

FACTORS INFLUENCING THE CONSUMER'S DECISION USING FINANCIAL TECHNOLOGY: CASE STUDY IN JAKARTA

(Faktor-faktor yang Memengaruhi Keputusan Konsumen Menggunakan Fintech:
Studi Kasus di Jakarta)

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Abstrak

Perkembangan evolusi perekonomian dimulai dari gelombang pertama hingga masuk revolusi industri membawa perubahan terhadap perekonomian. Salah satu dampak tersebut adalah semakin berkembangnya teknologi. Perkembangan teknologi membawa dampak terhadap peningkatan *Financial Technology* (Fintech) di Indonesia. Penggunaan fintech di Indonesia mengalami peningkatan khususnya penggunaan fintech di Jakarta. Penelitian ini bertujuan untuk menganalisis faktor-faktor yang memengaruhi niat untuk terus memanfaatkan layanan fintech. Studi ini mengumpulkan data dari pengguna fintech di Jakarta yang berusia 17 hingga 35 tahun menggunakan metode *non-probability sampling* dengan periode penelitian dari bulan Maret – Mei tahun 2020. Analisis data menggunakan *Structural Equation Model* (SEM) dengan program *software AMOS*. Studi ini menemukan bahwa tekanan persaingan dalam layanan teknologi dan kemudahan teknologi digital menawarkan konsumen berbagai pilihan. Konsumen dengan mudah beralih ke layanan teknologi lain dengan harga yang cukup terjangkau. Penelitian ini juga menemukan bahwa variabel persepsi konsumen terhadap manfaat dan variabel kepercayaan terhadap layanan fintech berpengaruh terhadap sikap konsumen. Namun, kedua variabel tersebut tidak berpengaruh langsung terhadap keinginan untuk terus menggunakan layanan fintech. Variabel persepsi risiko tidak memengaruhi sikap dan keinginan konsumen untuk tetap menggunakan layanan fintech. Variabel sikap memengaruhi keinginan untuk terus menggunakan layanan fintech. Hasil studi menunjukkan bahwa penetrasi fintech meningkat dan konsumen terus menggunakan fintech. Persepsi risiko terhadap fintech yang digunakan konsumen perlu ditingkatkan.

Kata kunci: fintech, manfaat dan persepsi risiko, *Structural Equation Model*

Abstract

Economic evolution started with the first wave of the industrial revolution. Economic evolution brought about changes in the economy. One of these effects is the advancement of technology, which has increased the use of Financial Technology (Fintech) in Indonesia. Fintech usage has risen in Indonesia, particularly in Jakarta. The study's goal is to look at the elements that influence people's decision to keep using fintech services. The study used non-probability sampling methods to obtain data from fintech users in Jakarta aged 17 to 35 years old over the research period of March to May 2020. The data was analyzed by using Structural Equation Model (SEM) with the AMOS software program. This study found that competitive pressures in technology services and the ease of digital technology offer consumers a wide range of options. Customers easily switch to other technology services at a reasonably affordable price. The study also found that variable consumer perceptions of benefits and trust variables in fintech services influence consumer attitudes. However, these two variables have no direct effect on the desire to continue using fintech services. Variable risk perception does not affect the attitude and desire of consumers to continue using fintech services. Variable attitudes affect the desire to continue using fintech services. The study results showed that increasing the penetration of fintech and continue consumers to continue to use fintech. It is necessary to improve risk perception to fintech used by consumers.

Keywords: fintech, benefit and risk perception, *Structural Equation Model*

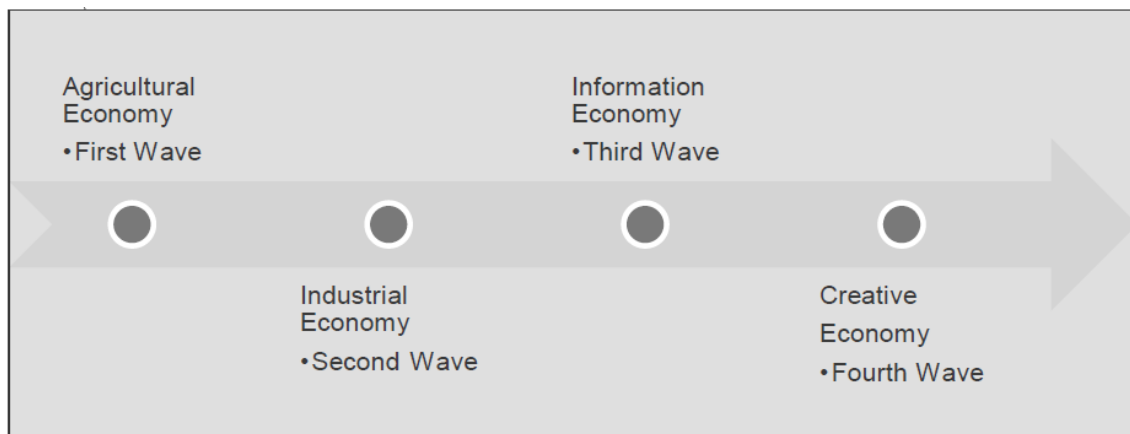
INTRODUCTION

Change and development are inevitable phenomena experienced by all countries of the world. The change in economic orientation is a definite and negotiable one in line with the development of an economy. Every individual can see how technology has constructed almost all economic developments in nearly all countries. The industrial

revolution marked a significant turning point in the economic development of nations. New tools were developed through technological advancement, which significantly improved productivity and living standards. Furthermore, several technical pioneers and early adapters moved ahead of the rest of the world during the nineteenth century, while others lagged (Lin & Rosenblatt, 2012).

Like any country globally, Indonesia has also experienced progressive economic developments. The phase of economic orientation from the beginning to the present consists of four steps: the agricultural economy, the industrial, the knowledge, and the creative economies (UNCTAD, 2019). The change started from the initial phase of the agriculture-based economy and then evolved into industrial economic development. The third phase was next, specifically the era of financial information. Nevertheless, with the increasingly intensive technological disruption process, economic orientation shifted into a creative economy's fourth phase. This economy emphasized the utilization of thought and technology in economic development, known as the industrial revolution 4.0. Figure 1 demonstrates the progressive changes in the economic phase from the initial agricultural to the creative economy's final phase (Moelyono, 2010).

and services due to these features. Industry 4.0 aspects, such as big data, the Internet of Things (IoT), and smart factories, improve long-term performance. As a result, incorporating industry 4.0 can improve long-term corporate success by addressing numerous technological difficulties (Haseeb et al., 2019). However, together with technology's increasingly massive growth, the use of the internet is unavoidable. The internet's advancement has always been costly, but the price has become significantly low. Due to its development, the internet can now be accessed by all people anywhere. In the early days of the internet, smartphones were very costly and unaffordable for the majority. However, in this age of mobile use, smartphones are relatively affordable for all. The cost of the internet is not only declining, but in this era, smartphone devices are becoming increasingly affordable (Wahab, 2016). Furthermore, with 160.23



Source: Moelyono, 2010.

