Journal of Indonesian Economy and Business
Volume 40, Number 2, 2025, 196 – 213

DETERMINANTS OF INDONESIAN SMES' INTENTIONS TO ADOPT FINTECH: AN INNOVATION DIFFUSION THEORY PERSPECTIVE

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ABSTRACT

Introduction/Main Objectives: Financial technology (Fintech) has become a solution for many SMEs seeking to improve business performance in an increasingly competitive business environment. Thus, it is important to investigate the factors underlying SMEs' decision to adopt Fintech. **Background Problem:** Previous studies have applied various theoretical frameworks to explore Fintech adoption. Despite this, limited knowledge exists regarding the determinants influencing the adoption of Fintech among SMEs. **Novelty:** By using innovation diffusion theory, this study examines the underlying elements that contribute to the adoption of Fintech by SMEs. **Research Methods:** Data were collected using the survey approach. Self-administered questionnaires were distributed to SMEs in Indonesia using purposive sampling, yielding 273 responses. The data were then analyzed using the partial least square structural equation modelling (PLS-SEM) method. **Findings/Results:** The results confirmed all hypotheses developed for the study. Specifically, relative advantage, compatibility, complexity, and observability positively affect attitude towards Fintech adoption. In turn, positive attitude towards the adoption of Fintech has a significant impact on the intention to use Fintech. In addition, attitude mediates the relationship between IDT factors (relative advantage, compatibility, complexity, and observability) and Fintech adoption intention. **Conclusion:** Innovation diffusion theory is able to explain the factors that form SMEs' attitude and adoption intention toward Fintech. The outcomes of this research provide important implications both theoretically and practically.

ARTICLE INFO

Article information:

Received November 20, 2023. Received in revised version April 29, 2024.Received in revised version July 4, 2024. Accepted September 3, 2024

Keywords:

Financial technology, innovation diffusion theory, adoption intention

JEL Code:

D13, I31, J22, K31

ISSN:

ISSN 2085-8272 (print)
ISSN 2338-5847 (online)

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https://doi.org/10.22146/jieb.v40i2.10843 https://journal.ugm.ac.id/v3/jieb

INTRODUCTION

Small and medium enterprises (SMEs) are central to the economic sustainability of most countries.They perform a significant role in fostering economic expansion and generating job prospects (Soni et al., 2022). Even though SMEs make a large contribution, various problems can hinder their growth, incuding access to financial products and services (Lu et al., 2020). With regard to their finances, for example, SMEs are very dependent on funding originating from domestic banking institutions (Gupta et al., 2022). Nevertheless, the emergence of the Financial Technology (Fintech) phenomenon has provided hope for SMEs in terms of widening access to financial products and services (Ivashchenko et al., 2018; Khan et al., 2022).

In the last decade, the development of Fintech has opened up vast opportunities for both business actors and individuals to access financial products and services more easily (Long et al., 2023). According to Alkhawaldeh et al. (2023), the existence of Fintech has radically changed traditional financial services by providing products and services that did not exist before. Encompassing technology such as mobile applications, big data, and cloud computing (Hu et al., 2019), Fintech enables financial inclusion through peer-to-peer (P2P) lending, crowdfunding, and digital payment systems (Makina, 2019).

For SMEs, adopting Fintech is an alternative solution to ensure business sustainability and improve business efficiency (Okfalisa et al., 2022). The adoption of Fintech makes it more straightforward for SMEs to obtain funding quickly with relatively low interest rates and it also makes financial transactions simpler for business people (Abbasi et al., 2021; Hoque, 2023). As summarized byLontchi et al. (2023), adopting Fintech can provide many benefits for SMEs, including innovation, flexibility, efficiency and cost minimization.

Responding to the growing recognition of the significance of Fintech adoption for the sustainability of SMEs, the factors underlying adoption intentions have been investigated. Identified factors include supporting business operations in times of crisis(Das & Das, 2023), perceived usability (Edo et al., 2023), social influence (Irimia-Diéguez et al., 2023), and perceived risk (Abdul-Rahim et al., 2022). Furthermore, a literature review conducted by Firmansyah et al. (2023) reports that several theories have been applied to explain Fintech adoption intentions, primarily the technology acceptance model (TAM) (Belanche et al., 2019; Hasan et al., 2021; Setiawan et al., 2021; Singh et al., 2020) and unified theory of acceptance and use of technology (UTAUT) (Chan et al., 2022; Rahim et al., 2023; Xie et al., 2021). Notably, only one of the reviewed studies applies innovation diffusion theory (IDT) as the theoretical framework to explain Fintech adoption intentions (Ngo & Nguyen, 2022). This finding is very surprising considering that IDT has been widely applied in understanding innovation adoption (Ezeh & Nkamnebe, 2022).

