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Factors Influencing Fintech Adoption Among MSME's in Bandung West Java Indonesia

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Abstract

The purpose of this study was to identify and quantify the factors impacting the adoption of fintech by micro, small, and medium-sized enterprises (MSMEs) in Bandung. The factors are perceived ease of use, perceived utility, financial literacy, user innovation, government assistance, and trust. Based on the data gathered, this study comprised 356 participants who are either performers or owners of Micro, Small, and Medium Enterprises (MSMEs) in Bandung. The correlation between variables is investigated in this study utilising the Partial Least Squares (PLS) data analysis approaches and SmartPLS v 3.2.9 software. The results of the study show that perceived simplicity of use, perceived usefulness, user innovativeness, and trust all have a major impact on Fintech acceptance. In contrast, financial literacy and government backing have no substantial impact on fintech uptake. This study emphasizes the importance of fintech service providers to prioritize ease of service and build trust..Then the government ought to accelerate the development of information and communication technology (ICT) infrastructure, such as expanding mobile broadband coverage and promoting Fintech companies through advantageous laws. Incorporating financial literacy into the school curriculum may help to reduce information asymmetry and improve financial accessibility, hence promoting the growth of MSMEs.

***Keywords:** Financial Technology, Fintech Adoption, Financial Literacy, Trust, MSMEs*

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INTRODUCTION

Fintech provides a wider range of users in offering financial services and a rapidly growing user base worldwide (Nugraha, D., Setiawan, B., Nathan, R., & Fekete-Farkas, 2022). The growth of Fintech users worldwide is expected to increase every year from 2017 to 2027 (Statista, 2023). The increase occurs in all industry segments. Worldwide Fintech users are expected to reach 5.62 billion by 2023, with 4.4 billion being in the digital payment space. There will likely be more than

7 billion Fintech users by 2027. The Fintech market's worldwide transaction value is also anticipated to rise, reaching a total of USD 4.5 trillion between 2023 and 2027 (Statista, 2023).

In Indonesia, Bandung, the capital of West Java province, is the third biggest city in Indonesia, Furthermore, internet users in Bandung City alone reached 2.1 million citizens or 85.2% of the city's total population (Diskominfo, 2023). The usage rate of digital payments in Bandung City is much higher than in other cities in Indonesia. This can happen because Bandung as the capital city of West Java Province has economic growth that exceeds the national average to reach 6.21% and digital investment in West Java Province is the highest. Then from 2020 to 2021 e-commerce transactions in Bandung also increased by 50.75%, where in 2020 it had a transaction value of IDR 266 trillion while in 2021 it became IDR 401 trillion (Ripaldi, 2022). The increase in MSMEs and digital trade transactions in Bandung City has increased rapidly, adding up to 180,000 new businesses and increasing digital trade by 150% (Ray, 2022). Therefore, the level of digital payment usage in Bandung City is higher than in other cities.

However, according to a report issued by the Asian Development Bank (2023) entitled Online Platforms, Pandemic, and Business Resilience in Indonesia, one of the challenges faced is the lack of adaptability and use of technology among some merchants who have low education and have business locations far from metropolitan areas. Furthermore, based on survey findings and observations from an ADB report, it is stated that MSME owners are unaware of or unable to access government assistance programs that can help them digitize their businesses, where the report also says that there is frustration or confusion about the procedures or requirements for registration (Iskandar & Elhan-Kayalar, 2023). In addition, according to the Ministry of Communication and Information of Indonesia, MSMEs in Indonesia that can do business online are only around 19 million business units or 29% of the total MSMEs of 64 million units (Rivaldi, S., & Dinaroe, 2022)Another barrier that makes the lack of adoption of Fintech by MSMEs in Indonesia is low financial literacy. According to a report issued by the World Bank Group (2021) Among demand-side obstacles to financial inclusion in Indonesia, inadequate financial literacy is the largest.

OJK's 2022 National Survey on Financial Literacy and Inclusion (SNLIK) indicates that Indonesia has a 49.68% financial literacy and inclusion index. With 98%, Malaysia 85%, and Thailand 82%, this number is still a long way from Singapore (Karunia & Pratama, 2021). Additionally, according to a report issued by the Boston Consulting Group (BCG), there are major barriers to Fintech adoption for Indonesians. The first is that there are too many applications to choose from. Users face initial challenges in choosing a suitable platform, due to the large number of choices and lack of differentiation (Apriliana, T., Gusni, G., & Farida, 2023). Users are concerned about security and safety when using apps. This concerns storing funds with non-traditional institutions, especially fintech providers (Kumar et al., 2023). Then there are higher fees compared to banks. According to a report by Boston Consulting Group (2023), users associate Fintech with higher fees and prefer to use cheaper alternatives provided by conventional banks.

