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The Impact of Perceived Risk and Trust on Consumer Intention to Use FinTech Payment in Indonesia

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ABSTRACT

FinTech rises as a faster, easier, and cheaper alternative to conventional financial products and services in Indonesia. The largest FinTech sub-segment in Indonesia is payment systems, representing over 30% of overall FinTech startup community. Consumer confidence and trust are essential to acquire and retain users and increase transaction volumes for FinTech companies. Therefore, in the expectation that a better understanding of factors that shape consumer behavior can promote the development of FinTech payment system, the goal of this research was to examine consumer perceived risks and trust in FinTech payment systems in Indonesia. The data generated from 175 respondents were analyzed using the Structural Equation Modeling (SEM). Using trust as the mediating variable, this research concludes that there is a significant relationship between perceived risk and intention to use Fintech payments. Perceived ease of use is also found to be the antecedent of trust. In addition to that, this study also suggests that consumer trust and intention have positive impacts on a good evaluation of FinTech payment with objective opinions on the future of FinTech payment.

Keywords: Fintech payment, perceived risk, trust, intention to use

1. Introduction

Financial Technology, more widely known as Fintech, has been rising as one of the most discussed topics on finance in recent years. FinTech commonly defined as companies that incorporate innovative technology to improve the delivery of financial services to customers. As a result of digital disruption, FinTech offers more personalized, efficient, and user-friendly products and services compared to the traditional financial services. FinTech companies can be classified into four segments according to their business models namely financing, asset management, payment system, and other FinTechs

(Dorfleitner et al., 2017). The growing role of FinTech in Indonesia happened simultaneously with rapid mobile Internet penetration growth in Indonesia. In 2016, there were 140 FinTech companies operating in Indonesia. This number had increased by 78 percent compared to the previous year (Indonesia Fintech Association, 2017). The majority of FinTech companies in Indonesia fall into the payment system segment. Since FinTech payment system is relatively new to the financial service consumer in Indonesia, it is often associated with some type of risks like security and privacy risks. The way consumer perceive risks in using FinTech payment system may influence their intention to use the services. Therefore, in the expectation that a better understanding of factors that shape consumer behavior can promote the development of FinTech payment system, the goal of this research was to examine consumer perceived risks and trust in

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FinTech payment systems in Indonesia.

Many research have been conducted to investigate the relationship between perceived risk and trust on consumer decisions to purchase products online (Hong & Cha, 2013, Ling et al., 2010; Lopez-Nicolas & Molina-Castillo, 2008, Suki & Suki, 2017). Some previous research focus on exploring consumer perceived risk and trust for online payment system (Roubah, Lowry & Hwang, 2016; Yang, Pang, Liu, Yen, and Tam, 2015). Although the literature that examine the relationship among perceived risk, consumer trust, and intention to buy is extensive, no research has been conducted of the aforementioned variables on the intention to use FinTech payment system, particularly in Indonesia. FinTech payment system is seen as a promising alternative to conventional payment system provided by banks or other financial institutions in accelerating financial inclusion in Indonesia. Thus, it is necessary to study consumer perceived risk and trust for FinTech payment system in the Indonesian context, in which percentage of bank account ownership is still low and cash payment is highly preferred over digital payment system.

The remainder of this article is organized as follows. Section 2 discusses literature review and theoretical foundations. The methodology used in this research is described in section 3, while data analysis and results are presented in Section 4. The final section provides conclusions and implications of the study as well as direction for future research.

II. Literature Review

A. Technology Adoption Models

Since FinTech is a combination of financial and technological product, hence it is relevant to analyze consumer intention from technology adoption models perspective. Early literature on the relationship between user beliefs, attitudes, and intentions include Theory of Reasoned Action, or TRA hereafter (Fishbein & Aizen, 1975), Theory of Planned Behavior or TPB hereafter (Aizen, 1991), and Technology Acceptance Model or TAM hereafter (Davis, 1989). TRA explains that consumer' intentions, which eventually generate their behavior, are influenced by consumers' beliefs. This study reveals that

attitude (towards performing behavior) and subjective norms (to perform behavior) determine consumer behavior. TPB extends TRA by incorporating perceived behavioral controls toward performing behavior as additional factor that can generate a person's actual behavior. This theory suggests that behavior can be deliberative and planned. TAM, also an adaptation of TRA, was designed for modeling acceptance of information technology (Davis, Bagozzi, & Warshaw, 1989). TAM predicts the likelihood of a new technology being adopted based on the user's perceived usefulness and perceived ease of use of that technology.