Existing studies have proven the usefulness of IDT in explaining social media use (Kwon et al., 2021), autonomous vehicle acceptance (Yuen et al., 2020), and Bitcoin transaction services adoption (Yoo et al., 2020). In a business environment marked by increasingly fierce competition, technology adoption allows SMEs to improve operational performance and ultimately drive business growth (Eze et al., 2019). In this context, IDT provides a very useful theoretical framework because it encompasses concepts that make it possible to explain the reasons underlying SME technology adoption (Kim et al., 2019).

This study aims to address a theoretical gap in the Fintech literature by examining the determinants of SMEs' inclination towards adopting Fintech using the IDT framework. IDT is applied because it has proven widely useful in explaining how innovation spreads through a social system (Lekezwa & Zulu, 2023). Specifically, the following research issues will be addressed by this study: *1) How do IDT factors determine SMEs' intention to adopt Fintech? 2) To what extent is the IDT framework able to explain SMEs' intentions to adopt Fintech?*

LITERATURE REVIEW

1. Innovation Diffusion Theory

Innovation diffusion theory (IDT) has been widely used to explain the acceptance or rejection of an innovation or technology (Jamshidi & Kazemi, 2020; Neto & Vieira, 2023). IDT explains why, how, and to what extent new innovations spread, and how attitudes leading to decisions to accept or reject these innovations are formed (Kim et al., 2019; Yuen et al., 2018). As understood in the IDT framework, innovation not only involves the use of new technology, but also new practices and ideas (Talebian & Mishra, 2018). As the basis of innovation is something new, efforts to spread innovation are challenging, often encountering various obstacles. The intention behind individuals' adoption of innovation can thus be seen as reflecting the concept and process of IDT itself (Yoo et al., 2020). Following Qin and Luo (2022), this research applies four constructs from IDT, specifically relative advantage, complexity, compatibility, and observability.

2. Relative Advantage

Relative advantage indicates the belief that an innovation or technology has advantages compared to other innovations or technologies in terms of effectiveness and efficiency (Lekezwa & Zulu, 2023). The relative advantage of an innovation or technology may take the form of economic benefits, social benefits, or additional benefits (El Mallouli & Sassi, 2022). Relative advantage has been identified as one of the reasons a technology is rejected or accepted (Mehra et al., 2022; Neto & Vieira, 2023). Technology with a high level of relative advantage tends to be preferred and so is more likely to be adopted (Jamshidi & Kuanova, 2022). Individuals will form a positive attitude towards a technology that offers benefits and advantages that other technologies do not (Jamshidi & Hussin, 2018). Similarly, other studies report that relative advantage holds significant influence in determining attitudes (Jiang et al., 2021; Kumar et al., 2023) and adoption intentions (Nath et al., 2022; Yuen et al., 2018). This study therefore hypothesizes that the relative advantage of Fintech will drive attitudes toward Fintech adoption.

H1: Relative advantage positively affects attitude towards Fintech adoption

3. Compatibility

Compatibility is a concept that pertains to the perception that an invention or technology aligns with the needs, experiences, and values of its adopters (Ezeh & Nkamnebe, 2022). Compatibility is believed to be one of the driving factors in determining whether a technology is accepted or rejected (Selim et al., 2020). People tend to like technology that suits the experiences and conditions they are facing (Jamshidi & Kuanova, 2022; Sudarsono et al., 2022). On the other hand, they will form an unfavorable attitude and reject a technology if it conflicts with their needs and values (Chen et al., 2018; Nordhoff et al., 2021). Several studies report that compatibility is an important determinant of attitude (Jamshidi & Hussin, 2018; Jiang et al., 2021) and adoption

intention (Kamboj et al., 2022; Qader et al., 2023). Thus, this study predicts that perceived compatibility with Fintech will also drive attitudes towards Fintech adoption.