Finally, Indonesians in the 31 to 40 age group have less understanding of Fintech. While people over the age of 40 do not know how to use or register on Fintech platforms and lack trust in Fintech By looking at studies from (Purnamasari, P., Pramono, I., Haryatiningsih, R., Ismail, S., & Shafie, 2020) MSMEs' intentions to embrace Fintech are directly impacted by perceived utility, perceived simplicity of use, government assistance, trust, and user innovation. Perceived utility within the technological framework thus has a considerable and favorable impact on MSMEs' propensity to embrace Fintech (Wulandari, A., Suryawardani, B., & Marcelino, n.d.). Then the study carried out by (Utami, 2023; Ketut et al., 2024) explains that MSMEs' inclination

to embrace Fintech is positively and significantly impacted by their perceptions of its utility and simplicity of usage. where the desire of MSMEs to embrace Fintech is positively impacted by trust. Users' confidence to embrace new technology may rise as a result of this trust's association with decreased fear. It is possible to significantly speed up MSMEs' access to finance in Indonesia by comprehending the elements that propel Fintech adoption. To create innovative strategies to support Fintech services and expand financial access near and under MSMEs' demands, policymakers may consider the factors driving Fintech adoption. By determining the relationship between perceived advantages, perceived ease of use, financial literacy, user innovation, government assistance, trust, and behavioral intentions in adopting Fintech across MSMEs in Bandung, this research's uniqueness may broaden the application of the Technology Acceptance Model (TAM).

According to Davis et al in (Rosadi, R., Bayuni, E., & Wijayanti, 2023) An Approach for forecasting user adoption of new technology is the Technology Adoption Model or TAM. When using this strategy, which Davis et al. initially presented in 1989, investigations are more likely to have strong validity. The goal of TAM is to characterize the elements that affect people's acceptance of computer usage in general. It also seeks to explain user behavior regarding various end-user computing platforms and user bases (Latifah, F., Ariyanti, N., Fauji, I., & Tiswanah, 2023). To what extent external circumstances influence interior beliefs, attitudes, and intentions is the primary goal of TAM. Fishbein's Theory of Reasoned Action (TRA), which TAM also draws upon, is a theory. Based on the premise that an individual's responses and interpretations will shape their attitudes and behaviors, the theory was developed. According to TRA, an individual's behavioral intentions to engage in certain behaviors determine whether they do so.

These intentions are determined by an individual's beliefs and subjective norms around the conduct in question (Dyatmika et al., 2023). In addition to perceived usefulness and perceived ease of use, this study expands on TAM (perceived usefulness and perceived ease of use) by including financial literacy, user innovativeness, government support, and trust. It does so by drawing on previous research and recommendations from Fintech practitioners in Indonesia.

Individual effort necessary to utilize new technology is known as perceived ease of use (Zheng & Li, 2020). Displays and user-friendly interface designs have been shown to support consumer engagement with financial services and hasten the adoption of new technologies, according to data from many studies (Mei, 2022). In addition, according to research by Shubhangi et al (2020), When it comes to Fintech services, usability makes a big difference. This is the theory that is presented based on previous research. The degree to which technology is seen to be beneficial is known as perceived usefulness. The continuation of the adoption of technology is significantly influenced by this characteristic (Ancillai et al., 2023). The research used perceived usefulness as a metric to assess how Fintech adoption might fulfill user requirements, including timesaving and profit-maximizing.

Earlier studies conducted by Ho, Y., Merollini, K., & Gordon (2023) have also shown a link between Fintech uptake and perceived usefulness. Furthermore, according to studies by R. Nathan et al (2022) In Vietnam, Fintech acceptance is heavily influenced by its perceived usefulness. User behavior towards a Fintech product or service may be influenced by how helpful and simple they consider it to be. Hence, the way the good or service is used and how it affects other people socially might be impacted by these behavioral intentions. Based on studies (Singh, S., Sahni, M., & Kovid, 2020) Adoption intention of Fintech services is positively impacted by their perceived usefulness. Furthermore, consistent with the findings the inclination to embrace Fintech is significantly influenced by perceived usefulness and perceived ease of use.

Based on studies carried by Dewi and Candraningrat (2022), When estimating the viability and performance of MSMEs, financial literacy is crucial. MSMEs with better financial literacy have a greater chance of having better performance and sustainability. For MSMEs, financial literacy is especially crucial since it enables them to obtain financial services, manage their money wisely, and make sound financial choices (Isnaeny, R., & Susilowati, 2023). In a research project led by Firmansyah et al (2022), findings indicate that a key factor influencing Fintech adoption is financial literacy. Accordingly, people are more inclined to use Fintech services if they have a greater grasp of financial ideas and goods. According to the report, usage of Fintech services may rise by enhancing financial literacy via educational and training initiatives. Moreover, studies conducted (Widagdo, B., & Sa'diyah, 2023) say that there is a strong and favorable correlation between MSME success and Fintech services and financial literacy.

Incorporating financial literacy variables into the Technology Acceptance Model (TAM) framework in this study has a strong basis for explaining the dynamics of Fintech adoption by MSMEs in Bandung. Financial literacy is an important variable because the adoption of financial technology depends not only on ease of use and perceived benefits but also on users' understanding of financial concepts and their ability to make the right financial decisions. In the Indonesian context, low financial literacy is often the main obstacle that prevents MSMEs from utilizing fintech services to the fullest. Adequate knowledge of digital financial products allows users to better understand the benefits and risks involved, thereby increasing positive perceptions of Fintech services.