Venkatesh, Davis, Davis, and Morris (2003) proposed the unified theory of acceptance and use of technology (UTAUT), developed from eight prominent models to explain the acceptance and use of information system and information technology innovations. The eight models consolidated by Venkatesh et al. (2003) are TRA, TAM, Motivational Model (Davis, Bagozzi, & Warshaw, 1992), TPB, Integrated Model of TAM and TPB (Taylor & Todd, 1995), Model of PC Utilization (Thompson, Higgins, & Howell, 1991), Innovation Diffusion Theory (Moore & Benbasat, 1996), and Social Cognitive Theory (Bandura, 1996). In order to explain the variance in intention, UTAUT proposes four constructs, namely: (i) performance expectancy, (ii) effort expectancy, (iii) social influence, (iv) facilitating conditions, grouping similar earlier constructs. UTAUT also explores the role of four key moderating variables: gender, age, experience, and voluntariness of use. Venkatesh, Thong, & Xu (2012) extended the UTAUT model by adding three new constructs: (i) hedonic motivation, (ii) price value, and (iii) habit, and also dropping voluntariness of use from the moderating variable lists. UTAUT has been widely used to examine user's acceptance toward mobile technologies, such as Internet banking and mobile banking in Malaysia (Tan, Chong, Loh, & Lin, 2010), and on-line banking adaption in Oman (Riffai, Grant, & Edgar, 2012).

B. Perceived Risk

Perceived risk is an uncertainty faced by the customers when considering to purchase products or services, as a result of involving their subjective assessments into the decision making process (Murphy and Enis, 1986). In the context of electronic transactions, Kim et al. (2007)

defined perceived risk as consumer's belief about the potential uncertain negative outcomes from the online transaction. There are various types of risks discussed in the marketing literatures. Jacoby & Kaplan (1972) classified seven types of risks namely financial, performance, physical, psychological, social, time and opportunity cost risk. They also introduced the overall risk measurement as the general measure when all risks are evaluated together. Overall risk is referred as total risk in this paper. Physical risk is considered to be not relevant for electronic services (e-services) because there is no physical contact between the seller and the buyer. In the case of online shopping, (Bhatnagar, Misra, and Rao, 2000) identified the three predominant risks: financial risk, product risk and information risk (security and privacy risk). More specific to risk associated to electronic payment system, Yousafzai, Pallister, & Foxall (2003) mentioned economic risk, personal risk, functional risk, and privacy risks as risk factors that determine trust for e-banking. Lopez-Nicolas & Molina-Castillo (2008) argued that technical risk, delivery risk, and service risk are relevant in the context of e-commerce. Technical risk and delivery risk are basically part of security risk, so those risk are not considered as perceived risk facets in this paper. The following table shows the description and definition of risk facets.

