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The Influence of Trust, Perceived Risk, and Level of Technology Anxiety on MSMEs' Interest in Using Financial Technology (Fintech) (Case Study: MSMEs in Pangkalpinang City)

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Abstract

Although Indonesia's micro, small, and medium enterprise (MSME) sector is expanding rapidly, fintech adoption within these businesses continues to lag. This research investigates how trust, perceived risk, and technology anxiety shape MSMEs' intentions to adopt financial technology in Pangkalpinang City. Utilizing a quantitative associative-causal framework, primary data were gathered from 70 purposively sampled MSME operators via a 5-point Likert scale instrument. Data analysis was executed using Partial Least Squares Structural Equation Modeling (PLS-SEM) on SmartPLS software. The statistical evaluation demonstrates that adoption intention is positively driven by trust (β = 0.334; p = 0.000), whereas perceived risk (β = -0.386; p = 0.000) and technology anxiety (β = -0.273; p = 0.023) demonstrate significant negative effects. Overall, the proposed model explains roughly 48.3% of the variance in adoption intention, with perceived risk acting as the primary barrier to adoption. These findings suggest that accelerating MSME digitalization requires more than payment infrastructure provision; it demands cybersecurity education to reduce risk perception, consumer protection guarantees to build trust, and digital literacy training to lower technology anxiety among business operators.

Keywords: Financial Technology, MSMEs, Trust, Perceived Risk, Technology Anxiety

INTRODUCTION

Financial technology (fintech) innovations in the digital age are growing rapidly and have become one of the key drivers advancing financial integration across Indonesia. The outstanding financing of fintech lending reached Rp59.64 trillion in 2023, with Rp20.87 trillion channeled to MSMEs, reflecting the massive shift in public transaction behavior from conventional systems toward the digital ecosystem (Antara News, 2024).

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This growth is closely tied to the government's major agenda to achieve a national financial inclusion target of 90%, one of the strategies for which involves the digitalization of Micro, Small, and Medium Enterprises (MSMEs) (GovInsider, 2023). The choice of MSMEs as the driving force behind this strategy is not without reason: these enterprises serve as a core backbone for the domestic market, as evidenced by its contribution of over 60% to the Gross Domestic Product (GDP). With a business population that extends to even the most remote areas and a massive capacity to absorb labor, MSMEs are often referred to as the "backbone of the people's economy," whose sustainability is crucial to macroeconomic stability.

However, this optimism at the policy level has not yet fully aligned with the reality on the ground. Data from the Ministry of Trade (2023) shows that the national digital adoption rate among MSMEs has only reached 33.6%, far from the ideal level needed to support the 90% financial inclusion target (INDEF, 2024). This gap between macro-level policy ambitions and the actual pace of adoption at the micro level indicates the presence of unresolved structural and psychological issues in the digital transformation of MSMEs.

This disparity is also clearly evident in the city of Pangkalpinang. On the one hand, the city possesses immense digital economic potential, as reflected by the presence of 26.235 MSMEs in the trade sector that form the foundation of daily transactions for the community. Local governments and relevant authorities have also been aggressively promoting the implementation of QRIS in traditional markets as a concrete effort to expand the cashless payment ecosystem down to the grassroots level. However, these efforts still face resistance on the ground, where some business owners remain reluctant or hesitant to fully switch to digital payment methods (RRI, 2024). It is this disparity between the availability of infrastructure and the level of acceptance among business owners that serves as the starting point for this study.

To achieve a sharper research focus, this study limits its scope to payment fintech, specifically QRIS and e-wallets. This limitation is based on the fact that both payment tools heavily support day-to-day business activities of MSME operators, ranging from sales and purchase transactions and sales recording to interactions with consumers. Thus, payment fintech is considered the most relevant and contextual representation of the actual nature of MSME transactions in the trade sector, compared to other types of fintech, such as lending or investment, which are less directly related to the day-to-day operations of businesses.

