

# The Effect of Perceived Usefulness and Perceived Easiness towards Behavioral Intention to Use of Fintech by Indonesian MSMEs

Astri Wening Perwitasari\*

Management Department, Universitas Internasional Semen Indonesia  
Kompleks PT. Semen Indonesia (Persero) Tbk, Jl. Veteran, Sidomoro, Gresik Regency, East Java 61122, Indonesia  
astri.perwitasari@uisi.ac.id

Received: 21<sup>st</sup> February 2021/ Revised: 21<sup>st</sup> April 2021/ Accepted: 22<sup>nd</sup> April 2021

**How to Cite:** Perwitasari, A. W. (2022). The effect of perceived usefulness and perceived easiness towards behavioral intention to use of fintech by Indonesian MSMEs. *The Winners*, 23(1), 1-9.  
<https://doi.org/10.21512/tw.v23i1.7078>

**Abstract** - The research aimed to test how are MSMEs acceptance towards financial technology (fintech). The number of MSME that using fintech is still need to be maximized. MSMEs were chosen as research object due to their numerous contribution in gross domestic product (GDP). Therefore, it was considered important to understand MSME's notion to use fintech in their business operation, which is well-known that financial technology could give a lot of services which may improve MSMEs performance. The research adopted the technology acceptance model (TAM) theory to determine the effect of the variable perceived of usefulness and perceived ease of use on behavioral intention to use fintech services by MSME entrepreneurs. Technology acceptance model had been the most widely applied model to measure and analyze a technology's use and acceptance. This descriptive quantitative research conducted the analysis using multiple linear regression tests on 60 respondents. Respondents were managers of MSMEs who use financial technology services in their business operations in any form. Classical assumption testing was carried out to meet the requirements of multiple linear regression analysis. The data met the criteria for multiple linear regression. The results reveal that perceived of usefulness and perceived ease of use variables simultaneously affect the behavioral intention to use financial technology services. Partially, perceived of usefulness affects behavioral intention to use, as well as the perceived ease of use affects behavioral intention to use financial technology services.

**Keywords:** technology acceptance model, fintech, MSME

## I. INTRODUCTION

Technology nowadays has developed rapidly and covered various fields. Finance is one of the fields that have been affected by technological developments. Fintech or financial technology currently has a decisive role in varieties of financial transactions. Indonesia currently is experiencing high growth in the fintech industry. Various types of fintech products provide specific financial services, making it easier for public to make transactions. This can be seen from the development of fintech lending, which increased in the accumulated amount of loans in December 2019, reaching a value of IDR 81,50 trillion, an increase of 259,56% YTD. The increase in the number of outstanding fintech lending loans in December 2019 reached IDR 13,16 trillion, an increase of 160,84% YTD. The number of lender and borrower accounts also increased. The number of lender accounts in December 2019 was 605.935 accounts, while borrower accounts reached 18.569.123 accounts ("Statistik fintech lending", 2020).

Fintech uses information technology developments to improve services in the financial industry (Napitupulu et al., 2017). Leong (2018) defines fintech as an innovative ideas which improve financial service process by proposing technology solutions according to different business situation. Fintech is a financial system supported by technology, including online funding, digital payments, or data processing with the help of artificial intelligence. With this technology, it is easy for consumers to access various digital financial services. The advancement of financial technology is in line with the development of smartphone and internet technology, which currently cannot be separated from daily activities (Asosiasi

Fintech Indonesia, 2018).

Fintech has started to develop in 1866 (fintech 1.0 era) where this development was still based on the development of infrastructure in the form of computers and networks. Furthermore, 1967 was the start of fintech 2.0 era, whose development began to focus on the internet and digitization, until era 3.0 entered in 2008. From 2008 until now, fintech has entered fintech era 3.0 to 5.0. In the 3.0 era, the development of fintech occurred rapidly with the development of smartphones (Napitupulu et al., 2017).

Bank Indonesia through Bank Indonesia Regulation No. 19/12/PBI/2017 about Implementation of Financial Technology) issued on 30 November 2017 divides the types of fintech into five categories, which are: 1) payment systems, 2) market support, 3) investment management and risk management, 4) loans, financing and provision of capital, and 5) other financial services (Harahap et al., 2017). Another categorization is carried out by Napitupulu et al. (2017), dividing fintech services into three major categories, namely: 1) payment and transfer, 2) alternative ending and financing, and 3) others.