H2: Compatibility positively affects attitude towards Fintech adoption

4. Complexity

The concept of complexity relates to subjective perceptions in relation to the simplicity and usability of a technological system (Jamshidi & Kazemi, 2020). Approval or rejection of a technology is significantly influenced by its complexity (Hubert et al., 2019). Individuals typically seek technology that is user-friendly and which does not necessitate a significant time investment to achieve mastery. Conversely, individuals will avoid technology perceived as difficult to operate and requiring a long time to learn (Qin & Luo, 2022). Furthermore, Jiang et al. (2021) state that individuals will form a favorable attitude towards technology that is easy to use. Other studies have demonstrated that the degree of difficulty or simplicity of a technology influences attitudes (Giovanis et al., 2019; Karahoca et al., 2018) and adoption intentions (Ali et al., 2019; Sudarsono et al., 2022). Thus, this study proposes that the perceived complexity of Fintech will also drive attitudes towards its adoption.

H3: Complexity positively affects attitude towards Fintech adoption

5. Observability

Observability reflects the degree to which others can observe a technology's outcomes and benefits (Jeong et al., 2022). Observability is one of the main variables in the formation of positive attitudes and technology adoption (Badi et al., 2021; Kumar et al., 2023). The likelihood of an individual developing a good mindset towards and adopting a technology is higher if the results and benefits of the technology can be seen by them (Min et al., 2019). In line with this argument, Arli and Bakpayev (2023) report that individuals see how other people use a technology and will tend to adopt the technology if they feel it provides great results and benefits for its users. A number of other studies have similarly found that observability is a determinant of attitudes (Jiang et al., 2021; Reyes-Mercado & Rajagopal, 2017) and adoption intentions (Lekezwa & Zulu, 2023; Norng, 2022). Thus, this study expects that the perceived observability of Fintech will also drive attitudes towards its adoption.

H4: Observability positively affects attitude towards Fintech adoption

6. Attitude

Siddiqui et al. (2023) state that an individual's tendency to accept or reject a technology is not only determined by the characteristics of the technology in question, but also by psychological factors such as attitudes towards technology. In this context, attitude can be conceptualized as the cognitive and affective components of an individual's psychological state (favorable or unfavorable) regarding the results of adopting a technology (Li et al., 2021b). The significance of attitude in influencing the intention to adopt has been widely acknowledged (Irimia-Diéguez et al., 2023; Virmani et al., 2023). A person with a favorable attitude toward a technology is more likely to embrace and adopt it. Conversely, a negative attitude towards a technology will lead to rejection of the technology (Khan et al., 2023; Maryam et al., 2022). As confirmed by other research, intention to adopt a technology is positively influenced by attitude (Elnadi, 2022; Opasvitayarux et al., 2022). Thus, this study predicts that attitudes towards Fintech will drive adoption intentions.

H5: Attitude towards Fintech adoption positively affects adoption intention

Besides its important role in determining adoption intentions, existing research indicates the importance of attitude as a mediator (Alhammadi et al., 2023; Li et al., 2021a). For example, Kasilingam (2020) found that attitude mediates the relationship between IDT factors and intention to use chatbots for shopping. Furthermore, Arli and Bakpayev (2023) report findings on the indirect influence of IDT factors on mobile payment adoption via attitude. Adding to the consensus, Ejigu & Yeshitela (2024) suggest that considering attitude as a mediator is necessary to obtain a broader picture of the relationship between IDT factors and adoption intentions. Thus, in the context of technology adoption, attitudes form based on the adopter's perception of the characteristics of the technology itself (Ashinze et al., 2021; Huang et al., 2020). In simple terms, a good perception of a technology will lead to the formation of a favorable attitude and ultimately strengthen the intention to adopt the technology (Acikgoz et al., 2023). Thus, this study expects that attitude will also mediate the relationship between IDT factors (relative advantage, compatibility, complexity, and observability) and SMEs' intention to adopt Fintech.