The disposition to investigate novel technologies, take up cutting-edge technology as early adopters, and be keen to test out Fintech services is known as user innovation (Desiyanti, R., Husin, N., Elvira, R., Sefnedi, S., Putri, T., & Chrismondari, 2023). earlier studies carried by Setiawan et al (2021), said that a key indicator of the acceptance of fintech in Indonesia is user creativity. More inventive people are more inclined to utilize Fintech services, according to the research, which indicated that user invention has a favorable and substantial influence on Fintech adoption. The study of also reveals the same finding (Rasjid, 2022), it indicates that MSMEs' inclination to embrace Fintech is positively impacted by user innovation. Enhancing behavioral intents and increasing consumers' e-loyalty toward FinTech services are the results of personal innovativeness, which has a strong influence on performance expectation and effort expectancy (Alkhwaldi et al., 2022).

In addition, government support plays an important role in creating a conducive ecosystem for the adoption of new technologies. The government can act as a facilitator through the development of digital infrastructure, providing incentives, and removing complex regulatory barriers. In Indonesia, challenges such as limited telecommunications access in remote areas and the complexity of the digital service registration process often hinder MSMEs from adopting Fintech. Strong government support can increase MSMEs' trust in the security and stability of Fintech services, which in turn accelerates the adoption of the technology. By integrating these two variables, this study not only expands the scope of the classic TAM model but also captures the socio-economic dimensions that are important in understanding the external factors that influence MSMEs' adoption of financial technology.

To provide support, governments can make sure Fintech solutions meet safety and soundness standards, create a legal and regulatory framework that is "digital-ready" by lowering administrative hurdles and regulatory complexity, facilitate the effective implementation of digitization solutions, and offer tax breaks and grants to promote the mobility of digital talent (Ferli, 2023). As stated by Nugraha et al. (2022), The term "government support" describes the

actions taken by the government via regulatory sandboxes to enhance the creation of a conducive environment for the Fintech industry. A portion of the link between awareness and Fintech adoption may be mediated by government assistance (Malokani, 2023). Then, by creating an enabling environment through government policies and partnerships with the private sector and international organizations, it can significantly increase Fintech adoption and financial inclusion (Danladi et al., 2023). According to Kulshrestha (2023), to properly use fintech and enable people to make wise financial choices and use digital financial services, financial literacy is a crucial component. Fintech platforms can improve financial literacy by providing easily accessible financial education and training programs, which in turn encourage responsible financial behavior (Kulshrestha, 2023).

A major factor in the growth of fintech is government assistance. Government backing also has a favorable effect on Fintech uptake, according to several studies (Chinnasamy et al, 2019). A key element in the growth and uptake of Fintech is customer innovation combined with government support. As stated by Bureshaid et al (2021), Customers of banks that want to utilize Fintech services are directly impacted favorably by user innovation and government support. Similarly, Shellyna et al (2022) found that sentiments regarding the desire to embrace Fintech are significantly influenced by user innovation and support from the government. But according to research done by Wijayanti et al (2021), A couple of key elements impacting the uptake of Fintech services in Indonesia are user innovation and government support. The findings of this research indicate that the desire to embrace financial literacy is positively impacted by user innovation directly, and indirectly by government support.

For financial services, trust is the cornerstone. Trust is associated with less worry when it comes to adopting new technologies, which in turn boosts customer confidence (Nugraha et al, 2022). In the context of Fintech, trust is closely related to data privacy and financial transactions. Trust, then, plays a crucial role in the uptake of technology and financial services. Considering earlier studies were out by Nugraha et al (2022), The desire of MSMEs to embrace Fintech is positively impacted by trust. Additionally, based on Wijayanti et al (2021), The desire of Fintech users in Indonesia to adopt is significantly impacted by the trust. In the rapidly evolving digital era, the adoption of financial technology (Fintech) has become a crucial aspect in supporting the growth of Micro, Small, and Medium Enterprises (MSMEs). The figure 1 is a conceptual framework of this study examine the hypotheses.

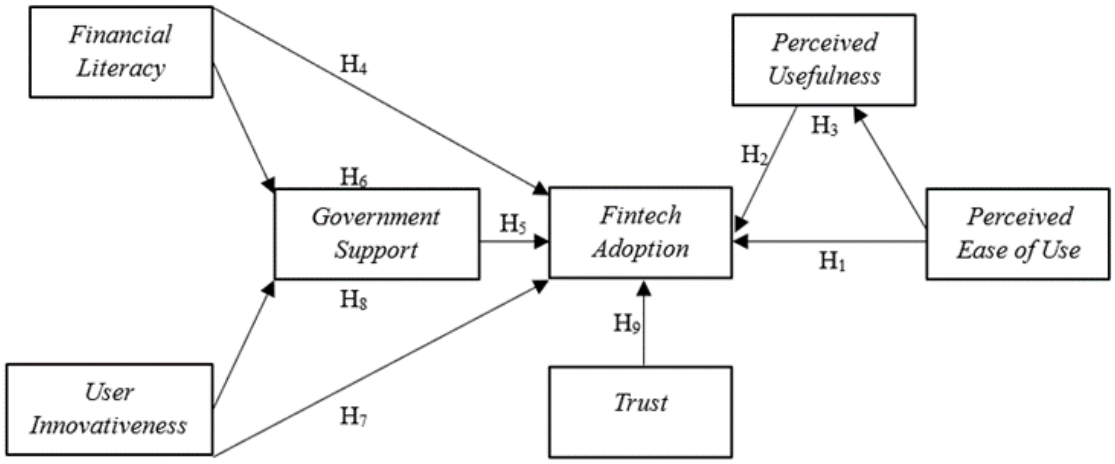

Figure 1. Conceptual Framework
Source: Processed data, 2024

This study examines the mediating functions that government support and perceived usefulness contribute. The purpose of this study is to learn more about the features that MSMEs in Bandung deem vital while implementing Fintech. Based on the background, phenomena explained and research framework, the hypotheses formed in this study are as follows:

H_1: Perceived Ease of Use has a significant positive effect on fintech adoption by MSMEs in Bandung.

