THE IMPLEMENTATION OF TECHNOLOGY ACCEPTANCE MODEL IN ANALYZING ATTITUDES TOWARD THE ADOPTION OF FINTECH

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ABSTRACT

The intention of this study is to find empirical prooving regarding the relationship model of Perceived Risk, Perceived Ease-of-Use, and Perceived Usefulness against Attitudes Toward the Adoption of FinTech, by adopting the Technology Acceptance Model theoretical approach. The source of the data used is primary data derived from questionnaires which are distributed directly to respondents using a questionnaire with a Google Form format. Respondents are limited to users of banking services and marketplaces who are domiciled in Jakarta and its surroundings. Data were collected using non-probability sampling method. The instrument used is a structured questionnaire of 14 questions which are arranged based on indicators and dimensions derived from each variable. This study uses the multiple regression method with the support of the Smart PLS version 3. The finding of this study show that Perceived Risk, Perceived Ease-of-Use, and Perceived Usefulness have a positive effect on Attitudes Toward the Adoption of FinTech Services.

Keywords: Perceived Ease-of-Use, Perceived Risk, Perceived Usefulness, Attitudes, FinTech Services

1. INTRODUCTION

Financial Technology, or better known as "FinTech", is a new breakthrough in financial services that comes following new technological advances. Mobile-based payments are the most common service in China, Korea, and the UK [1]. The existence of FinTech dates back to the 1950s when the use of credit card services was initiated with the aim of avoiding or minimizing the risk of carrying cash. Then for years the banking world used ATM machines or Automatic Teller Machines, where the existence of ATM machines was a form of banking innovation in improving online-based services in the 1990s to the public. Digitalization in the financial world is growing with the birth of several Fintech-based applications, such as payment applications, mobile wallets, crowdfunding platforms as a platform that provides alternative funding needed for business development, and robo advisors as a digital platform used for managing various financial services. and is also used to prepare financial planning,

Developments in the use of FinTech in Indonesia continue to grow, this can be seen from the increasing number of potential users of FinTech products in Indonesia. According to the Cambridge Center for Alternative Finance [2], the majority of FinTech company customers in Indonesia in 2019 were individual users at 47%, MSMEs at 38%, the corporate sector at 8% and the public sector at 7%. FinTech can accelerate financial inclusion as FinTech opens up greater access to financial services. According to the Cambridge Center for Alternative Finance, most FinTech companies in Indonesia focus on serving underbanked and banked community groups by targeting individuals and MSMEs.

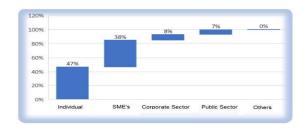


Figure 1 FinTech Product Customers in Indonesia in 2019. Source: [2]

FinTech can accelerate financial inclusion as FinTech opens up greater access to financial services. Global financial markets are increasingly being influenced by FinTech developments due to the tendency of payments made by consumers when they make financial transactions. In this case, companies engaged in ICT services will continue to innovate in making the development of financial services easier and simpler. This step was immediately followed by non-financial companies that began to enter the financial market, which of course this fact is bad news for the services of companies engaged in conventional financial services.

The development of an increasingly advanced era requires the financial industry to adapt. In order to keep up with the times, the financial industry is also trying to develop its business by utilizing advanced technology. Banking is one sector that proves that the financial industry is trying to move forward together with technological sophistication. This can be seen from almost all banks already providing internet banking and mobile banking services. In addition, there are now various platforms that provide digital payments or electronic money such as emoney, links, and others.

This combination of technology and finance is known as FinTech (financial technology) is engaged in the production of goods, services, new business models, technology that can have an bring into the stability and security of the financial system, smoothness, efficiency, and reliability of the payment system. By utilizing technological sophistication, it is hoped that the financial industry can be more easily accessible to the wider community. People can enjoy financial services or services easily. In addition, work related to financial transactions such as payments, loan applications or credit can be done more easily and quickly. Thus, FinTech is expected to strengthen the country's economy.

