

The Effect of Loan Interest Rate, Loan Flexibility, And Perceived Risk on the Intention to Use Peer-To-Peer Lending Among MSMEs In Pangkalpinang

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ABSTRACT

Purpose: This study aims to examine the effects of loan interest rates, loan flexibility, and risk perception on micro, small, and medium-sized enterprises' (SMEs') intention to use peer-to-peer (P2P) lending applications in Pangkalpinang.

Research methodology: This study uses a quantitative approach with multiple linear regression analysis, employing t- and F-tests to examine the effects of loan interest rates, loan flexibility, and risk perception on micro, small, and medium-sized enterprises' (MSMEs') intention to use peer-to-peer (P2P) lending in Pangkalpinang. The sample consists of 103 MSME owners selected through purposive sampling.

Results: Loan interest rates, loan flexibility, and risk perception account for 23.1% of the variation in UMKM intention to use P2P lending applications in Pangkalpinang. Barriers include limited understanding, repayment concerns, and low digital literacy, whereas supporting factors include flexible loan options, competitive interest rates, and increasing awareness of digital financial services.

Conclusions: Loan interest rates, loan flexibility, and risk perceptions together influence UMKM's intention to use P2P lending applications.

Limitations: This study is confined to one district with a small sample size, limiting its broader applicability.

Contribution: This research provides empirical evidence on the impact of the loan interest rate, loan flexibility, and risk perception on UMKM's intention to use P2P lending in Pangkalpinang, offering practical insights for policymakers and P2P providers to enhance strategies for UMKM adoption of digital financial services.

Keywords: *Intention to Use, MSMEs, Loan Interest Rate, Loan Flexibility, Perceived Risk*

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1. Introduction

Micro, small, and medium enterprises (MSMEs) play a crucial role in supporting Indonesia's economic development, particularly in employment creation and regional economic growth. However, despite their strategic contributions, MSMEs continue to face significant barriers in accessing formal financing, mainly due to collateral requirements, administrative complexity, and lengthy approval processes in conventional banking institutions ([Kadzima, Matemane, Machokoto, & Lemma, 2025](#)). These limitations create a persistent financing gap that restricts business expansion and sustainability.

The rapid advancement of financial technology (fintech) has introduced alternative financial intermediation mechanisms, including peer-to-peer (P2P) lending platforms ([Chatterjee, 2025](#)). P2P lending directly connects borrowers and lenders through digital platforms, offering faster processing times, simplified procedures, and broader access than traditional banking systems ([Lin, Prabhala, & Viswanathan, 2013](#)). The emergence of P2P lending has been widely recognized as a driver of financial inclusion, particularly for underserved segments, such as MSMEs ([Gai, Qiu, & Sun, 2018](#)).

Despite the growing availability of digital lending platforms, adoption is not automatic ([Tarigan & Yuliansyah, 2025](#)). The intention to use financial technology services plays a central role in determining actual usage behavior ([Srivastava, Sahawneh, Inairat, Alzoubi, & Kota, 2024](#)). According to the theory of planned behavior, behavioral intention is the most immediate predictor of behavior and is influenced by attitudes, perceived behavioral control, and subjective norms ([Ajzen, 1991](#)). In the context of fintech adoption, individuals evaluate the expected benefits and potential risks before forming an intention to use the service ([Wei, Liang, Wang, & Liu, 2025](#)).

One important determinant of borrowing intention is the loan interest rate, which represents the financial cost of accessing capital ([Annisa & Hamzah, 2025](#)). Economic theory suggests that higher borrowing costs may reduce credit demand ([Lukas, 2017](#)). However, empirical findings in fintech studies are mixed. Some studies find that interest rates significantly influence borrowing decisions, whereas others suggest that convenience and accessibility outweigh cost considerations in digital lending contexts ([Wijayanti, Ashari, & Darma, 2025](#)).