Table 1. Description of Perceived Risk Facets

Perceived Risk Facet	Description
1. Economic Risk	"The potential monetary outlay associated with the initial purchase price as well as the subsequent maintenance cost of the product" (Grewal, Gotlieb, and Marmorstein,1994). Economic risk also includes the potential monetary losses because of payment sytem failure.
2. Functional Risk	Risk related to the stability and reliability of the payment system. Grewal et al., (1994) defined performance or functional risk as "the possibility of the product malfunctioning and not performing as it was designed and advertised and therefore failing to deliver the desired benefits"
3. Security Risk	The risk that the payment system or third parties are vulnerable to cyber attacks. (Penningto, Wilcox, Grover, 2003)
4. Privacy Risk	The risk that consumers' personal information being used without their permission due to negligence or illegal activities of FinTech payment system, third parties or others (Featherman and Pavlou,2003); (Veloutsou and Bian, 2008); (Yousafzai et al., 2003)
5. Time Risk	The risk of time wasted for doing research on products and services, making the bad purchasing decisions, and completing the payment process (Featherman and Pavlou,2003)
6. Service Risk	The risk that the payment systems provide low quality services (Lopez-Nicolas and Molina-Castillo, 2008)
7. Psychological Risk	The risk that the uncertainty in the payment system will have a negative effect on consumer's feeling (Featherman and Pavlou, 2003)
8. Social Risk	"Potential loss of status in one's social group as a result of adopting a product or service, looking foolish or untrendy" (Featherman and Pavlou,2003)
9. Total risk	"A general mesure of perceived risk when all criteria are evaluated together" (Featherman and Pavlou, 2003)

Based on that description above, this research propose the following hypothesis:

- H1.** Economic risk, functional risk, security risk, privacy risk, time risk, service risk, psychological risk, and social risk are multiple aspects of perceived total risk in FinTech payment system

C. Perceived Usefulness and Perceived Ease of Use

Perceived usefulness and perceived ease of use are derived from the Technology Acceptance Model (TAM). Davis (1989) proposed TAM to measure the quality of information system and its suitability to job requirements, therefore the acceptance and usage of information system can be predicted. Perceived usefulness is defined as the extent to which individuals believe that using a specific application system will enhance their productivity (Davis, 1989). In the case of e-commerce, Koufaris and Hampton-Sosa (2004) defined perceived usefulness as customer's subjective perception on website's function during their online shopping. Perceived Ease of Use (EOU) is defined as the degree to which a person believes that using a particular system would be free from effort (Davis, 1989). Geffen (2000) mentioned that perceived ease of use in-

dicates the cognitive effort required to learn and use new information technology. In relation to e-service, Kim and Forsythe (2008) found that perceived usefulness has a positive effect toward e-service. In addition to that, Featherman, Valacich, and Wells (2006) mentioned that perceived ease of use also has negative impact on perceived risk in the e-server. Thus, this research proposed the hypotheses as follows:

H2a. There is a negative relationship between perceived usefulness and consumer perceived total risk

H2b. There is a negative relationship between perceived ease of use and consumer perceived total risk

D. Trust

Due to its business nature, consumers face certain level of inherent risk when they are engaged in e-services. The absence of physical contact and new technology adoption services raises the uncertainty of e-services compared to offline services. Trust plays important role in dealing with the uncertainty in e-services. In the presence of trust, a person gains feelings of certainty and security towards other party (Rempel, Holmes, and Zanna (1985). Hong and Cho (2011) argue trust is a significant factor that determines online purchase intentions. Furthermore, Urban, Amyx, and Lorenzon (2009) found that the biggest obstacle to consumers in doing online transaction is the lack of trust.

There are no consensus among researcher regarding the relationship between perceived risk and trust. Murkherjee and Nath (2007) investigated that online trust can reduce perceived risk in the online retailing. In contrast, some research showed different results. Chen and Barnes (2007) suggested that there is a positive relationship between perceived risk and initial trust in e-commerce. Yang et al. (2015) concluded that perceived total risk is negatively related to trust in case of online payments in China. In the context of mobile banking, Kuisma, Laukkanen, & Hiltunen (2007) studied the relationship between individual value and resistance to Internet banking. The study found that consumers prefer ATM services to Internet banking due to Internet insecurity, inefficiency, and inconvenience. Perceived risk factors such as the possibility of consumers' passwords and lack of official receipts contribute to low level of consumer trusts. Rotchanakitumnuai and Speece (2003) explain that

perceived risks by corporate costumers in using Internet Banking provided by Thai banks affect trust, particularly among non-users. This research will test a hypothesized negative relationship between perceived total risk and trust.