Upon further examination, the main barriers to the adoption of fintech payment solutions among MSME operators turned out not to be purely technical or infrastructural in nature, but were dominated by psychological factors, namely trust, perceived risk, and technology anxiety. Trust plays a crucial role because digital transactions essentially take place without direct face-to-face interaction between the transacting parties; thus,

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systemic user confidence becomes a foundational determinant in minimizing the uncertainty inherent in the digital ecosystem. Conversely, high perceived risk, typically fueled by widespread media coverage of cybercrime, data breaches, and cases of illegal fintech operations that harm the public, tends to dampen business owners' interest in conducting electronic transactions, as this perception of risk directly influences their psychological cost-benefit analysis before adopting new technology.

The complexity of these obstacles is further compounded by "technology anxiety", a feeling of fear of making mistakes, restlessness, or a lack of confidence that arises when business owners must operate new financial systems with which they are not yet familiar. This condition is generally more common among older MSME entrepreneurs and those with low digital literacy, where the combination of age and limited technological understanding creates a sort of "multi-layered psychological barrier" in the transition to digital payments. These three psychological factors, trust, perceived risk, and technology anxiety, ultimately become crucial determinants of the success or failure of the digital transformation process at the micro-business level, far beyond the mere availability of technical infrastructure.

The urgency of this research is further reinforced by the inconsistent findings (research gap) from previous studies examining the relationship between these variables. Regarding perceived risk, for example, Andini & Himawan (2023) and Anggraeni & Primadineska (2024) found that perceived risk actually positively drives fintech adoption intentions, a finding that can be conceptually explained by the argument that perceived risk can encourage both caution and curiosity among business actors. However, this finding contradicts the results of A'la (2021) study, which instead found an inverse association between perceived risk and adoption interest, consistent with the general logic that a high perception of risk should reduce the willingness for technological integration. Such discrepancy in the direction of the effects between these two sets of findings indicates that how perceived risk influences user interest in using fintech is far from conclusive.

A similar inconsistency was also found in the trust variable. Theoretically, trust is generally assumed to positively influence the willingness to adopt financial technology, given that trust is a fundamental prerequisite for digital transactions. However, Noviyanti & Erawati (2021) actually indicate that trust has a negative effect, arguing that MSME actors in reality prioritize technical ease of use over mere trust in the system. This finding raises further questions regarding the extent to which trust is truly a primary determinant, or whether it actually serves as a secondary factor that is less dominant than other practical considerations.

This unresolved empirical gap, coupled with the limited number of integrative models that link the three psychological variables (trust, perceived risk, and technology

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anxiety) within a single research framework applied to local ecosystems such as the city of Pangkalpinang, serves as both the foundation and the main impetus behind this study. The present study seeks to offer theoretical insights, by testing an integrative model in the context of regional MSMEs, which have been underrepresented in the literature, and practically, by serving as a basis for policy recommendations to help stakeholders design more targeted strategies to accelerate the adoption of fintech payment solutions. Driven by these underlying factors, this study is conducted under the title: **"The Influence of Trust, Perceived Risk, and Level of Technological Anxiety on MSMEs' Interest in Using Financial Technology (Fintech) (Case Study: MSMEs in Pangkalpinang City)."**

LITERATURE REVIEW

Technology Acceptance Model (TAM)

First conceptualized by Davis (1989), the Technology Acceptance Model (TAM) represents a specialized adaptation of Fishbein and Ajzen's (1975) Theory of Reasoned Action (TRA). This framework posits that individual behavior is dictated by behavioral intentions, which are intrinsically shaped by personal attitudes toward performing those actions. Specifically, TAM extends this theoretical model to information system acceptance by incorporating two foundational variables: **perceived usefulness** and **perceived ease of use**, both of which determine the **behavioral intention** to use a technological system.

In this study, TAM was used as a grand theory but with contextual modifications. The two core TAM dimensions (usefulness and ease of use) were excluded from direct testing because this study argues that, in the context of fintech payment adoption (QRIS and e-wallets) by MSMEs in Pangkalpinang City, the main barriers are no longer technical functions or operational ease, since digital payment app interfaces are generally simple and familiar today, but rather the users' **psychological dimensions**: how much they trust the service provider (trust), how much they worry about potential losses (perceived risk), and how anxious they are about using the technology itself (technology anxiety). This shift in focus is consistent with the argument by Wijaya et al. (2024), who noted that evaluating "perceived ease of use" is no longer relevant to test in isolation because modern users are already accustomed to digital devices, making affective and risk variables stronger determinants.