H_2: Perceived Usefulness has a significant positive effect on fintech adoption by MSMEs in Bandung.

H_3: Financial Literacy has a significant positive effect on fintech adoption by MSMEs in Bandung.

H_4: User Innovativeness has a significant positive effect on fintech adoption by MSMEs in Bandung.

H_5: Government Support has a significant positive effect on fintech adoption by MSMEs in Bandung.

H_6: Trust has a significant positive effect on fintech adoption by MSMEs in Bandung.

H_7: Perceived Usefulness mediates the relationship between Perceived Ease of Use and fintech adoption.

H_8: Government Support mediates the relationship between Financial Literacy and fintech adoption.

H_9: Government Support mediates the relationship between User Innovativeness and fintech adoption.

RESEARCH METHOD

This research used the quantitative research approach known as Structural Equation Modelling or SEM. The statistics employ a deliberate sampling method using criteria like MSME owners in Bandung and proficiency with Fintech services. Fintech specialists and SMEs provided support in obtaining the sample. For rating the concept variables, a 5-point Likert scale was used, ranging from 1 (strongly disagree) to 5 (strongly agree) (Susantri & Nasution, 2023). Every respondent was defined by adhering to some rules. It was argued that using as small sample size would help prevent bias in SEM findings. As mentioned by, for instance, (Hair et al.2022), The minimal sample size for an unknown population is 145 respondents, which may be computed by multiplying by 5.22 indicators + 7 latent factors after adding indicators and latent variables. It is also necessary to have 160 respondents based on the G-Power software technique, which is powered at an estimated 0.80 with a 95% confidence level. There were 356 more responders than the minimum sample size needed.

The study employed the PLS-SEM technique to examine the factors that drive Fintech adoption. Specifically, the TAM model (perceived ease of use and perceived usefulness) was expanded to include exogenous variables like financial literacy, user innovativeness, government support, and trust, as illustrated in Figure 1. The research comprises two evaluation phases: first, the measurement model is examined via the construct validity and reliability of every indicator; subsequently, a model fit is used to investigate the causal relationship between latent variables. The construct variable and indicator item question items are shown in Table 1.

The sample size selected in this study, namely 356 respondents, has met the criteria recommended in the Partial Least Squares Structural Equation Modeling (PLS-SEM) analysis method. Based on the guidelines of Hair et al. (2022), the minimum sample size can be calculated

by considering the number of indicators and latent variables in the model. In this study, the research model uses seven latent variables with a total of 22 indicators, so the minimum recommended sample size is 145 respondents. In addition, calculations using G-Power software with a confidence level of 95% and a test power of 0.80 indicate a minimum requirement of 160 respondents. With an actual sample of 356 respondents, this study has exceeded this minimum limit, providing sufficient statistical power to test the relationship between variables and ensure the reliability of the results.

Table 1. Operational Variable

No	Construct Veriable	Indicator	Indicator Code
1	Percieved Ease of Use	Using Fintech services is convenient	PEU1
		The Fintech services used by my company are easy to understand or user-friendly	PEU2
		My business has the tools to use Fintech services (mobile phone, app, WIFI, etc)	PEU3
2	Financial Literacy	I have some knowledge about interest rates	FL1
		I have some knowledge about inflation	FL2
		I have some knowledge about risk diversification	FL3
3	User Innovativeness	When I hear about a new technology product, I look for way to try it out	UI1
		Between competitors, my company is usually the first to try the latest technology products	UI2
		I currently experiment with the latest Fintech services	UI3
4	Trust	I believe in our financial security when using Fintech services	TR1
		I believe my personal information is protected when using Fintech services	TR2
		In general, I believe that Fintech services are trustworthy	TR3
5	Perceived Usefulness	Implementing Fintech can fulfill my company's service needs	PU1
		Fintech services can save time for my company	PU2
		Overall, Fintech services are beneficial to my company	PU3
6	Government Support	I believe the government support the use of Fintech services for MSMEs	GS1
		I believe government support in increasing the use of Fintech services for MSMEs	GS2
		I believe government is active in building various kinds of infrastructure, such as telecommunication networks that play a positive role in promoting Fintech services	GS3
7	Fintech Adoption	I am willing to continue using Fintech services	FA1
		I want to use Fintech services immediately	FA2
		I will recommend Fintech services to our peers	FA3

Source: Data processing by the researcher, 2024

The decision to exclude certain indicators is based on strict validity and reliability criteria in the analysis of the measurement model. Indicators with outer loading values below 0.7 or those that do not meet the Average Variance Extracted (AVE) criteria of 0.5 are excluded to ensure adequate

convergent validity. In addition, indicators that have a Variance Inflation Factor (VIF) value above 5 are removed to avoid multicollinearity problems. This indicator filtering process aims to maintain the quality and clarity of the relationship between variables, as well as ensure that the indicators retained truly represent the constructs being measured. With this approach, the study provides more reliable and well-interpretable results, although there are limitations in terms of generalization due to the narrow geographic focus on the Bandung area.