H3. There is a negative relationship between consumer perceived total risk and trust

Previous studies have investigated the relationship between perceive usefulness and perceived ease of use and trust. Malhotra, Kim, and Agarwal (2004) argue that perceived ease of use is on of the contributing factor in building consumer trust in online shopping. Perceived usefulness and perceive ease of use in e-commerce reduce consumer's effort to control and monitor transactional process, hence increase the level of trust (Chircu, Davis, and Kauffman, 2000). Li, Hess, and Valacich (2008) mentioned perceived usefulness, perceived ease of use, and risk are elements of trust. The presence of trust has positive effect to intention to use online payments and also encourage consumers to do evaluation of online payment channels after they pick the best one. In accordance with the discussion above, this research suggest:

H4a. There is a positive relationship between perceived usefulness and trust

H4b. There is a positive relationship between perceived ease of use and trust

As a relatively new payment system alternative, consumers often compare FinTech based payment system to payment system offered by banks or other financial institutions. Yang et al. (2015) confirmed that in the case of online payment, perceived usefulness and perceived ease of use both have positive impact on comparison. As has been discussed previously, trust in e-services is positively associated with consumer intention. Thus, the positive relationship between those variables will lead to a positive evaluation towards e-services development. The conceptualizations above have directed the formation of the following hypotheses:

H5a. There is a positive relationship between perceived usefulness and comparison

H5b. There is a positive relationship between perceived ease of use and comparison

H6. There is a positive relationship between comparison and trust

H7. Perceived risk is positively related to intention to use FinTech payment system, mediated by trust

H8. Consumer trust and intention positively influence

the evaluation of FinTech payment system

III. Methodology

A. Procedure and data collection

Data were collected using an online survey and restricted to those who have used or is still using FinTech payment systems. Structured self-administered questionnaires were distributed to respondents with minimum age of 17. Convenience sampling method was used as data collection method among 176 respondents. After the data cleaning process, 175 responses were usable and one unusable response was excluded. The questionnaire was structured into three sections. First section covered respondents' demographic profile such as gender, age, monthly expenses. Second section comprised of questions detailed the independent, mediating, and dependent variables. The measurement of economic risk, functional risk, privacy risk, time risk, and psychological risk were adopted from Featherman and Pavlou (2003) and Veloutsou and Bian (2008). Last section asked respondents their experience on using FinTech payment system. Reference was made to Pennington et al. (2003) in developing items of security risk, where else questions on service risk, social

risk, and psychological risk were taken from Lopez-Nicolas & Molina-Castillo (2008). Items of trust and intention were adopted from McKnight and Chervary (2002), Mayer et al. (1995), and Jarvenpaa et al. (2000). Meanwhile, the questions of comparison and evaluation were derived from Yang et al. (2015). All measurement items were measured by using a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

B. Statistical technique

The data were analyzed using the Structural Equation Modeling (SEM) approach supported by Lisrel 8.51. SEM method is quite similar to multiple regression analysis, makes it suitable for exploratory research purposes. SEM is capable to model and estimate complex models with both latent and observed variables. Data requirements are also more relaxed in SEM, it accommodates non-normal data, small sample sizes, and formatively measured constructs (Hair, Sarstedt, Hopkins, and Kuppelwieser, 2014). This research apply a conceptual model of consumer perceived risk and trust proposed by Yang et al. (2015) as shown below:

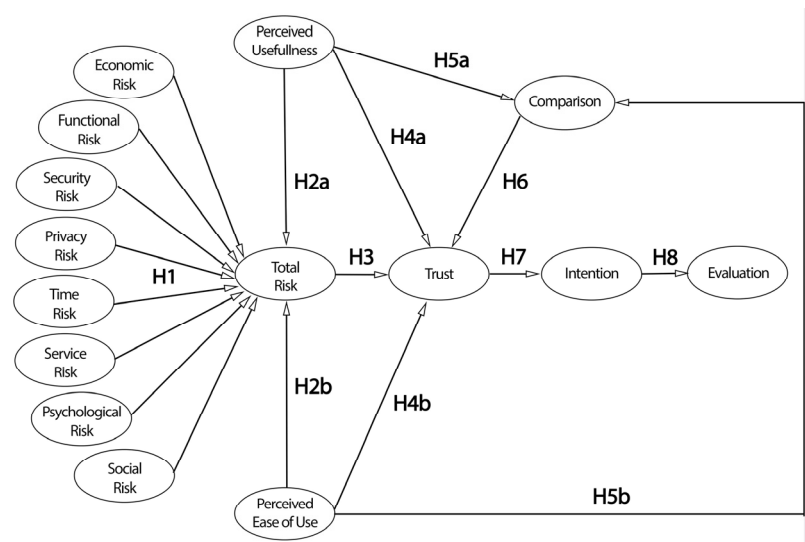


Figure 1. Research Model

IV. Data analysis and results

A. Descriptive statistics

Table 1 depicts the descriptive analysis of demographic characteristics of the respondents. Of those 175 participants in the sample, 57.7% are female and 42.3% are male. In terms of age distribution, more than half of the respondents were 35 years old and younger (84%). The remaining 16% of the respondents aged more than 36 years old. In the case of monthly income, 19.4% of the respondents spent less than Rp2 million per month, 42.9% spent between Rp2 million to 5 million per month, 20.6% spent between Rp5.000.001 to Rp10.000.000, and 17.1% spent more than Rp10 million per month.

Table 2. Sample Characteristics

Variable	Frequency	Percentage
<i>Gender</i>		
Female	101	57.7%
Male	74	42.3%
<i>Age</i>		
17-25	64	36.6%
26-30	37	21.1%
31-35	46	26.3%
36-40	20	11.4%
41-45	5	2.9%
>45	3	1.7%
<i>Monthly expenses</i>		
<Rp2.000.000	34	19.4%
Rp2.000.000-Rp5.000.000	75	42.9%
Rp5.000.001-Rp10.000.000	36	20.6%
Rp10.000.001-Rp15.000.000	14	8.0%
>Rp15.000.001	16	9.1%

Table 3 portrays the main purpose of consumer using FinTech payment system. The majority of the respondents (68.6%) chose FinTech payment systems to pay their transportation expenses. About 18.3% of the respondents paid their online shopping transaction via FinTech payment systems. Other purposes such as offline shopping, fund transfer, etc were chosen by less than 5% of the respondents each.

Table 3. The Main Purpose of Consumers using FinTech Payment

Variable	Frequency	Percentage
<i>Purpose of Using</i>		
Pay transportation expense	120	68.6%
Online store shopping	32	18.3%
Offline store shopping	8	4.6%
Fund transfer	6	3.4%
Top up phone credit	3	1.7%
Pay mandatory participation fees (universal health coverage, workers social security)	2	1.1%
Pay financial product bill (insurance, credit card, pension plan)	2	1.1%
Pay utilities bill (electricity, gas, water)	2	1.1%

B. Measurement properties

Research model was estimated using PLS-SEM approach that comprises two-stage data analysis: measurement model and structural model. The measurement model is used to test the validity and reliability of the measures. Table 4 displays the results of reliability and validity analysis. Reliability of the measurement items were examined via composite reliability (CR) and average variance extracted (AVE). Hair et al. (2009) stated that CR value has to be higher than 0.7 and the AVE should be higher than 0.5. The results showed that measurement items used in this study met all the reliability requirements. Validity was gauged by testing the standardized loading factors and t-values. Hair et al. (2014) suggested that factor loading should be greater than 0.5. Meanwhile, a research model is valid when the absolute value of the t-value is greater than or equal to 1.96 (two-sided test) and 1.65 (one-sided test). Table 4 shows that factor item for all loadings surpassed the threshold value.

Table 5 shows the goodness of fit analysis of the measurement model. This study used five indicators to test the goodness of fit namely: Chi-square and degrees of freedom, Root Mean Square Error of Approximation (RMSEA), Comparative Fit Index (CFI), Incremental Fit Index (IFI), and Goodness of Fit Index (GFI). The results for measurement model and structural model indicate a good fit to the data.