Loan flexibility is another potential determinant of the intention to use P2P lending ([Kusumawati, Hanafi, & Surwanti, 2024](#)). Flexible repayment schedules, adjustable tenures, and simplified application requirements may enhance perceived ease and control ([Haripin, Indraprakoso, Wibisono, & Utomo, 2025](#)). Perceived ease of use has consistently been found to positively influence technology adoption intentions ([Amnas, Selvam, & Parayitam, 2025](#)). In fintech services, operational flexibility may increase user confidence and strengthen the intention to adopt digital lending platforms ([Adamek & Solarz, 2023](#)).

Perceived risk also plays a crucial role in digital financial transactions. Online financial services involve financial risk, privacy risk, and security concerns, which may reduce users' willingness to adopt technology ([Damanik, Prasetyo, Alie, & Oktaria, 2025](#); [Kaban, Thamrin, & Andriana, 2025](#)). Higher perceived risk has been shown to negatively affect the intention to use online financial services ([K. L. Tang, Ooi, & Chong, 2020](#)). Nevertheless, in contexts where regulatory supervision and platform credibility are strong, the negative effect of perceived risk may be reduced.

Although prior research has examined fintech adoption, several gaps remain. First, empirical evidence regarding the impact of interest rates on borrowing intention in P2P lending contexts remains inconsistent ([Wijayanti et al., 2025](#)). Second, loan flexibility has not been sufficiently explored as a distinct construct in MSME-focused P2P lending research. Third, limited empirical studies have investigated fintech adoption at the regional level in Indonesia, particularly in Pangkalpinang, where MSMEs may demonstrate different financial behavior and digital readiness characteristics.

Therefore, this study aimed to examine the effects of loan interest rates, loan flexibility, and perceived risk on MSMEs' intention to use P2P lending in Pangkalpinang. By addressing these gaps, this research

contributes to the literature on fintech adoption and provides practical implications for digital lending providers and policymakers in strengthening financial inclusion strategies.

2. Literature Review

2.1 Loan Interest Rate

The loan interest rate represents the monetary cost incurred by borrowers when accessing external financing. Classical economic theory suggests that higher interest rates reduce credit demand because they increase repayment burdens ([Lukas, 2017](#)). In MSME financing decisions, interest rates influence cost efficiency and business profitability ([Lubinza, Mayala, & Kileo, 2024](#)). On P2P lending platforms, interest rates are often risk-based and vary across borrowers depending on credit scoring mechanism. Studies in digital lending markets show that borrowers compare interest rates with alternative financing options before making decisions ([Jagtiani & Lemieux, 2019](#)). Higher borrowing costs may reduce perceived financial benefits and thus decrease intentions to use ([Lubinza et al., 2024](#)).

However, fintech adoption research indicates that financial cost is not always the primary determinant of intention. Convenience, speed, and ease of access may outweigh cost considerations, especially among small businesses with urgent liquidity needs ([Ryu, 2018](#)). Some studies have found that service efficiency and accessibility significantly influence borrowing decisions more than interest rate levels ([Bazarbash, Beaton, & Eriksson, 2020](#)). These mixed findings suggest that the influence of interest rates on P2P lending adoption remains inconclusive, particularly in MSME contexts within emerging markets. Therefore, further empirical investigation is necessary.

2.2 Loan Flexibility

Loan flexibility refers to adaptable loan terms, including adjustable repayment schedules, flexible tenure, and simplified procedures. In digital finance, flexibility enhances convenience and reduces the perceived effort in financial transactions ([Adamek & Solarz, 2023](#)). According to the technology acceptance model, perceived ease of use positively influences intention ([Amnas et al., 2025](#)). In addition, the theory of planned behavior suggests that greater perceived behavioral control strengthens behavioral intention ([Ajzen, 1991](#)). Flexible loan schemes may enhance perceived control over repayment obligations, particularly for MSMEs facing fluctuating cash flows.

Empirical fintech studies demonstrate that service convenience and operational flexibility positively affect the intention to adopt digital platforms ([Alalwan, Dwivedi, & Rana, 2017](#)). In digital lending contexts, simplified processes and customizable repayment structures increase user satisfaction and trust ([Jagtiani & Lemieux, 2019](#)). Despite its practical relevance, loan flexibility is rarely treated as an independent construct in P2P lending research, as most studies focus on trust, usefulness, or perceived ease. This indicates a research gap regarding the specific role of loan flexibility in shaping MSMEs' intentions to use P2P lending.