Thus, TAM serves here as an umbrella framework: its underlying logic (that certain perceptions of technology shape the intention to use it) is retained, but its constituent constructs are replaced with three variables more relevant to the characteristics of MSME actors, a population that, based on the context of this study, is often older, has limited

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digital literacy, and operates on a micro-to-small business scale where tolerance for the risk of transaction failure is very low.

Financial Technology (Fintech) and MSMEs' Interest in Adoption

Financial Technology (fintech) is a technologically driven advancement within financial solutions aimed at improving transactional speed, operational ease, and system safety. According to the Financial Services Authority, fintech consists of several categories, such as payment systems, P2P lending, crowdfunding, market comparison services, and risk management tools. This study specifically focuses on payment fintech, namely QRIS and e-wallets, as these are the most widely used services in MSME transaction activities.

Payment fintech provides MSMEs with the convenience of conducting digital transactions, thereby improving operational efficiency and the quality of service provided to consumers. Unlike loan-based fintech (peer-to-peer lending), payment fintech is more closely related to the payment process and thus carries distinct risk characteristics, such as system disruptions, data security issues, and transaction failures.

In this study, fintech adoption interest refers to how inclined MSME operators are to adopt, keep using, and recommend payment fintech services in their business activities. This construct directly aligns with the concept of "behavioral intention" within the Technology Acceptance Model (TAM) formulated by Davis (1989), which asserts that user intention acts as the fundamental driver behind ongoing technology adoption. Thus, adoption intention serves as a key indicator for measuring the success of payment fintech implementation among MSMEs.

Factors That Influence Interest in Technology Use

1. Trust

   Trust refers to users' readiness to depend on fintech services, driven by confidence that the service provider possesses integrity, competence, data security guarantees, and operational transparency (Pavlou, 2003). As proposed Mayer et al. (1995), three main core dimensions build this trust: technical ability, benevolence, and the service provider's integrity.

   In the digital financial ecosystem, trust serves as the primary foundation for mitigating the uncertainty arising from non-face-to-face transactions. The relationship between trust and interest in usage is directly proportional; when MSME operators feel confident regarding platform stability and guaranteed protection for their data and funds, their interest in utilizing fintech in daily business operations will increase significantly (Purwantini & Anisa, 2021; Putri et al., 2023).

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2. Perceived Risk

Perceived risk is a prospective user's subjective assesMSMEnt of the potential for loss or uncertainty resulting from the use of a new technology (Bauer, 1960; Featherman & Pavlou, 2003). According to the classification by Featherman and Pavlou (2003), several distinct dimensions comprise these risks, including financial risk (reflecting material losses), privacy and security risk (pertaining to unauthorized data exposure), performance risk (involving system glitches or delayed transactions), and time-related risk.

For MSME operators, these concerns are generally triggered by issues such as cybercrime, potential technical disruptions to applications during transactions, and the proliferation of illegal fintech platforms. This high perception of risk creates a psychological barrier that causes business operators to tend to delay or even be reluctant to adopt digital financial services (A'la, 2021). Although some findings indicate that users will continue to conduct transactions as long as the benefits gained are considered to outweigh the risks (Andini & Himawan, 2023; Anggraeni & Primadineska, 2024), theoretically, risk perception remains the primary factor hindering adoption intentions.

3. Technology Anxiety

Technology anxiety refers to an emotional response characterized by fear, restlessness, or a lack of confidence when individuals must interact with digital technology (Meuter et al., 2003; Venkatesh, 2000). These feelings typically stem from self-doubt and the fear of making operational errors that could result in transaction failures or financial losses.