The FinTech industry has grown rapidly in Indonesia since 2016 since the release of regulation No. 77/POJK.01/2016 which regulates digital-based lending and borrowing activities. At first, FinTech operators in Indonesia were only engaged in two types of activities, namely online lending (peer to peer lending) and digital-based payments (e-money). However, currently FinTech providers have developed their business by providing various types of services such as aggregators, innovative credit scoring, equity crowd funding, and project financing.

Currently, not all FinTech providers have been officially registered and licensed. The following will display data on the number of FinTech providers in Indonesia per quarter during 2020.

Table 1 FinTech Actors in Indonesia in 2019-2020

Description	12/2019	03/2020	06/2020	11/2020
Registered Conventional FinTech	128	125	116	109
Licenced Conventional FinTech	24	24	31	34
Registered Syariah FinTech	11	11	9	8
Licenced Syariah FinTech	1	1	2	2
FinTech Actors	164	161	158	153

Source: Financial Services Authority (OJK) [3]

From Table 1, it shown the number of FinTech provider in Indonesia during 2020 has decreased, both conventional FinTech and Islamic FinTech. Of the total FinTech players, only about 70% are registered and only 20% are officially licensed. Meanwhile, refer to data released by Financial Services Authority, it is known that as of January 10, 2021, the total number of registered and licensed P2P Fintech lending providers at OJK is 149 companies. Until now, OJK still urges the public to use FinTech lending services that have been registered or have received official permission from the OJK.

In the midst of conditions of uncertainty during the Covid-19 pandemic, the FinTech industry is considered to be one of the sectors that is able to survive. People's lifestyles during the pandemic tend to change, as well as consumer behavior changes. Restrictions on activities outside the home have caused people to choose to do activities online, including in financial transactions such as shopping, paying bills, and even applying for loans. Based on the 2019-2020 Aftech Member Survey Annual Report, it is known that the number of electronic money instruments touched the highest point, reaching 412,055,870. The cumulative transaction value increased rapidly from IDR 47 trillion in 2018, then to IDR 145 trillion in 2019 and in the period January - June 2020 has reached IDR 93 trillion. The accumulation of funding distribution through FinTech peer-to-peer (P2P) lending continues to grow.

Although FinTech is expected to be an industry that continues to grow and can bring convenience to the community and support the national economy, FinTech cannot be separated from the risks it faces. This also makes some people still hesitate to use FinTech services. According to Ryu [4], the main obstacle for people to use FinTech is the risk of losing money and there are various additional costs that must be borne by the user. In addition, guarantees for the security and privacy of user data need to be improved, and there is a need for legal certainty that regulates FinTech problems or risks that may occur in the future. Thus, FinTech companies are expected to be able to make efforts to reduce potential risks that may occur.

Perceived risk can affect user attitudes in using FinTech services. Khedmatgozar et al, [5] said that the level of risk perception is the most important factor influencing the adoption of digital services. FinTech is one of the digital financial services so FinTech also has several potential risks that must be faced. This perception of risk can then affect public trust or attitude in using FinTech services. If the perception of risk is high, the attitude in using FinTech services will be lower. On contrary, if the perception of risk is low, the attitude in using FinTech services will be higher. Hu et al's research, [6] has previously tested the effect of risk perception on

user attitudes towards using FinTech services. The finding of Hu et al [6], prove that risk perception can influence user attitudes through trust in FinTech services..

