

INFORMATION TECHNOLOGY LITERACY AND INTENTION TO USE FINTECH IN MICRO BUSINESS ENTERPRISE: THE MODERATING ROLE OF PERCEIVED SECURITY

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Abstract : *The Fintech phenomenon is the delivery of financial products and services via the synthesis of technological platforms and innovative business models. Intention to use Fintech for business processes largely remains unexplored in the context of Micro Small and Medium Enterprise (MSME). Responden of this study are 130 owner of MSMEs in Palembang city, one of the provincial capitals in Indonesia. Data was collected with questionair using a field survey. The method applied for data analysis was partial least squares structural equation modeling (PLS-SEM). The result show that technology literacy are not associated with and intention to use fintech. However, other result confirm that perceived security has a moderating effect on the relation between technology literacy and intention to use fintech. This is consistent with the argument that small business owner assess the security of fintech firm taking into account in adopting fintech services.*

Keyword: *Information technology literacy, Intension to use, Financial technology, Perceived security.*

1. Introduction

Information and communication technology has become a major component that supports development in various fields, especially in the business world. Experts have recognized dramatic changes in business efficiency and productivity due to the use of information technology (Pratt 2002). In the scope of small businesses, information technology provides opportunities to increase competition, as well as a means to increase efficiency and effectiveness (Dinlersoz and Hernandez-Murillo 2004). Reduced costs, increased availability of computers and application programs, and increased access seem to make information technology a viable resource for many companies. However, small businesses are slow to adopt IT innovation, in contrast to their larger counterparts (O'Cass and Fenech 2002). As information technology develops and is supported by rapid internet penetration, there are a number of digital financial services that make it easier for the public to conduct transactions and to obtain financing. This digital financial service is called financial technology or Fintech.

In Indonesia, Micro, Small and Medium Enterprises (MSMEs) are expected to continue to develop in terms of quality and quantity by various parties, because of their important role in economic aspects. According to the Ministry of Cooperatives and Small and Medium Enterprises (2017), MSMEs have absorbed 96.71% of the workforce and contributed 61.41% in Gross Domestic Product (GDP). This shows that MSME has the potential to improve the Indonesian economy. One of the obstacles faced by MSMEs is capital. As many as 80.9% of the total micro-businesses in Indonesia do not yet have access to bank financing (KemenkopUKM, 2017). The emergence of Fintech can provide solutions to capital problems experienced by MSMEs. The Fintech company uses technology to make financial systems and financial services more

efficient. According to data from the Ministry of Cooperatives and Small and Medium Enterprises in 2018, the number of entrepreneurs in Indonesia increased from previously only 1.67% to 3.10% of the total number of Indonesian occupation. However, this number is still lower compared to entrepreneurs in Malaysia, which accounts for 6% of the total population and in Thailand 5% and Singapore 7%. Even Vice President of The Republic of Indonesia (republika.co.id, 2018) considers that there is an imbalance in the number of entrepreneurs compared to the Indonesian population. Indonesia is one of the countries with the largest population in the world. Antoni (2014) states that the big challenges are globalization and the development of communication and information technology. The use of the Internet as a medium for communication and transactions at various levels of business, manufacturing, MSME, financial and non-financial is an opportunity to be more competitive. Usniah and Alhifni (2017) concludes that sharia entrepreneurs have honest characteristics, do business fairly, are communicative, capable, happy to help customers, maintain consumer rights and fulfill zakat, infaq, and shadaqah. This means that Indonesian entrepreneurs has the strength of character strength to face competition in the business world and the use of information technology.

The key for MSMEs to compete in the global market is that entrepreneurs must be able to realize good management, accountable financial management, and authentic added value. Therefore literacy support becomes very important in running MSMEs. Aribawa (2016) (2016) found that financial literacy affects the performance and sustainability of small and medium-sized businesses. This shows that an entrepreneur must have adequate literacy skills so that the business he leads can compete. Financial literacy affects people's behavior such as managing finances (Lestari, 2015; Kiliyanni & Sivaraman, 2016) and saving behavior (Wildayati 2018). Financial literacy is a basic requirement for everyone to avoid financial problems and how to manage finances and techniques in investing with the aim of achieving prosperity (Lusardi and Mitchell 2007). The latest research from the Jakarta Social Systems Pulse Lab team (the conversation.com, April 26, 2019) involved 116 respondents both Fintech users and those not yet in Jakarta and surrounding areas. Three mental barriers for micro-entrepreneurs in adopting financial services, including those related to the use of Fintech, which are comfortable with cash, micro-entrepreneurs' perceptions of the purpose of savings products in banks, and the lack of digital literacy. This shows that mobile ownership is high among micro-entrepreneurs and does not make them feel n in adopting types of financial technology services. So digital literacy of businesses does not make them directly use fintech services.

Most behavioral intention research uses the Theory of Reasoned Action (TRA) which is a good general intention research model that can be applied in predicting and explaining behavior. According to TRA, the intention is a function of two basic determinants, one relating to personal factors and the other related to social influence (Fishbein & Ajzen, 1975). However, in this study, behavioral intentions are seen from the perspective of Kurt Lewin's Field Theory. Lewin views each individual as being in a psychological field of strength. The psychological force field in which the individual acts are called "life space" which includes the manifestation of the environment in which the individual acts. The living space consists of a personal and psychological environment. According to Lewin, motivation to change triggers personal learning so that changes in cognitive structure occur. Changes in the cognitive structure that is the result of two kinds of power, namely first, comes from the field structure of the psychological environment; second, comes from the needs and internal motivation of individuals. So the intention to behave is influenced by these two factors where the facts of the psychological environment and personal facts can influence each other.