At the local MSME level, this anxiety is closely linked to low digital literacy and a lack of familiarity with operating modern devices, a situation frequently observed among older business owners. These psychological factors ultimately diminish their perception of the benefits and convenience of technology, leading to a reluctance to switch from conventional cash transactions to digital platforms (Widodo & Pratama, 2020).

HYPOTHESIS

1. The Influence of Trust on Interest in Using Financial Technology (Fintech)

Trust denotes a user's confidence and readiness to rely upon a fintech platform, anchored in expectation that the service provider possesses integrity, competence, data security guarantees, and service transparency (Pavlou, 2003). As outlined by Mayer et al. (1995), three main core elements structure trust: ability, benevolence, and integrity. Within the Technology Acceptance Model (TAM) framework, external

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variables such as trust serve as important supporting factors to mitigate the uncertainty inherent in digital financial transactions (Davis, 1989; Wijaya et al., 2024).

When MSME operators feel confident in platform stability, guaranteed financial security, and the privacy of data managed by digital platforms, their hesitation in adopting the technology will decrease significantly. These observations correspond with earlier studies by Putri et al. (2023) as well as Purwantini and Anisa (2021), demonstrating that trust favorably and significantly enhances user intention to adopt fintech services. Considering these empirical insights, the formulated hypothesis is:

H1: Trust has a positive impact on the interest of MSMEs in Pangkalpinang City in using financial technology (fintech).

2. The Influence of Perceived Risk on Interest in Using Financial Technology (Fintech)

Perceived risk refers to a user's personal evaluation regarding possible adverse outcomes or ambiguities stemming from using newly introduced technology (Bauer, 1960; Featherman & Pavlou, 2003). Featherman and Pavlou (2003) categorize these risks into several types, such as financial risk, security/privacy risk, and system performance risk. In the context of financial technology adoption, risk perception arises from business owners' concerns regarding potential cybercrime, technical disruptions in applications during transactions, and the proliferation of illegal fintech entities.

High risk perception creates anxiety and psychological barriers that lead MSME business owners to postpone or cancel their plans to switch to digital payment systems. This aligns with the findings of A'la (2021), which show that risk exposure significantly diminishes intentions regarding fintech adoption. Consequently, an increase in risk perception among business owners directly corresponds to a decline in their intention to adopt fintech in their business activities. Grounded in this conceptual framework, the formulated hypothesis is:

H2: Perceived risk has a negative effect on the interest of MSMEs in Pangkalpinang City in using financial technology (fintech).

3. The Influence of Technology Anxiety on Interest in Using Financial Technology (Fintech)

Technology anxiety refers to an emotional response characterized by feelings of fear, restlessness, tension, or a lack of confidence that individuals experience when they must interact with digital technology (Meuter et al., 2003; Venkatesh, 2000). This anxiety stems from the fear of making operational errors that could lead to transaction failures or financial losses. At the local MSME level, technology anxiety is closely linked to low digital literacy and a lack of familiarity with modern transaction applications, issues commonly faced by older business owners.

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This psychological condition diminishes business owners' confidence in the effectiveness and benefits of technology, thereby creating a reluctance to switch from conventional cash transactions. Research conducted by Widodo and Pratama (2020) reveals that technological apprehension adversely affects adoption intention regarding mobile payment platforms. Elevated levels of technological apprehension among business owners correspond to reduced willingness to adopt fintech solutions. In light of these theoretical premises, the formulated hypothesis:

H3: Technology anxiety has a negative impact on the interest of MSMEs in Pangkalpinang City in using financial technology (fintech).

RESEARCH METHODOLOGY

Employing a quantitative causal framework, this study evaluates the impact of independent variables (trust, perceived risk, and technology anxiety) upon the dependent variable (trust, perceived risk, and technology anxiety) and the dependent variable (interest in using financial technology) among MSMEs in Pangkalpinang City. The study uses primary data collected through questionnaires. The research was conducted in Pangkalpinang City, Bangka Belitung Islands Province, as this region has the largest number of MSME operators and fintech users across the province.

Data was analyzed using SmartPLS via the PLS-SEM technique, encompassing evaluations of both outer (measurement) and inner (structural) specifications, alongside empirical hypothesis testing via bootstrapping procedures.