2.3 Perceived Risk

Perceived risk refers to an individual's expectation of potential losses resulting from a transaction. In the fintech adoption literature, perceived risk commonly includes financial, privacy, security, and performance risks ([Al-lawati, Liew, & Rajan, 2023](#)). Digital financial services involve online data exchange and remote transactions, which may increase uncertainty among users ([Ryu, 2018](#)). Studies consistently show that perceived risk negatively affects the intention to adopt mobile banking and digital payment systems ([Oliveira, Thomas, Baptista, & Campos, 2016](#)). In P2P lending contexts, higher perceived risk reduces borrowers' trust and willingness to participate ([H. Tang, 2019](#)).

However, the magnitude of this effect may vary depending on regulatory oversight, platform credibility, and digital literacy levels ([Bazarbash et al., 2020](#)). In emerging markets, regulatory protection may mitigate risk perception, thereby weakening its negative effects ([Ryu, 2018](#)). Given that MSMEs may be sensitive to financial and security uncertainties, perceived risk is expected to negatively influence their intention to use P2P lending services.

2.4 Intention to Use

Intention to use refers to an individual's conscious plan or willingness to perform a particular behavior. In behavioral research, intention is considered the most immediate predictor of actual behavior. The theory of planned behavior explains that behavioral intention is determined by attitude toward behavior, subjective norms, and perceived behavioral control (Ajzen, 1991). This framework has been widely applied in financial technology adoption studies (Alalwan et al., 2017). In technology acceptance research, the technology acceptance model posits that perceived usefulness and perceived ease of use influence behavioral intention (Amnas et al., 2025). This model has been extended to fintech contexts, including mobile banking, digital payment systems, and peer-to-peer lending (Oliveira et al., 2016).

The Unified Theory of Acceptance and Use of Technology further highlights performance expectancy and effort expectancy as direct determinants of intention (Wei et al., 2025). Empirical studies confirm that intention significantly predicts the adoption of fintech services, including crowdfunding and peer-to-peer (P2P) lending platforms (Ryu, 2018). However, the determinants of intention may differ depending on contextual, financial, and psychological factors. Therefore, identifying financial determinants, such as interest rates and loan flexibility, alongside perceptual determinants, such as perceived risk, is essential for explaining MSMEs' intentions to use P2P lending.

2.5 Hypothesis Development

2.5.1 The Effect of Loan Interest Rate on Intention to Use

The loan interest rate represents the financial cost that borrowers must bear when obtaining external financing. From an economic perspective, borrowing decisions are based on cost-benefit considerations, in which higher interest rates increase repayment burdens and reduce the attractiveness of credit (Lukas, 2017). For micro, small, and medium-sized enterprises (MSMEs), interest rates directly influence operational costs, profit margins, and cash flow stability.

Although peer-to-peer (P2P) lending platforms offer convenience and faster approval processes compared to traditional financial institutions, borrowers still evaluate the financial implications of the loan before making a decision (H. Tang, 2019). Empirical studies in the fintech lending context indicate that borrowing costs can negatively influence adoption intentions (Ryu, 2018). Empirical studies in the fintech lending context indicate that borrowing costs can negatively influence adoption intentions (Ryu, 2018). Therefore, it is reasonable to expect that higher loan interest rates will decrease MSMEs' intention (Ryu, 2018). Therefore, it is reasonable to expect that higher loan interest rates will decrease MSMEs' intention to use P2P lending applications.

H₁: A higher loan interest rate has a negative effect on the intention to use P2P lending applications among MSMEs in Pangkalpinang.

2.5.2 The Effect of Loan Flexibility on Intention to Use

Loan flexibility refers to the adaptability of loan terms, including repayment schedules, loan tenure options, and simplified procedures. MSMEs often experience fluctuating cash flows; therefore, flexible financing arrangements can help reduce financial pressure and improve liquidity management. The technology acceptance model explains that perceived ease of use positively influences behavioral intention (Amnas et al., 2025). Flexible loan schemes may reduce perceived complexity and enhance convenience. Furthermore, the theory of planned behavior highlights that greater perceived behavioral control strengthens intentions. When MSMEs perceive that repayment structures are manageable and adaptable to business conditions, their confidence in using the application increases.