Research on the effect of information technology literacy on behavioral intentions is still very limited and inconsistent. In the case of small businesses, information technology provides

opportunities for competition including increasing the effectiveness and efficiency of their business (Dinlersoz & Hernandez-Murillo, 2004; Pratt, 2002). Aweng (2016) research proves that information technology literacy has a positive effect on the intensity of e-village use when users feel the benefits of the system. On the contrary, Varma (2019) shows that perceived technical competence has no significant effect on fintech adoption. This was also found in a survey conducted by Chandra, Kristin, Suhartono, Sutarto, & Sung (2018) to users aged 17-30 concerning the adoption of mobile payments. They concluded that people who have the ability and knowledge of information technology do not guarantee to adopt an information system. This result leads to the presence of a factor that determines a person when deciding to use fintech services.

In adopting Fintech services, the problem that arises is how secure this service is security. These factors are crucial in the financial industry such as banking. Several studies have proven the role of perceived security of intentions to behave like online purchasing decisions (Raman, Arasu, and Viswanathan 2011), intentions of using mobile fintech (Lim et al. 2018), and adopting fintech (Stewart and Jürjens 2017). Raman, Arasu, and Viswanathan (2011), through a study conducted on online consumers in Malaysia, found that safety factors had a positive and significant relationship in influencing online purchasing decisions. The results of a German study by Stewart and Jürjens (2017) confirm that data security together with consumer trust and user design interfaces influence fintech adoption. Finally, Lim et al. (2018) show that knowledge and perceived security in mobile fintech services influence perceived usefulness. However, perceived security does not directly affect intention to use and user satisfaction. The purpose of this study is to examine the effect of mediators perceived security on the relationship between information technology literacy and intention to use fintech. This research has several contributions. First, the results of the study provide new insights into the factors driving the use of Fintech in running MSMEs. Second, this study provides evidence of the role of perceived security as a continuous factor in deciding the use of Fintech. This result has implications for Fintech companies to further enhance the security guarantee of the services they provide.

2. Teoritical Review

1) Intention to Use Model

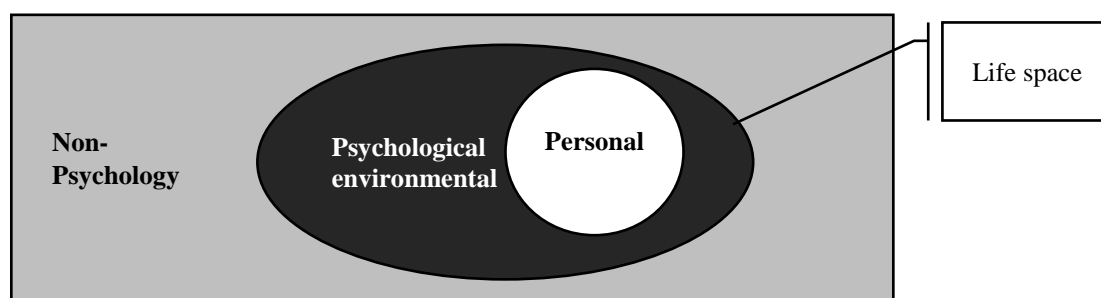
Intention, often also called motivation, is defined as the desire to conduct behavior. Intention are not always static. Intention can change over time (Hartono 2007). Behavioral intention and behavior are two different things. Behavioral interest is still an interest and not in the form of behavior, while Behavior is an actual action or activity carried out. Schiffman & Kanuk (2007) states that intention is something related to one's tendency to take any action or behave in a certain way. The intention to use a system is the user's intention to use the system continuously assuming that they have access to the system. Behavioral intention (behavioral intention) is defined as a measure of the strength of a person's intention to perform certain behaviors. In the basic concept of user acceptance models that have been developed, behavioral intention becomes an intermediary construct of the perception of the use of information technology and actual use (use behavior). The role of behavioral intention as a predictor of use behavior has been widely accepted in a variety of user acceptance models (Viswanath Venkatesh et al. 2003). The results of V. Venkatesh & Davis (2000), show that behavioral intention is a good predictor of the use of technology by system users.

2) Field Theory

According to Lewin (1951), human behavior must be seen in context. From physics, Lewin borrows the concept of the field to show the totality of forces that affect a person at a given

moment. Human behavior is not just a response to a stimulus, but the product of various styles that affect it spontaneously. Lewin called all psychological styles that affect humans as living space. Life space consists of individual goals and needs, all the factors that are realized, and self-awareness. Lewin made the formula $B = f(P, E)$, meaning that the Behavior is the result of the interaction between that Person with his psychological Environment.

Lewis views individual learners as being in a psychological field. When someone wants to achieve a goal, there are always obstacles that can be overcome by learning. Then the motive for overcoming that obstacle will appear is by studying learning material. If the obstacle has been overcome, then the learning goal has been reached and cognitive changes will occur. Thus he will enter into new fields and new goals, and so on.



Life space (field) contains all the possible facts that can determine individual behavior. Life space includes everything that must be known to understand the concrete behavior of individual humans in a particular psychological environment at a particular moment. Behavior is a function and living space. Non-psychological facts can and do change psychological facts. Facts in the psychological environment can also produce changes in the physical world. There is two-way communication between living space and the outside world that is permeability, but the physical world (outside) cannot be directly related to the person because a fact must exist in the psychological environment before it is influenced or influenced by the person.