The development of fintech products in Indonesia is currently quite large and rapid. Based on data by Financial Services Authority of Indonesia (OJK), as much as 22,6 trillion rupiahs of P2P (peer-to-peer) lending was disbursed during 2018 and experienced a significant increase in 2019, reaching 60,4 trillion rupiahs, almost three times the previous year. The number of borrower accounts has also increased, surprisingly reaching 4,3 million accounts in 2018, and increasing to 14,3 million borrower accounts in 2019 (DSResearch, 2019). Fintech digital payment services development is also interesting. A survey by DSResearch of 787 respondents stated that 82,7% of them understand and are familiar with digital wallet products. Some of the most frequently used digital wallet services in Indonesia include GoPay and OVO, with more than 80% of the total number of users on each platform. The Institute for Development of Economics and Finance (INDEF) predicts that P2P Lending can contribute up to 100 trillion rupiahs in Indonesia's GDP. In 2019 P2P Lending contributed as much as 60 trillion to GDP. Fintech is estimated to keep increasing in 2020. The estimated increase in 2020 is influenced by two factors, ease of transactions and increased Indonesian people's financial literacy. According to INDEF, the increase in financial literacy is from 29,07% in 2016 to 38,03% in 2019.

Data shows that in 2017 most fintech transactions are dominated by payment services, covering 32% of the total transactions using fintech. Investment through fintech is next with 17% coverage, followed by other fintech (blockchain, insurance, online trading, etc.) 16%, lending 15%, point of sales 11%, and crowdfunding 9% (DSResearch, 2019).

Fintech services certainly provides many benefits, one of which is its benefit for micro small medium enterprises (MSMEs). Payment and lending services in fintech helps MSME transaction efficiently.

Fintech-supported payment services make it very easy for consumers to make the transaction process faster and easier. Lending can also be used by MSME to meet capital requirements.

MSME is small business which meet some criteria in Indonesia's Law Number 20 of 2008 about Micro, Small and Medium Enterprises. MSME divides into three category, which are micro business, small business and medium business.

Micro business is a productive business owned by an individual and/or an individual business entity that meets the criteria for the maximum amount of assets of IDR 50.000.000 excluding land and buildings or has a maximum turnover of IDR 300.000.000. Small business is a productive economic business that stands alone, carried out by an individual or a business entity that is not a subsidiary or branch of a company that is owned, controlled, or is a part, either directly or indirectly, of a medium or large business that owns net assets between IDR 50.000.000 to IDR 500.000.000 excluding land and buildings or having annual sales proceeds between IDR 300.000.000 to IDR 2.500.000.000. Lastly, medium business is a productive economic business that stands alone, carried out by an individual or business entity that is not a subsidiary or branch of a company that is owned, controlled, or is part of either directly or indirectly with a small or large business with net assets between IDR 500.000.000 to IDR 10.000.000.000 excluding land and buildings or has annual sales proceeds of between IDR 2.500.000.000 to IDR 50.000.000.000.

The number of MSMEs in Indonesia in 2017 has reached 62.922.617 businesses and increased by about 2% in 2018 to 64.194.057 (Indrawan, 2019). The contribution of MSMEs to GDP reached 60% ("Sektor UKM terus didorong", 2019). MSME also have critical role on employment. It is stated that it supplies 99,8% of the country's employment and account more of 95% off all enterprises Indonesia (Maksum, Rahayu, & Kusumawardhani, 2020).

Safitri (2020) states that Indonesia's economy development is strongly influenced by the MSME. It will be a an important issue to developing IT-based MSME and optimally utilizing fintech, especially with the incessant cashless movement that Bank Indonesia suggested some time ago. Digital payment services are closely related to MSME products, such as ShopeePay, GoPay, and OVO. Data shows that GoPay is currently used in more than 370 cities in Indonesia with more than 360.000 small and medium business partners (Asosiasi Fintech Indonesia, 2018). According to Leong (2018), there are four major categories of fintech application, namely: 1) payment, 2) advisory service, 3) financing, and 4) compliance. McKinsey's released data indicate that digital activities can boost 10% of Indonesia's GDP in 2025 (Wibowo, 2017). Businesses in Indonesia play an essential role in the use of fintech by the community. If more businesses use or accept fintech in their transactions, it is possible that the use of fintech by consumers will undoubtedly increase.

Although some fintech services are predicted to provide benefits to MSMEs, in fact, maximizing the use of fintech still has to be pursued. The PwC survey concludes that around 74% of MSMEs could be targeted for fintech financing (Annur, 2019). This opportunity will certainly be achieved if MSMEs as the main object choose fintech lending as an alternative financing. This is not only applied to lending, but also payment services and other fintech services. In fact, optimizing the absorption of the use of fintech by MSMEs, will also requires the intervention of financial regulators in formulating rules or policies for implementing the use of fintech in Indonesia. According to Abubakar & Handayani, (2018), the current implementation of fintech regulations in Indonesia remains lacking, so it requires the responsiveness of regulators to deal with it.