The study population includes all MSME operators in Pangkalpinang City, totaling 26.235 business units (RRI, 2024). Samples were selected via purposive sampling based on these criteria: (1) MSME operators domiciled and operating in Pangkalpinang City; (2) engaged in the trade sector, particularly in the food and beverage business; and (3) aware of or previously exposed to information regarding payment fintech services (QRIS or e-wallet), whether or not they had already used them. Based on the ten-times rule in PLS-SEM, the minimum required sample size was 30 respondents (Barclay et al., 1995). However, this study involved 70 respondents to to enhance estimate stability and statistical reliability.

Data were collected both offline at business locations and online through a Google Forms survey utilizing a 5-point Likert-type measurement (spanning 1 for strongly disagree to 5 for strongly agree). Measurement items in the questionnaire drew inspiration from established literature. Subsequently, empirical evaluations of the gathered data were conducted across outer-model and inner-model frameworks.

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RESULT AND DISCUSSION

Respondent Profile Description

This study involved 70 MSME owners in Pangkalpinang City as the research sample. An overview of the respondents' business profiles including business type/sector, length of time in business, and experience using financial technology (fintech) services, can be seen in Table 1.

Table 1. Profile of Respondents' Business Characteristics

Profile Characteristic	Category/Option	Number of Businesses	Percentage (%)
Business Type/Sector	Food	56	80,00%
	Beverages	14	20,00%
Business Duration	< 1 Year	24	34,29%
	1−3 Years	30	42,86%
	3−5 Years	7	10,00%
	> 5 Years	9	12,86%
Fintech Usage Experience	Have Used	58	82,86%
	Never Used	12	17,14%

Source: Data processed by the researcher, 2026

According to Table 1, the majority of respondents operate in the food sector, comprising 56 businesses (80.00%), while 14 businesses (20.00%) are engaged in the beverage sector. In terms of business duration, most respondents have operated for 1–3 years (42.86%) and less than one year (34.29%), indicating that the majority of businesses are relatively new or in the development stage.

Regarding fintech usage experience, 58 respondents (82.86%) had previously used fintech services such as QRIS or e-wallets, while 12 respondents (17.14%) had never used them. This indicates that digital transaction adoption among culinary MSMEs in Pangkalpinang City is relatively high.

Analysis Data

To execute analytical procedures, this investigation utilized SmartPLS application for partial least squares structural equation modeling (PLS-SEM). This analysis involved evaluating measurement specifications (outer model) to confirm indicator construct validity along with reliability, as well as structural model (inner model) paths to examine hypothetical links within the framework. This PLS-SEM technique was chosen due to its optimal performance in assessing latent variable frameworks while accommodating small sample dimensions.

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1. **Outer Model**

To confirm that measurement indicators possess adequate validity and reliability for evaluating Trust (X_1), perceived risk (X_2), technology anxiety (X_3), alongside interest in Using Fintech (Y) an outer model assessment was executed.

a. Convergent Validity

Convergent validity is assessed based on an outer loading of ≥ 0.70 and an average variance extracted (AVE) of ≥ 0.50. The initial convergent validity test revealed three items with outer loading values below 0.70, one each in the Trust (X_1), Perceived Risk (X_2), and Technology Anxiety (X_3) constructs. Following Hair et al. (2019), these items were eliminated and the model was re-estimated, resulting in 35 items analyzed from the 38 items originally distributed.

Table 2. Convergent Validity Test Results

Variables	Number of Items	Outer Loading Range	AVE	Information
Trust (X1)	9	0,839−0,932	0,776	Valid
Perceived Risk (X2)	9	0,864−0,917	0,807	Valid
Technology Anxiety (X3)	9	0,740−0,933	0,761	Valid
Interest in Using (Y)	8	0,906−0,950	0,873	Valid

Source: SmartPLS output, 2026

As shown in Table 1, the remaining indicators across all variables display outer loadings exceeding 0.70 alongside Average Variance Extracted (AVE) scores higher than 0.50, which confirms how all retained items satisfy convergent validity requirements.

b. Discriminant Validity

Discriminant validity testing was evaluated via the Fornell-Larcker Criterion matrix in conjunction with the Heterotrait-Monotrait Ratio (HTMT) approach (Henseler et al., 2015).

