

FINTECH ADOPTION: THE ROLE OF FINANCIAL LITERACY, TRUST AND USER INNOVATIVENESS IN MSMEs IN SAMPANG

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Abstract

The rapid development of financial technology has changed how financial services are provided, especially for micro, small, and medium enterprises (MSMEs). However, the adoption of fintech among MSMEs on Madura Island is still relatively low, so further studies are needed on the factors influencing adoption decisions. This study examines the influence of financial literacy and trust on fintech adoption among MSMEs in Sampang Regency, Madura, with user innovativeness as a mediating variable. This study uses a quantitative approach with primary data collected from 100 MSME fintech users through a structured questionnaire. The analysis technique used is Structural Equation Modeling with the Partial Least Squares (SEM-PLS) approach to four primary constructs: financial literacy, trust, user innovativeness, and fintech adoption. The study results show that financial literacy does not directly affect fintech adoption but has an indirect effect through user innovativeness. It shows that financial literacy alone is insufficient without an innovative attitude towards technology. Meanwhile, trust does not have a significant effect, directly or indirectly, reflecting concerns about data security and preferences for conventional financial practices. In contrast, user innovativeness is shown to play a significant role in driving fintech adoption. Theoretically, this study integrates three primary constructs into one fintech adoption model and emphasizes the importance of the mediating role of innovativeness. These results support the need for digital financial education that encourages innovativeness, expands access to technology, and public policies that build trust in fintech services.

Keywords: Fintech adoption, Literacy, Trust, User innovativeness, MSMEs, Technology Adoption.

INTRODUCTION

Financial technology (fintech) provides an opportunity for anyone to enjoy the convenience of transacting anywhere and anytime efficiently and reliably, increasing the efficiency and effectiveness of the transaction process. Fintech is an innovative financial services that combines digital technology to simplify, speed up and make financial transactions more efficient without going through face-to-face meeting. The paradigm shift in consumers increasingly relying on internet access is a major driver of fintech innovation. The increasingly widespread availability of internet access has contributed significantly to the transformation of how transactions are carried out, allowing customers to transact in real-time easily and efficiently. Using mobile phones for financial services has enabled developing countries to leapfrog the traditional physical branch office model and gain significant financial inclusion gains (Beck, 2020). Fintech companies can reach potential consumers in rural locations as long as consumers are in possession of a smartphone and the internet, unlike conventional financial services that typically add more branches to reach consumers. It influences the cost of funds for the company and the financial services charged to consumers.

Various empirical studies show the role of fintech in increasing public literacy, fintech services (especially mobile money) have helped increase financial inclusion in developing countries where traditional bank-based financial systems are still underdeveloped (Suri, 2017). Conversely, low levels of financial literacy are a barrier to public understanding of fintech adoption (Morgan & Trinh, 2019).

Yoshino et al., (2020) assert that financial literacy has a powerful effect on the extent to which fintech services are utilized.

Innovativeness of the user and trust play a vital role in the adoption of financial technology. Trust in the service is greatly significant in user decision-making regarding the adoption of fintech. Specifically, the greater the user trust in the service provider, the greater their likelihood of using the service, making fintech service adoption easier. Numerous empirical research works have identified trust as a significant driver of fintech adoption (Nathan et al., 2022; Sánchez-Torres et al., 2018). User innovativeness also contributes to the adoption of financial technology, where the willingness to use new technology is a significant motivator for its adoption. User innovativeness has been conceptualized as the tendency to search for new technological solutions. According to a study conducted by Hu et al., (2019) user innovativeness and trust both have a significant positive influence on the adoption of fintech. This study examines the mediating role of user innovativeness between financial literacy and trust on fintech adoption, a context in which previous research is still limited.