It is very important to know the perceptions of fintech users, especially by MSMEs, given the various services provided by fintech for MSMEs. The research will explore MSMEs' behavioral intention in using fintech by adapting the technology acceptance model (TAM). It is a model to determine user acceptance attitudes towards technology. TAM is the most widely applied model to measure and analyze a technology's use and acceptance. According to Candra et al. (2020), TAM can be used to measure the level of acceptance and utilization of a consumer technology. In this research, TAM is used to analyze the acceptance of fintech by Indonesian MSMEs.

TAM uses a behavioral theory approach to the technology adoption process (Venkatesh, 2000). According to the TAM model, two factors determine user behavior perceived ease of use and perceived usefulness. The research use these two variables to see their effect on behavioral intentions to use financial technology services. TAM bases behavioral intention to use on two behaviours, namely perceived ease of use and perceived usefulness. It is believed that the perceived ease of use affects the perceive of usefulness since the easiness of technology will increase the useful itself (Venkatesh, 2000).

According to Davis (1989), perceived usefulness is the degree to which a person believes that using a particular system will improve their performance. This term is in accordance with the word "useful" whose definition is abilities to be used profitably. There are several indicators Davis (1989) used to measure the perceived usefulness of a system or technology, namely: 1) faster work, 2) job performance, 3) increase in productivity, 4) effectiveness, and 5) makes work easier and useful.

Perceived ease of use is the degree of a person's belief that using a particular system will be free from (or reduce) the effort it issues. The term is in accordance with the definition of the word "ease" (to make it easier), which means freedom from great difficulty or effort. Several indicators for measuring the perception of ease include are easy to learn, controllable, clear and easy to understand, flexible, easy to become proficient, and easy to use (Davis, 1989).

According to Agarwal & Karahanna, in Aditya & Wardhana (2016), behavioral intention is the desire or interest to carry out a particular behavior. Vijayasarathy (2004) shows that behavioral intention can be a good predictor of technology use. Candra et al. (2020) also states that behavioral intention is a significant determinant in the actual use of a system or technology. Basically, the intention to behave and actualization of behavior have a strong correlation. In this research, behavioral intention to use is the intention or interest to use fintech.

Some researchers had conducted studies with various TAM adoption models. One of them was by Aboelmaged & Gebba (2013) on the adoption of mobile banking usage. The result shows that perceived usefulness does not affect the decision to adopt or use mobile banking, and perceived ease of use does not influence mobile banking usage behavior in the United Arab Emirates. Lule, Omwansa, and Mwololo (2012), on mobile-banking adoption in Kenya, shows that the perceived usefulness variable does not affect adopting m-Banking use. However, the perceived ease of use affects the mobile-banking adoption decision in Kenya. Chuang et al. (2016) also conduct research on the adoption of fintech services in Taiwan, which reveals that perceived usefulness and perceived ease of use affect attitude toward using fintech.

The adoption of the TAM model in this study expected to predict the behavior of MSMEs acceptance of financial technology (fintech) services and be able to provide deeper information about this behavior for both fintech companies, users and regulators in the financial sector. Figure 1 shows the research model:

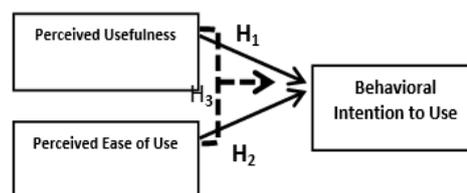


Figure 1 Research Model

Based on the theoretical basis that has been described, the hypotheses are:

- H<sub>1</sub> : There is an effect of perceived usefulness on behavioral intention to use fintech by MSMEs
- H<sub>2</sub> : There is an effect of perceived ease of use on behavioral intention to use fintech by MSMEs
- H<sub>3</sub> : There is an effect of perceived usefulness and perceived ease of use simultaneously on behavioral intention to use fintech by MSMEs

## II. METHODS

The research uses primary data by distributing questionnaires to respondents. Question item measures used Likert scale of 1 to 5. Scale 1 means strongly disagree, and scale 5 means strongly agree. The following are indicators of the variables which is used in the questionnaire:

Table 1 Variables and Indicators

No.	Variable	Indicators	Source
1	Perceived Usefulness (PU)	1. Speed up works 2. Effectiveness 3. Makes works easier 4. Helpful 5. Job Performance	Davis (1989)
2	Perceived Ease of Use (PEU)	1. Easy to Learn 2. Clear and easy to understand 3. Can be controlled 4. Easy to use	Davis (1989)
3	Behavioral Intention of Use (BIU)	1. Intention to always using 2. Prediction to continue using 3. Always try to use	(Hanggono et al., 2015)

The sample selection method is purposive sampling technique with the condition that the respondent is the manager or owner of MSMEs who understands and becomes a user of fintech in any form of service. Determination of the number of samples taking into account the opinion Sekaran and Bougie (2009) and Ferdinand (2002) that a sample size of more than 30 and less than 500 is appropriate for most studies. The number of samples is the number of indicators multiplied by 5 to 10. Therefore, the research uses 60 samples to meet the minimum requirements based on the arguments of previous researchers.