Empirical evidence in fintech adoption research shows that service convenience and operational flexibility positively affect users' intentions to adopt digital financial services (Alalwan et al., 2017). In P2P lending contexts, flexible repayment mechanisms may enhance perceived suitability and encourage adoption. Accordingly, increased loan flexibility is anticipated to positively influence MSMEs' intention to adopt P2P lending applications.

H₂: Loan flexibility positively affects MSMEs' intentions to use P2P lending applications in Pangkalpinang.

2.5.3 The Effect of Perceived Risk on Intention to Use

Perceived risk refers to an individual's subjective assessment of potential losses in a transaction (Al-lawati et al., 2023). In digital financial services, perceived risk may include financial risk, privacy risk, security risk, and concerns about platform reliability. Because P2P lending transactions are conducted online, users may perceive uncertainty due to the absence of physical interaction and reliance on digital systems. According to the theory of planned behavior, negative evaluations of potential outcomes reduce behavioral intention. If MSMEs perceive high levels of financial or security risk, their intention to use P2P lending applications may decline.

Empirical studies consistently show that perceived risk negatively influences the intention to adopt digital financial services (Oliveira et al., 2016). In P2P lending contexts, concerns about fraud, data misuse, and regulatory uncertainty may reduce borrowing intention (H. Tang, 2019). Therefore, higher perceived risk is expected to decrease MSMEs' intention to use P2P lending applications.

H₃: Perceived risk negatively affects MSMEs' intention to use P2P lending applications in Pangkalpinang.

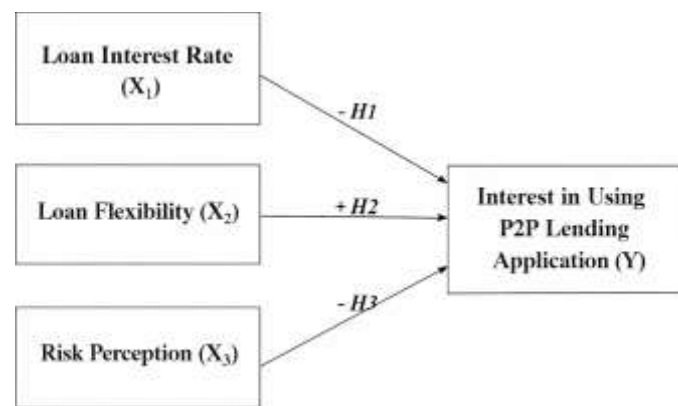


Figure 1. Research model

3. Methodology

3.1 Research Approach

This study adopts a quantitative research approach to examine the effects of loan interest rates, loan flexibility, and perceived risk on MSMEs' intention to use P2P lending applications in Pangkalpinang. A quantitative approach is appropriate when research aims to test hypotheses and analyze causal relationships among variables using statistical techniques (Ghanad, 2023). This study is explanatory in nature, as it seeks to explain how independent variables influence a dependent variable based on theoretical foundations. Explanatory research is commonly used to test theoretical models and determine the direction and strength of relationships between constructs (Gudergan, Moisescu, Radomir, Ringle, & Sarstedt, 2025; Hair Jr, Black, Babin, & Anderson, 2010).

Furthermore, this study employs a cross-sectional survey design in which data are collected from selected respondents at a single point in time. Cross-sectional designs are widely applied in behavioral and technology adoption research to measure perceptions and intentions within a specific period (Jamshaid, Rashid, & Idrees, 2025). This design is considered appropriate because the study focuses on analyzing MSMEs' current perceptions and intentions regarding the use of P2P lending applications rather than examining changes over time.

3.2 Population and Sample

The population of this study consists of Micro, Small, and Medium Enterprises (MSMEs) located in Pangkalpinang. A population refers to the entire group of individuals or units that share specific characteristics relevant to the research objectives (Ghanad, 2023). MSMEs were selected as the target population because they represent a business sector that frequently encounters financial constraints and may consider peer-to-peer (P2P) lending as an alternative source of external financing. Therefore, this

population is considered appropriate for examining the effects of loan interest rates, loan flexibility, and perceived risk on the intention to use P2P lending applications.