Understanding the factors driving Fintech adoption is vital in accelerating financial access for MSMEs (Micro, Small, and Medium Enterprises). MSMEs greatly influence the economic prosperity of a country. MSMEs also contribute to poverty alleviation efforts by creating jobs. According to data from the Ministry of MSMEs, as of December 2024, there were 65.5 million micro and small business units in Indonesia, equivalent to 99.9% of the total existing businesses. MSMEs contribute around 60.5% to the national GDP (www.umkm.go.id). To support economic growth, it is important to strengthen the capacity of MSMEs, one of which is by improving the ability of MSMEs to manage finances and expand financial access by adopting fintech. Fintech also provides benefits for MSMEs and financial access. Fintech companies' advanced technology speeds up the delivery of financial solutions at affordable rates. Fintech adoption in Indonesia has been connected by a number of empirical research from the viewpoint of individual users (Firmansyah et al., 2021; Setiawan et al., 2021). Nevertheless, despite their substantial contribution to the Indonesian economy, MSMEs continue to receive insufficient attention. This study was carried out on MSMEs in Sampang. Based on preliminary research, the adoption of MSME fintech in Sampang is still relatively low.

This study makes important contributions both theoretically and practically. Theoretically, it broadens the understanding of fintech adoption by building a model that integrates financial literacy, trust and user innovativeness, especially in the context of MSMEs in developing areas such as Sampang. Practically, the results of this study provide a strong basis for the government and fintech service providers to design digital education strategies.

LITERATURE REVIEW AND HYPOTHESIS FORMULATION

Financial Technology

Automated Teller Machines (ATMs) and credit card processing services were the first to create fintech, followed by the emergence of electronic stock trading and e-commerce (Milian et al., 2019; Puschmann, 2017). As online banking becomes more and more common, a new wave of fintech services is emerging. The rise of blockchain, cloud computing, AI, and mobile banking comes next (Milian et al., 2019; Puschmann, 2017). As a result, banking operations become more effective (Lynn et al., 2019; Puschmann, 2017).

Fintech has brought efficiency to business operations and the financial sector by reducing intermediation costs and increasing access to financial services by creating alternatives to accessing these services. Traditional banking institutions suffer greatly from information asymmetry and legacy information systems are slow to integrate with modern technologies (Vives, 2017). Taking advantage of the low level of technology adoption by conventional financial institutions, fintech has disrupted the financial sector by offering more creative and innovative services. The advancement of fintech in digital technology has disrupted banking services such as payments, lending, customer acquisition, savings movement, insurance, financial advice, and many more (KPMG, 2019). Fintech adoption takes advantage of the availability of communication, the simplicity and security of financial

transactions, the ubiquity of the internet, and the automation of information and transaction processing in the finance industry (Davradakis & Santos, 2019).

As quoted in the EY Global FinTech Adoption Index 2019 report, interest in using fintech solutions is on the rise. The adoption rate of fintech services worldwide has grown to 64%, with 96% of consumers familiar with at least one fintech product, primarily in segments including money transfer and payment (EY, 2019). Fintech services are now being used in banking and investment fund sectors and have expanded to almost all industries, including telecommunications and wholesale trade (Singh et al., 2020).

According to Ryu, (2018) fintech adoption continues to be plagued by factors such as financial risks, legal uncertainty, security, privacy, and inefficient work systems of fintech companies. A study conducted by Leong et al., (2017) on the behavior of customers and fintech acceptance barriers confirmed the reality that the adoption of any technology is highly dependent on the readiness of prospective users to embrace and use technological advancements.

Financial literacy

Financial literacy increases the relationship to the take-up of financial technology, as those with a good grasp of financial knowledge have higher levels of adaptability to fintech services (Aftab et al., 2025). It refers to an individual's ability to understand and efficiently implement financial knowledge to make effective financial decisions. In the context of this study, financial literacy includes an understanding of personal finance, saving, and risk diversification. Financial literacy also affects the level at which fintech services are used. Yoshino et al., (2020) discovered that financial literacy positively affects the usage of electronic money, the usage of mobile payment applications, and the usage of at least one of the two fintech services. Conversely Nathan et al., (2022) argue that financial literacy has a negative effect on the adoption of fintech solutions. In contrast, Nugraha et al., (2022) said that financial literacy plays a part in the growth of MSME businesses through encouraging entrepreneurs to innovate.

H1: There is a direct relationship between financial literacy and fintech adoption

H2: Financial literacy influences Fintech adoption that is mediated by user innovativeness

Trust

Trust is closely related to the perceived risk in adopting fintech (Malaquias & Hwang, 2016). Users who feel a higher level of trust in the integrity and security of fintech platforms' data are more likely to prefer fintech services. Trust in this study refers to user confidence regarding the security of personal data and the fact that fintech can provide good products for users. Hassan et al., (2022) state the significant positive effect of trust on the intention to adopt MFS (mobile fintech services) in Bangladesh. Also, Sánchez-Torres et al., (2018) state trust affects e-banking adoption in Colombia. User innovativeness can mediate the effect of trust on fintech adoption because innovative individuals tend to have the courage to try new technologies even though their level of trust is not yet fully high.