H6: Attitude mediates the effect of relative advantage (a), compatibility (b), complexity (c), and observability (d) on adoption intention

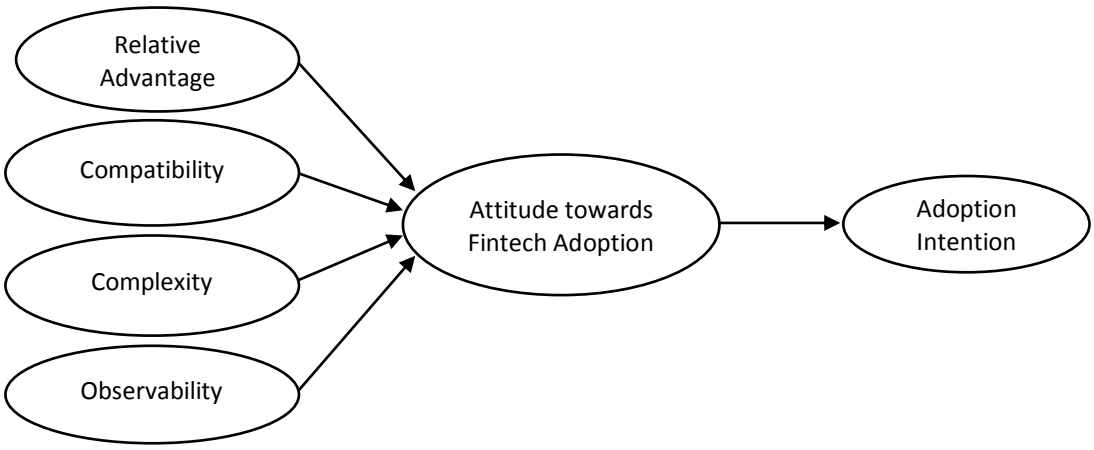
Figure 1 depicts the conceptual framework of this research.

METHOD, DATA, AND ANALYSIS

1. Measurements

In this investigation, a total of 23 items were adapted from previous research to explore the identified constructs, as follows: four items for the relative advantage variable from Jamshidi and Hussin (2018), Jiang et al. (2021), and Nath et al. (2022); five items for the compatibility variable from Qader et al. (2023) and Qin and Luo (2022); three items for the complexity variable from Jamshidi and Kazemi (2020) and Neto and Vieira (2023); three items for the observability variable from Jamshidi and Kazemi (2020), Lyu et al. (2023), and Mehra et al. (2022); five items for the attitude variable from Irimia-Diéguez et al. (2023), Li et al. (2021b), and Siddiqui et al. (2023); and three items for the adoption intention variable from Khan et al. (2023) and Opasvitayarux et al. (2022). A 5-point Likert scale was used to evaluate each measurement item (1 = strongly disagree to 5 = strongly agree).

Figure 1. Conceptual framework



2. Sample and Data Collection

A quantitative methodology was employed to examine factors that influence SME adoption of Fintech. The study population comprised Indonesian SMEs who are acquainted with and have utilized the following Fintech services: peer-to-peer (P2P) lending, crowdfunding, and digital payment systems. These three Fintech services were chosen because they are widely used by SMEs in Indonesia. Distribution of questionnaires to SMEs in Indonesia was carried out from July to August 2023 using the purposive sampling method. The criterionfor study participation was SMEs that had used Fintech for at least one year. In total, 273 responses were obtained. To determine a representative sample size we followed Hair et al. (2019), who specify that the sample should be ten times the number of indicators. As23 indicators were used in the study, the sample size of 273 can be considered representative. Following collection, the data were subsequently subjected to analysis utilizing the partial least squares structural equation modeling (PLS-SEM) methodology. PLS-SEM was used because it allows researchers to estimate complex models with many constructs, indicator variables and structural paths without imposing distributional assumptions on the data. In addition, PLS-SEM is a causal-predictive approach to SEM that emphasizes prediction in estimating statistical models, the structure of which is designed to provide causal explanations (Hair et al., 2019). The demographic information of the participants in this study is presented in Table 1.