This study employed a non-probability sampling technique using a purposive sampling approach in which respondents were selected based on specific criteria relevant to the research objectives (Ahmad & Wilkins, 2025). The criteria included MSME owners or managers who were aware of or had obtained information about P2P lending services. The total sample consisted of 103 respondents. This sample size was considered adequate for multiple linear regression analysis, as multivariate research generally requires a sufficient number of observations to ensure stable and reliable parameter estimates (Gudergan et al., 2025; Hair Jr et al., 2010).

3.3 Data Collection Techniques

This study used primary data collected through a structured questionnaire distributed to MSME owners or managers in Pangkalpinang who met the predetermined sampling criteria. Primary data refers to information gathered directly by the researcher to address specific research objectives (Ghanad, 2023). The survey method was chosen because it is widely applied in quantitative research to efficiently measure perceptions, attitudes, and behavioral intentions (Ahmad & Wilkins, 2025). The questionnaire items were adapted from constructs established in previous fintech adoption studies and measured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), which is commonly used in social science research to quantify respondents' perceptions (Gudergan et al., 2025; Hair Jr et al., 2010).

3.4 Operational Definitions

Table 1. Operational definitions

Variable	Operational Definition	Indikator	Scale
Loan Interest Rate	The loan interest rate refers to the borrowing cost charged by P2P lending platforms to MSMEs. It represents the financial obligation that must be paid in addition to the principal amount. This variable reflects how MSMEs perceive the affordability of interest rates and the extent to which these rates influence their business financial decisions.	<ol style="list-style-type: none"> 1. High loan interest rates 2. Lack of clarity regarding interest rate information 3. Suitability of interest rates with repayment ability 	Likert
Loan Flexibility	Loan flexibility refers to the adaptability of the loan terms provided by P2P lending platforms. This includes flexibility in repayment schedules, loan durations, and procedural requirements. This variable reflects how MSMEs perceive the convenience and ease of adjusting loan terms according to their business conditions.	<ol style="list-style-type: none"> 1. Availability of various loan duration options 2. Ease of adjusting the loan amount 3. Flexibility of installment repayment schemes 	Likert
Perceived Risk	Perceived risk refers to MSMEs' assessment of the potential losses or uncertainties associated with using P2P lending applications. These risks may	<ol style="list-style-type: none"> 1. Financial risk 2. Data and information security risk 3. Legal risk and regulatory uncertainty 	Likert

	include financial loss, data security concerns, and privacy issues. This variable reflects the level of concern that may discourage MSMEs from using digital lending services.		
Intention to Use	Intention to use refers to MSMEs' willingness and likelihood to adopt P2P lending applications in the future. It represents the behavioral tendency to utilize digital lending services as a source of business financing. This variable reflects MSMEs' readiness to engage with P2P lending platforms.	<ol style="list-style-type: none"> 1. Intention to use the application 2. Likelihood of recommending the application to other MSMEs 3. Readiness to use the service continuously 	Likert

4. Results And Discussion

4.1 Validity and Reliability Test of the Research Questionnaire

Before the questionnaire results were further processed, they were first tested for validity and reliability to ensure that the questionnaire was suitable for use as a research measurement tool. The validity test was performed using product-moment correlation (r_{count}), in which the questionnaire was declared valid if the correlation was greater than or equal to 0.195 (Barker, Pistrang, & Elliott, 2015). The reliability test used Cronbach's alpha method, and it was considered reliable if the reliability coefficient was greater than 0.70 (Barker et al., 2015).