Figure 1. Development of Economic Orientation Change

The use of information technology was characterized by industrial revolution 4.0, which was very influential in all industries. Its use in Indonesia's early developmental period started in 1998 but experienced low adoption by the public. Industry 4.0, also known as the fourth industrial revolution, offers enhanced manufacturing flexibility and mass customization, higher quality, and increased productivity. As a result, it enables businesses to meet the challenges of generating increasingly personalized products with shorter lead times and improved quality. Industry 4.0 places a high value on intelligent production. Industry 4.0 is a German strategic project aiming at building intelligent factories where cyber-physical systems (CPSs), the Internet of Things (IoT), and cloud computing are used to improve and alter manufacturing technology (Stasiak-Betlejewska et al., 2018; Zhong et al., 2017).

Industry 4.0 plays a good role in resolving various data management and technology difficulties. Industry 4.0 has a strong positive impact on improving products

million smartphone users, Indonesia ranks fourth in terms of smartphone usage. Indonesia has a smartphone penetration rate of 58.6 percent of the population (katadata, 2021).

The increase in relatively affordable internet tariffs and the decrease in smartphones' prices have enhanced significant internet growth and adoption. This rise in internet use has also influenced Indonesia's growing use of fintech. Data from the Indonesian Internet Service Providers Association (APJII) showed a growing trend from 1998 to 2019. The number of internet users reached 196.7 million in 2019 (see Figure 2). This growth is driving an increasing range of internet-based activities in Indonesia (APJII, 2019). Furthermore, numerous internet-based applications and operations are rising, and financial technology (fintech) penetration is presently one of the essential applications of internet-based operations in Indonesia. It is essential to increase internet use, as the use and penetration of fintech in a country depend heavily on the country's internet presence.

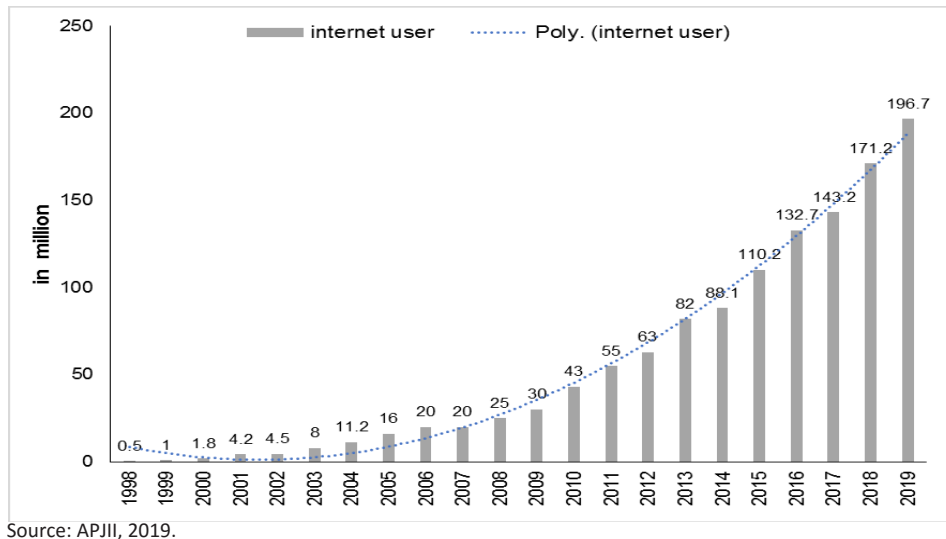
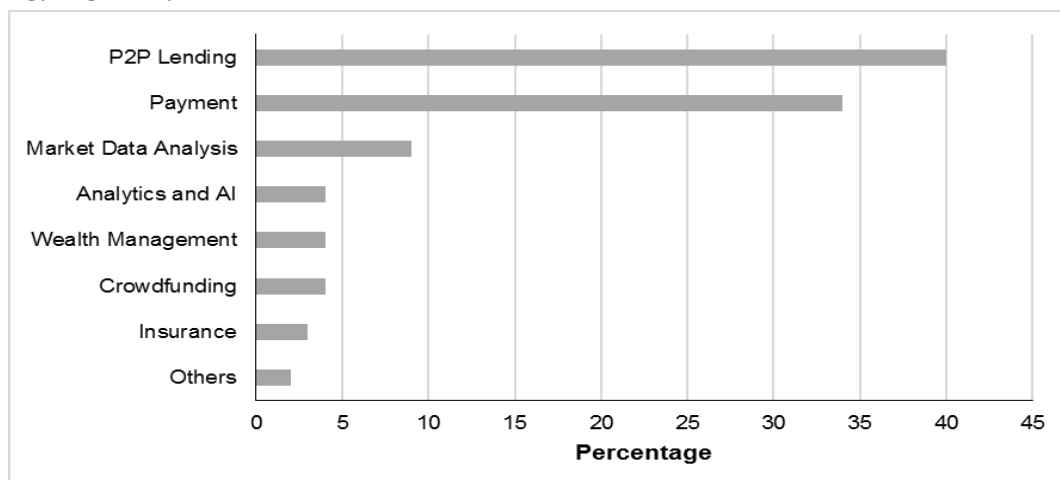


Figure 2. The Increasing Number of Internet Users in Indonesia from 1998-2019

According to Devezas et al. (2017), research on technological disruption, its implications, and industrial revolution 4.0 not only encourages changes in consumption and production. It also causes changes in phenomena and paradigms regarding technological processes and economic structures. Digital transformation includes the financial industry through the emergence of financial technology, better known as fintech. In almost all countries, including Indonesia, fintech has rapidly developed.

Bank Indonesia is the banking and financial transaction regulator and authority in Indonesia. In 2017, Bank Indonesia released Regulation No. 19 of 2017 concerning the Fintech Sandbox Regulation of the Members of the Board of Governors. As a regulator, the Bank has classified fintech in Indonesia and categorized it into several types: payment system, market support, investment, risk management, loans, financing, capital investment, and other financial services. Bank of Indonesia has regulated Members of the Board of Governors of Bank Indonesia Number 19 of 2017 concerning Financial Technology Regulatory Sandbox (Bank Indonesia, 2017).

The Indonesian Fintech Forum, based on data from the Coordinating Ministry for Economic Affairs of The Republic of Indonesia, clarified that fintech use in Indonesia has increased. Data showed that from 6 classifications, Coordinating Ministry for Economic Affairs of The Republic of Indonesia consists of Peer to Peer (P2P) Lending, Payment, Market Data Analysis, Analytics, Artificial Intelligence, Wealth Management, Crowdfunding, insurance, and others (see Figure 3). From this classification, fintech has multiplied in Indonesia, especially in Peer Lending. Approximately 40 percent of overall fintech involves creating Peer to Peer (P2P) lending to individuals or companies, while 34 percent involve payments. Fintech market provisioning of 9 percent is the subsequent growth. Furthermore, the growth of equity in fintech crowdfunding, data mining, artificial intelligence, and asset management in Indonesia increased by 4 percent. Fintech advances in the insurance industry have also advanced by 3 percent in recent years (Jayani, 2019).