According to Lewin, the person is heterogeneous, divided into separate parts although interconnected and interdependent. Personal areas are divided into cells. Cells that are adjacent to the conceptual area of the motor are called peripheral cells, cells in the center of the circle are called central cells. The motor system acts as a unit because usually, the land can do something at one time. Similarly, the perceptual system means that people can only pay attention to and perceive one thing at a time. The sections hold communication and are interdependent, cannot stand alone. The person is formulated as a separate area in the living space. Even though the person is surrounded by his psychological environment, he is not part of it. The psychological environment stops at the edge of the ellipse, but the boundary between the person and the environment is also impervious. This means that environmental facts can affect the person and personal facts can affect the environment.

3) Personal Factors: Information Technology Literacy

According to Field theory, changes in the structure of knowledge (cognitive structure) can occur due to repetition. But what is important is not that the test occurs, but rather that the cognitive structure changes. Literacy can change the structure of cognition and ultimately determine individual behavior. Several studies have reported the impact of financial literacy on saving intentions and saving behavior. Research Jamal, Ramlan, Karim, & Osman (2015) in

Malaysia found that financial literacy can predict saving behavior where financial literacy has a significant effect on saving attitudes. Badshah, Hakam, Khan, & Saud (2014) examined the relationship between financial literacy and short-term investment intentions on 46 potential investors in Pakistan. The results show that financial literacy has a significant effect on the intention to invest. Consistent with previous research, Manurung, Bramani, Ricky, & Darmanto (2018) found that financial literacy affects the intention to invest in the Indonesian capital market. These results indicate that there is a tendency if the higher a person's financial literacy, the higher his intention to invest in the capital market.

According to Syarifuddin (2014), to understand public literacy towards ICT, it must be known first various elements of knowledge, literacy experience, and other abilities that must be owned by the community. To measure the level of public literacy on information and communication technology, of course, it can be done from the level of introduction, use, and purpose of using information and communication technology along with its various elements. Rose (2007) defines the term technological literacy as an understanding of man-made works, the relationship between science, the environment and technology, the ability to use technology, especially in learning and teaching science and the ability to establish self-determination, and the ability to evaluate and make decisions.

It is known that aspects of digital literacy are inseparable from the attitude and ability to engage in constructive social life. Yusnimar (2014) argues that attitude is an internal ability that plays a role in taking action that is influenced by the assessment of profit and loss, good or bad, satisfying or not, from the actions taken. Attitude is also a tendency of learning to be able to choose something. Jones, Windsor, & Visinescu (2011) argue that IT literacy is more complex than described by the linear flow. Ignoring a system context can have an unfavorable impact on IT literacy. The basic pattern of a system is a high-level picture of the overall structure of a system that provides a theory of system behavior (Wolstenholme 2003). This basic pattern illustrates the "boundary for growth" structure that occurs in an effort to balance actual achievement with expected goals, the behavior is in the form of a balancing circle (Senge 1990). Interventions can be in the form of formal education or informal activities such as personal use of technology.

Nurjanah, Rusmana, & Yanto (2017) prove that digital literacy has a relationship with the quality of e-resources usage with a very high correlation category which means that digital literacy is a factor that determines the high quality of e-resources usage. A high relationship between digital literacy and the quality of the use of e-resources is a natural thing, because basically digital literacy is the ability to understand and use information in various formats originating from various digital sources displayed through computers, and e-resources themselves are information sources whose use requires a computer device that can be accessed both offline and online. So someone who has digital literacy capabilities can certainly access and use e-resources.

H1: Information technology literacy is positively related to intention to use Fintech

4) Psychological Environmental Factors: Percieved Security as a Requirement of Fintech Services

Kang (2018) believes that one of the important requirements for Fintech services is security. Because payment services are directly related to user assets, security is a requirement in Fintech cellular payment services. So that sensitive security information from users is not exposed to malicious attackers, cellular payment services must be built safely both in terms of hardware and software. Even if multiple payments have been made with the same payment

service, information about payment methods must not be exposed to unauthorized third parties. Likewise from during the use of the Fintech cellular payment service, information about users must not be disclosed. If a secure payment service is not provided, it can not only cause monetary damage to the user but also attack the user's privacy based on the payment information used by the user.

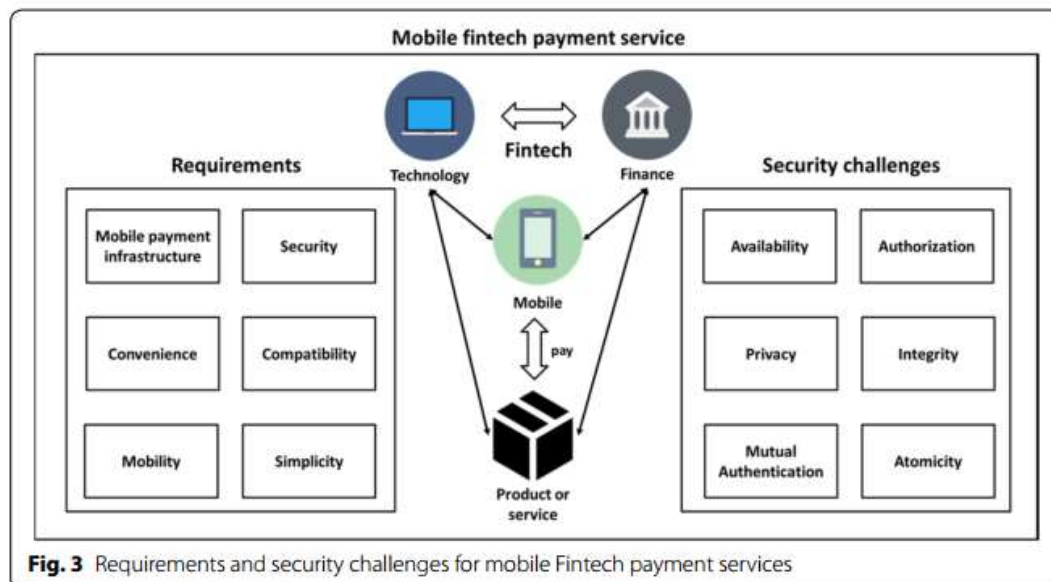


Figure 1. Requirements for Fintech mobile payment services (Source: Kang, 2018, p. 9)