Table 3. Fornell-Larcker Criterion Matrix

Construction	X1	X2	X3	Y
Trust (X1)	0,881			
Perceived Risk (X2)	-0,026	0,898		

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Technology Anxiety (X3)	-0,468	0,263	0,872	
Interst in Using (Y)	0,471	-0,467	-0,531	0,934

Source: SmartPLS output, 2026

Table 4. Heterotrait-Monotrait Ratio (HTMT) Matrix

Construction	X1	X2	X3	Y
Trust (X1)				
Perceived Risk (X2)	0,077			
Technology Anxiety (X3)	0,479	0,269		
Interst in Using (Y)	0,473	0,474	0,541	

Source: SmartPLS output, 2026

As demonstrated in Table 2, the square roots of AVE scores across all constructs (diagonal bold values) exceeds the correlations between the other variables. Furthermore, Table 3 indicates that the HTMT values between variables remian under the 0.90 threshold, reaching a maximum of 0.541 for Technology Anxiety (X_3) and Interest in Using (Y). This demonstrates that the research instrument possesses good discriminant validity.

c. Internal Consistency Reliability Test

Table 5. Reliability Test Results

Variable	Cronbach's Alpha	Composite Reliability (rho_a)	Composite Reliability (rho_c)
Trust (X1)	0,964	0,969	0,969
Perceived Risk (X2)	0,970	0,973	0,974
Technology Anxiety (X3)	0,960	0,963	0,966
Interst in Using (Y)	0,979	0,981	0,982

Source: SmartPLS output, 2026

As presented in Table 4, both Cronbach's Alpha and Composite Reliability scores across all constructs exceed the 0.70 threshold.These results confirm that all instruments are reliable and consistent.

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2. Inner Model

Evaluation of the inner model was performed to determine predictive capacity and examine hypothesis significance through bootstrapping.

a. Coefficient of Determination (R^2) and Effect Size (f^2)

Table 6. R-Square Value Results

Dependent Variable	R-Square (R^2)	R-Square Adjusted
Interest in Using (Y)	0,483	0,459

Source: SmartPLS output, 2026

Table 5 shows an R-Square value of 0.483. Signifying that 48.3% of the variance observed in MSMEs' interest in using fintech in Pangkalpinang City can be explained by the variables Trust, Perceived Risk, and Technology Anxiety, whereas external factors not included in the model drive the remaining 51.7%. An R^2 value of 0.483 belongs to the moderate classification in PLS-SEM modeling (Hair et al., 2019).

Table 7. f-Square (f^2) Value

Independent Variables	f^2 to Y
Trust (X1)	0,166
Perceived Risk (X2)	0,265
Technology Anxiety (X3)	0,103

Source: SmartPLS output, 2026

Based on Table 6, the f^2 values for perceived risk (X_2) at 0.265 and trust (X_1) at 0.166 fall into the moderate influence category, while the value for technology anxiety (X_3) at 0.103 falls into the small influence category (Cohen, 1988). These results confirm that perceived risk is the variable that contributes most significantly to explaining variations in MSME actors' interest in using fintech.

b. Results of the Partial Hypothesis Testing (Path Coefficients)

Table 8. Hypothesis Test Results (Path Coefficients)

Path	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
X1 -> Y	0,334	0,325	0,078	4,282	0,000
X2 -> Y	-0,386	-0,386	0,091	4,266	0,000
X3 -> Y	-0,273	-0,299	0,120	2,279	0,023

Source: SmartPLS output, 2026

Based on Table 7, hypothesis testing was conducted using the criteria of a T-statistic value > 1.96 and a P-value < 0.05. The results of the analysis indicate that all proposed hypotheses (H1, H2, and H3) were accepted.