Source: Jayani, 2019.

Figure 3. The Development of Fintech in Indonesia

Fintech is an innovation that can revolutionize the banking industry, as this is a mix of financial services and technology that can shift the business model from traditional to moderate (Wonglimpiyarat, 2017). According to Gai et al. (2018), fintech has become a popular term describing new technologies adopted by financial services agencies. A Report in the 2019 Daily Social research showed the proliferation of fintech worldwide. Furthermore, E&Y (2017) stated that the average percentage of consumers who used fintech services in 2015 amounted to 16 percent and increased by 33 percent in 2017 (Harahap et al., 2017).

Furthermore, fintech development in developing countries increases due to several supporting factors. These include: (1) young residents who have access to mobile devices; (2) approximately 60 percent of the world's population will be located in Asia by 2030; (3) financial and capital market inefficiency in creating opportunities for informal activities; (4) lack of physical infrastructure from banking; (5) tendency to observe behaviours of the covenant; (6) new market opportunities; and (7) data protection and less intense competition (Barberis, 2016). These constitute the variables that increase customer penetration of fintech.

Ozili's (2018) study on fintech's impact on financial inclusion stated that it influences financial inclusion, which posed a problem for developing countries. Financial inclusion is a problem because consumers are targeted by fintech, as they do not often have access to banking (referred to as an underbanked society). The fintech success story in reaching an underbanked society is that it has managed to get approximately 250,000 people who have obtained loans from this sector. Therefore, Ozili (2018) suggested that it positively affects financial inclusion in developing countries and is less costly than traditional banks.

Ryu (2018a) expressed that consumer considers the benefits and risks to determine the expected value of fintech. Once the advantages are more significant than the costs, the consumer chooses the product or service (Keong et al., 2020). Compared with conventional financial services, fintech entails modern approaches with innovative systems and new procedures that often lack security expertise alongside an old comparison of regulations. Furthermore, growing innovation in technology and the ease of digital technologies provide consumers with a wide variety of choices to quickly turn to other low-cost technology services (Wang et al., 2019).

Retaining customers is a crucial concern for fintech service providers. Previous literature on the continuation of users in the online world and the financial sector highlighted trust's role. It results from a consistent customer statement founded on relationships (Yulia & Kim, 2018). Therefore, trust in the company and

confidence in the ecosystem is essential for customers and fintech development.

The growing competition in technology services and the ease of digital technologies offer consumers a wide variety of choices. The ease of digital technologies is because customers can quickly turn to other technology services at an affordable price (Wang et al., 2019). Based on previous research, people have been motivated to continue using fintech services, primarily because of consumer confidence in current conditions. Fintech users in Jakarta occupy the highest position for the percentage of comparison between the number of internet users and the number of fintech users, at 189.92 percent, according to Stefanny & Tiara (2021). This situation differs greatly for areas outside of Java, where the percentage ratio is below 15.42 percent. This situation demonstrates that the province of Jakarta dominates fintech consumers in Indonesia, which is also the reason for the city's designation as a research locus.

Furthermore, the Indonesia Fintech Report 2020 indicates that fintech is primarily used for fintech loans and fintech for payment. This can be seen in the report's statistics, which shows that fintech loan accounts for 50 percent of fintech users in Indonesia, while payments account for 23 percent. The rest is tiny fintech, including crypto, personal fintech, crowdfunding, comparison, and others. As a result, fintech used for loans and fintech used for payment is the focus of research among Indonesia's significant consumers. As a result, the respondents chosen have used or are now using both types of fintech.

This research aims to analyze factors that influence the intention to continue utilizing fintech services. Promoting fintech growth in Indonesia, the results are expected to guide policy-making stakeholders. Fintech-related research results are instrumental for relevant stakeholders to establish regulations that facilitate the improvement of fintech. Therefore, feedback is expected to be given to the Bank of Indonesia and the Financial Service Authority to prepare and issue fintech related policies.

METHOD

Types and Data Sources

This study used primary data derived from data collected directly from Google Forms. The research used a non-probability sampling method to investigate the impact of consumers' behaviour on their intention to continue using fintech. As a result, the study relied on data that met the research objectives outlined in the previous section. Data was collected via Google Forms because of the pandemic Covid-19, so the questionnaires were sent randomly in Jakarta to collect the data from respondents from March to May 2020. The respondents that have been collected are the user of fintech lending and

payment. Jakarta has been chosen for the locus of this research based on the previous section we have stated in the introduction section. Moreover, the increase of fintech in Jakarta has been benchmarked and centered on the progress of fintech in Indonesia. These responders were still alive and well, and they had employed fintech in various applications. Respondents ranged in age from 17 to 35 years old, with an average diploma and undergraduate degree.

Furthermore, the research revealed that roughly 60 percent of the population earns between Rp1 and Rp5 million each month. At least one mobile phone or internet banking application and one fintech application. For the study, a total of 280 questionnaires were gathered from respondents. However, 260 surveys were returned out of the 280 that were sent. There were 112 respondents on the return questionnaire who did not match the requirements to be considered responders.

The research method used was a quantitative method by looking at the relationship between the variables studied (causal relationship). There were five variables evaluated in this research: perceived benefit, trust, perceived risk, attitude, and continuity intention. Each variable measured by several statements derived from various sources. Table 1 shows the variable, research indicator and the analysis performed using the Structural Equation Model (SEM) in the AMOS software.

previous research. All indicators are measured using a Likert scale from 1 to 5. Number 1 = strongly disagree, Number 2 = disagree, Number 3 = doubtful, Number 4 = agree, and Number 5 = strongly agree.

Using AMOS Software, this research utilized a SEM method or approach. SEM approach was used to analyze the relationship between variables. The SEM application in this research is expected to resolve the research issues mentioned in the previous section. Several steps were taken in the analytical stage of the data before performing quantitative analysis using SEM. The first step, the evaluation stage, was carried out, which involved model measurement. At this stage, an analysis of the validity and reliability of the instrument was performed. The next step was to test the hypothesis using the software used. Input for the development of regulations created by policymakers is focused on the results of this study. Furthermore, sensible policies notably related to the implementation of this research require significant positive feedback. The expected results are necessary to formulate regulations that promote Indonesia’s fintech ecosystem.

Conceptual frameworks were constructed from several previous studies to answer the research question. Therefore, this research has a framework for analysis, as defined in Figure 4.