The research conducts validity test and reliability test. The validity test is carried out by testing the Pearson Product-Moment Correlation, namely by connecting each statement item score with the questionnaire's total score. A reliability test is used to see the consistency and reliability of the data collected. The research conducts the reliability test using Cronbach's Alpha.

The next step is classical assumption test. The classical assumption test is the test to see if the data meet multiple linear regression tests requirements. The tests are the normality test, multicollinearity test, heteroscedasticity test, and linearity test.

Hypothesis testing is conducted using a multiple linear regression test. The F-test is to see the variable's effect simultaneously. At the same time, the t-test is

conducted to see each variable's partial effect. The coefficient of determination is to see the extent of the independent variables' influence on the dependent variable.

## III. RESULTS AND DISCUSSIONS

Based on the collecting data process, there are 60 data that can be used for the next analysis. Table 2 is a summary of the respondent's data obtained.

Table 2 Respondent Descriptions

Based on Gender		
Men	26	43,33%
Women	34	56,67%
Based on Education Background		
Elementary-Junior High School Graduate	1	1,67%
High School Graduate	31	51,67%
Diploma/Bachelor	20	33,33%
Post graduate	8	13,33%
Based on the types of fintech that they use		
Payment	57	95%
Lending	3	5%
Based on the period of using fintech		
Less than 1 year	18	30%
1 – 2 years	31	51,67%
More than two years	11	18,33%

Respondents' descriptions based on the type of fintech used to refer to the financial technology service brand or financial technology service provider company. 57 respondents answered using fintech payment type using financial technology services such as OVO, GoPay, ShopeePay, and DANA.

Based on filling out the questionnaire by the respondent, each question item and variable has an average score as shown in Table 3.

Each variable has a high average score. The variable perceived usefulness with the item that fintech increases business productivity (sales) has the lowest average score (4,07). This result might happen because not all businesses entirely depend on fintech in their operations, so fintech might increase sales but not significantly. While the item accelerating transactions has the highest average score (4,42). Using fintech for various transactions only needs a smartphone. Which is now smartphone is an item that must be carried anywhere. Internet connection also develops better by continuously increasing the speed and expansion of the network.

The perceived ease of use variable with indicator ease of controlling gets the lowest average score (4,15). This result is due to the variety of

Table 3 Descriptive Analysis

Variables	Item	Statements	Average Item Score	Average Variable Score
Perceived Usefulness	PU1	Financial technology services help me make transactions in my business faster	4,42	4,27
	PU2	Financial technology services add to the effectiveness of my business (for example, payment transactions are safer or services can be used as I needed)	4,40	
	PU3	Financial technology services help make it easier for me to run a business (for example, online payment features (Go-Pay, OVO, etc.), online financial management services, online cashbook services, online credit, etc.)	4,28	
	PU4	In my opinion, financial technology services provide positive benefits for my business because of their various reliability (functions).	4,20	
	PU5	Financial technology services help my business in increasing productivity/sales. (For example, by using Go-Food / Go-Pay, OVO, Shopee Pay services to increase your sales)	4,07	
Perceived Ease of Use	PEU1	For me, using financial technology services is easy to learn (for example, there are instructions or access to how to use these financial technology services)	4,18	4,2
	PEU2	The financial technology services that I use are straightforward and easy to understand. (For example, because of the easy access and application display that is accompanied by clear instructions, hence it is easy to understand)	4,18	
	PEU3	I can control the financial technology services that I use (the use of financial technology services can be used according to my needs)	4,15	
	PEU4	In my opinion, the financial technology services that I use are easy to use for transactions	4,30	
Behavioral Intention to Use	BIU1	I still use financial technology services, even though there have been various changes in features or rules.	3,95	3,99
	BIU2	Once using financial technology services, there will be a desire to continue using them	3,83	
	BIU3	After knowing that there are various types of financial technology services, I feel like trying to make more use of them by adjusting their development to my business in the future	4,18	

services provided by different companies, so the use of one type of fintech in a particular company will have limited control over the service. For example, when using GoPay, transactions that consumers can make are related to transportation, food, medicine, etc. However, transactions such as buying clothes, bags, shoes, etc. will be more suitable if consumers use the ShopeePay platform. The ease of use indicator obtained the highest average score (4,30). Fintech users find fintech is very easy to use. This easiness is supported by sophisticated technology and user interface that support convenience. The appearance of fintech applications usually contains pictures and words that explain, accompanied by information or procedures for their user.