Research in various countries proves the importance of perceived security in determining behavioral intentions. In Germany, the results of Stewart & Jürjens (2018) research confirm that data security, customer trust, and user interface design greatly influence the intention to adopt Fintech. These results can be used to improve the performance of Fintech's strategy and enable banks to achieve economies of scale for global intensity. Arpacı, Yardımcı Cetin, and Turetken (2015) examined senior management from 201 private sector organizations in Turkey. The results show that perceived security affects the adoption of smartphone organizations. Whereas the research of Salisbury et al. (2001) in America found that the higher level of accelerated web security would lead to greater intentions to buy products on the Web. Research in Spain, Roca, García, and de la Vega (2009) shows that online financial dealers and brokers must improve the security of the online system since e-investors form perceptions about perceived security and then increase trust which results in their increasingly liking using financial online services. Finally, the study of (Lim et al. 2018) shows that knowledge and perceived security in mobile Fintech services have a significant effect on user confirmation and new perceived benefits subsequently relate to intention using services.

As explained in the international standard for information security management systems (ISO 27002), data security is the confidentiality, integrity, and availability of data. This is also known as the CIA triad (ISO / IEC 27002, 2013). CIA triads have always been the business and industry standard in terms of data security; however, it is not appropriate to overcome the dynamics of rapid and continuous financial technological innovation. According to Whitman & Mattord (2009), data security is insurance of data and crucial assets, for example, equipment used for data collection, data storage, and transmission processes. Therefore, Whitman & Mattord (2009) include accuracy, legitimacy, usability, and ownership in data security measures.

From a critical perspective, these various definitions of data security requirements analysis. First and foremost, data protection must not be classified as a technology item or product, but rather as a process (Mitnick and Simon 2002). As demonstrated by Introna & Wood (2004), data security was previously considered technical; However, due to the massive utilization of computers and networks today, data security must go beyond a technical perspective. Safa et al. (2015) propose information security awareness for better understanding, familiarity, and capacity to manage and overcome crises. Werlinger, Hawkey, & Beznosov (2009) also include the human factor in the definition of data security, because the leaders and employees of the Fintech organization play a major role in securing data that will affect customer trust in Fintech services.

H2: Perceived Security affects the relationship between information technology literacy and intention to use Fintech.

3. Research Method

1) Data and Sample

The sample of this study was MSMEs in Palembang, one of the provincial capitals in Indonesia. Small businesses are defined as companies with no more than 100 employees (Igbaria et al. 2006). The owner and top manager of micro small business are usually the same people (Kuan and Chau 2001). The selection of samples using convenience sampling is chosen at the time of data collection. The number of samples is determined using the GPower application. The calculation includes $\alpha = 5\%$ with a confidence level of 95% and 3 independent variables. Based on the calculation results, the minimum sample is 120. However, the final result of data collection is 130 samples.

Data collection using a questionnaire with 5 Likert scales. Questionnaires were distributed in Palembang City in 5 areas. This region was chosen because there are many MSMEs. Respondents in this study are the owners of MSMEs. At the time of distributing the questionnaire, researchers came directly to the location of MSMEs and the owner directly filled out the questionnaire when given. This procedure makes the response rate very high so that the target sample can be achieved.

2) Measurements

Intention to use Fintech uses the concept of behavioral intention that is developed in intentional behavior. Behavioral intention is a desire (interest), someone, to do a certain behavior. Someone will do a behavior if you have the desire or interest to do it (Hartono 2007). The results of previous studies indicate that behavioral intention is the best predictor of the use of technology by system users. Intention to use fintech is a plan prepared by consumers to use Financial Technology in the future. The indicators of intention are the desire to conduct transactions shortly, the desire to conduct transactions, and the intention to conduct transactions in the future (Ling, Chai, and Piew 2010).

Information technology literacy is defined as the ability of self-reported use of computer hardware and software to express themselves, communicate with others and organizations, search and process information electronically, and engage in problem-solving activities masalah (Shelley, Thrane, and Shulman 2006). So information technology literacy is the ability to understand the completeness that follows technology such as hardware, software, and ethics in utilizing technology. Whereas in an online environment, security is defined as the ability of online company websites to protect consumer information and their financial transaction data is stolen during a relationship between them. While perceived security controls illustrate the extent to which an e-commerce website is considered safe and can protect other information from

potential threats. Indicators to measure consumer safety are data confidentiality and security guarantees (Raman, Arasu, and Viswanathan 2011).

3) Data Analysis

This research uses a structured equation modeling method with a partial least square (SEM-PLS) technique as a data analysis method while for data processing using WarpPLS software. This method was chosen because the focus of this research is exploration and prediction where SEM-PLS is better used than covariance-based SEM (CB-SEM). Also, consideration of choosing this method because of the relatively small number of research samples.

4. Results

1) Statistic descriptive

Table 1 shows the descriptive statistics of the research variables. Responden in the study were mostly women as much as 78.46%. Those who entered the MSME business were 54.62% under the age of 30 years. This shows that the interest to start a business from a micro-scale has emerged in young people. Owner of the MSME business has a good information technology literacy of 21.81 and the intention to use Fintech is quite high at 10.69. While the perceived security of Fintech services is at the moderate level of 23.04.