H3: Trust has a direct effect on fintech adoption

H4: Trust influences fintech adoption mediated by user innovativeness

User innovativeness

Innovativeness is the tendency of individuals or groups to adopt new ideas or technologies earlier than others. In this study, user innovativeness is the willingness to explore new technologies, become early adopters of cutting-edge technologies, and be enthusiastic about experimenting with fintech services. Hu et al., (2019) stated that user innovativeness significantly impacts fintech. Likewise, Setiawan et al., (2021) show that user innovativeness directly and indirectly impacts fintech

adoption. Nathan et al., (2022) stated that user innovativeness significantly correlates with fintech adoption in Vietnam.

H5: User innovativeness has a direct effect on fintech adoption

RESEARCH METHODS

The research data is primary data obtained from distributing questionnaires. The population in this study are MSME owners in Sampang who have adopted fintech to ensure that the data collected is relevant to the research topic regarding the adoption of financial technology. Assuming that a minimum sample size of 100–200 was needed for SEM (Ghozali & Latan, 2015), the study included 100 MSME owners who had implemented fintech. Structured data collection which includes distributing official questionnaires with a Likert scale of 1 to 5 (strongly disagree, disagree, neutral, agree, strongly agree).

This research uses path *analysis with* the following equation::

$$\text{Equation 1: } Z = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + e_i$$

$$\text{Equation 2: } Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 Z + e_i$$

where:

β_0 = Constant

$\beta_1, \beta_2, \beta_3$ = Regression Coefficients

X_1 = Financial literacy

X_2 = Trust

Z = User Innovativeness

e_i = error term

This study uses the smartPLS4 program for path analysis. The Partial Least Square (PLS) method is selected because there are intervening or mediating variables, which must test direct and indirect effects. PLS is considered more reliable because it has a bootstrapping feature to test indirect effects.

RESULTS AND DISCUSSION

Path analysis begins with Outer Model analysis, then testing the structural model of the hypothesis testing section with the Inner Model. The outer model is carried out to test the validity and reliability of the questionnaire used in the research so that the questionnaire can be valid or reliable. Validity Test with Convergent Validity. Convergent validity is related to the concept that the view of a variable from the model is required to have a high correlation. The results of the Convergent Validity test are presented in Table 1.

Table 1. Convergent validity value

Variables	Indicator	Outer Loading	Rule of Tumb	Information
Financial Literacy (X1)	X1.1	0.886	0.7	Valid
	X1.2	0.913	0.7	Valid
	X1.3	0.902	0.7	Valid
	X1.4	0.913	0.7	Valid
Trust (X2)	X2.1	0.835	0.7	Valid
	X2.2	0.784	0.7	Valid
	X2.3	0.831	0.7	Valid
User Innovativeness (Z)	Z1	0.889	0.7	Valid
Fintech Adoption (Y)	Z2	0.885	0.7	Valid
	Z3	0.782	0.7	Valid
	Y1	0.790	0.7	Valid
	Y2	0.971	0.7	Valid
	Y3	0.817	0.7	Valid

Source: Field Survey – SmartPLS

The convergent validity measurement can be seen by the loading factor for each indicator. To achieve convergent validity, the loading factor value must be > (greater than) 0.70 for confirmatory research. The 0.60-0.70 value of a loading factor can be utilized or accepted for exploratory research. Table 1 obtained an outer loading value of > 0.7, thus the research indicators are valid. Besides the outer loading value, convergent validity can also be assessed using the Average Variance Extracted (AVE) measure. AVE is deemed acceptable if it exceeds 0.50 in confirmatory and exploratory research contexts (Ghozali & Latan, 2015). The AVE values derived from the result of the tests conducted are explained in the next subsection. From Table 2, It can be seen that the AVE value of all the variables studied has a value > 0.5. Thus, all of the variables can be declared valid.