In the behavioral intention to use variable, the item with the lowest average score is the prediction to continue using fintech (3,83). Continued use of fintech is the lowest indicator might seem because of the

variety and specific fintech platforms, while technology continues to evolve. This might make some platform become obsolete to use. As it is now, online banking can almost be used for various types of transactions. Hence, it will be better for fintech product providers to meet consumers' needs and desires in using fintech services. The item always trying to use fintech has the highest average score (4,18). This might be caused by the variety of services and continuous development, so users still want to continue to use and find out the suitable product for their needs in using fintech.

Hypothesis testing begins by testing the research instrument, which is the questionnaire. The validity test used Pearson Product-Moment Correlation test by linking each item score with the questionnaire items' total score. Questionnaire items are declared valid if the significance value per item is  $< 0,05$  or the calculated r-value is more than the r-table value. Table 4 shows the results of the validity test processing.

Table 4 Validity Test

Item	r-calculated	r-table	sig.
PU1	0,827**	0,2542	0,000
PU2	0,772**	0,2542	0,000
PU3	0,829**	0,2542	0,000
PU4	0,854**	0,2542	0,000
PU5	0,734**	0,2542	0,000
PEU1	0,783**	0,2542	0,000
PEU2	0,888**	0,2542	0,000
PEU3	0,820**	0,2542	0,000
PEU4	0,853**	0,2542	0,000
BIU1	0,761**	0,2542	0,000
BIU2	0,698**	0,2542	0,000
BIU3	0,873**	0,2542	0,000

Based on the data processing results, each item's significance value is  $0,000 < 0,05$ , and the value of  $r\text{-count} > r\text{-table}$ , which means that the question items in the research instrument are valid.

The next instrument test is the reliability test by looking at the Cronbach Alpha value. In the testing process, whether reliable or not, the research instrument depends on Chronbach's Alpha value. If the Chronbach's Alpha value is more than  $> 0,6$ , the research instrument is reliable (Sujarweni, 2014). The results of data processing are provided in Table 5.

Table 5 Reliability Test

Reliability Test Result		
Cronbach's Alpha	N	Reliability
0,950	12	Reliable

Based on the processing results, the Cronbach Alpha value is 0,95 (more than 0,05), which means the instrument is reliable and can be used for further analysis.

The next step is doing classical assumptions test to meet the requirements of hypothesis testing with multiple linear regression. The classical assumption tests include normality test, multicollinearity test, heteroscedasticity test, and linearity test.

Normality test, as seen in Table 6, is done to see the distribution of data, whether it is distributed normally or not. Data normality is tested using the Kolmogorov-Smirnov test. Criteria for interpretation of test results is determined by looking at the significance value of the test. If the significance value is more than 0,05, the data is normally distributed. The data are normally distributed with a significance of 0,200.

The classical assumption for linear regression cannot be done if data has multicollinearity condition. Multicollinearity test is conducted by looking at the tolerance and VIF (variance inflation factor) values. It will determine the multicollinearity of the data. There

is no multicollinearity if the tolerance value is more than 0,10 or the VIF value is less than 10.

Table 6 Normality Test

One-Sample Kolmogorov-Smirnov Test	
	Unstandardized Residual
Asymp. Sig. (2-tailed)	0,200 <sup>c,d</sup>

Table 7 Multicollinearity test

Variable	Tolerance	VIF
PU	0,201	4,979
PEU	0,201	4,979

The regression's tolerance value between the independent and dependent variables is 0,201, which is more than 0,10. Table 7 shows that the VIF value is 4,979 or less than 10, which means no multicollinearity between variables.

Another assumption that needs to be fulfilled is heteroscedasticity-free among the variables. To make sure that there is no heteroscedasticity symptoms, tests are carried out using the Glejser test. The interpretation of the test results is taken by looking at the regression's significance value between the independent variables and the residuals' absolute value. The regression model does not experience heteroscedasticity symptoms if the test's significance value is more than 0,05. The results are shown in Table 8.

Table 8 Heteroscedasticity Test

Variables Regressions	Significance
PU*BIU	0,258
PEU*BIU	0,106

Both variables have a significance value of more than 0,05, which means there is no symptom of heteroscedasticity in the model.

The last step is linearity test to make sure that the data meet regression assumptions. A linearity test is carried out to see if there is a linear relationship between the dependent and independent variables. The research uses the SPSS test for linearity. It indicates a linear relationship if the test results in a significance value of more than 0,05. Table 9 shows the results of linearity testing with SPSS:

Table 9 Linearity Test

Variable	Significance
PU	0,603
PEU	0,517

a. Dependent Variable: Absolut\_RES

Each independent variable's significance with the dependent variable is more than 0,05, which means that there is a linear relationship between each independent variable and the dependent variable.