Table 1. Statistics Descriptive

Variable	Mean	SD	Min	Max
Literacy	21.81	2.39	11.00	25.00
Perceived Security	23.04	3.49	8.00	30.00
NFintech	10.69	1.94	3.00	15.00
Variable	Persen %			
Gender				
Male	21.15			
Female	78.46			
Age				
<30	54.62			
30-39	29.23			
40-49	10.77			
50-59	4.62			
>59	0.76			

2) Evaluation of Measurement Model.

To validate the measurement model, there are 3 types of validity assessed: content, convergent, and discriminant. Content validity shows the level of representation and comprehensiveness of items used to scale (Straub, Limayem, and Karahanna-Evaristo 1995). Content validity of measurements is needed to ensure consistency between measurement items and literature. Convergent validity is assessed using Cronbach Alpha, composite reliability and average variance extracted (AVE) for each construct (Barclay, Higgins, and Thompson 1995). The Cronbach alpha value and composite reliability must be higher than 0.7 (Nunnally and Bernstein 1994) while the AVE value must be greater than 0.5 (Fornell and Larcker 1981) to support convergent validity. Finally, discriminant validity is verified using the square root of

AVE. Supporting criteria is if the square root value of AVE for each construct must be greater than the correlation with other constructs.

Table 2. Initial Validity Test Results

Konstrak	Item	Factor Loading	CR	Cronbach Alpha	AVE
NFintech			0.872	0.779	0.694
	NP1	0.816			
	NP2	0.879			
	NP3	0.803			
Literacy			0.868	0.806	0.572
	LT1	0.878			
	LT2	0.557			
	LT3	0.821			
	LT4	0.736			
	LT5	0.752			
Perceived Security			0.901	0.867	0.606
	KA1	0.858			
	KA2	0.849			
	KA3	0.806			
	KA4	0.619			
	KA5	0.755			
	KA6	0.758			

Table 3. Final validity test results

Konstrak	Item	Factor Loading	CR	Cronbach Alpha	AVE	VIF
NFintech			0.872	0.779	0.694	1.334
	NP1	0.816				
	NP2	0.879				
	NP3	0.803				
Literacy			0.885	0.827	0.659	1.094
	LT1	0.876				
	LT3	0.815				
	LT4	0.774				
	LT5	0.778				
Perceived Security			0.908	0.873	0.665	1.415
	KA1	0.867				
	KA2	0.858				
	KA3	0.830				
	KA5	0.756				
	KA6	0.76				

Table 2 contains the results of the evaluation of the measurement model regarding validity and reliability. Cronbach's alpha values for all variables are above 0.7 so it can be concluded that the scale is reliable. The loading factor for all variables is above 0.7 except for LT2 and KA4

items. Therefore both items were deleted from the final questionnaire. After two items are deleted, the loading factor values for all items are above 0.7 and the CR and Cronbach Alpha values have increased. Average Variance Extracted (AVE) value is a measure of convergent validity. Table 3 shows that the AVE value for all variables is above 0.5 so it can be said that all questionnaires have convergent validity. Table 4 illustrates the results of the inter-construct correlation. The correlation results show that the size of the variance of each construct is greater than the size of the other variables.

Table 4. Correlation among laten variabels with square roots of AVEs

	Literacy	Perceived Security	NFintech
Literacy	(0.812)		
Perceived Security	0.104	(0.815)	
NFintech	0.042	0.50	(0.833)

Before structural models can be used, it is necessary to check collinearity (Sarstedt et al. 2014). A good model should be free from multicollinearity problems. Multicollinearity for all variables is examined using variance inflation factors (VIFs). Table 2 shows the VIF values for Literacy, Safety and Nfintech variables respectively 1,094, 1,415, and 1,334. These results indicate that the research model does not occur with multicollinearity problems.

Table 5. Output general result model

Criteria	Value	Results
Average path coefficient (APC)	0.190	p-value 0.006
Average R-square (ARS)	-0.133	p-value 0.030
Average adhjusted R-square (AARS)	0.119	p-value 0,041
Average block VIF (AVIF)	1.171	<3.3 very ideal
Average full collinearity VIF (AFVIF)	1.244	<3.3 very ideal
Tenenhaus GoF (GoF)	0.284	>=0.25 medium
Sympsom's paradox ratio (SPR)	1.000	=1 very ideal
R-square contribution ratio (RSCR)	1,000	=1 very ideal
Statistical suppression (SSR)	1,000	>0.7 accepted
Nonlinier bivariate causality direction ratio (NLBCDR)	1.000	>0.7 accepted

3) Evaluation of Structural Model

Table 4 shows whether the model used is fit to the specified criteria. The results explain that the general result model has a good fit, where P-values for average path coefficient (APC), Average R-square (ARS) and Average adjusted R-square (AARS) <0.05 with APC values = 0.190, ARS values = -0.133 and the AARS value = 0.119. While the results of the output show that the average block VIF (AVIF) and Average full collinearity VIF (AFVIF) produced are <3.3, which means there is no multicollinearity problem between indicators and between exogenous variables. The resulting GoF value is 0.284> 0.25 which means that the model fit is good. The SPR and RSCR indices produce a value of 1,000> 0.7 which means the model is ideal. While the SSR and NLBCDR values of 1,000 indicate that there is no causality problem in the model.