The rapid development of technology today raises a relatively high level of uncertainty. These high-level

Table 1. Variables and Research Indicators

Variable	Indicator	Source
Perceived benefit	1. Many advantages gained using fintech.	(Razzaque et al., 2020), (Nizar, 2017), (Benlian & Hess, 2011)
	2. I can easily and quickly use fintech.	
	3. Using fintech is very beneficial to me.	
	4. Using fintech offers more quality services than traditional financial services.	
Trust	1. I believe fintech services maintain the confidentiality of my data.	(Hu et al., 2019), (Sánchez-Torres et al., 2018)
	1. Overall, I believe fintech services can be trusted.	
Perceived Risk	1. Using fintech deals with high risk.	(Lim et al., 2019), (Benlian & Hess, 2011)
	2. Using fintech is full of uncertainty.	
Attitude	1. I am sure using fintech is a good idea.	(Grabner-Kräuter & Faullant, 2008), (Jiwasiddi et al., 2019)
	2. Using fintech is a pleasant experience.	
	3. I am interested in using fintech.	
Continuance Intention	1. I am already using fintech services and will continue to use them.	(Marakarkandy et al., 2017)
	2. I will use fintech services soon.	
	3. I would recommend fintech services to friends.	
	4. I would consider fintech positively as my choice.	
	5. I prefer fintech.	
	6. I intend to continue using it-fintech in the future.	

Analytical Methods

The instruments used in this study were developed to measure variables. Variable measurement in a developed model involves each variable’s indicators, as shown in Table 1 above. Research indicators were adopted from previous studies that correspond to the variables used in

causes trust to be an essential factor in examining the use of fintech services. Hu et al. (2019) positive effect on consumers’ attitudes. Jiwasiddi et al. (2019) expressed confidence that the technology will affect the system’s attitudes and behaviours. Therefore, the following hypothesis stated that: H₁: Trust positively affects consumer attitudes toward fintech services.

Further research conducted by Xu et al. (2014) showed that trust, perceived gain, and perceived risk significantly influence customer attitudes when shopping online. Perceived risk can be a barrier for users wanting to utilize fintech services (Ryu, 2018b). Conducted by Hu et al. (2019) stated an effect of perceived risk on consumer attitudes to adopt fintech services. Furthermore, Nangin et al. (2020) mentioned that attitude is an exchange of values between positive (perceived benefit) and negative attributes (perceived sacrifice). A person's positive attitude towards an object will be low when the consumer feels a high sacrifice and vice versa. The study carried out by Leonardo (2016) showed that the perceived benefits and perceived sacrifices could affect consumer attitudes. Based on previous research, perceived risk negatively affects consumers' attitudes towards fintech services. Meanwhile, perceived benefit positively affects consumer attitudes towards fintech services.

Further studies initiated by Nelloh et al. (2019) mentioned risk perception as a variable affecting the purchase. The risk perception is primarily during online transactions due to a lack of physical contact between the customer and the seller. When the security of transactions on the website is well maintained, it reduces the perceived risk (Kim & Lennon, 2013). Indiani et al. (2015) also found that perceived risk can increase trust, encouraging actual purchase (Bazarbash, 2019). Deng et al. (2018) also assessed the impact of perceived risk on confidence in China's health services. Besides, Indiani et al. (2015) stated that the perception of risk affects trust, and the hypothesis of fourth can be written as H_4 : Perceived risk negatively affects *trust*.

Xiao et al. (2017) conducted previous research, based on the research results, expressed higher confidence in the company due to the higher perception of benefits that consumers will feel. Based on previous studies, the fifth hypothesis can be H_5 : Trust positively impacts the perceived benefit. Attitudes are positive or negative emotions and perceptions formed whenever it comes to an element. Based on the Technology Acceptance Model (TAM), behavior against technology was determined by such users' attitudes. Empirical research such as Payne et al. (2018) and Purwanto et al. (2019) studied the positive relationship between attitudes and intentions in using technology. The results were strengthened by Foroughi et al. (2019), which expressed a positive influence between attitude and desire to continue using mobile banking. Furthermore, Jiwasiddi et al. (2019) also stated that ethics in a person has a higher positive attitude towards technology use. The intention to continue to use it will be relatively higher, and the sixth hypothesis can be written as H_6 : Positive attitude influences the intention to use fintech continually.

Ryu (2018a) observed that perceived benefit and risk could affect consumers' desire to continue using fintech/continuance intention. The perceived gain had a positive, essential effect on fintech's continuity expectation, while the perceived risk seemed to affect fintech's continuity-specific intent. This phenomenon is backed by another research (Putritama, 2019). Therefore, the following hypothesis was formulated: H_7 : The perceived gain significantly impacted fintech's continuity intent. H_8 : Perceived risk adversely affects the desire to start fintech.

Furthermore, Faradynawati (2018) stated that consumer confidence could reduce the perception of risk faced, and this belief affects the desire to continue to use fintech services (Gomber et al., 2018; Lee & Shin, 2018). The research is consistent with Zhou et al. (2018) research, as individuals who expressed trust significantly influence the e-business continuity intention. Therefore, the following hypothesis was formulated: H_9 : Trust positively affects Fintech continuity intention.

Figure 4 shows the variables used in the analysis as defined in the research framework. A perceived gain (P.B.) is an advantage, comfort, or benefit gained by the use of fintech. T.R. stands for confidence and relates to fintech's belief in preserving confidentiality and reliability. P.R. stands for perceived risk, which is a factor that explains why fintech is related to a high degree of risk and uncertainty. ATT stands for attitude, which is described as confidence in the use of fintech, a positive experience with fintech, and a willingness to use fintech. IN is continuance purpose, is a vector that continues to use fintech and will soon use fintech. Table 1 offers a more detailed explanation of the variables used in this analysis.

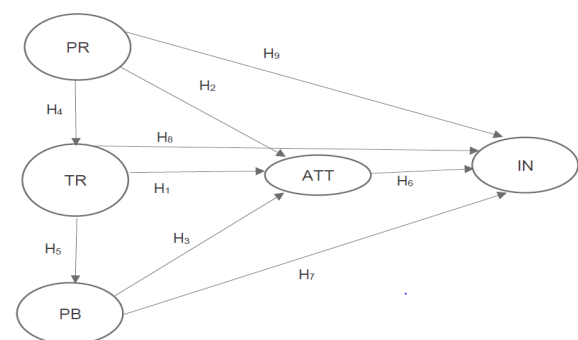


Figure 4. Conceptual Framework

Based on previous research that has been mentioned before, then the following hypothesis is mentioned below:

- H1 Trust positively affects consumer attitudes to use fintech services.
- H2 Perceived risk negatively affects the attitude of consumers to use fintech services.
- H3 Perceived benefit positively affects consumer attitudes to use fintech services.
- H4 Perceived risk negatively affects trust.

- H5 Trust has a positive impact on perceived benefit.
 H6 The attitude of positive influence on fintech continuity intention.
 H7 The perceived benefit has a significant impact on fintech's continuity intent.
 H8 Perceived risk adversely affects the desire to start fintech.
 H9 Trust positively affects fintech continuity intention.