Lastly, regression test is conducted to determine the result of hypothesis test. The research uses multiple linear regression tests consisting of the F-test, t-test, and the coefficient of determination.

The coefficient of determination is the proportion in the dependent variable that the independent variable can explain. The coefficient of determination is indicated by the value of adjusted R-squared, which results from multiple linear regression testing. The greater the adjusted R2 value, the better the research model used. The results of data testing are provided in Table 10.

Table 10 Coefficient Determination

Model Summary <sup>b</sup>			
Model	R	R-squared	Adjusted R- squared
1	0,825 <sup>a</sup>	0,681	0,670

a. Predictors: (Constant), PEU, PU

b. Dependent Variable: BIU

The coefficient of determination is indicated by the adjusted R-squared value of 0,670, which means that the behavioral intention to use variable is influenced by the perceived usefulness and perceived ease to use variables by 67%, while other variables influence the other 33%.

The F-test determined whether the independent variables simultaneously significantly affect the dependent variable. The F test results are provided in Table 11.

Table 11 F Test

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	24,201	2	12,101	60,769	0,000 <sup>b</sup>
	Residual	11,350	57	0,199		
	Total	35,551	59			

a. Dependent Variable: BIU

b. Predictors: (Constant), PEU, PU

Table 11 shows the influence between the perceived usefulness and perceived ease to use together on behavioral intention to use. The two independent variables together affect the dependent variable if the test's significance value is less than 0,05 or the F-calculated value (60,77) is greater than the F-table (2,16). The test results show that the significance value is 0,000, less than 0,05, which shows a simultaneous

influence between the dependent and independent variables.

T-test shows how far the influence of one independent variable individually (partially) explains the dependent variable's variation. The test shows that each perceived usefulness and perceived ease of use affects behavioral intention to use. The independent variable is declared to significantly affect if the significance value is less than 0,05 or the t-calculated is more than the t-table, as seen in Table 12.

Table 12 T-test

Coefficients <sup>a</sup>					
Model		Unstandardized Coefficients	Standardized Coefficients	t	Sig.
		B	Std. Error		
1	(Constant)	0,094	0,365	0,257	0,798
	PU	0,517	0,188	0,459	2,749
	PEU	0,401	0,172	0,389	2,327

a. Dependent Variable: BIU

The test results shows that perceived usefulness affects the behavioral intention to use variable with a significance value of 0,008. Likewise, perceived ease to use has an effect on behavioral intention to use with a significance value of 0,024. This result is in line with the research by Chuang et al. (2016) regarding the adoption of fintech in Taiwan; Aditya and Wardhana (2016) regarding the adoption of the use of the instant messenger LINE application, and Handayani and Harsono (2016) regarding TAM on computerization of land activities.

The result is also in line with Singh et al., (2020) who state that perceived of usefulness is the key factor that positively influences intention to use fintech while perceived ease of use positively impacts the actual use. The equation obtained from this test is  $BIU = 0,094 + 0,517 (PU) + 0,401 (PEU)$ . It means if the value of perceived usefulness increases by 1, the value of behavioral intention to use will increase 0,517. If perceived ease of use's value increases by 1, the value of behavioral intention to use will increase 0,401. Therefore, perceived usefulness is effect more to behavioral intention to use than perceived ease of use.

The result means that financial technology services with more effective and easy-to-use benefits will encourage MSMEs to continue using financial technology services. There are currently various types of financial technology services that can be tailored to users' needs, in this case, MSMEs. The ease in using financial technology services is significantly supported by the rapid development of technology, making fintech programs easier for MSME operations.

Perceived usefulness is a variable that determines the usefulness of the functions presented by fintech. In relation to MSMEs in the research, the most commonly used service is payment services, which provide immediate and significant benefits for business owners, along with online sales today. Apart from being fast and easy, financial technology services in the form of payment are considered to increase MSME sales.

The perceived ease to use variable describes easiness financial technology services to use. Currently, fintech applications are remarkably easy to access and learn. This result is relevant with the research by Winarto (2020). He mentions that 75% of the respondents which are MSME in Batang, Pematang, and Pekalongan Regency agree that fintech is easy to use. A very attractive and easy user interface makes financial technology services very helpful and makes financial transactions easier for MSMEs. Sophisticated devices that support fintech applications are now considered more affordable for almost everyone.