This approach ensures that the research model not only meets methodological requirements but also produces relevant findings that can be used as a basis for recommendations for increasing Fintech adoption among MSMEs in Indonesia.

RESULTS AND DISCUSSION

Results

In this survey, women make up the majority (51%), according to Table 2, which displays the characteristics of the participants. A bachelor's degree is held by 39% of respondents, 50% of whom are between the ages of 26 and 35. Slightly over half of the participants have been in company for over three years, and 29 percent have made between 5.000.001 and 7.000.000 IDR every month.

Table 2. Respondent Characteristics

Characteristic	Criteria	Frequency (*n* = 356)	Percentage
Gender	Male	174	49%
	Female	182	51%
Age	18-25	104	29%
	26-35	177	50%
	36-45	70	20%
	>45	5	1%
Education	High School	105	29%
	Diploma	86	24%
	Bachelor	138	39%
	Master	27	8%
Net Income (IDR)	< 3.000.000	26	7%
	3.000.000 – 5. 000.000	96	27%
	5.000.000 – 7.000.000	103	29%
	7.000.000 – 10.000.000	87	24%
	>10.000.000	44	12%
Business Establishment	< 1 year	37	10%
	1 – 3 years	159	45%
	>3 years	160	45%

Source: Data processing by the researcher, 2024

Several processes are involved in the SEM analysis. The outer loading factor, which meets the criterion that a value should be more than 0.7, first shows convergent validity; all construct variables have values that are higher than 0.7. An integrated reliability measure, with a minimum value of 0.7, was used to evaluate internal consistency dependability. With composite

dependability scores more than 0.7, all ideas showed high internal consistency,which illustrated in Table 3.

Table 3. Measurement Model Analysis

Construct	Outer Loadings	Cronbach's Alpha	Compsite Reliability	Average Variance Extracted (AVE)
Perceived Ease of Use		0.716	0.863	0.785
PEU1	0.906			
PEU2	0.855			
PEU3	0.895			
Financial Literacy		0.729	0.784	0.813
FL1	0.917			
FL2	0.861			
FL3	0.926			
User Innovativeness		0.814	0.758	0.780
UI1	0.914			
UI2	0.849			
UI3	0.885			
Trust		0.912	0.855	0.776
TR1	0.903			
TR2	0.846			
TR3	0.893			
Perceived Usefulness		0.827	0.796	0.762
PU1	0.876			
PU2	0.864			
PU3	0.858			
PU4	0.892			
Government Support		0.830	0.900	0.769
GS1	0.891			
GS2	0.862			
GS3	0.862			
GS4	0.893			
Fintech Adoption		0.805	0.843	0.761
FA1	0.866			
FA2	0.855			
FA3	0.897			

Source: Data processing by the researcher, 2024

Convergent validity was evaluated in the third phase by calculating AVE value of all constructs explained beyond 0.5 to see whether the variables passed the validity test. Furthermore, for every construct variable, AVE value was modified to be greater than half. Each construction variable has an AVE value greater than 0.5, as Table 3 shows. Assessing discriminant validity was a part of phase four. Next, it is possible to verify that one construct is different from the others by using various metrics. For example, the ratio of heterotrait to monotrait (HTMT) put out by Hair et al. (2022), is a means of evaluating discriminant validity. An accurate result is defined as a threshold value of 0.9. As seen in Table 4, every HTMT score was below 0.9.

Tabel 4. HTMT Values

	FL	FA	GS	PEU	PU	TR	UI
FL							
FA	0.753						
GS	0.674	0.587					
PEU	0.668	0.799	0.537				
PU	0.563	0.493	0.761	0.559			
TR	0.422	0.856	0.689	0.695	0.781		
UI	0.812	0.611	0.577	0.831	0.880	0.739	

Source: Data processing by the researcher, 2024

Estimating the structural model is the next stage in using the path coefficient to explain the statistical significance. First, the requirement that VIF be less than five must be applied when analyzing the multicollinearity test (Hair et al., 2022). Table 5 indicates the absence of multicollinearity among the contract variables since each of their VIF values is less than 5. Additionally, Table 6 indicates that the research model has a high capacity for explanation, with an R2 value of 62.8%.