Table 1. Demographic data of participants

Demographic Variables		Frequency	Percentage (%)
Gender	Male	116	42.5
	Female	157	57.5
Age	17-25 years old	55	20.1
	26-35 years old	103	37.7
	36-45 years old	76	27.8
	>45 years old	39	14.3
Education	Less than high school	23	8.4
	High school	51	18.7
	Diploma	64	23.4
	Bachelor	92	33.7
	Master	43	15.8
Length of use of Fintech	1 to less than 3 years	87	31.9
	3 to less than 5 years	95	34.8
	5 to less than 7 years	59	21.6
	>7 years	32	11.7
Monthly Income (IDR)	<10,000,000	62	22.7
	10,000,000 to 20,000,000	94	34.4
	20,000,001 to 30,000,000	52	19.0
	30,000,001 to 40,000,000	37	13.6
	>40,000,000	28	10.3

RESULTS AND DISCUSSION

1. Measurement Model Assessment

The present study assessed a measurement model using the methodology outlined by Hair et al. (2019) The assessment findings are displayed in Table 2 and Table 3. The evaluation of convergent validity was performed by analyzing the loading and average variance extracted (AVE) values. The results show there is satisfactory convergent validity, as reflected in loading values above 0.70 and AVE above 0.50 (see Table 2). Subsequently, assessment of internal consistency reliability was undertaken utilizing Cronbach's alpha and composite reliability coefficients. The findings indicate excellent internal consistency reliability, as evidenced by the Cronbach's alpha and composite reliability values exceeding the threshold of 0.70. Furthermore, the heterotrait-monotrait ratio of correlations (HTMT) was employed as a means to evaluate the discriminant validity. The results show satisfactory discriminant validity as reflected by the HTMT values of below 0.85 (see Table 3).

Table 2. Convergent validity and reliability results

Constructs	Loadings	AVE	Cronbach's Alpha	Composite Reliability
Relative Advantage				
RA1: Fintech will provide new opportunities for our business	0.888	0.807	0.920	0.944
RA2: Fintech will allow us to enhance our business productivity	0.910			
RA3: Fintech will allow our business financial transactions to be more efficient	0.896			
RA4: Fintech will improve our overall business performance	0.900			
Compatibility				
CPA: Fintech adoption is compatible with our current business situation	0.762	0.613	0.842	0.888
CPA2: Fintech adoption is compatible with our business in all aspects	0.761			
CPA3: Fintech adoption is compatible with our business needs	0.746			
CPA4: Fintech adoption is compatible with our business values	0.817			
CPA5: Fintech adoption is compatible with our overall business practices	0.825			
Complexity				
CPL1: It is easy to use Fintech for my business	0.899	0.750	0.834	0.900
CPL2: It is easy to learn to use Fintech for my business	0.885			
CPL3: It is easy to access Fintech for my business	0.811			
Observability				
OBS1: I observed others using Fintech and saw the advantages of doing so	0.888	0.771	0.851	0.910
OBS2: I have had enough opportunities to see others using Fintech	0.856			
OBS3: I have seen what others can do regarding their financial transactions using Fintech	0.889			

Constructs	Loadings	AVE	Cronbach's Alpha	Composite Reliability
Attitude				
ATT1: I think adopting Fintech will be very beneficial for my business	0.871			
ATT2: I think adopting Fintech is a good idea	0.829			
ATT3: I think adopting Fintech can facilitate my business financial transactions	0.850	0.744	0.914	0.935
ATT4: I think adopting Fintech is better than using traditional ways	0.884			
ATT5: I think adopting Fintech is necessary for my business	0.877			
Adoption Intention				
AI1: I intend to adopt Fintech for my business	0.874			
AI2: I am willing to adopt Fintech for my business	0.882	0.758	0.841	0.904
AI3: I have a plan to adopt Fintech in the future	0.856			

Tabel 3. Discriminant validity results (HTMT)

Constructs	1	2	3	4	5	6
(1) Adoption Intention	-	-	-	-	-	-
(2) Attitude towards Fintech Adoption	0.812	-	-	-	-	-
(3) Compatibility	0.658	0.789	-	-	-	-
(4) Complexity	0.754	0.772	0.731	-	-	-
(5) Observability	0.752	0.778	0.771	0.658	-	-
(6) Relative Advantage	0.647	0.744	0.659	0.624	0.692	-

2. Structural Model Assessment

Following Hair et al. (2019), evaluation of this study's structural model was based on assessment of collinearity, in-sample predictive capacity, and the statistical significance of path coefficients. The outcomes of the structural model assessment are presented in Table 4 and Table 5. Assessment of the collinearity problem was conducted by evaluating the value of the variance inflation factor (VIF). Kock (2015) states that any indication of common method bias can also be detected through the VIF value. A VIF value below 3.3 signifies the absence of common technique bias in the Partial Least Squares Structural Equation Modeling (PLS-SEM) model. The results suggest the study was not affected by collinearity and typical procedure bias, with VIF values less than 3.3 (see Table 4).