Table 2. AVE Value (Average Variance Extracted)

Variables	AVE	Rule of Thumb	Information
X1	0.816	0.5	Valid
X2	0.568	0.5	Valid
Z	0.654	0.5	Valid
Y	0.615	0.5	Valid

Source: Field Survey – SmartPLS

Discriminant validity is related to the concept that the view of a variable from the model should not have a high correlation. The measurement requirements used in the discriminant validity test are based on the cross-loading value indicator. It is said to be passed or valid if the cross-loading for each variable is > (greater) than 0.70 for confirmatory research and greater than 0.50 for exploratory research.

Table 3. Discriminant validity value (Cross Loading)

Cross loading value	X1	X2	Z	Y	Information
X1.1	0.886	0.449	0.381	0.339	Valid
X1.2	0.913	0.406	0.377	0.323	Valid
X1.3	0.902	0.489	0.289	0.242	Valid
X1.4	0.913	0.462	0.418	0.388	Valid
X2.1	0.233	0.733	0.237	0.105	Valid
X2.2	0.255	0.784	0.248	0.211	Valid
X2.3	0.552	0.831	0.360	0.298	Valid
Z1	0.172	0.273	0.771	0.427	Valid
Z2	0.356	0.291	0.885	0.971	Valid
Z3	0.416	0.366	0.782	0.510	Valid
Y1	0.124	0.015	0.147	0.889	Valid
Y2	0.356	0.291	0.885	0.971	Valid
Y3	0.049	0.116	0.095	0.738	Valid

Source: Field Survey – SmartPLS

Every indication of every variable has a cross-loading value greater than 0.70, according to the data in Table 3. It demonstrates that each variable's indicators are regarded as legitimate.

To determine whether a measuring device is consistent and whether it will remain consistent when retested, a reliability test is utilized. Cronbach's alpha and the composite reliability value are utilized to determine whether the reliability test in this study is successful. The reliability value's lower limit is measured by Cronbach's alpha. The true value of a construct's reliability will be measured by composite reliability. According to Ghozali & Latan, (2015) composite reliability is better than 0.70 for confirmatory research, the Rule of Thumb for Cronbach's alpha is 0.6, and 0.60-0.70 is still appropriate for exploratory research. Cronbach's Alpha and Composite Reliability values are shown from Table 4. The value of each variable is more than 0.7. As a result, it may be said that the variables under study are trustworthy and satisfy the general criteria for reliability testing.

Table 4. Cronbach's Alpha and Composite Reliability Values

Variables	cronbach's alpha	composite reliability	Rule of Thumb	Information
X1	0.925	0.947	0.70	Reliable
X2	0.794	0.866	0.70	Reliable
Z	0.741	0.847	0.70	Reliable
Y	0.700	0.826	0.70	Reliable

Source: Field Survey – SmartPLS

The inner model can be a structural model to test the hypothesis, to see the direct or indirect influence, significant or not, on the relationship between research variables, and to see the r-square value or q predictive relevance. The r-square value is presented in Table 5.

Table 5. r-square value

Variables	R-square
Y (Fintech adoption)	0.777
Z (User innovativeness)	0.213

Source: Field Survey – SmartPLS

The data in Table 5 shows that the R-squared of the Y variable (fintech adoption) is 0.777 or 77.7%. It means that the Y is explained by X1 (financial literacy), X2 (trust), and Z (user innovativeness) with a percentage of 77.7%, and the rest with a percentage of 22.3% is influenced by other variables not explained in this study. The R-Square value of the Z is 0.213 or 21.3%, which means that the Z is explained by the independent variables, namely the X1 and X2 with a percentage of 21.3%, and the rest with a percentage of 78.7% is influenced by other variables not explained in this study.

Next, the calculation of Q-Square based on the R-Square value is as follows:

$$\begin{aligned}
 \text{Nilai Q-Square} &= 1 - [(1 - R^2Y) \times (1 - R^2Z)] \\
 &= 1 - [(1 - 0,777) \times (1 - 0,213)] \\
 &= 1 - (0,223 \times 0,787) \\
 &= 1 - 0,176 \\
 &= 0,824 \\
 &= 82,4\%
 \end{aligned}$$

Based on the results of the Q-Square test, it show that Q² has a predictive relevance value of 0.824 or 82.4%. This Q-Square value can indicate that this model is feasible because the diversity of the data can explain the model with a percentage of 82.4%. The remaining 17.6% is explained by other variables not explained in this research model. With the Q² percentage result of 82.4%, the PLS model that has been formed is good because the model can explain 82.4% of the whole.