Perceived usefulness can also affect user attitudes in using FinTech services. Perceived usefulness is the extent to the use of a technology provide service can increase the efficiency of its users' performance [7]. Users will choose to use FinTech services if they think FinTech can provide positive benefits or impacts. Thus, the perception of benefits also affects user attitudes in using FinTech services. Hu et al, [6] have conducted research on the influence of perceived usefulness against attitudes of FinTech users and found that perceived benefits have a positive effect on user attitudes in adopting FinTech

In addition to perceived usefulness, another positive factor that can encourage the desire and attitude to adopt FinTech is the Perceived Ease-of-Use. Perceived Ease-of-Use is defined as the level of user confidence that a technology service can improve its performance because it is easy to use [7]. Ease of use is meant that it does not require excessive effort to use such based services. The better a technology-based service provides convenience for its users, the better the attitude of its users. Conversely, if a technology service is difficult to use and actually hinders work, it will have a negative impact on the attitude of its users. Previous research on ease of use on user attitudes has been carried out by Alharbi and Drew [8]. The found of the research showed that Perceived Ease-of-Use had a positive effect on user attitudes in using FinTech services.

As a new star in the local financial ecosystem, how much contribution can be made by FinTech to the Indonesian economy and SMEs is still not widely explored. So far, very little research has been done on the domestic FinTech industry. Until now, local business practitioners such as start-up companies, newcomers, venture capitalists and potential investors, policy makers, studies related to the acceptance of FinTech services by consumers and SMEs in Indonesia are still very limited. In addition, studies for the FinTech industry on user attitudes in Indonesia are still very limited.

Therefore, this study aims to determine the level of acceptance or user attitudes towards using FinTech products and services in Indonesia as an implementation of the TAM theory. There is a significant urgency to assess the acceptance, expectations, and readiness of FinTech users in Indonesia for FinTech products and services that are considered beneficial for personal and business financing needs, so as to accelerate the growth of the digital economy as a whole.

2. THEORETICAL REVIEW

Grand Theory

Technology Acceptance Model

Technology Acceptance Model (TAM) is "a theory that explains a person's acceptance of the use of information technology systems. TAM aims to provide a basis for the influence of external factors on user acceptance of an information system" [9]. TAM introduces two key variables, namely perceived usefulness and Perceived Ease-of-Use which are considered capable of predicting user acceptance of information technology. TAM is a theory that considers psychological elements in the use of technology, by reviewing the beliefs, intensity, attitudes, and behavioral relationships of users. According to Davis et [9], the TAM model can be depicted as the following figure:

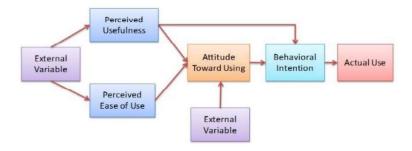


Figure 2 TAM Model Source: Davis et al. [9]

Perceived Risk Theory

Risk consists of two dimensions, namely uncertainty and consequences [10]. Uncertainty is something that is not clearly known, cannot be predicted and controlled because it has not happened. While the consequences are repercussions that must be faced and borne after taking an action [11]. Negative consequences may arise from online transaction activities. Customers seek more information in the interest of risk reduction. Information seeking is a strategy to reduce risk to a manageable level [12]. Perceived risk from online transactions is customer beliefs about the negative consequences that may occur as a result of conducting online transactions [11]. Online transactions are also vulnerable to fraud which can cause financial losses for customers and is a financial risk that makes customers reluctant to conduct online transactions [11]. Therefore, perceived risk theory has an important role in explaining customer behavior when conducting online transactions.

Perceived risk has an influence on all types of consumer behavior or service users. As quoted from Mitchell [13], user behavior can be grouped into four types, namely dissonance-reducing complex buying behavior, habitual buying behavior, buying behavior, and variety seeking behavior.

Consumers often act on incomplete and imperfect information so they often face risk or uncertainty in making decisions. However, risk is not the only factor that influences consumers in making decisions to adopt a technology, perceived benefits also affect users [14]. Peter and Tarpey in [4] created a framework that combines the benefits and risks perceived by users.

According to the TRA Theory, the intention to useFinTech is determined by the customer's attitude towards FinTech adoption which is influenced by user beliefs. The benefits and risks of FinTech adoption can be considered as beliefs that determine the attitudes, intentions and actions of users [4]. Based on this idea, it can be concluded that users determine the benefits and risks that may arise from FinTech adoption, then generate an assessment of FinTech adoption that leads to intentions to adopt FinTech.