The result should be an evidence for financial technology companies and regulators to attract MSME to adopt more financial services in their business operation. Regulators, aside from formulating the precise rule to just prevent unwanted event or effect from fintech, could also design rules which give benefits for MSME if they use fintech. As for fintech companies should design their product as the market needs. More useful and easy fintech product will increase MSMEs' intention to use. In terms of spreading information, fintech company together with regulators should provide more. With the more fintech literacy, MSME can transform their business process into the digital. Banding et al. (2020) show that only 2 of 15 MSME managers knows about financial technology and its benefits in Tarakan Regency. Tambunan (2019) also adds that there are some serious constrain which prevent MSME's development. Limited access to capital, difficulties in marketing, and lack of technologies skill are the main problems for MSME in development countries. These problem actually might be reduced if MSME are more well informed and understand fintech. Therefore, they can access efficient financial transactions.

#### IV. CONCLUSIONS

Behavioral intention to use fintech by MSMEs is influenced by perceived usefulness and perceived ease of use, both simultaneously and partially. MSMEs mostly use financial services in the form of payment. The benefits and ease of access to financial technology services influence MSMEs' attitudes to continue using fintech. The research contributes by providing the findings that Indonesian MSME will agree to use fintech in their business process if it gives benefits and ease of use. Thus, it can be an information for fintech companies to adjust their products and increase the ease of use of their fintech products. Easier user interface,

detailed information how to use the technology, and easiness to reach the technology can help increase the MSME's intention to use fintech. Fintech companies should also provide financial technology services that actually meet the needs of MSMEs. More benefit such as time and fee efficiency in transaction will attract MSMEs' attention to use fintech services.

The research also provides an equation to determine behavioral intention to use fintech by MSMEs, which is  $BIU = 0,094 + 0,517 (PU) + 0,401 (PEU)$ . If the value of perceived usefulness increases by 1, the value of behavioral intention to use will increase 0,517. If perceived ease of use's value increases by 1, the value of behavioral intention to use will increase 0,401. Therefore, perceived usefulness affects more to behavioral intention to use than perceived ease of use.

The research is limited due to the small number of the sample and taking financial technology as a whole technology. Further similar research can use more extensive and broader sample and use other variables to provide deeper analysis on the application of fintech in Indonesia in every type of financial technology services separately.

#### REFERENCES

- Aboelmaged, M. & Gebba, T. R. (2013). Mobile banking adoption: An examination of technology acceptance model and theory of planned behavior. *International Journal of Business Research and Development*, 2(1), 35-50. <https://doi.org/10.24102/ijbrd.v2i1.263>
- Abubakar, L. & Handayani, T. (2018). Financial technology: Legal challenges for Indonesia financial sector. *IOP Conference Series: Earth and Environmental Science*, 175. <https://doi.org/10.1088/1755-1315/2F175/2F1/2F012204>
- Aditya, R. & Wardhana, A. (2016). Pengaruh perceived usefulness dan perceived ease of use terhadap behavioral intention dengan pendekatan Technology Acceptance Model (TAM) pada pengguna Instant Messaging LINE di Indonesia. *Jurnal Siasat Bisnis*, 20(1), 24-32. <https://doi.org/10.20885/jsb.vol20.iss1.art3>
- Annur, C. M. (2019, June 28). Survei PwC: 74% UMKM belum dapat akses pembiayaan. *Katadata*. <https://katadata.co.id/desysetyowati/digital/5e9a5182d753a/survei-pwc-74-umkm-belum-dapat-akses-pembiayaan>
- Asosiasi Fintech Indonesia. (2018). *Fintech untuk Usaha Mikro Kecil Menengah tentang Asosiasi Fintech Indonesia*.
- Banding, M. P., Ashar, A., Juliana, A., Azis, M. I., & Thresia, Y. (2020). Financial technology for SMEs capital problems with crowdfunding method. *Media Ekonomi dan Manajemen*, 35(2), 150-163. <https://doi.org/10.24856/mem.v35i2.1503>
- Candra, S., Nuruttarwiyah, F., & Hapsari, I. H. (2020). Revisited the technology acceptance model with e-trust for peer-to-peer lending in Indonesia (perspective from fintech users). *International*