Table 4. Collinearity Results

Path	VIF
Relative Advantage -> Attitude	1.863
Compatibility -> Attitude	2.205
Complexity -> Attitude	1.828
Observability -> Attitude	2.110
Attitude -> Adoption Intention	1.000

The next step was assessing the significance of the coefficients of each hypothesis. Table 5 displays the path coefficient values for each hypothesis in this study. The results show that all hypotheses were confirmed. Specifically, relative advantage ($\beta = 0.262$, p-value = 0.000), compatibility ($\beta = 0.225$, p-value = 0.001), complexity ($\beta = 0.269$, p-value = 0.000), and observability ($\beta = 0.229$, p-value = 0.000) all showed a positive effect on attitude towards Fintech adoption, thus supporting hypotheses

H1, H2, H3, and H4. Furthermore, Fintech adoption intention was positively influenced by Fintech adoption attitude (β = 0.714, p-value = 0.000) among the study participants, thus supporting H5.

The structural model assessment continued by analyzing in-sample predictive power with reference to the R^2 value. Hair et al. (2019) state that R-squared values of 0.75, 0.50, and 0.25 indicate high, moderate, and low levels of predictive power, respectively. According to the findings presented in Table 6, the study model exhibits a modest level of predictive power within the sample, with R^2 values of 0.677 and 0.509, which correspond to the attitude and adoption intention variables, respectively.

Table 6 displays the results of the mediation analysis. The results show that attitude partially mediates the effects of relative advantage (β = 0.187, p-value = 0.000), complexity (β = 0.192, p-value = 0.000), and observability (β = 0.164, p-value = 0.000) on Fintech adoption intentions. Thus, H6a, H6c, and H6d are partially supported. On the other hand, attitude fully mediates the relationship between compatibility and Fintech adoption intentions (β = 0.161, p-value = 0.000). Thus, H6b is confirmed.

3. Discussion

The primary objective of this study was to examine the factors that impact SMEs' inclination towards adopting financial technology (Fintech). Applying IDT theoretical framework, this study has identified technology characteristics as determinants of Fintech adoption intentions.

The first finding reveals the positive role of relative advantage in determining attitudes towards Fintech adoption. The greater the benefits perceived by SMEs from the use of Fintech,the stronger their positive attitude towards Fintech adoption. These results align with findings from several previous studies on innovation adoption in other settings (Jiang et al., 2021; Kumar et al., 2023). Furthermore, the results of this study reveal that relative advan-

Table 5. Path Coefficients

Path	Path Coefficients	T statistics	P values	R^2
Relative Advantage -> Attitude	0.262	4.745	0.000	0.677
Compatibility -> Attitude	0.225	3.243	0.001	
Complexity -> Attitude	0.269	4.447	0.000	
Observability -> Attitude	0.229	3.821	0.000	
Attitude -> Adoption Intention	0.714	22.382	0.000	0.509

Table 6. Mediation Analysis

Path	Direct Effect		Indirect Effect		Mediation Type
	Path Coefficients	P values	Path Coefficients	P values	
Relative Advantage -> Attitude -> Adoption Intention	0.169	0.002	0.187	0.000	Partial Mediation
Compatibility -> Attitude -> Adoption Intention	0.041	0.283	0.161	0.000	Full Mediation
Complexity -> Attitude -> Adoption Intention	0.343	0.000	0.192	0.000	Partial Mediation
Observability -> Attitude -> Adoption Intention	0.319	0.000	0.164	0.000	Partial Mediation

tage is the second most important determinant of attitudes towards Fintech adoption after complexity. The findings show that in the Fintech adoption process, SMEs really consider the extent of the relative advantage provided by Fintech features because they can offer many benefits, both financial and non-financial. For example, Fintech services such as P2P lending and crowdfunding provide sources of business funding. Other Fintech services such as digital payment systems provide non-financial benefits in the form of efficient financial transactions. Thus, SMEs tend to be interested in and develop a favorable attitude towards Fintech services that provide a high relative advantage.