Table 4. Reliability and Validity Analysis

Variable	Items	Standardized loadings	t-values	Composite reliability	Average variance extracted
Economic Risk	ECON1	0.6	7.96	0.703127062	0.549909982
	ECON2	0.86	11.49		
Functional Risk	FUNCT1	0.61	7.54	0.731418832	0.576719577
	FUNCT2	0.58	7.19		
Security Risk	SECUR1	0.85	10.53	0.885423653	0.794733153
	SECUR2	0.93	15.32		
Privacy Risk*	PRIVACY1	1	n.a	1	1
Time Risk	TIME1	0.8	11.97	0.843338214	0.642737896
	TIME2	0.85	12.87		
	TIME3	0.75	11		
Service Risk*	SERVICE1	1	n.a	1	1
Psychological Risk	PSYCHO1	0.57	13.19	0.816316682	0.604570892
	PSYCHO2	0.86	12.69		
	PSYCHO3	0.86	14.54		
Social Risk*	SOCIAL1	1	n.a	1	1

Note: * anchor item

Table 5. Goodness of Fit Statistics

Goodness of Fit	Chi-Square (d.f.)	Chi-Square/d.f.	RMSEA	CFI	IFI	GFI
Good Model Fit		<3	<0.080	>0.9	>0.9	≈0.90
Measurement	231.12 (137)	1.69	0.06	0.95	0.95	0.88
Structural	669.70 (414)	1.62	0.06	0.92	0.92	0.81
Results		good fit	good fit	good fit	good fit	marginal fit

C. Test of the structural model

Table 6 shows the statistical results for the structural model, including standardized loadings and t-values. Based on those two indicators, all of the eight perceived risk facets had insignificant impact on total risk. Hence, H1 is not supported. The results were different from previous studies (Yang et al., 2015), which found economic, functional and privacy risk have significant affect toward total risk. This suggests that the consumers of FinTech payment system in Indonesia do not consider eight risk facets mentioned in this study when doing transactions. One possible explanation of this result is most of the respondents were 35 year and younger, commonly known as millennials. One of the most prominent characteristics of the millennials is they are digital natives. Prensky (2001) defined the younger generation, who were born between the early 1980s and the early 2000s, as the native

speaker of the digital language of computers, video games and Internet. Hence, Internet-based payment systems like FinTech payment are not new thing for the digital natives. In regards to trust, Hoffmann, Lutz, and Meckel (2015) stated that unlike digital immigrants, digital native did not critically weight the risks of a transaction against its benefits.

The relationship between perceived usefulness and total risk was also found to be insignificant, thus H2a is not validated. The previous explanation about respondents' characteristics can also justify this result. As digital natives, consumers have been using computers and Internet form an early age, thus the marginal utility of using FinTech payment system may not be as high as it is for the older generations. On the other hand, statistical results confirmed that perceived ease of use have negative effect to total risk as proposed in H2b. It confirmed previous study by Featherman, Valacich, and Wells (2006), which men-

Table 6. Structural Model Statistical Results

Hypo-thesis	Path	Standardized Loadings	t-values	Results
1	Economic risk -> Total risk	1.8	0.38	H1 Not supported
	Functional risk->Total risk	-2.88	-0.38	H1 Not supported
	Security risk -> Total risk	0.83	0.32	H1 Not supported
	Privacy risk -> Total risk	0.16	0.32	H1 Not supported
	Time risk -> Total risk	0.23	0.29	H1 Not supported
	Service risk -> Total risk	0.29	0.59	H1 Not supported
	Psychological risk -> Total risk	0.51	0.35	H1 Not supported
	Social risk -> Total risk	-0.26	-0.59	H1 Not supported
2a	Perceived usefulness -> Total risk	-0.01	-0.06	H2a Not supported
2b	Perceived ease of use -> Total risk	0.77	9.38	H2b Supported
3	Total risk -> Trust	-0.03	-0.5	H3 Not supported
4a	Perceived usefulness -> Trust	0.08	-0.6	H4a Not supported
4b	Perceived ease of use -> Trust	0.49	4.49	H4b supported
5a	Perceived usefulness -> Comparison	0.22	1.64	H5a Not supported
5b	Perceived ease of use -> Comparison	0.34	2.58	H5b supported
6	Comparison -> Trust	0.47	6.16	H6 supported
7	Perceived risk moderated by Trust -> Intention	0.8	9.22	H7 supported
8	Trust and Intention -> Evaluation	0.81	13.39	H8 supported

tioned that perceived ease of use has negative effect on perceived risk in the e-server.