Table 5. VIF Values

Construct Indicator	VIF
PEU1	2.637
PEU2	1.884
PEU3	2.462
FL1	3.137
FL2	1.992
FL3	3.371
UI1	2.797
UI2	1.823
UI3	2.445
TR1	2.674
TR2	1.751
TR3	2.521
PU1	2.956
PU2	2.757
PU3	2.693
PU4	3.140
GS1	3.369
GS2	2.809
GS3	2.851
GS4	3.337
FA1	2.021
FA2	1.853
FA3	2.329

Source: Data processing by the researcher, 2024

Table 6 show the fintech adoption variable's R2 value is 0.628. This indicates that 62.8% of the variance in the fintech adoption variable can be accounted for by the variables that include perceived ease of use, perceived usefulness, financial literacy, user innovativeness, government support, and trust. Meanwhile, 37.2% of the variation is accounted for by factors not included in this investigation. Additionally, there is a 50.3% explanation for the government support variable in the financial literacy and user innovativeness variables, according to the government support variable's R2 value of 0.503. In the case when 49.7% is accounted for by factors not included in this investigation. With an R2 value of 0.564, the perceived usefulness variable may account for 56.4% of the variance, whereas factors not included in this research account for 43.6% of the variance

Table 6. Coefficient of Determination

	R-Square	R-Square Adjusted
Fintech Adoption	0.628	0.619
Government Support	0.503	0.517
Perceived Usefulness	0.564	0.553

Source: Data processing by the researcher, 2024

A path coefficient analysis was performed after scaling with a sample size of 5000 to assess the statistical significance of a causal relationship among indices and construction variables show in Figure 2.

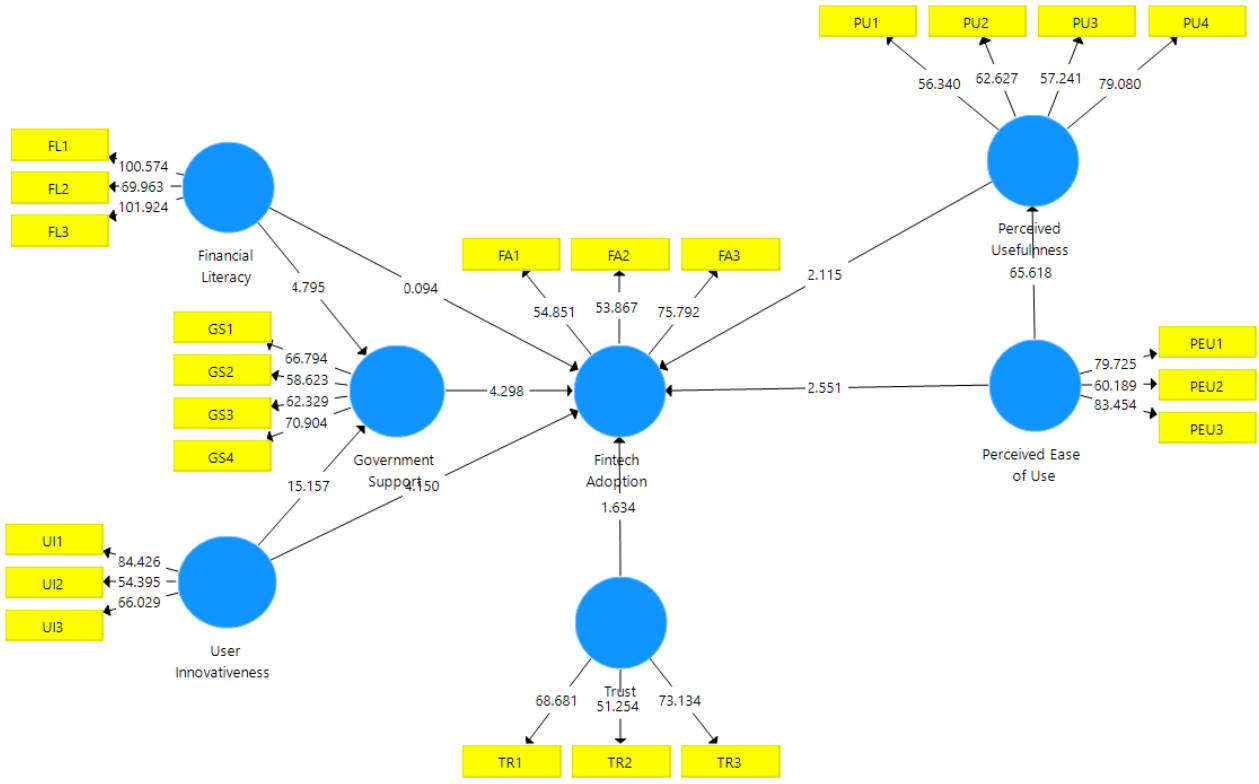

Figure 2. Hypothesis Testing
Source: Processed data, 2024

In addition, Table 7 presents three indirect effect hypotheses and six direct effect hypotheses, all of which are supported. The adoption of fintech by Indonesian SMEs is significantly and favorably impacted by perceived ease of use (H1; β = 0.384), perceived usefulness (H2; β = 0.251), financial literacy (H4; β = 0.230), user innovativeness (H5; β = 0.928), government support (H7; β = 0.481), and trust (H9; β = 0.733), in that order. In contrast, the adoption of Fintech services by SMEs in Bandung is not significantly impacted by financial literacy and government support.