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Trust on Interest in Using Financial Technology (Fintech)

Empirical testing of H1 confirms that trust positively influences MSME adoption intention regarding fintech solutions in Pangkalpinang City, supported by a regression coefficient of 0.334, a T-statistic of 4.282 > 1.96, and a p-value of 0.000 < 0.05. These statistical findings indicate implies that confidence in system stability, financial safety, and platform openness strongly encourages adoption willingness among business owners.

These research results align with Davis's (1989) Technology Acceptance Model (TAM) framework and reinforce previous studies by Purwantini and Anisa (2021) as well as Putri et al. (2023), demonstrating how greater user confidence directly elevates small business owners' willingness to engage in digital transactions. An f^2 value of 0.166 indicates that trust makes a moderate contribution to explaining the variation in the interest of MSME business owners.

Perceived Risk on Interest in Using Financial Technology (Fintech)

Statistical evaluation of the second hypothesis verifies H2, demonstrating that perceived risk exerts an adverse impact on fintech adoption intention among MSMEs in Pangkalpinang City. This finding is evidenced by a negative regression coefficient of -0.386, alongside a T-statistic of 4.266 > 1.96, and a p-value of 0.000 < 0.05. Business owners' assessments of potential risks, such as the threat of cybercrime, failed fund disbursements, and personal data breaches, constitute significant barriers that reduce their interest in switching to digital payment systems.

These findings support the research by A'la (2021) as well as Featherman and Pavlou (2003). Although the study by Andini and Himawan (2023) noted that risk can have a positive effect if it is perceived as commensurate with the benefits, in the context of local SMEs in Pangkalpinang, risk perception consistently acts as the primary barrier to adoption. The f^2 value of 0.265 represents the largest effect size across the three predictor variables, demonstrating that that perceived risk makes the largest contribution to explaining the variation in interest in using fintech.

Technology Anxiety on Interest in Using Financial Technology (Fintech)

H3, positing that "Technology anxiety negatively influences the willingness of MSMEs in Pangkalpinang City to adopt fintech," was also accepted, with a regression coefficient of -0.273, a T-statistic of 2.279 > 1.96, and a p-value of 0.023 < 0.05. Emotional barriers, such as anxiety, fear of making mistakes while operating the app, and a lack of confidence when conducting digital transactions, were found to significantly reduce the intention to use fintech.

These empirical findings correspond with prior studies by Widodo and Pratama (2020) alongside Meuter et al. (2003), demonstrating a negative correlation between

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technology anxiety and an individual's willingness to adopt mobile payment systems, while associating such apprehension with limited digital literacy among users. An f^2 value of 0.103 indicates that technology anxiety's contribution to explaining variations in interest is relatively small compared to the other two variables, although its effect remains statistically significant. However, this study did not examine individual characteristics or business profiles as explanatory variables for anxiety; therefore, the specific sources triggering anxiety among respondents cannot yet be determined and require further investigation.

CONCLUSION

In summary, empirical results demonstrate how **trust**, **perceived risk**, and **technology anxiety** substantially drive fintech adoption willingness among Pangkalpinang MSMEs. Specifically, **trust** exhibits a positive association with adoption interest, whereas **perceived risk** along with **technology anxiety** have negative effects. This indicates that these constructs play crucial roles in either fostering or inhibiting fintech uptake among MSME operators.

Trust in the security, reliability, transparency, and reputation of fintech providers can boost the confidence of MSME operators in using digital financial services. Conversely, perceptions of risks, such as data security, financial loss, and service failures, can reduce interest in using fintech. Additionally, technology anxiety, manifesting as fear of making mistakes, discomfort, and lower self-efficacy in operating digital tools, also acts as a barrier to the adoption process.

These empirical results suggest that increasing fintech adoption among MSMEs does not depend solely on the availability of digital infrastructure and services. Security and trust must be strengthened, accompanied by efforts to reduce perceived risks and improve MSMEs' comfort and ability to use technology. This approach can support the more optimal utilization of fintech in business activities.