Financial Technology

According to Ryu [4], FinTech is a financial service combined with information technology services. Chuen and Teo [16] define FinTech as a product or service in a financial services

company that is created with highly innovative technology. FinTech is defined as innovation in financial business, where technology is the main supporting factor [4]. Lee and Shin [17] argue that FinTech exists as a type of business that uses hardware and software technology to provide financial services. So, it can be said that FinTech is a combination of financial services with innovative information technology so as to produce a service that aims to facilitate its users.

According to Hsueh in Marsudi and Widjaja [18], there are three types of FinTech services, namely a) Third-party Payment Systems. FinTech services that provide payment systems through third parties such as payment platforms that provide bank or transfer payment services. b) P2P Lending as an online lending platform. c) Crowdfunding produces products such as designs, programs, and other creative works that are publicly published. Crowdfunding aims to help meet the financial needs of entrepreneurship and predict market demand.

Refers to OJK [19], the implementation of FinTech in Indonesia has several benefits, including encouraging the distribution of national financing that is still unequal, encouraging the export capability of MSMEs which is currently still low, Increasing national financial inclusion, Encouraging equitable distribution of population welfare, Assisting the fulfillment of the need for domestic financing is still very large. While the risks that need to be minimized in the implementation of FinTech according to the Financial Services Authority [19] include the potential for financial losses caused by misuse, fraud, or force majeure from FinTech. FinTech services are prone to intentional misuse of data such as data hacking or unintentionally such as a computer virus.

Perceived Risk

According to Ryu [4] perceived risk is the customer's belief about uncertainty and the possibility of negative consequences related to FinTech adoption. The perception of risk depends on the user because each user has a different perception of risk. Risk factors can be a barrier for users who are considering whether to use FinTech services or not. Therefore, FinTech companies are expected to continue to make efforts to minimize risk. Meanwhile, according to Ryu [4], there are four types of risk that are included as perceived risk, namely security, legal, financial, and operational risks.

Perceived Usefulness

Based on the TAM model, perceived usefulness is an element used in the information system adoption step. Users will prefer to use FinTech services if they believe the implementation of FinTech can have a positive advantage [4]. The perceived usefulness of FinTech services can be classified into three different aspects, namely economic benefits, convenience, and transaction processing which can be explained as follows. Economic benefits are usually the main factor influencing users' desire to adopt FinTech [16]. FinTech offers lower transaction and capital costs compared to other financial services such as banks, thereby benefiting users [20]. Convenience refers to the flexibility of time and location [21]. FinTech is a digital financial service that can be accessed using a smartphone, making it easier for users to enjoy FinTech services anywhere and anytime. Therefore, the convenience of accessing FinTech through mobile devices determines the level of perceived benefit of FinTech adoption. Transaction processing refers to the benefits related to financial transactions using FinTech such as online shopping, transferring money, applying for credit, and investing.

Perceived Ease-of-Use

Perceived Ease-of-Use is the level of effort expended in adopting the IT system [7]. According to Hu et al. [6] Perceived Ease-of-Use refers to a person's level of comfort in enjoying FinTech services. FinTech services provide a better experience for users to meet their needs so as to cover the weaknesses of the FinTech business. The ease of use of FinTech is the main factor that determines the adoption of FinTech by users [6].

Someone who believes in the ease of use of information technology systems, then that person will use it. But when someone feels that the information technology system is difficult to use, that person will not use the technology [22]. Davis explains that there are three indicators of Perceived Ease-of-Use, namely information technology systems are very easy to learn, information technology systems do what users want easily, and user skills will increase by using information technology systems.

Attitudes Toward the Adoption of FinTech Services

Attitude refers to the user's subjective judgment and personal inclination related to something [23]. Davis [7] defines attitude toward the system used in TAM as a level of assessment of the impact experienced by a person when using a particular system in his work.