Hypothesis testing uses SEM-PLS analysis, utilizing the bootstrapping feature in the smartPLS4 application. Hypothesis testing can be seen by calculating the path coefficient for direct influence and the specific indirect effect for indirect influence in the inner model test. The variable has an effect or is accepted if the hypothesis test shows a t-statistic value > t-table 1.96 or a p-value < significance value or alpha 0.05 or 5% (Hair et al., 2017). Meanwhile, the research model is presented in Figure 1.

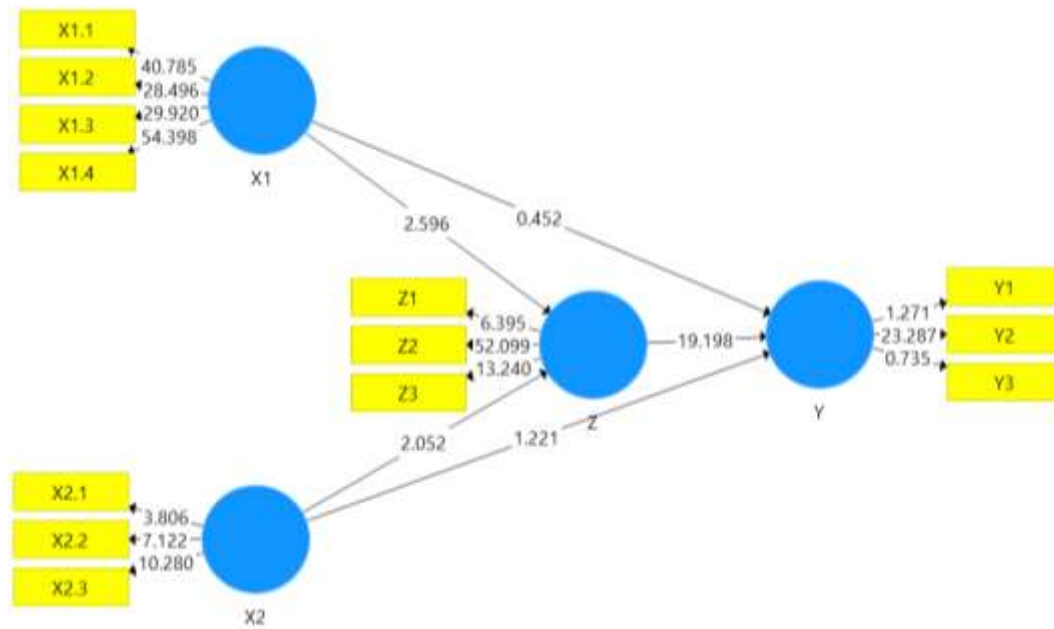


Figure 1. Research Model
 Source: Author's design

The basis for hypothesis testing in this study is the results of smartPLS4 bootstrapping output of path coefficient values and specific indirect effects in the inner model test. This test helps see direct effects and indirect effects. The results of the path coefficient values to see the direct effect are presented in Table 6, while Table 7 shows the indirect effect.

Table 6. Results of Direct Influence Relationship Test (Output Path Coefficient)

Influence Between Variables	Original sample(O)	Sample mean(M)	Standard deviation (STDEV)	T-statistic	P-Values	Note
X1 -> Y	0.030	0.031	0.066	0.452	0.651	Rejected
X1 -> Z	0.295	0.296	0.114	2,596	0.010	Accepted
X2 -> Y	-0.066	-0.064	0.054	1,221	0.223	Rejected
X2 -> Z	0.238	0.252	0.116	2,052	0.041	Accepted
Z -> Y	0.893	0.888	0.047	19,198	0,000	Accepted

Source: Field Survey – SmartPLS

Table 7. Results of the Indirect Influence Relationship Test (Output Path Coefficient)

Influence Between Variables	Original sample(O)	Sample mean(M)	Standard deviation (STDEV)	T-statistic	P-Values	Note
X1 -> Y	0.293	0.294	0.114	2,575	0.010	Accepted
X2 -> Y	0.146	0.160	0.120	1,212	0.226	Rejected