Moreover, the empirical findings support the existence of a positive correlation between compatibility and attitudes towards the adoption of Fintech, albeit at a weaker level of influence than the other IDT factors. The fit between Fintech and the needs and values of SME owners is important. SMEs will consider the extent to which features of Fintech are able to meet their needs and are in accordance with the values. In this regard, Fintech services such as P2P lending and crowdfunding can meet SMEs' need to obtain funding more quickly. Thus, the more appropriate Fintech is to the conditions being faced by SMEs, the greater the likelihood this perceived compatibility will lead to the formation of a positive attitude towards Fintech adoption. The results for compatibility also align with prior research that has demonstrated similar patterns (Jamshidi & Hussin, 2018; Jiang et al., 2021).

The study results also confirm the positive role of complexity in determining attitudes towards Fintech adoption. As mentioned earlier, complexity shows the strongest influence compared with other IDT factors, withperceived ease of use an important basis for SMEs to form positive attitudes towards adopting Fintech that is characterized by user-friendliness, thus requiring less time and effort for acquisition of knowledge and skills. In the context of this study, the ease of financial transactions enabled by digital payment systems and the ease of obtaining loan funds from Fintech services such as P2P lending and crowdfunding were crucial to the formation of positive attitudes by SMEs. Fintech services that are simple and easy to use enhance the efficiency of SMEs. Conversely, Fintech features that are complex and difficult to apply directly require additional time to learn. Put simply, the easier Fintech is to use, the more positive the attitude that is formed. Prior investigations of technology adoption have also documented comparable results (Giovanis et al., 2019; Karahoca et al., 2018). Furthermore, this study indicates that simplicity is an important factor because it concerns the flexibility of the SMEs themselves.

Observability also has a positive effect on attitudes towards Fintech adoption, with the study results showing it is an important determinant in forming SMEs' attitudes. It is evident that SMEs tend to observe how other people use Fintech and the extent to which others benefit from using Fintech because this can minimize the risk of failure. Specifically, SMEs will observe the extent of the benefits and convenience obtained by their colleagues in applying for loans using P2P lending and crowdfunding and also the efficiency gains from using digital payment systems. The study outcomes are in accordance with findings on perceived observability from several previous studies on innovation adoption (Jiang et al., 2021; Reyes-Mercado & Rajagopal, 2017). Observability exhibited the third highest level of influence when compared to other IDT factors in the current study.

Furthermore, the findings suggest that SMEs' intentions to adopt Fintech are directly

and significantly influenced by their positive attitudes towards Fintech adoption. SMEs with a favorable attitude towards Fintech adoption tend to have strong acceptance and intention towards adopting Fintech. In other words, the greater the SMEs' intention to adopt Fintech, the more positive their attitude toward its adoption. The outcomes of this study support previous findings by Elnadi (2022) and Opasvitayarux et al. (2022) that also highlight the significant influence of attitudes on individuals' intentions to adopt technology. The current study further reveals that Fintech adoption depends on the extent to which positive attitudes are developed. SMEs with a favorable attitude towards Fintech will build positive feelings and have high expectations so that the possibility of SMEs adopting Fintech is also high.

Finally, the findings of this study confirm the mediating role of attitude on the effect of IDT factors (relative advantage, compatibility, complexity, and observability) on SMEs' intention to adopt Fintech. These results strengthen previous findings that also reveal the significant role of attitude in mediating the relationship between IDT factors and intention to adopt technology (Arli & Bakpayev, 2023; Kasilingam, 2020). Furthermore, the current study revealsthat when SMEs perceive Fintech services as providing benefits (financial and non-financial), suiting their needs, being easy to operate, and having been adopted by other people, they will develop a favorable attitude that is reflected in positive feelings towards Fintech. These positive feelings are then converted into a strong intention to adopt Fintech. In other words, the better the SMEs' perception of the characteristics of Fintech, as based on relative advantage, compatibility, complexity, and observability, the more favorable the attitude that is formed, ultimately strengthening the intention to adopt Fintech.