The Relationship between Variables

The Relationship between Perceived Risk and Attitudes Toward the Adoption of FinTech Services

Khedmatgozar et al, [5] explained that grade of risk perception greatly determines the use of digital services. The same thought was conveyed by Forsythe et al. [24] which argues that users are concerned about the risks resulting from the manipulation of FinTech users' personal information. As a result, attitudes towards the use of FinTech will be affected. Moreover, FinTech services will certainly not be separated from the involvement of new technologies such as IoT, Big Data, and cloud computing. This condition is a potential risk for FinTech users [23]. For this reason, the perception of risk arising from the adoption of FinTech will affect the desire to use FinTech services in everyday life [6].

Trust is a key factor for a user to adopt a technology. Trust can decrease if there is a perception of risk. This shows that the user's perception of risk towards FinTech services can reduce the level of trust or user attitudes towards FinTech services. Institutions that provide FinTech services need to take steps to reduce the risk perceived by users so as to strengthen public trust in FinTech products and services. Thus it can increase users' willingness to adopt FinTech services [6]

The Relationship between Perceived Usefulness and Attitudes Towards the Adoption of FinTech Services

Users can determine the benefits arising from the adoption of FinTech, then users can assess the overall perceived benefits. The results of the assessment determine user attitudes which in

turn lead to the intention to adopt FinTech [4]. FinTech adoption intentions are positively influenced by perceived benefits [4].

The Relationship between Perceived Ease-of-Use and Attitudes Towards the Adoption of FinTech Services

The ease with which the user feels in using an information system will determine his attitude towards the adoption of the information system. The results of research by Riquelme and Rios [25] found that Perceived Ease-of-Use significantly affects the attitudes and willingness of users to adopt FinTech. Users tend do not want to use complex information systems to conduct financial transactions. If users perceive FinTech services as comfortable, friendly, and easy to run, users will be more willing to adopt it [25]. So, the perception of ease of use will affect the user's attitude of adoption towards the FinTech services.

Research Hypothesis

The model to be analyzed in this study is shown in the following figure:

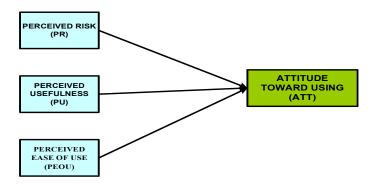


Figure 3 Research Model

Based on the theory that has been described above and the relationship between variables, the research hypothesis can be formulated as follows:

- H1: Perceived Risk has a negative effect on Attitudes Toward the Adoption of FinTech Services
- **H2:** Perceived Usefulness has a positive effect on Attitudes Toward the Adoption of FinTech Services.
- **H3:** Perceived Ease-of-Use has a positive effect on Attitudes Toward the Adoption of FinTech Services.

3. RESEARCH METHOD

Population and Sample

The population of this research is all users of banking services and start-ups in Indonesia. Sampling used a non-probability sampling method with purposive type with criteria for workers aged between 15 to over 56 years who still have a steady income in Jabodetabek and

have an education between D3 to S3. Refers to Hair et al.[26] sample size is at least ten times the number of formative indicators used for construct measurement

This study has 14 indicators to measure all variables, so the minimum number of samples in this study amounted to 140 samples. Data obtained by distributing questionnaires distributed through online media, namely by using the whatsapp, telegram and line messenger applications. Data analysis using SmartPLS Version 3.0 pro.

Operationalization of Variables

The measurement of variables in this study used a Likert scale with a code range of 1-5. Code 1 states strongly disagree while number 5 states strongly agree.

1. Dependent Variable.

The dependent variable in this study is Attitudes Toward the Adoption of FinTech Services. Attitudes Toward the Adoption of FinTech Services are measured using 3 statements adopted from the research by [27].