Source: Field Survey – SmartPLS

The Influence of Financial Literacy on Fintech Adoption

Table 6 shows that X1 has a positive effect on Y with a coefficient value of 0.030 and a significance level (p-value) of 0.651. Thus, hypothesis 1 which states that X1 (financial literacy) positively affects Y (fintech adoption), is rejected. The results of this study indicate that MSME owners in Sampang have good knowledge of the importance of financial management. To avoid waste, most MSME owners make a monthly spending budget. In addition, MSME owners in Sampang

understand the importance of controlling expenses and always have reserve funds for extraordinary needs. Most MSMEs in Sampang understand the importance of saving in financial management. They know the benefits of saving and are disciplined in setting aside part of their income to improve their financial management. These MSMEs believe that saving regularly can reduce their dependence on loans. Overcoming financial risks and strengthening financial stability requires this knowledge. However, the level of MSME literacy in Sampang Regency does not impact fintech adoption. This is due to several obstacles, such as limited access to technology, unstable internet connections, or lack of digital devices. In addition, cultural factors and financial management habits, such as the tendency to store money physically, affect the acceptance of fintech, and the preference for conventional financial services is still strong. In addition, the lack of knowledge about fintech causes some people to not fully understand the benefits and how the service works.

The findings of this study run counter to those of Yoshino et al., (2020) who discovered that financial literacy influences the intensity of use of fintech services and has a positive impact on the use of mobile payment apps, electronic money, and at least one of the two fintech services. According to a study by Taufiq et al., (2022), there is a significant relationship between Malaysian consumers' degree of financial literacy and their propensity to utilize FinTech. However, financial literacy hinders the adoption of fintech, according to Nathan et al., (2022).

The Influence of Financial Literacy on Fintech Adoption Mediated by User Innovativeness

Table 7 shows that the indirect influence of X1 on Y through Z has a significance level (p-value) of 0.010. Thus, hypothesis 2 which states that Z (user innovativeness) mediates the influence of X1 (financial literacy) on Y (fintech adoption), can be accepted. This study shows that MSMEs in Sampang Regency have good financial literacy, especially in financial management and planning. They are aware of making a monthly spending budget to avoid waste, which helps improve the effectiveness of financial planning. In addition, they also understand the importance of having a reserve fund to deal with unexpected expenses. The habit of discipline in saving and setting aside income regularly is important to reduce dependence on loans. This knowledge helps MSMEs manage financial risks and improve their businesses' financial stability.

User innovativeness can mediate the influence of financial literacy on fintech adoption because it encourages individuals to apply their financial knowledge creatively through technology. Although MSME owners have good financial literacy, this does not necessarily immediately encourage them to use fintech services. With an innovative attitude, MSME owners are more likely to explore and utilize financial technology as a solution to manage finances more efficiently. User innovativeness also spurs the courage to try new fintech services, adapt to technological developments, and use fintech features creatively. This study aligns with Nugraha et al., (2022) who stated that financial literacy could significantly improve MSME businesses with innovativeness from business owners.

The Influence of Trust on Fintech Adoption

Table 6 shows that X2 has a negative effect on Y with a coefficient value of -0.066 and a significance level (p-value) of 0.223. Thus, hypothesis 3 which states that X2 (trust) positively affects Y (fintech adoption), is rejected. The results of this study indicate that trust does not significantly affect the adoption of fintech by MSME owners. MSME owners in Sampang still prefer to make transactions in cash even though there are developments in fintech for digital payments. Cash payments are considered easier and more efficient because without additional processes, they are considered complicated. They are reluctant to use new technology because of the habits and social influences of using cash payments for years. In the FinTech context, social influence shapes adoption and can contribute to developing trust and credibility for these services (Zaid Kilani et al., 2023).

In addition, this preference is influenced by a poor understanding of how fintech services work. Perceptions about the security of fintech services vary, although some MSMEs believe it is

safe. MSMEs with a favorable view usually come from good experiences, such as never experiencing fraud or data leaks. On the other hand, negative views usually come from bad experiences, such as account fraud that causes unauthorized transactions. Few MSME owners in Sampang do not yet understand fintech services that can be accessed via digital devices or mobile phones. Some face problems such as insufficient devices or unstable internet connections. They are reluctant to switch to fintech because of traditional financial management habits, such as manual recording or using cash.