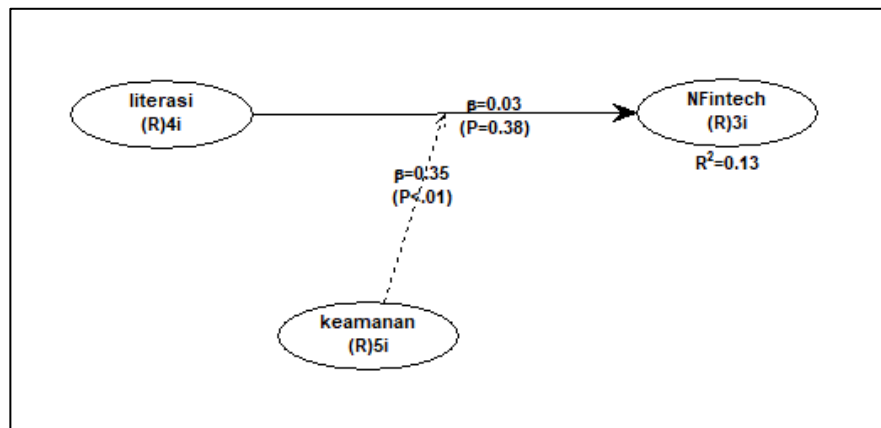


Figure 2. Results of structural models

The results of the structural model analysis are presented in Figure 2. The results show that information technology literacy has a positive coefficient but does not significantly influence the intention to use Fintech. This can be seen from the coefficient $b = 0.09$ with $p = 0.14$. Based on these results, hypothesis 1 is not supported. The interaction between information technology literacy and perceived security shows $b = 0.35$ with $p < 0.01$. This result supports hypothesis 2. So it can be stated that perceived security is a moderating variable for the relationship between information technology literacy and intention to use fintech. The results of structural analysis can be seen in table 5.

Table 6. Output PLS-SEM

Hipotesis	Path Coefficient	t-statistics	Hasil
H1: Literacy → NFintech	0.03	0.38	Not accepted
H2: Perceived security*Literasi → NFintech	0.35	<0.01	accepted

4) Discussion

The results of this study confirm that perceived security felt by MSME owners determines the intention to use Fintech. The results of this study are consistent with the studies of Stewart and Jürjens (2017), Arpaci, Yardimci Cetin, and Turetken (2015), Salisbury et al. (2001), Roca, García, and de la Vega (2009), and Lim et al. (2018). If Fintech services can provide confidence to entrepreneur that the business data that are there are safe, it will strengthen their confidence in using Fintech services. Conversely, if the sense of security for fintech services is low, the entrepreneur is reluctant to adopt fintech services.

Decision making is influenced by past experiences that have been embedded. This experience shapes a person's knowledge in decision making. However, one can ignore past experiences and choose actions that are more appropriate to the new social conditions and are relevant to the situation that is happening. This happens because someone feels the need to

change behavior to be able to adapt to the situation (Burnes, 2004; Lewin, 1951). Thus it can be said that a person's behavior is influenced by internal and external factors.

Information technology literacy as a person's internal factors is more subjective because it is more related to one's personality. External factors are more related to the influence of social conditions being faced. All of these things will affect the character and way of thinking of an individual who ultimately determines how the decision will be taken (Lewin, 1964; Moskowitz, 2004). Environmental psychology is very important in determining someone's intention to do something. Knowledge about technology is not enough to encourage someone using an application even though it can help someone run and develop their business. Perceived security for Fintech can strengthen the entrepreneur in SMEs to adopt financial technology in their business processes. Perceived security is very important in confirming personal knowledge and competence regarding the technology they have.

5. Conclusion and Implications

1. Conclusion

The results of this study indicate that the decision to use technology by entrepreneur is largely determined by the feeling of security from the business processes of Fintech companies. If the Fintech company can provide guarantees regarding data security or business processes of its customers, the intention of the SME owners to use fintech will be even greater. These results are consistent with Field's theory which states that the facts of the psychological and personal environment can influence and influence each other in determining individual behavior. The results of this study support this. Psychological environmental factors that are the perceived security of Fintech service companies become a contingency factor for entrepreneur in adopting the use of Fintech.

2. Implications

Limitations in this study are the characteristics of respondents as entrepreneur still not explicitly determined and the location of the study is still local. Therefore further research can consider this limitation in the research design. Besides, research can be developed by examining the context of small businesses using governance principles. This can enrich knowledge about the role of fintech in the business world. The implication of this research is how Fintech companies can provide security guarantees like a banking company. This is a challenge faced by the company Fintech because, in terms of funding or finance, the safety factor is always a decisive condition for consumers to use their products. In the financial industry, trust is the foundation of the parties concerned and a sense of security is the foundation of forming trust in business. Future studies can include other contingency factors such as trust to predict intentions of using Fintech services.