2. Independent Variables.

- a. Perceived Risk. Perceived Risk is measured by 3 statements adopted from research Grabner-Kräuter & Faullant [27]. Marakarkandy et al., [28]. In the measurement of Perceived Risk, it is increasingly leading to point 1, indicating that the perceived risk is lower and increasingly leading to point 5, indicating that the perceived risk is getting higher.
- b. Perceived Usefulness. Perceived Usefulness is measured using 4 statements adopted from research by [29].
- c. Perceived Ease-of-Use. Perceived Ease-of-Use is measured by 4 statements adopted from research by [30][31].

Data Analysis

The analysis method uses Structural Equation Modeling with the support of the SmartPLS analysis tool [34]. Tests in data analysis include testing the outer model and testing the inner model.

Outer Model

The outer model is often also called the outer relation or measurement model, showing how the observed variables represent the latent variables to be measured. Tests carried out on the outer model are validity testing using convergent validity, and reliability testing using Cronbach's Alpha and Composite Reliability [32].

Inner Model

Inner model is a structural model that describes the relationship between latent variables [32]. In testing the inner model, it is divided into three parts, namely testing the coefficient of determination, Goodness fit test, and hypothesis testing

4. RESULT AND DISCUSSION

Data Analysis

Outer-Model Test

a. Validity Test

Validity test is conducted by looking at Convergent Validity. An indicator is categorized as quite valid if loading factor value of 0.5 - 0.6. If the loading factor is above 0.7. It is considered valid [32].

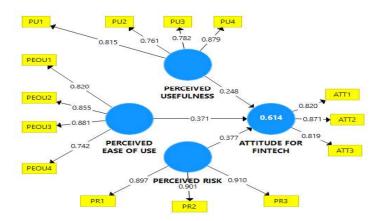


Figure 4 Loading-Factor Result

The loading factor test results are shown in Figure 5. All loading factor is above 0.7. So, all the constructs are valid.

b. Reliability Test

Reliability test by determining the value of Cronbach's Alpha and Composite Reliability. A construct is reliable if it meets the Composite Reliability greater than 0.7, Cronbach's alpha is greater than 0.6 and the Average Variance Extracted is greater than 0.5 [32]. The output of the reliability test is displayed in Table 2 below.

Variables Cronbach's Alpha **Composite Reliability** AVE 0.7860.701 ATT0.875 **PEOU** 0.843 0.895 0.682 PR 0.887 0.930 0.815 PU 0.826 0.884 0.657

Table 2 Reliability Test Results

Source: Data Processing Results

From the output of the reliability test on the constructs, it was concluded that PR, PU, PEOU, and ATT were reliable because they met the reliability test criteria.

Inner-Model Test

- a. Coefficient of Determination Test (R² test). The R² test was conducted to see the contribution of exogenous variables in depicting endogenous variables. From the output of the determination coefficient test, it was found that the Adjusted R² value for the Attitude for FinTech (ATT) variable was 0.608. This finding can be interpreted that ATT can be explained by PR, PU and PEOU by 61.4%, the remaining 38.6% is determined by other factors not included in the model.
- b. Goodness of Fit Model Test. The Goodnes of Fit test is intended to assess the accuracy of the resulting model. This value ranges from 0-1, the closer to 1, the more fit the model [32]. The NFI test results show that the NFI in this study is 0.801. It can be concluded that the accuracy of this research model is of good value, because it is close to 1.
- c. Hypothesis test. The independent variable is declared significant on the dependent variable if the P_value is smaller than 0.05. Original Sample shows the direction of influence of exogenous variables on endogenous variables. The results of the t-test of each variable can be seen in Table 3.

Original Sample (O) P Values

PR \rightarrow ATT 0.377 0.000

PU \rightarrow ATT 0.248 0.000

PEOU \rightarrow ATT 0.371 0.000

Table 3 Results of t-Test

Source: Data Processing Results

Based on the Table above, it can be explained as follows:

- a. The PR variable for ATT has an original sample of 0.377 and a P-Value is 0.000. This result means that Perceived Risks significantly and positively affect Attitudes towards Fintech Adoption, which means that hypothesis 1 is accepted.
- b. The PU variable on ATT has an original sample of 0.248 and a P-Value of 0.000, this indicates that there is a positive and significant influence between Perceived Usefulness on Attitudes Toward the Adoption of Fintech, which means that hypothesis 2 is accepted.
- c. The PEOU variable against ATT has an original sample of 0.371. This shows that there is a positive and significant influence between Perceived Ease-of-Use on Attitudes Toward the Adoption of Fintech, which means that hypothesis 3 is accepted.

