral control) which positively affect the investment intention. The further result of this study is that there is a mediation by attitudes toward relationship between financial knowledge and investment intention. While attitudes toward investment behavior and financial knowledge have a negative impact on investment intention. Although both

relationships are different structural models, both negative impacts encourage a significant relationship between intention and investment behavior [14]. Whereas research conducted by Sondari and Sudarsono [24] shows that investment interest is influenced by attitude variables toward investment and subjective norms. While user's behavior (security) is insignificant meaning it does not affect investment interest. In contrast to research conducted by Syarfi and Asandimitra [26] which shows that attitudes toward behavior significantly influence investment intention. Meanwhile subjective norms and perceptions of behavioral control do not affect investment intention.

Many people nowadays expect a better lifestyle in various fields, such as health, transportation and finance [21]. P2P Lending investment is the right solution in this case for millennials, because this system provides community-based capital today. This fintech-based platform is very close to young people and is a popular investment alternative. Research conducted by Ichwan and Kasri [9] proves that 66% of respondents are under 25 years. The Indonesian Internet Service Providers Association [10] also states that internet users are aged between 19-34 years. Research by Abidat [27] also explains the characteristics of the respondents were dominated by the age of 21-30 years and categorized as millennials. According to Chen [38] that the lenders' behavior are influenced by the characteristics of respondents [28]. This shows that these millennials have a significant impact on economic growth in this country. Respondents' characteristics become important in conducting research, because with that the authors can see the social condition of each respondent by questionnaire survey or direct interview.

If you look at tables 3 and 4, both of them show that the respondents who dominate are Millennials. Categorized as Millennials aged 15-34 years according to Ichwan and Kasri [9]. With a Bachelor's level and student status. The average income per month is according to research in Indonesia in table 3 IDR 4,000,000 - IDR 6,000,000 Abidat [27]. However, the sample selection criteria must be adjusted to the problems and objectives of the study. The results of this literature study are expected to provide theoretical contributions related to the development of behavior models for investment decision making. Meanwhile, investors can use the results of this study as a reference in investing in P2P Lending companies. Then in selecting a company, it is recommended that the company has been registered and obtained permission from the Financial Services Authority to consider the risks that will arise in the future.

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References

- [1] H. Stewart and J. Jürjens, "Data security and consumer trust in FinTech innovation in Germany," *Inf. Comput. Secur.*, vol. 26, no. 1, pp. 109–128, 2018, doi: 10.1108/ICS-06-2017-0039.
- [2] I. Goldstein, W. Jiang, and A. Karolyi, G, "To FinTech and Beyond," *Rev. Financ. Stud.*, vol. 32, no. 5, pp. 1648–1661, 2019, doi: 10.1093/rfs/hhz025.
- [3] D. Bruggink and E. Mouilleron, "Success factors for the deployment of financial technology: An interview with Eric Mouilleron," *J. Payments Strateg. Syst.*, vol. 10, no. 4, pp. 396–400, 2017.
- [4] I. D. Anikina, A. V Gukova, A. A. Golodova, and A. A. Chekalkina, "Methodological Aspects of Prioritization of Financial Tools for Stimulation of Innovative Activities," *Eur. Res. Stud.*, vol. XIX, no. 2, pp. 100–112, 2016.
- [5] Ernst & Young, "Global FinTech Adoption Index 2019," <https://fintechauscensus.ey.com/2019/Documents/ey-global-fintech-adoption-index-2019.pdf> pp. 1–44, 2019.
- [6] D. Muhammad and M. Zahrotul, "the Influence of Investment Knowledge on the Interest of Students Investing in Peer To Peer Lending Shariah," *J. Ekon. dan Perbank. Syariah*, vol. 7, no. 2, pp. 20–33, 2019.
- [7] L. Gonzalez, "Blockchain , herding and trust in peer-to-peer lending," *Manag. Financ.*, 2018, doi: 10.1108/MF-09-2018-0423.
- [8] T. Setyaningsih and N. Wisnu, "Fintech-Based Peer-To-Peer Lending : An Opportunity Or A Threat ?," *J. Ris. Akunt. dan Keuang. Indones.*, vol. 4, no. 3, pp. 122–123, 2019.
- [9] Ichwan and K. Rachmatina, A, "Why Are Youth Intent on Investing Through Peer To Peer Lending? Evidence From Indonesia," *J. Islam. Monet. Econ. Financ.*, vol. 5, no. 4, pp. 741–762, 2019, doi: 10.21098/jimf.v5i4.1157.
- [10] Asosiasi Penyelenggara Jasa Internet Indonesia, "Penetrasi dan Perilaku Pengguna Internet Indonesia," *Apjii*, 2017.
- [11] J. Kilber, A. Barclay, and D. Ohmer, "Seven tips for managing generation Y," *J. Manag. Policy Pract.*, vol. 15, no. 4, p. 80, 2014.
- [12] W. Hulukati and M. Rahim, "The Role of Guidance and Counseling in Millennial Generation Character Building," *Adv. Soc. Sci. Educ. Humanit. Res.*, vol. 382, no. I cet, pp. 137–140, 2019, doi: 10.2991/icet-19.2019.33.
- [13] F. M. Moreno, J. G. Lafuente, F. Á. Carreón, and S. M. Moreno, "The Characterization of the Millennials and Their Buying Behavior," *Int. J. Mark. Stud.*, vol. 9, no. 5, pp. 135–144, 2017, doi: 10.5539/ijms.v9n5p135.
- [14] S. Sivaramakrishnan, M. Srivastava, and A. Rastogi, "Attitudinal factors, financial literacy, and stock market participation," *Int. J. Bank Mark.*, vol. 35, no. 5, pp. 818–841, 2017, doi: 10.1108/IJBM-01-2016-0012.