REFERENCES

- Adzkiya, Fina Auliya. 2017. “Pengaruh Orientasi Merek, Kepercayaan Dalam Membeli Online Dan Pengalaman Membeli Online Sebelumnya Terhadap Niat Pembelian Online.” Institut Agama Islam Negeri Surakarta.
- Antoni. 2014. “Muslim Entrepreneurship: Membangun Muslim Peneurs Characteristics Dengan Pendekatan Knowledge Based Economy.” *El-Hikam: Jurnal Pendidikan Dan Kajian Keislaman* 7 (2): 325–52. <http://ejournal.kopertais4.or.id/index.php/elhikam/article/view/1422%0Ahttp://ejournal.kopertais4.or.id/index.php/elhikam/article/download/1422/1021>.
- Aribawa, Dwitya. 2016. “Pengaruh Literasi Keuangan Terhadap Kinerja Dan Keberlangsungan UMKM Di Jawa Tengah.” *Jurnal Siasat Bisnis* 20 (1): 1–30. <https://doi.org/10.1007/s10006-013-0431-4>.
- Arpaci, Ibrahim, Yasemin Yardimci Cetin, and Ozgur Turetken. 2015. “Impact of Perceived Security on Organizational Adoption of Smartphones.” *Cyberpsychology, Behavior, and Social Networking* 18 (10): 602–8. <https://doi.org/10.1089/cyber.2015.0243>.
- Aweng. 2016. “Pengaruh Literasi Teknologi Informasi Perangkat Desa Terhadap Intensitas Penggunaan E-Desa.” *Fakultas Ekonomi Universitas Sanata Dharma Yogyakarta*. Universitas Sanata Dharma Yogyakarta. <https://doi.org/https://doi.org/10.3929/ethz-b-000238666>.
- Badshah, W., U. Hakam, A. S. Khan, and S. Saud. 2014. “Factors Effecting Short-Term Investment Intensions of Stock Investors in Pakistan.” *Management and Administrative Sciences Review* 3 (3): 464–69.
- Barclay, D., C. Higgins, and R. Thompson. 1995. “The Partial Least Squares (PLS) Approach to Causal Modeling: Personal Computer Adoption and Use as an Illustration.” *Technology Studies* 2 (2): 285–309.
- Burnes, B. 2004. “Kurt Lewin and the Planned Approach to Change: A Re-Appraisal.” *Journal of Management Studies* 41 (6): 977–1002.
- Chandra, Yakob Utama, Desi Maya Kristin, Joni Suhartono, Fina Shabrina Sutarto, and Minseol Sung. 2018. “Analysis of Determinant Factors of User Acceptance of Mobile Payment System in Indonesia (A Case Study of Go-Pay Mobile Payment).” In *Proceedings of 2018 International Conference on Information Management and Technology, ICIMTech 2018*, 454–59. IEEE. <https://doi.org/10.1109/ICIMTech.2018.8528182>.
- Dinlersoz, E. M., and R. Hernandez-Murillo. 2004. “The Diffusion of Electronic Business in the U.S.” St. Louis, MO.
- Fishbein, M., and I. Ajzen. 1975. *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*. Boston: Addison-Wesley Publishing Company.
- Fornell, C., and D.F. Larcker. 1981. “Evaluating Structural Equation Moels with Unobservable Vaiables and Measurement Error.” *Journal of Marketing Research* 18 (1): 39–50. <https://doi.org/http://doi.org/10.177/002224378101800104>.
- Hartono, Jogyianto. 2007. *Sistem Informasi Keperilakuan*. Revisi. Yogyakarta: Andi Offset.

- Igbaria, Magid, Nancy Zinatelli, Paul Cragg, and Angele L. M. Cavaye. 2006. "Personal Computing Acceptance Factors in Small Firms: A Structural Equation Model." *MIS Quarterly* 21 (3): 279. <https://doi.org/10.2307/249498>.
- Introna, L. D., and D Wood. 2004. "Picturing Algorithmic Surveillance: The Politics of Facial Recognition Systems." *Surveillance & Society* 2: 177–98.
- Jamal, A. A. A., W. K. Ramlan, M. R. A. Karim, and Z. Osman. 2015. "The Effects of Social Influence and Financial Literacy on Savings Behavior: A Study on Students of Higher Learning Institutions in Kota Kinabalu, Sabah." *International Journal of Business and Social Science* 6 (11): 110–19.
- Jones, Mary C, John C Windsor, and Lucian Visinescu. 2011. "Technology Literacy Revisited: An Exploratory Assessment." *Acm Inroads* 2 (2): 59–66.
- Kang, Jungho. 2018. "Mobile Payment in Fintech Environment: Trends, Security Challenges, and Services." *Human-Centric Computing and Information Sciences* 8 (1). <https://doi.org/10.1186/s13673-018-0155-4>.
- Kiliyanni, A. L., and S. Sivaraman. 2016. "The Perception-Reality Gap in Financial Literacy: Evidence from the Most Literate State in India." *International Review of Economics Education* 23: 47–64. <https://doi.org/https://doi.org/10.1016/j.iree.2016.07.001>.
- Kuan, K. K., and P. Y. Chau. 2001. "A Perception-Based Model for EDI Adoption in Small Businesses Using a Technology–Organization–Environment Framework." *Information & Management* 38 (8): 507–21.
- Lestari, S. 2015. "Literasi Keuangan Serta Penggunaan Produk Dan Jasa Lembaga Keuangan." *Jurnal Fokus Bisnis* 14 (02): 14–24.
- Lewin, K. 1951. *Field Theory in Social Science: Selected Theoretical Papers*. New York: Harper & Row.
- Lewin, K. 1964. *Resolving Social Conflicts & Field Theory in Social Science*. Washington, DC: American Psychological Association.
- Lim, Se Hun, Dan J. Kim, Yeon Hur, and Kunsu Park. 2018. "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*. <https://doi.org/10.1080/10447318.2018.1507132>.
- Ling, K. C., L. T. Chai, and T. H. Piew. 2010. "The Effects of Shopping Orientations , Online Trust and Prior Online Purchase Experience toward Customers ' Online Purchase Intention." *International Business Research* 3 (3): 63–76. <https://doi.org/https://doi.org/10.5539/ibr.v3n3p63>.
- Lusardi, A., and O. S Mitchell. 2007. "Baby Boomer Retirement Security: The Roles of Planning, Financial Literacy, and Housing Wealth." *Journal of Monetary Economics* 54 (4): 205–24.
- Mauludiyahwati, Septi. 2017. "Pengaruh Kepercayaan, Keamanan, Kualittas Pelayanan Dan Persepsi Risiko Menggunakan E-Commerce Terhadap Keputusan Pembelian Online." Universitas Negeri Yogyakarta.