Discussion

The Influence of Perceived Risk on Attitude Toward the Adoption of Fintech

Khedmatgozar et al [5] said risk perception is a key factor influencing the use of digital applications. The perceived risk will reduce individual confidence to use fintech services. Perceived risk has a negative impact on the trust of fintech users, even though trust is a factor that influences users to adopt fintech services. This shows that the user's perception of risk towards fintech services can reduce the level of trust or user attitudes towards fintech services. The results of Hu et al's research [6] which prove that risk perception can influence

user attitudes through trust in fintech services. In contrast to this research, the results of this study prove that perceived risk has a positive effect on attitudes toward the adoption of fintech services. This can also be seen from the contribution of each perceived risk indicator which is higher than other indicators, showing that overall users feel that the fintech services they use are safe so users have a positive attitude towards adopting the fintech services.

The Effect of Perceived Usefulness on Attitudes Toward the Adoption of Fintech

Perceived usefulness can be interpreted if the user feels the benefits of using a new technology, the user's attitude towards the technology will be affected. If fintech users feel the benefits of their performance or work by transacting using fintech, it will affect the user's attitude towards fintech. Several previous studies on the adoption of information technology found evidence that perceived usefulness has a positive impact on user intentions ([6]. The results of this study also provide the same conclusions or findings, namely that perceived usefulness has a positive effect on attitudes toward the adoption of fintech services.

The Influence of Perceived Ease-of-Use on Attitudes Toward the Adoption of Fintech

Perceived Ease-of-Use can be interpreted as the level of user confidence that an information system is easy to use so that it can improve user performance. The ease with which the user feels in using an information system will determine his attitude towards the adoption of the information system. The results of research by Riquelme and Rios (Riquelme & Rios, 2010) found that Perceived Ease-of-Use significantly affects the attitudes and willingness of users to adopt fintech. Alharbi and Drew [8] also found that Perceived Ease-of-Use had a positive effect on user attitudes in using fintech services. The results of this study also found findings similar to previous research, namely that Perceived Ease-of-Use had a positive effect on attitudes toward the adoption of fintech services.

5. CONCLUSION

This research was conducted to determine the effect of Perceived Risk, Perceived Usefulness, Perceived Ease-of-Use on Attitudes Toward the Adoption of Fintech partially among the users of mobile banking and internet banking services in Jakarta and the Greater Area.

Based on the results of statistical data processing and discussion above, it can be concluded that Perceived Usefulness, Perceived Risk, and Perceived Ease-of-Use have a positive effect on attitudes towards using FinTech services.

Some limitations include only using 202 respondents from using banking services and online transactions in the marketplace in Jakarta and the Greater Area, so that the respondents are less representative of the population in Indonesia as a whole. In addition, the limited time of the study and the number of respondents who were not willing to fill out the questionnaire so that only 202 samples were used. The use of independent variables in this study is limited to Perceived Risk, Perceived Usefulness and Perceived Ease-of-Use. Meanwhile, there are other factors that might influence the attitudes toward the adoption of fintech services. such as benefits, attitudes, and subjective norms.

Therefore, the recommendations from the researchers are as follows:

a) For further research, it is to expand the sample of the research domicile area in order to obtain more accurate results.

- b) For FinTech Providers, the results of this research can be used as a reference to further improve service quality.
- c) Recommendations to the government to make policy rules that are more stringent for FinTech Operators to obtain official permission from the OJK so that the public is safe and protected from fraudulent practices.

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