Table 7. Hypothesis Testing

Hypothesis	Path	Original Sample	*t*-Statistics	*p*-Values
H1	Perceived Ease of Use→ Fintech Adoption	0.384	3.094	0.011
H2	Perceived Usefulness→ Fintech Adoption	0.251	4.795	0.034
H3	Perceived Ease of Use→ Perceived Usefulness→ Fintech Adoption	0.401	4.298	0.034
H4	Financial Literacy→ Fintech Adoption	0.230	1.558	0.106
H5	User Innovativeness→ Fintech Adoption	0.928	5.618	0.000
H6	Financial Literacy→ Government Support→ Fintech Adoption	0.182	2.115	0.001
H7	Government Support→ Fintech Adoption	0.481	1.634	0.000
H8	User Innovativeness→ Government Support→ Fintech Adoption	0.261	4.150	0.000
H9	Trust→ Fintech Adoption	0.733	15.157	0.002

Source: Data processing by the researcher, 2024

Discussion

The analysis of hypothesis testing 1 in Table 7 revealed that perceived ease of use has a significant positive impact on fintech adoption. The t-statistics value of 3.094 > 1.65 and the p-values of 0.011 < 0.05, respectively, support this. When using Fintech services, participants may experience the convenience. Furthermore, participants' firms' usage of Fintech services is simple to comprehend. This conclusion is further supported by the descriptive analysis of how participants responded to the perceived ease of use variable, which has an average score of 4.06, falling into the excellent group.

The study's findings concur with those of previous studies by Nugraha et al (2022) where the adoption of Fintech is significantly boosted by perceived ease of use. Studies carried out by Nangin et al (2021) the degree of Fintech acceptance is favorably and strongly impacted by its perceived ease of use, it was also discovered. In terms of technology or systems, this is the degree to which people feel comfortable interacting with and using them. Easy-to-use, intuitive, and understand applications increase the likelihood of their adoption by users (Sumarsono et al., 2020). Perceived usefulness significantly positively influences the adoption of fintech, according to the study of hypothesis 2 testing. The p-values of 0.034 < 0.05 and the t-statistics value of 4.795 > 1.65 provide proof of this. Respondents said that using Fintech services may boost productivity and save time. This conclusion is further supported by the descriptive analysis of respondents' responses to the perceived usefulness variable, which has an average score of 4.08, falling into the good group. Studies carried out by Nugraha et al (2022) explains that MSMEs' motivation to embrace fintech is directly impacted by the value they get from fintech services. These findings

corroborate the technology acceptance model hypothesis, which holds that individuals would consider employing technology by assessing its value when creating a firm (Menne et al., 2022).

The findings from the third hypothesis test suggest that perceived usefulness can serve as a mediating factor in Fintech adoption. This is supported by a t-statistics value of 4.298 (greater than 1.96) and a p-value of 0.034 (less than 0.05), indicating a statistically significant result. The study reveals a notable indirect relationship between perceived ease of use and Fintech adoption, with perceived usefulness acting as a mediator. Specifically, when perceived ease of use increases, it leads to a significant positive effect on perceived usefulness, which in turn positively influences Fintech adoption. This aligns with Natsir et al. (2023), who assert that the relationship between perceived ease of use and the willingness to adopt Fintech services is strongly mediated by perceived usefulness. According to Natsir et al. (2023), users are more likely to adopt Fintech if it meets their needs, which are often shaped by the technology's ease of use.

A study from Baba et al (2023) further discovered that user happiness, which influences the sustained usage of Fintech services, is strongly impacted by its perceived usefulness. Fintech adoption is not significantly impacted by financial literacy, according to the analysis of hypothesis testing 4 outcomes. The p-values of 0.106 >0.05 and the t-statistics value of 1.558 < 1.65 provide proof for this. This agrees with the conclusions of Nugaraha et al (2022), It also revealed that the predictor with the least influence on the uptake of fintech is believed to be financial literacy.

The finding that financial literacy does not significantly affect Fintech adoption among Bandung MSMEs indicates a shift in user needs in the digital era. Ease of access and intuitively designed fintech service features appear to have reduced reliance on in-depth understanding of financial concepts. Singh et al.'s (2020) study supports this finding, stating that a simple interface increases technology adoption even though users have limited financial literacy. In addition, trust in data security and ease of use of services often replace financial literacy as the main drivers of adoption, as explained by Nugraha et al. (2022). This shows that high digital literacy among MSME actors is not always in line with adequate financial literacy, as stated by Widagdo and Sa'diyah (2023). Therefore, a more contextual and practical financial education approach is needed, which can help MSMEs understand the risks and benefits of Fintech services according to their business needs. Fintech providers also have the opportunity to become innovative education platforms by presenting experience-based learning features.

Nonetheless, several studies indicate that Fintech may advance financial inclusion without requiring a high degree of financial literacy as it provides financial services to those who lack access to banking and those with little financial knowledge (Setiawan et al., 2021). In the meanwhile, it is possible to conclude that user inventiveness significantly increases the uptake of fintech, according to the findings of hypothesis test 5. The t-statistics value of 5.618 > 1.65 and the p-values of 0.000 < 0.05 found to support this. The degree to which users are inventive has a significant role in the adoption of Fintech because it influences their attitude, willingness, and capacity to accept new innovations and technology. Considering the results of Setiawan et al (2021) which states that user innovation and a positive attitude towards technology are significant predictors of Fintech adoption. Thus, user innovativeness contributes to building trust in Fintech services, which in turn can significantly influence user attitudes towards adopting services (Alkhwaldi et al., 2022).