Table 2. Results of validity test

Variable	Rcount	Rtable	Description
Loan Interest Rate (X_1)	0.849	0.195	Valid
	0.859	0.195	Valid
	0.833	0.195	Valid
Loan Flexibility (X_2)	0.894	0.195	Valid
	0.886	0.195	Valid
	0.925	0.195	Valid
Perceived Risk (X_3)	0.887	0.195	Valid
	0.795	0.195	Valid
	0.825	0.195	Valid
Intention to Use P2P Lending (Y)	0.929	0.195	Valid
	0.839	0.195	Valid
	0.928	0.195	Valid

Based on the validity test results, all questionnaire items showed correlation coefficients (r-count) greater than 0.195. For the Loan Interest Rate variable (X_1), the r-count values ranged from 0.833 to 0.859. For Loan Flexibility (X_2), the values ranged from 0.886 to 0.925. For Perceived Risk (X_3), the values ranged from 0.795 to 0.887. Meanwhile, for Intention to Use (Y), the r-count values ranged from 0.839 to 0.929. Since all r-count values exceeded the critical value of 0.195, it can be concluded that all questionnaire items were valid and suitable for measuring their respective constructs.

Table 3. Results of reliability test

Variable	Cronbach's Alpha	Keterangan
Loan Interest Rate (X_1)	0.796	Reliabel
Loan Flexibility (X_2)	0.882	Reliabel
Perceived Risk (X_3)	0.785	Reliabel
Intention to Use P2P Lending (Y)	0.882	Reliabel

Based on the reliability test results, all variables in this study demonstrated Cronbach's alpha values greater than the recommended threshold of 0.70. The loan interest rate (X_1) had a Cronbach's alpha value of 0.796, loan flexibility (X_2) had a value of 0.882, perceived risk (X_3) had a value of 0.785, and intention to use (Y) had a value of 0.882. As all values exceeded 0.70, it can be concluded that all constructs were reliable and exhibited good internal consistency.

4.2 Classical Assumption Test

Before hypothesis testing is conducted using multiple linear regression analysis, several assumptions must be met to ensure that the conclusions of the regression are not biased. These assumptions include normality, multicollinearity, and heteroscedasticity testing. All these testing steps were performed using the IBM SPSS Statistics 21 software.

4.2.1 Normality Assumption Test

The normality assumption is a critical requirement in the significance testing of regression coefficients. If the regression model does not follow a normal distribution, the conclusions drawn from the test remain questionable because the t-test statistic in regression analysis is derived from a normal distribution. In this study, the Kolmogorov–Smirnov one-sample test was used to test the normality of the regression model.

Table 4. Normality assumption test

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		103
Normal Parameters ^{a,b}	Mean	0
	Std. Deviation	2.9037311
Most Extreme Differences	Absolute	.128
	Positive	.058
	Negative	-.128
Kolmogorov-Smirnov Z		1.297
Asymp. Sig. (2-tailed)		.069
a. Test distribution is Normal.		
b. Calculated from data.		

The normality test was conducted using the one-sample Kolmogorov–Smirnov test on the unstandardized residuals with a total of 103 observations. The results show a Kolmogorov–Smirnov Z value of 1.297 and an Asymp. Sig. (2-tailed) value of 0.069. Since the significance value (0.069) is greater than the 0.05 threshold, the null hypothesis that the residuals are normally distributed cannot be rejected. This indicates that the residuals follow a normal distribution, meaning that the normality assumption of the multiple linear regression model has been satisfied and the model is appropriate for further hypothesis testing.

4.2.2 Multicollinearity Assumption Test

Multicollinearity refers to the presence of a strong relationship between some or all of the independent variables in the regression model. If multicollinearity exists, the regression coefficients become indeterminate, and the error level increases significantly. In this study, the variance inflation factor (VIF) was used as an indicator to detect multicollinearity among the independent variables.

Table 5. Multicollinearity assumption test

Coefficient ^a		Collinearity Statistics	
		Tolerance	VIF
Model			
1	(Constant)		
	Loan Interest Rate	.549	1.821
	Loan Flexibility	.998	1.002
	Perceived Risk	0.548	1.824

a. Dependent Variable: Intention to Use P2P Lending

The multicollinearity test was conducted by examining the tolerance and variance inflation factor (VIF) values for each independent variable. The results indicate that the loan interest rate has a tolerance value of 0.549 and a VIF value of 1.821, loan flexibility has a tolerance value of 0.998 and a VIF value of 1.002, and perceived risk has a tolerance value of 0.548 and a VIF value of 1.824. Since all tolerance values are greater than 0.10 and all VIF values are below 10, it can be concluded that there is no multicollinearity among the independent variables. This means that each independent variable provides distinct and non-overlapping information in explaining the variation in the intention to use P2P lending applications, and the regression model satisfies the multicollinearity assumption.