- Journal of Technology*, 11(4), 710-721. <https://doi.org/10.14716/ijtech.v11i4.4032>
- Chuang, L.-M., Liu, C.-C., & Kao, H.-K. (2016). The adoption of fintech service: TAM perspective. *International Journal of Management and Administrative Sciences (IJMAS)*, 3(7), 1-15.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *Management Information System Quarterly*, 13(3), 319-340. <https://doi.org/10.5962/bhl.title.33621>
- DSResearch. (2019). *Moving Towards A New Era In Indonesia's Financial Industry*. Fintech Report 2019. 1-10.
- Ferdinand, A. (2002). *Structural Equation Modeling dalam Penelitian Manajemen* (3<sup>rd</sup> Ed.). Fakultas Ekonomi Universitas Diponegoro.
- Handayani, W. P. P. & Harsono, M. (2016). Aplikasi technology acceptance model (TAM) pada komputerisasi kegiatan pertanahan. *Jurnal Economia*, 12(1), 13. <https://doi.org/10.21831/economia.v12i1.8415>
- Hanggono, A., Ragil, H. S., & Heru, S. (2015). Analisis atas praktek TAM (Technology Acceptance Model) dalam mendukung bisnis online dengan memanfaatkan jejaring sosial Instagram. *Jurnal Administrasi Bisnis Universitas Brawijaya*, 26(1), 1-9.
- 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*. (Working Paper WP/2/2017). Bank Indonesia. <http://publication-bi.org/repec/idn/wpaper/WP022017.pdf>
- Indrawan, R. (2019). *Sinergitas Pengembangan KUMKM melalui Penguatan Peran antar Lembaga*. Rapat Kerja Nasional. Kementerian Koperasi dan Usaha Kecil dan Menengah Republik Indonesia. <https://docplayer.info/156603042-Sinergitas-pengembangan-kumkm-melalui-penguatan-peran-antar-lembaga.html>
- Leong, K. & Sung, A. (2018). FinTech (financial technology): What is it and how to use technologies to create business value in fintech way? *International Journal of Innovation, Management and Technology*, 9(2), 74-78. <https://doi.org/10.18178/ijimt.2018.9.2.791>
- Lule, I., Omwansa, T. K., & Mwololo, T. W. (2012). Application of technology acceptance model (TAM) in m-Banking adoption in Kenya. *International Journal of Computing and ICT Research*, 6(1), 31-43.
- Maksum, I. R., Rahayu, A. Y. S., & Kusumawardhani, D. (2020). A social enterprise approach to empowering micro, small and medium enterprises (SMEs) in Indonesia. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(3). <https://doi.org/10.3390/JOITMC6030050>
- Napitupulu, S., Rubini, A., Khasanah, K., & Rachmawati, A. (2017). Kajian perlindungan konsumen sektor jasa keuangan: Perlindungan konsumen pada fintech. *Departemen Perlindungan Konsumen, Otoritas Jasa Keuangan*, 1-86.
- Safitri, T. A. (2020). *The Development of Fintech in Indonesia*. 436, 666-670. <https://doi.org/10.2991/assehr.k.200529.139>
- Sekaran, U. & Bougie, R. (2009). *Research Methods for Business: A Skill Building Approach* (5<sup>th</sup> Ed.). John Wiley & Sons, Inc.
- Sektor UKM terus didorong gunakan platform digital. (2019, January 24). *Indonesia.go.id*. <https://indonesia.go.id/narasi/indonesia-dalam-angka/ekonomi/sektor-ukm-terus-didorong-gunakan-platform-digital>
- Singh, S., Sahni, M. M., & Kovid, R. K. (2020). What drives FinTech adoption? A multi-method evaluation using an adapted technology acceptance model. *Management Decision*, 58(8), 1675-1697. <https://doi.org/10.1108/MD-09-2019-1318>
- Statistik fintech lending periode Desember 2019. (2020, January 31). *Otoritas Jasa Keuangan*. <https://www.ojk.go.id/id/kanal/iknb/data-dan-statistik/fintech/Pages/Statistik-Fintech-Lending-Periode-Desember-2019.aspx>
- Sujarweni, W. (2014). *Metode Penelitian: Lengkap, Praktis, dan Mudah Dipahami*. Pustaka Baru Press.
- Tambunan, T. (2019). Recent evidence of the development of micro, small and medium enterprises in Indonesia. *Journal of Global Entrepreneurship Research*, 9(1). <https://doi.org/10.1186/s40497-018-0140-4>
- Venkatesh, V. (2000). Determinants of perceived ease of use: Integrating control, intrinsic motivation, and emotion into the technology acceptance model. *Information Systems Research*, 11(4), 342-365. <https://doi.org/10.1287/isre.11.4.342.11872>
- Vijayasathy, L. R. (2004). Predicting consumer intentions to use on-line shopping: The case for an augmented technology acceptance model. *Information and Management*, 41(6), 747-762. <https://doi.org/10.1016/j.im.2003.08.011>
- Wibowo, P. (2017, February 01). Digital revolution: What it means for Indonesian business. *McKinsey & Company*. <https://www.mckinsey.com/featured-insights/asia-pacific/digital-revolution-what-it-means-for-indonesian-business#>
- Winarto, W. W. A. (2020). Peran fintech dalam usaha mikro kecil dan menengah (UMKM). *Jesya (Jurnal Ekonomi & Ekonomi Syariah)*, 3(1), 61-73. <https://doi.org/10.36778/jesya.v3i1.132>