Government assistance for the adoption of fintech may mediate financial literacy, according to an examination of the findings of hypothesis testing 6. Evidence for this may be seen in the p-values of 0.001 <0.05 and the t-statistics value of 2.115> 1.96. Financial literacy, government support, and fintech adoption all show a significant indirect association according to

the study's results. Growing financial literacy will facilitate the adoption of fintech and provide government support. This makes sense given prior research that indicated financial literacy and government backing are important factors in determining whether individuals choose to utilize Fintech services (Bureshaid et al., 2021). Consequently, financial inclusion, literacy, and government assistance may have a big influence on MSMEs' success.

As for the results of hypothesis testing 7, they allow us to conclude that government support for fintech adoption is beneficial but not statistically significant. Evidence supporting this is seen in the t-statistics value of 1.634 < 1.65 and the p-values of 0.000 < 0.05. This runs counter to the discoveries made by Nugraha et al (2022), which discovered the adoption of fintech is greatly increased by government support. Additionally, several explanations are provided in the body of existing research as to why government support for fintech may not significantly affect its adoption. Factors such as younger age groups making Fintech adoption more probable, the high cost of conventional banking, and the unfulfilled demand for financial services (Frost, 2020).

The results indicate that government assistance may moderate the relationship between user innovativeness and fintech adoption. This is supported by the t-statistics value of 4.150 (greater than 1.96) and the p-value of 0.000 (less than 0.05), demonstrating statistical significance. The findings reveal a significant indirect relationship between user innovativeness, government support, and fintech adoption. As user innovativeness increases, government support has a positive and significant effect on fintech adoption. These conclusions are consistent with the research by Setiawan et al. (2021), which highlights that user creativity plays a key role in fintech adoption in Indonesia, both directly and indirectly. Innovative users are more likely to adopt Fintech, and this adoption can be further accelerated with government support, including improved ICT infrastructure and supportive regulations (Setiawan et al., 2021). The government recognizes the importance of fostering user innovation as part of its strategy to enhance financial inclusion (Nugraha et al., 2022). Therefore, user innovation not only influences fintech adoption directly but also encourages government support, ultimately accelerating the overall adoption process.

On the other hand, although government support is considered relevant in creating an inclusive technology ecosystem, research findings show that this factor does not have a significant impact on Fintech adoption. This could be due to the limited and uneven digital infrastructure in Indonesia, especially in remote areas, as mentioned by Iskandar and Elhan-Kayalar (2023). The complexity of bureaucracy and unclear administrative procedures are also obstacles for MSMEs in utilizing government assistance programs, as identified by Rivaldi and Dinaroe (2022). The strategic implications of these findings highlight the need for the government to adopt a more decentralized approach to improve policy effectiveness and collaborate with the private sector to expand access to inclusive digital financial services.

Finally, trust has a strong positive influence on the adoption of fintech, according to the results of the last hypothesis test. The t-statistics value of 15.157 > 1.65 and the p-values of 0.002 < 0.05 found demonstrate this. When using Fintech services, respondents' beliefs about financial security are expressed. Furthermore, those surveyed think that utilizing Fintech protects personal data. The degree to which users trust Fintech services determines how they feel about the uptake of these services. Perceived risk and convenience of usage are not as significant as this element (Bajunaied et al., 2023).

CONCLUSION

This study shows that factors such as perceived ease of use, perceived usefulness, user innovation, and trust have a significant influence in driving Fintech adoption by MSMEs in Bandung. In contrast, financial literacy and government support show weaker impacts, although they are still relevant in creating a more inclusive technology adoption environment. The implications of these findings highlight the importance of improving user experience with simpler, more transparent, and more secure Fintech services to build trust among small business actors. In addition, fintech providers need to collaborate with the government and educational institutions to improve financial literacy and expand access to supporting digital infrastructure. Meanwhile, the government must encourage innovation through better infrastructure and policies. Ultimately, collaboration between fintech companies, the government, and the education system is critical for sustainable growth in the fintech sector and broader financial inclusion. However, this study has limitations that need to be considered. The use of a quantitative approach with PLS-SEM provides an overview of the relationship between variables but does not delve into the motivations and personal challenges that MSMEs may face. Furthermore, the study's focus is solely on Bandung, which restricts the applicability of its findings to a broader national or global context. Future research can expand the geographical scope and adopt a mixed approach with qualitative interviews to gain deeper insights into the factors influencing Fintech adoption. Further studies can also explore the role of government policies and regulatory changes that may affect the Fintech ecosystem and assess the impact of collaboration between traditional financial institutions and Fintech companies. By understanding the broader dynamics, it is hoped that more comprehensive solutions can be designed to support the sustainable digital transformation of MSMEs.

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List of Abbreviations
MSME's (Micro, Small, and Medium Enterprises)
PLS-SEM (Partial Least Square Structural Equation Modeling)
TAM (Technology Acceptance Model)

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All authors contributed equally to the research design, data collection, analysis, and manuscript preparation.

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Conflicts of Interest
The authors declare no conflicts of interest related to this research.

Availability of Data and Materials
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