- [15] T. Hidajat, "Unethical practices peer-to-peer lending in Indonesia," *J. Financ. Crime*, vol. 27, no. 1, pp. 274–282, 2019, doi: 10.1108/JFC-02-2019-0028.
- [16] A. Icek, "The Theory of Planned Behavior Organizational Behavior and Human Decision Processes," *Organ. Behav. Hum. Decis. Process.*, vol. 50, no. 2, pp. 179–211, 1991.
- [17] C. Herdinata, T. Wiradinata, S. Christian, and A. Setiobudi, "Effect of Organizational Competence, Organizational Support, and Organizational Productivity Towards Adoption of Financial Technologi," *J. Appl. Manag.*, vol. 17, no. 4, pp. 608–614, 2019, doi: <http://dx.doi.org/10.21776/ub.jam.2019.017.04.05>.
- [18] R. Kurniawan, "Examination of the Factors Contributing to Financial Technology Adoption in Indonesia using Technology Acceptance Model: Case Study of Peer to Peer Lending Service Platform," *Proc. 2019 Int. Conf. Inf. Manag. Technol. ICIMTech 2019*, vol. 1, pp. 432–437, 2019, doi: 10.1109/ICIMTech.2019.8843803.
- [19] L. Salciuviene, V. Auruskeviciene, and N. Ivanauskiene, "Key Drivers Affecting Customer Intention to Purchase Financial Services Online," *Eng. Econ.*, vol. 25, no. 2, pp. 194–202, 2014, doi: 10.5755/j01.ee.25.2.6427.
- [20] H. S. Ryu, "What makes users willing or hesitant to use Fintech?: the moderating effect of user type," *Ind. Manag. Data Syst.*, vol. 118, no. 3, pp. 541–569, 2018, doi: 10.1108/IMDS-07-2017-0325.
- [21] H. Gimpel, D. Rau, and M. Röglinger, "Understanding FinTech start-ups – a taxonomy of consumer-oriented service offerings," *Electron. Mark.*, vol. 28, no. 3, pp. 245–264, 2018, doi: 10.1007/s12525-017-0275-0.
- [22] R. K. Raut, "Past behaviour, financial literacy and investment decision-making process of individual investors," *Int. J. Emerg. Mark.*, vol. 15, no. 6, pp. 1243–1263, 2020, doi: 10.1108/IJOEM-07-2018-0379.
- [23] F. Akhtar and N. Das, "Predictors of investment intention in Indian stock markets," *Int. J. Bank Mark.*, vol. 37, no. 1, pp. 97–119, 2019, doi: 10.1108/IJBM-08-2017-0167.
- [24] C. Sondari and R. Sudarsono, "Using Theory of Planned Behavior in Predicting Intention to Invest : Case of Indonesia," *Int. Acad. Res. J. Bus. Technol.*, vol. 1, no. 2, pp. 137–141, 2015.
- [25] J. Brodmann, B. Rayfield, M. K. Hassan, and A. T. Mai, "Banking Characteristics of Millennials," *J. Econ. Cooperation Dev.*, vol. 39, no. 4, pp. 43–74, 2018.
- [26] S. Syarfi and N. Asandimitra, "Implementasi theory of planned behavior dan risk tolerance terhadap intensi investasi peer to peer lending," *J. Ilmu Manaj.*, vol. 8, no. 3, pp. 864–877, 2020.
- [27] A. Adzkia, H. Putu, Wuri, and A. Fatimah, "Analysis of Factors Affecting People's Intentions in Investing Through Sharia Peer-To-Peer Lending," *Proc. 2019 Int. Conf. Inf. Manag. Technol. ICIMTech 2019*, vol. 1, pp. 224–229, 2019, doi: 10.1109/ICIMTech.2019.8843790.
- [28] D. Chen, H. Lou, and C. Van Slyke, "Toward an understanding of online lending intentions: Evidence from a survey in China," *Commun. Assoc. Inf. Syst.*, vol. 36, pp. 317–336, 2015, doi: 10.17705/1cais.03617.
- [29] Q. Tao, Y. Dong, and Z. Lin, "Who can get money? Evidence from the Chinese peer-to-peer lending platform," *Inf. Syst. Front.*, vol. 19, no. 3, pp. 425–441, 2017, doi: 10.1007/s10796-017-9751-5.
- [30] R. Lenz, "Peer-to-peer lending: Opportunities and risks," *Eur. J. Risk Regul.*, vol. 7, no. 4, pp. 688–700, 2016, doi: 10.1017/S1867299X00010126.