- Mitnick, K., and W. L. Simon. 2002. *The Art of Deception: Controlling the Human Element of Security*. New York, NY: John Wiley & Sons.
- Moskowitz, G.B. 2004. *Social Cognition: Understanding Self and Others*. Edited by The Guilford Press. New York.
- Nunnally, J. C., and I. H. Bernstein. 1994. *Psychometric Theory*. 3rd ed. New York, NY: McGraw-Hill.
- Nurjanah, Ervina, Agus Rusmana, and Andri Yanto. 2017. “Hubungan Literasi Digital Dengan Kualitas Penggunaan E-Resources.” *Lentera Pustaka* 3 (2): 117–40.
- O’Cass, A., and T. Fenech. 2002. “Web Retailing Adoption: Exploring the Nature of Internet Users’ Web Retailing Behavior.” *Journal of Retailing and Consumer Services* 10 (2): 81–94.
- Pratt, J. H. 2002. *E-BIZ.COM: Strategies for Small Business Success (SBAHQ-00-C-0004)*. Washington, DC: Small Business Administration, U.S. Department of Commerce.
- Raman, Arasu, and A. Viswanathan. 2011. “Web Services and E-Shopping Decisions: A Study on Malaysian e-Consumer.” In *IJCA Special Issue on: Wireless Information Networks & Business Information System*, 54–60.
- Roca, Juan Carlos, Juan José García, and Juan José de la Vega. 2009. “The Importance of Perceived Trust, Security and Privacy in Online Trading Systems.” *Information Management and Computer Security* 17 (2): 96–113. <https://doi.org/10.1108/09685220910963983>.
- Rose, Annette Mary. 2007. “Perceptions of Technological Literacy among Science, Technology, Engineering, and Mathematics Leaders.” *Journal of Technology Education* 19 (1): 35–52.
- Safa, N. S., M. Sookhak, R. Von Solms, S. Furnell, N. A. Ghani, and Herawan T. 2015. “Information Security Conscious Care Behaviour Formation in Organizations”. *Computers & Security*. *Computers & Security* 53: 65–78. <https://doi.org/http://dx.doi.org/10.1016/j.cose.2015.05.012>.].
- Salisbury, W. David, Rodney A. Pearson, Allison W. Pearson, and David W. Miller. 2001. “Perceived Security and World Wide Web Purchase Intention.” *Industrial Management & Data Systems* 101 (4): 165–77. <https://doi.org/10.1108/02635570110390071>.
- Sarstedt, M., C.M. Ringle, D. Smith, R. Reams, and J. F. Hair Jr. 2014. “Partial Least Squares Structural Equation Modeling (PLS-SEM): A Useful Tool of Family Business Research.” *Journal of Family Business Strategy* 5 (1): 105–15. <https://doi.org/http://doi.org/10.1016/j.fbs.2014.10.002>.
- Schiffman, and Kanuk. 2007. *Consumer Behaviour*. 9th Edition, Upper Saddle River: Prentice-Hall.
- Senge, P. 1990. *The Fifth Discipline*. New York: Bantam Doubleday Publishing Group Inc.
- Shelley, M. C., L. E. Thrane, and S. W. Shulman. 2006. “Generational Differences in Information Technology Use and Political Involvement.” *International Journal of Electronic Government Research* 2 (1): 36–53.

- Stewart, Harrison, and Jan Jürjens. 2017. “Data Security and Consumer Trust in FinTech Innovation in Germany.” *Information and Computer Security*. <https://doi.org/10.1108/ICS-06-2017-0039>.
- Straub, D., M. Limayem, and E. Karahanna-Evaristo. 1995. “Measuring System Usage: Implications for IS Theory Testing.” *Management Science* 41 (8): 1328–42.
- Syarifuddin. 2014. “Literasi Teknologi Informasi Dan Komunikasi.” *Jurnal Penelitian Komunikasi* 17 (2): 153–64.
- Usniah, S., and A. Alhifni. 2017. “Karakteristik Entrepreneur Syariah Pada Usaha Mikro, Kecil, Dan Menengah (UMKM) Di Bogor.” *Jurnal Syarikah* 3 (1): 372–90.
- Varma, Ashish. 2019. “Fintech Adoption Choices of Small Businesses: A Technology Organization Environment (TOE) Framework Study.” *Accounting and Finance Research* 8 (2): 86. <https://doi.org/10.5430/afr.v8n2p86>.
- Venkatesh, V., and F. D. Davis. 2000. “A Theoretical Extension of the Technology Acceptance Model: Four Longitudinal Field Studies.” *Management Science* 45 (2): 186–200.
- Venkatesh, Viswanath, Michael G. Morris, Gordon B. Davis, and Fred D. Davis. 2003. “User Acceptance of Information Technology: Toward a Unified View.” *MIS Quarterly* 27 (3): 425–78. <https://doi.org/10.1006/mvire.1994.1019>.
- Werlinger, R., K. Hawkey, and K. Beznosov. 2009. “Anintegrated View of Human, Organizational, and Technological Challenges of IT Security Management.” *Information Management & Computer Security* 17: 4–19.
- Whitman, M., and H. Mattord. 2009. *Principles of Information Security*. Boston, MA: Course Technology.
- Wildayati. 2018. “Pengaruh Financial Behavior Dan Literasi Keuangan Terhadap Saving Behavior.” *Jurnal Elektronik REKAMAN (Riset Ekonomi Bidang Manajemen Dan Akuntansi)* 2 (1): 138–48.
- Wolstenholme, E. F. 2003. “Towards the Definition and Use of a Core Set of Archetypal Structures in System Dynamics.” *System Dynamics Review* 19 (1): 7–26.
- Yusnimar. 2014. “E-Book Dan Perpustakaan Perguruan Tinggi Di Jakarta.” *Al-Maktabah* 13 (1): 34–39.