The findings of this study deviate from those of earlier empirical investigations, such as the robust correlation between the adoption of fintech services and customer trust (Ramaswamy et al., 2024). Similarly, Sánchez-Torres et al., (2018) discovered that Colombians' adoption of e-banking is influenced by trust. However, trust has no bearing on the adoption of fintech in Vietnam, claim Nathan et al., (2022).

The Influence of Trust on Fintech Adoption Mediated by User Innovativeness

Table 7 shows that the indirect influence of X2 on Y through Z has a significance level (p-value) of 0.226. Thus, hypothesis 4 which states that Z (user innovativeness) mediates the influence of X2 (trust) on Y (fintech adoption), is rejected. User innovativeness cannot mediate the influence of trust on fintech adoption. If the level of trust in fintech services is low due to security concerns, such as the risk of data breaches or fraud, then user innovativeness is not enough to drive fintech adoption. Trust plays an important role in FinTech usage, as it influences the intention to use and the actual use of fintech (Amnas et al., 2023). In terms of security, the perceptions of MSMEs in Sampang vary. Those with positive experiences, like never experiencing fraud or data leaks, tend to believe that fintech services are safe. Conversely, those who have experienced fraud or unauthorized transactions have a negative view of fintech. In addition, the habit of managing finances traditionally, such as recording manually and using cash, makes many MSMEs reluctant to switch to digital payments even though fintech services offer convenience and security. Another obstacle is limited access to adequate devices or a stable internet connection, which hinders the use of fintech technology. The results of this study differ from those of Setiawan et al., (2021) who showed that user innovativeness has a direct and indirect impact on fintech adoption.

The Influence of User Innovativeness on Fintech Adoption

Table 6 shows that Z positively affects Y with a coefficient value of 0.893 and a significance level (p-value) of 0,000. Thus, hypothesis 5 which states that Z (user innovativeness) positively affects Y (fintech adoption), is accepted. In this study, innovative MSMEs in Sampang tend to be more open to learning new technologies. They not only try fintech services but also try to understand how they work and their benefits. This attitude accelerates the adaptation process and makes it easier for them to integrate fintech into their businesses. MSMEs with innovative characters generally orient towards growth, efficiency, and exploration of new opportunities, so they are more open to digital financial solutions such as fintech. They see fintech not only as a transaction tool but as a strategic instrument to expand financial access, accelerate cash flow, and manage bookkeeping more modernly. Innovative business owners act as pioneers who can bridge the gap between new technology and the local context. They tend to experiment and disseminate information about the benefits of technology to the surrounding business community. Thus, user innovativeness directly impacts individual fintech adoption and can also strengthen the effect of technology dissemination at the MSME community level.

This study's results align with previous empirical research, which concluded that user innovativeness significantly influences fintech (Akhtar et al., 2024; Hu et al., 2019) (Akhtar et al., 2024). As Setiawan et al., (2021) show user innovativeness directly and indirectly impacts fintech adoption. Meanwhile, Nathan et al., (2022) state that user innovativeness significantly correlates with fintech adoption in Vietnam

CONCLUSION

This study confirms that user innovativeness significantly drives MSMEs to adopt fintech in Sampang Regency. Although not directly impacted, financial literacy is proven to have a significant influence through the mediation of user innovativeness. On the other hand, trust does not show a significant relationship, either directly or indirectly, reflecting that the trust aspect has not been able to overcome the dominance of preferences for conventional financial systems. Theoretically, this model extends the literature on technology adoption in the context of MSMEs in developing regions by considering structural and cultural barriers. Practically, this study provides a strong policy foundation for decision-makers in designing strategies to increase fintech-based financial inclusion and supporting the need for digital financial education that encourages innovativeness, expands access to technology, and public policies that build trust in fintech services.

This study has limitations because the use of cross-sectional design limits understanding the dynamics of changes in fintech adoption behavior over time. Therefore, longitudinal studies are recommended in the future. In addition, using self-questionnaire data can potentially cause bias, so combining quantitative and qualitative methods can enrich the understanding and validity of the findings

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