- [31] C. Stern, M. Makinen, and Z. Qian, "FinTechs in China – with a special focus on peer to peer lending," *J. Chinese Econ. Foreign Trade Stud.*, vol. 10, no. 3, pp. 215–228, 2017, doi: 10.1108/JCEFTS-06-2017-0015.
- [32] D. Adriana and W. Dhewantoa, "Regulating P2P lending in Indonesia_ Lessons learned from the case of China and India," *J. Internet Bank. Commer.*, vol. 23, no. 1, pp. 1–19, 2018, [Online]. Available: <http://www.icommerceland.com>.
- [33] J. Ding, J. Huang, Y. Li, and M. Meng, "Is there an effective reputation mechanism in peer-to-peer lending? Evidence from China," *Financ. Res. Lett.*, vol. 30, pp. 208–215, 2019, doi: 10.1016/j.frl.2018.09.015.
- [34] Z. Zhu, "Safety promise, moral hazard and financial supervision: Evidence from peer-to-peer lending," *Financ. Res. Lett.*, vol. 27, no. July, pp. 1–5, 2018, doi: 10.1016/j.frl.2018.07.002.
- [35] H. Liu, H. Qiao, S. Wang, and Y. Li, "Platform Competition in Peer to Peer Lending Considering Risk Control Ability," *Eur. J. Oper. Res.*, vol. 274, no. 1, pp. 280–290, 2018, doi: 10.1016/j.ejor.2018.09.024.
- [36] L. Gibilaro and G. Mattarocci, "Peer-to-peer lending and real estate mortgages: evidence from United Kingdom," *J. Eur. Real Estate Res.*, vol. 11, no. 3, pp. 319–334, 2018, doi: 10.1108/JERER-12-2016-0048.
- [37] A. Lastusti and H. Tri, "Financial Technology : Legal Challenges for Indonesia Financial Sector Financial Technology : Legal Challenges for Indonesia Financial Sector," *IOP Conf. Ser. Earth Environ. Sci.*, vol. 175, pp. 1–6, 2018, doi: 10.1088/1755-1315/175/1/012204.
- [38] X. Chen, L. Zhou, and D. Wan, "Group social capital and lending outcomes in the financial credit market: An empirical study of online peer-to-peer lending," *Electron. Commer. Res. Appl.*, vol. 15, no. December, pp. 1–13, 2016, doi: 10.1016/j.elerap.2015.11.003.