RESULTS AND DISCUSSION

Evaluating the Instrument

A pattern is the assessment process of the instrument that must be done in quantitative research. The method is achieved by checking the validity and reliability of the tool. Checking validity and reliability is essential before distributing the resources to the respondents. Furthermore, the resources were dispersed through social and internet networks, collecting results from 148 participants. These participants were deemed suitable for inclusion in the hypothesis test.

Data was collected by spreading questionnaires through Google Form and performing data validity and reliability tests to ascertain data accuracy. The instrument is valid from the Average Variance Extracted (AVE) results and a loading standard > 0.5 . Additionally, reliability tests were conducted using the Construct Reliability value > 0.7 . Table 2 shows more details about the validity and reliability tests against study variables.

variables' construct reliability values were higher than the cut-off value of 0.7, while the indicators had the right internal consistency. The value of average variance extracted for the perceived benefit variable was 0.680, trust of 0.792, perceived risk 0.937, attitude 0.789, and continuity intention of 0.758. Therefore, the AVE value will be smaller than the construct reliability value. Since the five variables derive an AVE > 0.50 , the variances extracted are from the more significant indicators for forming latent variables. It can be inferred based on Table 2 that the variables used are true and accurate for use in the analysis. The next step was to conduct the goodness of fit analysis and then continue with structural model evaluation using the software, to solve the previously determined research problems.

Structural Model Evaluation

The next step after the validity and reliability tests was the goodness of fit test. The process of structural model assessment is described in the model for conceptual analysis. Furthermore, the method of evaluation in this study is an essential operation. The value of the coefficient determinant, coefficient course, and the effect size was evaluated. The structural model assessment was derived from the model's relevant study variables, as shown in Table 3. The value of RMSE is 0,089 acquired indicates an

Table 2. Validity and Reliability Tests

Variable	Indicator	Standard Loading	Construct Reliability (C.R.)	Variance Extracted (AVE)
Perceived Benefit	PB1	0.872	0.894	0.680
	PB2	0.770		
	PB3	0.880		
	PB4	0.770		
Trust	TR2	0.998	0.882	0.792
	TR1	0.767		
Perceived Risk	PR1	0.430	0.959	0.937
	PR2	0.813		
Attitude	AT1	0.872	0.917	0.788
	AT2	0.899		
	AT3	0.893		
Continuance Intention	CI1	0.855	0.949	0.757
	CI2	0.825		
	CI3	0.902		
	CI4	0.851		
	CI5	0.872		
	CI6	0.914		

Source: Data calculated by author, 2020.

Table 2 shows that the result of construct reliability values for perceived benefit was 0.894, with the trust of 0.882, perceived risk 0.960, attitude 0.918, and continuity intention 0.949. The five

acceptable fit. The goodness of fit test also showed that GFI and AGFI were close to the fitness value. While CFI and TLI > 0.900 qualify, the minimum was fit. Therefore, the model was considered fit.

Table 3. The Goodness of Fit Test

The goodness of Fit Test	Cut off	Value	Result
The goodness of Fit Index (GFI)	≥ 0.900	0.835	Marginal Fit
Adjusted Goodness of Fit Index (AGFI)	≥ 0.900	0.771	Marginal Fit
Comparative Fit Index (CFI)	≥ 0.900	0.924	Fit
Tucker-Lewis Index (TLI)	≥ 0.900	0.906	Fit
Root Mean Square Error (RMSEA)	$0 < RMSEA < 0.08$	0.061	Fit

Source: Data calculated by author (2020).

Hypothesis Test

The next step after the goodness of fit involved the hypothesis tests. Each hypothesis was tested using the software at the hypothetical test stage to respond to research problems. Using previous research that explored technology implementation, the researchers established these hypotheses. The seven hypotheses were used to explain the relationship between the six variables used in this analysis, as shown in Figure 1. The researchers measured the hypotheses with software AMOS version 23. The results are shown in Table 4.

Table 4 below shows the hypothetical test results using AMOS programs. The test was performed by looking at the Critical Ratio (C.R.) value compared to the Crites value identical to the T count value of ± 1.960 with a sig. value or p-value < 0.050 . If $C.R > t$ counts, then the hypothesis is supported, whereas if $C.R < 1.960$, then the hypothesis is not supported.

Table 4. Hypothesis Test Results

Hypothesis		Standardize Estimate	S.E.	C.R.	p-value	Description
H ₁ : Trust	→ Attitude	0.320	0.064	4.347	0.000	H ₁ : Supported
H ₂ : Risk	→ Attitude	0.055	0.068	1.048	0.294	H ₂ : Not Supported
H ₃ : Benefit	→ Attitude	0.651	0.077	7.993	0.000	H ₃ : Supported
H ₄ : Risk	→ Trust	-0.190	0.134	-2.833	0.005	H ₄ : Supported
H ₅ : Trust	→ Benefit	0.572	0.075	6.704	0.000	H ₅ : Supported
H ₆ : Attitude	→ Intention	0.969	0.136	7.655	0.000	H ₆ : Supported
H ₇ : Benefit	→ Intention	-0.013	0.098	-0.144	0.886	H ₇ : Not Supported
H ₈ : Trust	→ Intention	-0.022	0.058	-0.362	0.718	H ₈ : Not Supported
H ₉ : Risk	→ Intention	0.000	0.059	0.123	0.902	H ₉ : Not Supported

Source: Calculated by author, 2020.

According to hypothesis 1 test results, trust has a significant and positive effect on consumer attitudes to use fintech services. This is evidenced by the value of $C.R = 4.347 > 1.960$ with p-value < 0.050 and standard estimate 0.320. Therefore, the interpretation was that the higher the consumer trust is, the more favorable attitude to fintech. Consumer trust is a crucial factor influencing consumers' willingness to adopt fintech in Jakarta, according to Khozin (2018). Furthermore, the results

of this study showed that essential trust factors have an impact on fintech growth in Indonesia.

The hypothesis 2 test results showed the value of $C.R = 1.048 < 1.960$ and p-value = 0.294 (> 0.050). Therefore, the hypothesis was not confirmed, as the perception of risk does not significantly affect consumer attitudes towards the use of fintech services. Meanwhile, Hypothesis 3 obtained $C.R = 7.993 > 1.960$ and p-value < 0.050 with an estimate value of standardize is 0.651, therefore, H₃ was supported. The result signifies that consumers' perceived benefits will affect consumer attitudes towards fintech use. Dharmawan et al. (2021) discovered, utilizing a sample of fintech user data in Jakarta, that risk perception substantially impacted interest in fintech use. The higher the benefits, the more positive attitude of consumers to fintech services. H₂ and H₃ agree with Nadiyah et al. (2019) that perceived benefit positively affects consumer attitudes. The sacrifices do not influence the attitudes of the objects being examined.