REFERENCES

A'la, C. N. (2021). Pengaruh persepsi kemudahan penggunaan, efektivitas dan risiko terhadap minat bertransaksi menggunakan financial technology (fintech): Studi pada masyarakat Kota Medan [*Undergraduate thesis, Universitas Islam Negeri Sumatera Utara*].

Andini, V. A., & Himawan, A. F. I. (2023). Pengaruh perceived ease of use, perceived security, perceived risk dan trust terhadap minat penggunaan aplikasi Pospay. *SEIKO: Journal of Management & Business*, 6(1), 48–61.

Anggraeni, F. D., & Primadineska, R. W. (2024). Pengaruh perceived ease of use, perceived risk, dan trust terhadap minat menggunakan aplikasi pinjaman online

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Akulaku pada masyarakat Daerah Istimewa Yogyakarta. *Cakrawangsa Bisnis: Jurnal Ilmiah Mahasiswa*, 5(2), 73–83. https://doi.org/10.35917/cb.v5i2.527

Antara News. (2024, January 30). OJK: Outstanding pembiayaan pinjol capai Rp59,64 triliun pada 2023. Antara News. https://www.antaranews.com/berita/3939957/ojk-outstanding-pembiayaan-pinjol-capai-rp5964-triliun-pada-2023

Barclay, D., Higgins, C., & Thompson, R. (1995). The Partial Least Squares (PLS) approach to causal modeling: Personal computer adoption and use as an illustration. *Technology Studies*, 2(2), 285–309.

Bauer, R. A. (1960). Consumer behavior as risk taking. In R. S. Hancock (Ed.), Dynamic marketing for a changing world (pp. 389–398). *American Marketing Association.*

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly, 13(3), 319–340. https://doi.org/10.2307/249008

Featherman, M. S., & Pavlou, P. A. (2003). Predicting e-services adoption: A perceived risk facets perspective. *International Journal of Human-Computer Studies*, 59(4), 451–474. https://doi.org/10.1016/S1071-5819(03)00111-3

GovInsider. (2023). Indonesia targets 90% financial inclusion rate by 2024. https://govinsider.asia/intl-en/article/indonesia-targets-90-financial-inclusion-rate-by-2024

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24. https://doi.org/10.1108/EBR-11-2018-0203

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. https://doi.org/10.1007/s11747-014-0403-8

Institute for Development of Economics and Finance. (2024). Peran platform digital terhadap pengembangan UMKM di Indonesia. INDEF. https://indef.or.id/wp-content/uploads/2024/01/Laporan-Final-Peran-Platform-Digital-Terhadap-Pengembangan-UMKM-di-Indonesia-INDEF.pdf

Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review*, 20(3), 709–734. https://doi.org/10.2307/258792

Meuter, M. L., Ostrom, A. L., Bitner, M. J., & Roundtree, R. (2003). The influence of technology anxiety on consumer use and experiences with self-service

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technologies. *Journal of Business Research*, 56(11), 899–906. https://doi.org/10.1016/S0148-2963(01)00276-4

Pavlou, P. A. (2003). Consumer acceptance of electronic commerce: Integrating trust and risk with the technology acceptance model. *International Journal of Electronic Commerce*, 7(3), 101–134. https://doi.org/10.1080/10864415.2003.11044275

Radio Republik Indonesia. (2024, September 28). UMKM mencapai 26 ribu lebih di Pangkalpinang. RRI. https://www.rri.co.id/sungailiat/umkm/1009134/umkm-mencapai-26-ribu-lebih-di-pangkalpinang

Venkatesh, V. (2000). Determinants of perceived ease of use: Integrating control, intrinsic motivation, and emotion into the technology acceptance model. *Information Systems Research*, 11(4), 342–365. https://doi.org/10.1287/isre.11.4.342.11872

Wijaya, I. D., Astuti, E. S., Yulianto, E., & Abdillah, Y. (2024). The mediation role of perceived risk, trust, and perceived security toward intention to use in the model of fintech application adoption: An extension of TAM. *KnE Social Sciences*, 9(13), 324–335. https://doi.org/10.18502/kss.v9i11.15804

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