CONCLUSION AND SUGGESTION

The primary objective of this study was to examine the determinants that influence SMEs' intentions to adopt Fintech by applying the IDT theoretical framework. It has succeeded in proving and demonstrating the effectiveness of the IDT theoretical framework in explaining SMEs' intentions to adopt Fintech. Specifically, all hypotheses proposing that IDT factors (relative advantage, compatibility, complexity, and observability) play an important role in forming SMEs' attitudes towards Fintech adoption were confirmed. The findings also confirm the hypothesis that attitudes toward Fintech adoption play a significant role in determining SME intentions to adopt Fintech.

There are at least two important theoretical implications offered by the study. First, considering research that focuses on determining factors in SMEs' intention to adopt Fintech is still very limited, the results of this study offer novel perspectives regarding the factors underlying SMEs' intention to adopt Fintech. The findings confirm that relative advantage, compatibility of Fintech with SMEs' needs, its ease of use and perceived benefits are important determinants of Fintech adoption intentions by SMEs. Moreover, the findings support the aptness of Innovation Diffusion Theory (IDT) for elucidating factors influencing SMEs' intentions to adopt Fintech. This study provides empirical evidence regarding the effectiveness of IDT in understanding Fintech adoption intentions from an under-explored SME perspective.

There are at least four important practical implications offered by this study. First, by investigating the determinants of SMEs' intention to adopt Fintech, this study provides a conceptual framework and empirical support to Fintech service providers seeking to understand SME patterns in relation to Fintech adoption.

Second, this study indicates that perceived relative advantage and compatibility are two important factors influencing SME attitudes towards Fintech adoption. Therefore, it is essential for Fintech service providers to integrate the advantages of Fintech services and needs of SMEs to achieve satisfactory levels of Fintech adoption and in turn maximum business profits. Fintech service providers can put effort into advertising that highlights the advantages of their products/services compared to other providers. They can also strengthen the narrative regarding the relevance of the Fintech services they offer to meeting the current conditions and needs of SMEs. Third, the findings of this study suggest that the perceived ease of use or complexity associated with Fintech operations significantly influence the attitudes of SMEs towards the adoption of Fintech. SMEs tend to form a positive assessment of Fintech that offers ease of use. Thus, Fintech service providers must simplify the interface and operational characteristics of Fintech, for example transaction, registration and installation processes. Among other approaches, the use of facial recognition or fingerprints to access Fintech services can be considered. Fourth, this study indicates that perceived observability plays an important role in shaping SMEs' attitudes towards Fintech adoption. SMEs tend to observe the extent to which Fintech adoption benefits other SMEs. Thus, Fintech service providers can formulate appropriate strategies to ensure information about the benefits of Fintech adoption spreads to others. For example, Fintech service providers can utilize social media to spread information about the benefits of using Fintech.

LIMITATIONS AND FUTURE RESEARCH

A number of constraints have limited this study,nevertheless providing avenues for future research endeavors. First, as this study focuses on the Fintech adoption intentions of SMEs in Indonesia, the problem of generalizability cannot be avoided.This is because SMEs have fundamental differences compared to large companies in terms of access to capital and technology, and so the results of this study may not apply to large-scale companies. Cultural differences between Indonesia and other countries is another factor that limits the generalizability of the study findings. Future research can be undertaken to validate this research model in other contexts and regions to enrich understanding regarding Fintech adoption behavior. Second, the data collection for this study was carried out at one specific point in time, and thus the extent to which changes over time influence SMEs' assessments of Fintech adoption were not considered. Longitudinal methods could be applied in future research to evaluate the extent to which SMEs' assessments of Fintech adoption change over time. Third, this study focused solely on factors of innovation diffusion in influencing SMEs' intention to adopt Fintech. However, the SME literature indicates that demographic factors such as education level and gender can also determine the financial behavior of SMEs (Kunoviku-Demiri et al., 2021). Thus, in order to enhance the comprehensiveness and accuracy of future research, it is imperative to incorporate demographic elements when exploring SMEs' inclinations towards adopting Fintech. Finally, this study views all SMEs as one homogeneous group and so does not take into account regional and business sector diversity. Future studies could therefore investtigate the extent to which regional and business sector diversity influences Fintech adoption intentions by SMEs.

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