From the results, the hypothesis 4 test obtained the value $C.R = -2.833$ and p-value < 0.050 with an estimate of standardizing 0.190. H₄ stated that the higher the perceived risk, the lower the consumer trust in fintech. These results correspond with Deng et al. (2019) but differ in industries and research. Indiani et al. (2015) observed an influence of perceived risk on trust. This result concludes that in customers using fintech, the Perceived risk is an important factor. Meanwhile, tests on hypothesis 5 obtained

$C.R = 6.704$ and p-value < 0.05 with an estimated value of 0.572. It can be interpreted as higher consumer trust in fintech will increase the perceived benefits. These results agree with Xiao et al. (2017), which stated that more confidence in an object increases the perception of the object's benefits.

Test results of hypothesis 6 obtained $C.R = 7.655$ with p-value < 0.05 and estimate of standardizing is 0.969, which showed that consumers' positive attitude would substantially affect the desire to

continue using fintech. Moreover, the results of the test of hypothesis 7 obtained $C.R = -0.144$ and $p\text{-value} = 0.886 > 0.050$ estimate -0.013 . This signified that the perceived benefits do not affect the desire to continue using fintech. Raja & Widodoatmodjo (2020) discovered that attitudes substantially impact consumer interest in fintech based on data from 100 fintech users in Jakarta.

The data processing results against hypothesis 8 showed that the values were $C.R = -0.362$ and $p\text{-value} > 0.050$, with an estimate of the value standardize 0.022. Therefore, H_8 is not supported, which means that trust does not affect the desire to continue using fintech, but the results were not validated. Wang et al. (2019) observed that trust is instrumental in increasing the desire to continue using fintech services. This is possible because fintech companies are becoming more popular in Indonesia and are racing to seize consumers' attention by providing attractive offers such as cashback and discounts. However, consumers are hesitant to continue using the fintech services offered.

The test of hypothesis 9 gained $C.R = 0.123$ and the $p\text{-value}$ is 0.902 with an estimate of standardized is 0.000, which signified that the hypotheses were not supported. There is no effect of perceived risk on the desire to keep using fintech. Meanwhile, based on research conducted by Meyliana et al. (2019), the perceived risk does not affect the use of fintech. The testing results of hypotheses 7 and 9 do not agree with Ryu's (2018b) research, which stated that the perceived benefits are positive and significant in the desire to continue using fintech. Ryu (2018a) also stated that the perceived risk negatively and significantly impacts the desire to continue to use fintech. These results showed that the benefits and risks received could not guarantee that consumers will continue to use fintech services.

This research signifies that those variable trusts and benefits significantly influence varying attitudes. The trust variable then significantly affects the benefit variable. Meanwhile, the attitude variable significantly affects the variable of customer intent in fintech. Therefore, the trust variable has an impact on customers to use fintech either in attitudes and benefits.

Related to the increase in fintech penetration, research was conducted by Jünger & Mietzner (2020) on fintech. The study sample involved 643 consumers from October to November 2017. The results showed that the propensity to migrate to fintech was motivated by customer confidence and convenience with emerging technologies, financial literacy, and overall transparency. Consumers with low levels of trust, robust investment education, and a tendency

for clarity, in particular, were distinguished by the likelihood of higher fintech adoption. Furthermore, confidence can be created through three principal dimensions. The first applies to competence and features. Second, goodness is a desire to provide both sides with mutual gratification. Third, honesty is business-related, whether or not the consumer's information is accurate and in line with the truth.

Therefore, *Bank Indonesia* strives to enhance regulations and public policies as the regulator. The regulation and public policies are needed to increase the trust of fintech for customers' willingness to use fintech. The intent is to create regulations that promote fintech actors to enhance consumers' positive attitudes. This can be induced by encouraging fintech players to increase consumer trust and confidence in fintech services. Furthermore, Nangin et al. (2020) concluded that the main factor in increasing the extent of fintech adoption is trust.

Article 14 of Regulation No. 19/14/PADG/2017 of the Board of Governors of Bank Indonesia concerning Regulatory Sandbox states that financial technology companies are responsible for the accuracy and correctness of the data and documents submitted to Bank Indonesia for regulatory sandbox evaluation. Second, the systems' security and reliability are used in Regulatory Sandbox assessments for operating products, facilities, innovations, and business models. Thirdly, data, information security, and customer funds in the introduction of fintech. Finally, the resolution of all rights and commitments to customers and other relevant stakeholders of fintech operators (Bank Indonesia, 2017). However, the operational execution of how fintech players can improve the quality of services has not been explicitly regulated, particularly by improving customers' safety and confidence in fintech services.

The innovation of fintech teaches that the policy should be responsible for meeting the public's needs, primarily economic actors, and for following up with momentary developments. Furthermore, judicial institutions will need to balance and strengthen legal instruments, to preserve the quality of public confidence in the rule of law. The government will balance national interests and business players' interests with the comprehensiveness of legal instruments (Hapsari et al., 2019). The government should act as a regulator and facilitator, fostering an environment in Indonesia that is conducive to fintech growth. Bank Indonesia, the Financial Services Authority, fintech start-ups, customers, and the Indonesian House of Representatives should all work together to create an environment that supports fintech growth in the country.

CONCLUSION

Based on this research that focused on the use of fintech in Jakarta, the variable positive attitudes towards fintech strongly influence consumers' desire to continue using fintech. This positive attitude is strongly influenced by the perceived benefits and also trust in the fintech. The risk factors faced do not affect consumer attitudes to use fintech, but the risk affects trust. The greater the risk faced will reduce consumer confidence in fintech.

Companies engaged in fintech must continue to innovate to provide more benefits to the consumer. Trust that has been built well must also always be maintained because the higher the trust, the better the consumer's attitude towards fintech. The higher the trust, the higher the perceived benefits. Currently, fintech has only been introduced in Indonesia, especially for payments. Consumers still enjoy attractive offers provided by fintech companies, such as cashback and discounted prices. Based on this study, risk perception has not impacted consumers' preferences and confidence because the number of fintech usage is limited and only by payment. However, the benefits, trust, and risks have not influenced consumers' desire to continue using fintech.

This study has limitations in terms of the scope of the number of respondents based on only 148 respondents in Jakarta, and we only utilized two indicators to classify variables in this study. Further research requires many respondents from other provinces in Indonesia to get complete and valid conclusions on factors that affect the community using fintech in Indonesia and use more indicators to explain the variable.

REFERENCES

Books

- APJII. (2019). *BULETIN APJII EDISI 74*. APJII.
- Barberis, Janos, S.C. (2016). *The fintech book: The financial technology handbook for investor, entrepreneurs, and visionaries*. Willey.
- Devezas, T., Leitao, J., & Sarygulov, A. (2017). *Industry 4.0 entrepreneurship and structural change in the new digital landscape*. Switzerland: Springer Nature.
- Moelyono, M. (2010). *Menggerakkan ekonomi kreatif*. Rajawali Press.