The result of this study is in line with Morgan and Hunt (1994) which found no relationship between perceived risk and trust. Based on the statistical results, it is shown that perceived usefulness is not an antecedent of trust as previously mentioned by Gefen, Karahanna, and Straub (2003) and Erikson, Kerem, and Nilsson (2004). The possible explanation is that during the development stage of Fintech payment system in Indonesia, the nominal amount of transaction are limited compared to traditional payment system. This may also explain the lack of effect of perceived usefulness to comparison. The limitation on amount of transaction may also cause consumer were unable to compare FinTech payment sytems to other payment systems. However, perceived ease of use indicates a positive impact on both trust and comparison. The results are persistent to previous studies by Chircu (2000) and Li (2008).

Furthermore, comparison shows a positive impact towards trust as suggested by Yang et al. (2005). This suggests that the more consumers prefer to use FinTech payment compared to any other means of payment, the higher level of trust in FinTech payment. The negative

relationship between perceived risk and intention, with trust as mediating variable, were statistically significant. In line with Kim et al. (2008), which considered perceived risk as an important factor that influence purchasing decisions. Finally, consumer trust and intention are positively related to a good evaluation on FinTech payment as mentioned in Yang et al. (2015).

V. Conclusions

This research examined the relationship between perceived risk and trust in FinTech payments in the Indonesian context. Using trust as mediating variable, this research concludes that there is no significant relationship between perceived risk and intention to use Fintech payments. Perceived ease of use is found to be the antecedent of trust in FinTech payment. In addition to that, this study also suggests that consumer trust and intention have positive impacts on a good evaluation of FinTech payment with objective opinions on the future of FinTech payment. In regard to managerial implication, the results of this

study provide inputs for the FinTech companies to increase consumer intention to use FinTech payments. FinTech companies need to develop strategies to increase the perceived ease of use and build consumer trusts, hence consumers have higher intention to use FinTech payment. Most of the FinTech payment systems in Indonesia handle payment in small amount but high in frequency, daily transportation expenses, for instance. Consumer prefers to use FinTech payment system instead of other means because FinTech offers mobility and simplicity. Unlike Internet Banking or Mobile Banking that require several steps and open more than one application to complete the transaction, FinTech should make the payment steps less complicated in order to increase consumers' intention to use. FinTech companies should also emphasize the easy-to-use feature in their marketing campaign. In addition to that, this research also has policy implications with regards to financial consumer protection. The results of this study revealed that consumer perceived risks are not relevant in building trust and intention to use, which may indicate the lack of consumers' knowledge in risk embedded in FinTech products. Indonesia Financial Service Authority or OJK, as the authorized agency in charge of financial consumer protection, needs to conduct further study to examine consumers' knowledge of FinTech product risks. Low level of product knowledge could potentially lead to unfair practices against consumers.

The main limitation of this study is the small number of sample used due to limited number of potential respondents. FinTech payment is relatively new in Indonesia and only few people have used or are currently using the services. Therefore, as a recommendation for future research, larger number and more diverse sample will enrich the study of intention to use FinTech payment system. This study also shows that the relationship between common perceived risk facets (such as economic risk, security risk, etc) and total risk are not significant. The preliminary analysis regarding this finding related to demographic characteristic of the majority of the respondents. Hence, it is also suggested to explore the perceived risk facets from the digital natives perspective. Understanding the consumer behavior of different age groups is necessary to support the development of FinTech payment in Indonesia.

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