Journal

- Benlian, A. & Hess, T. (2011). Opportunities and risks of software-as-a-service: Findings from a survey of IT executives. *Decision Support Systems*, 52(1), 232–246. <https://doi.org/10.1016/j.dss.2011.07.007>
- Deng, X., Huang, Z., & Cheng, X. (2019). FinTech and sustainable development: Evidence from China based on P2P data. *Sustainability (Switzerland)*, 11(22). <https://doi.org/10.3390/su11226434>
- Dharmawan, B.S., Mulyanto, & Vidyasari, R. (2021). Pengaruh sikap, norma subjektif, dan persepsi risiko terhadap minat bertransaksi menggunakan aplikasi fintech. *Account*, 8(1), 1437–1445.
- Faradynawati, I.A.A. (2018). The impact of perceived risk and trust on consumer intention to use fintech payment in Indonesia. *International Review of Financial Consumer*, 3, 27–38.
- Foroughi, B., Iranmanesh, M., & Hyun, S.S. (2019). Understanding the determinants of mobile banking continuance usage intention. *Journal of Enterprise Information Management*, 32(6), 1015–1033. <https://doi.org/10.1108/JEIM-10-2018-0237>.
- Gai, K., Qiu, M., & Sun, X. (2018). A survey on FinTech. *Journal of Network and Computer Applications*, 103, 262–273. <https://doi.org/10.1016/j.jnca.2017.10.011>.
- Gomber, P., Kauffman, R.J., Parker, C., & Weber, B.W. (2018). On the fintech revolution: Interpreting the forces of innovation, disruption, and transformation in financial services. *Journal of Management Information Systems*, 35(1), 220–265. <https://doi.org/10.1080/07421222.2018.1440766>.
- Grabner-Kräuter, S. & Faullant, R. (2008). Consumer acceptance of internet banking: The influence of internet trust. *International Journal of Bank Marketing*, 26(7), 483–504. <https://doi.org/10.1108/02652320810913855>.
- Hapsari, R.A., Maroni, M., Satria, I., & Ariyani, N.D. (2019). The existence of regulatory sandbox to encourage the growth of financial technology in Indonesia. *FIAT JUSTISIA*, 13(3), 271. <https://doi.org/10.25041/fiatjustisia.v13no3.1739>.
- Haseeb, M., Hussain, H.I., Ślusarczyk, B., & Jermisittiparsert, K. (2019). Industry 4.0: A solution towards technology challenges of sustainable business performance. *Social Sciences*, 8(5), 1-24. <https://doi.org/10.3390/socsci8050154>.
- Hu, Z., Ding, S., Li, S., Chen, L., & Yang, S. (2019). Adoption intention of fintech services for bank users: An empirical examination with an extended

- technology acceptance model. *Symmetry*, 11(3), 1-16. <https://doi.org/10.3390/sym11030340>.
- Indiani, N.L.P., Rahyuda, I.K., Kerti Yasa, N.N., & Sukaatmadja, I.P.G. (2015). Perceived risk and trust as major determinants of actual purchase, transcending the influence of intention. *ASEAN Marketing Journal*, 7(1), 1–13. <https://doi.org/10.21002/amj.v7i1.4601>.
- Ismagilova, E., Slade, E.L., Rana, N.P., & Dwivedi, Y.K. (2020). The effect of electronic word of mouth communications on intention to buy: A meta-analysis. *Information Systems Frontiers*, 22(5), 1203–1226. <https://doi.org/10.1007/s10796-019-09924-y>.
- Jünger, M. & Mietzner, M. (2020). Banking goes digital: The adoption of FinTech services by German households. *Finance Research Letters*, 34, 1–13. <https://doi.org/10.1016/j.frl.2019.08.008>.
- Keong, O.C., Leong, T.K., & Bio, C.J. (2020). Perceived risk factors affect intention to use FinTech. *Journal of Accounting and Finance in Emerging Economies*, 6(2), 453–463.
- Kim, J. & Lennon, S.J. (2013). Effects of reputation and website quality on online consumers' emotion, perceived risk and purchase intention: Based on the stimulus-organism-response model. *Journal of Research in Interactive Marketing*, 7(1), 33–56. <https://doi.org/10.1108/17505931311316734>.
- Lee, I. & Shin, Y.J. (2018). Fintech: Ecosystem, business models, investment decisions, and challenges. *Business Horizons*, 61(1), 35–46. <https://doi.org/10.1016/j.bushor.2017.09.003>.
- Leonardo, A. (2016). Analisis pengaruh perceived benefit, free mentality dan perceived sacrifice terhadap attitude toward paying dan implikasinya terhadap willingness to pay (Studi pada pengguna Joox VIP). *ULTIMA Management*, 8(2), 32–53. <https://doi.org/10.31937/manajemen.v8i2.591>.
- Lim, S.H., Kim, D.J., Hur, Y., & Park, K. (2019). An empirical study of the impacts of perceived security and knowledge on continuous intention to use mobile fintech payment services. *International Journal of Human-Computer Interaction*, 35(10), 886–898. <https://doi.org/10.1080/10447318.2018.1507132>.
- Lin, J.Y., & Rosenblatt, D. (2012). Shifting patterns of economic growth and rethinking development. *Journal of Economic Policy Reform*, 15(3), 171–194. <https://doi.org/10.1080/17487870.2012.700565>.
- Marakarkandy, B., Yajnik, N., (2017). Enabling internet banking adoption: An empirical examination with an augmented technology acceptance model (TAM). *Journal of Enterprise Information Management*, 30, 263–294.
- Meyliana, Fernando, E., & Surjandy. (2019). The influence of perceived risk and trust in adoption of FinTech services in Indonesia. *Communication & Information Technology Journal*, 13(1), 31–37.
- Nadiyah, F., Mawardi, M.K., & Bafadhal, A.S. (2019). Pengaruh perceived benefit dan perceived sacrifice terhadap attitude toward paying dan implikasinya terhadap willingness to pay. *Jurnal Administrasi Bisnis*, 71(1), 1–10.
- Nangin, M.A., Barus, I.R.G., & Wahyoedi, S. (2020). The effects of perceived ease of use, security, and promotion on trust and its implications on fintech adoption. *Journal of Consumer Sciences*, 5(2), 124–138. <https://doi.org/10.29244/jcs.5.2.124-138>
- Nelloh, L.A.M, Santoso, A.S., & Slamet, M.W. (2019). Will users keep using mobile payment? It depends on trust and cognitive perspectives. *Procedia Computer Science*, 161, 1156–1164. <https://doi.org/10.1016/j.procs.2019.11.228>.
- Ozili, P. K. (2018). Impact of digital finance on financial inclusion and stability. *Borsa Istanbul Review*, 18(4), 329–340. <https://doi.org/10.1016/j.bir.2017.12.003>.
- Payne, E.M, Peltier, J.W., & Barger, V.A. (2018). Mobile banking and AI-enabled mobile banking: The differential effects of technological and non-technological factors on digital natives' perceptions and behavior. *Journal of Research in Interactive Marketing*, 12(3), 328–346. <https://doi.org/10.1108/JRIM-07-2018-0087>.
- Purwanto, S., Hartini, S., & Premananto, G.C. (2019). The development and testing of technology acceptance models for consumers towards the intention to use E-wallet. *EKSIS*, 14(1), 55-61. <https://doi.org/10.2991/iciir-18.2019.11>.
- Putritama, A. (2019). The mobile payment fintech continuance usage intention in Indonesia. *Jurnal Economica*, 15 (2), 243–258.
- Raja, V.S.T., & Widoatmodjo, S. (2020). Faktor yang menentukan penggunaan financial technology secara berkelanjutan pada pengguna OVO di Jakarta Barat. *Jurnal Manajerial Dan Kewirausahaan*, 2(3), 828–837.
- Razzaque, A., Cummings, R.T., Karolak, M., & Hamdan, A. (2020). The propensity to use FinTech: Input from bankers in the Kingdom of

- Bahrain. *Journal of Information and Knowledge Management*, 19(1), 1–22. <https://doi.org/10.1142/S0219649220400250>.
- Ryu, H. (2018a). What makes users willing or hesitant to use fintech? The moderating effect of user type. *Industrial Management and Data Systems*, 118(3), 541–569. <https://doi.org/10.1108/IMDS-07-2017-0325>.
- Ryu, H. (2018b). Understanding benefit and risk framework of fintech adoption: Comparison of early adopters and late adopters. *Proceedings of the 51st Hawaii International Conference on System Sciences*, 3864–3873. <https://doi.org/10.24251/hicss.2018.486>.
- Sánchez-Torres, J.A., Canada, F.J.A., Sandoval, A.V., & Alzate, J.A.S. (2018). E-banking in Colombia: Factors favouring its acceptance, online trust and government support. *International Journal of Bank Marketing*, 36(1), 170–183. <https://doi.org/10.1108/IJBM-10-2016-0145>.
- Stasiak-Betlejewska, R., Parv, L., & Gliń, W. (2018). The influence of industry 4.0 on the enterprise competitiveness. *Multidisciplinary Aspects of Production Engineering*, 1(1), 641–648. <https://doi.org/10.2478/mape-2018-0081>.
- Stefanny, V. & Tiara, B. (2021). Overview perbandingan jumlah user fintech (peer-to-peer-lending) dengan jumlah pengguna internet di Indonesia pada masa pandemi Covid-19. *Insan Pembangunan Sistem Informasi Dan Komputer*, 9(1), 134–142.
- Wahab, R.A. (2016). Analisis perkembangan internet broadband di wilayah perbatasan Provinsi Sulawesi Utara. *Jurnal Penelitian Pos Dan Informatika*, 6(2), 201–226.
- Wang, Z., Guan, Z., Hou, F., Li, B., & Zhou, W. (2019). What determines customers' continuance intention of FinTech? Evidence from YuEbao. *Industrial Management and Data Systems*, 119(8), 1625–1637. <https://doi.org/10.1108/IMDS-01-2019-0011>.
- Wonglimpiyarat, J. (2017). FinTech banking industry: A systemic approach. *Foresight*, 19(6), 590–603. <https://doi.org/10.1108/FS-07-2017-0026>.
- Xiao, Q., Liu, H., & Feldman, M.W. (2017). How does trust affect acceptance of a nuclear power plant (NPP): A survey among people living with Qinshan NPP in China. *PLOS*, 1–16.
- Xu, Y., Chong, T.W., Krilavičius, T., & Man, K.L. (2015). Perceived benefits, risks and trust on online shopping festival. 225-235. 10.1007/978-3-319-24770-0_20.
- Sullivan, Y.W. & Kim, D.J. (2018). Assessing the effect of consumers' product evaluations and trust on repurchase intention in e-commerce environments. *International Journal of Information Management*, 39, 199-219.
- Zhong, R.Y., Xu, X., Klotz, E., & Newman, S.T. (2017). Intelligent manufacturing in the context of industry 4.0: A review. *Engineering*, 3(5), 616–630. <https://doi.org/10.1016/J.ENG.2017.05.015>.
- Zhou, W., Tsiga, Z., Li, B., Zheng, S., & Jiang, S. (2018). What influence users' e-finance continuance intention? The moderating role of trust. *Industrial Management and Data Systems*, 118(8), 1647–1670. <https://doi.org/10.1108/IMDS-12-2017-0602>.

Digital Source

Bank Indonesia. (2017). Ruang uji coba terbatas (regulatory sandbox) teknologi finansial (space for limited trial (regulatory sandbox) of financial technology). Jakarta: Bank Indonesia. Retrieved from <https://www.bi.go.id/licensing/helps/PADGREGSAND.pdf>.

Bazarbash, M. (2019). FinTech in financial inclusion: Machine learning applications in assessing credit risk. *In IMF Working Papers No. 19/109*. <https://doi.org/10.5089/9781498314428.001>.

E&Y. (2017). EY FinTech Adoption Index 2017-The rapid emergence of fintech. EY FinTech Adoption Index 2017. Retrieved from <http://www.ey.com/GL/en/Industries/Financial-Services/ey-fintech-adoption-index>.

Fintech News Network. (2020). Indonesia fintech report 2020. Singapore: Fintech News Network. <https://fintechnews.sg/45513/indonesia/indonesia-fintech-report-and-map-2020/>.

Jayani, D.H. (2019). Fintech P2P lending dan pembayaran tumbuh paling pesat. *Katadata.co.id*. <https://databoks.katadata.co.id/datapublish/2019/09/05/fintech-p2p-lending-dan-pembayaran-tumbuh-paling-pesat#>.

Jiwasiddi, A., Adhikara, C., Adam, M., & Triana, I. (2019). Attitude toward using fintech among Millennials. *WoMELA-GG*. <https://doi.org/10.4108/eai.26-1-2019.2283199>.

Other Sources

Harahap, B.A., Idham, P.B., Kusuma, A.C.M., & Rakhman, R.N. (2017). Perkembangan financial technology terkait Central Bank Digital Currency

(CBDC) terhadap transmisi kebijakan moneter dan makroekonomi. *In* Bank Indonesia.

Khozin, N. (2018). The impact of mobile payment and trust on consumer intention to use Go-Pay in Gojek (case study in The City of South Jakarta). *Skripsi*. Management Departemen, International Program, Faculty Economics and Business, State Islam University Syarif Hidayatullah.

Nizar, M.A. (2017). Financial technology (Fintech): It' s concept and implementation in Indonesia. Munich Personal RePEc Archive, No. 98486/ Issue 98486.

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