4.2.3 Heteroscedasticity Assumption Test

Heteroscedasticity indicates the presence of unequal variances of residuals from one observation to another in the regression model. A good regression model should be free from heteroscedasticity. In this study, heteroscedasticity was tested using the formal method, which is the Spearman rank test [Malyarets, Kovaleva, Lebedeva, Misiura, and Dorokhov \(2018\)](#), by correlating the independent variables with the absolute residual values. If there is a significant correlation coefficient at the 5% error level, it indicates the occurrence of heteroscedasticity. The significance of the correlation coefficient of the independent variables with the absolute residual values is presented in the table below.

Table 6. Heteroscedasticity assumption test

Coefficients ^a		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
Model						
1	(Constant)	2.048	1.295		1.582	.117
	Loan Interest Rate	-0.086	.102	-.111	-.842	.402
	Loan Flexibility	-0.096	.049	-.191	-1.956	.053
	Perceived Risk	0.175	.119	.195	1.476	.143

a. Dependent Variable: ABS RES

The heteroscedasticity test was conducted using the Glejser method by regressing the absolute residual values on the independent variables. The results indicate that the significance values for loan interest rate, loan flexibility, and perceived risk are 0.402, 0.053, and 0.143, respectively. All significance values are greater than the 0.05 threshold. Therefore, none of the independent variables significantly affect the

absolute residuals. This finding indicates that there is no heteroscedasticity problem in the regression model. In other words, the variance of the residuals remains constant across different levels of the independent variables, and the regression model satisfies the heteroscedasticity assumption.

4.3 Multiple Linear Regression Analysis Results

Table 7. Multiple linear regression analysis results

		Coefficients ^a	
		Unstandardized Coefficients	
Model		B	Std. Error
1	(Constant)	1.102	2.266
	Loan Interest Rate	0.644	0.178
	Loan Flexibility	0.341	0.086
	Perceived Risk	-0.175	0.208

Based on the unstandardized coefficients (B) in Table 7, the following regression equation can be formulated:

$$Y = 1,102 + 0,644X_1 + 0,341X_2 + (-0,175)X_3 \quad (1)$$

Notes:

- Y : Intention to Use P2P Lending
- X₁ : Loan Interest Rate
- X₂ : Loan Flexibility
- X₃ : Perceived Risk

The coefficients in this equation can be interpreted as follows:

- 1) The constant of 1.102 indicates the average intention to use P2P lending applications among MSMEs in Pangkalpinang when the loan interest rate, loan flexibility, and perceived risk are zero. This means that in the absence of these influencing factors, the intention to use P2P lending applications is 1.102.
- 2) The regression coefficient of 0.644 for loan interest rate indicates that for every one-unit increase in loan interest rate, the intention to use P2P lending applications increases by 0.644 units, assuming that other variables remain constant. This suggests a positive relationship between loan interest rates and intentions to use.
- 3) The regression coefficient of 0.341 for loan flexibility indicates that for every one-unit increase in loan flexibility, the intention to use P2P lending applications increases by 0.341 units, assuming that other variables remain constant. This means that higher loan flexibility is associated with a higher intention to use.
- 4) The regression coefficient of negative 0.175 for perceived risk indicates that for every one-unit increase in perceived risk, the intention to use P2P lending applications decreases by 0.175 units, assuming that other variables remain constant. This suggests that higher perceived risk reduces MSMEs' intentions to use P2P lending applications.

4.4 Analysis of the Coefficient of Determination

The coefficient of determination was calculated to determine the extent to which loan interest rates, loan flexibility, and perceived risk simultaneously influenced the intention to use P2P lending applications among MSMEs in Pangkalpinang. The coefficient of determination was obtained from the results of data processing using SPSS 21 for Windows, as presented in the following table:

Table 8. Simultaneous coefficient of determination

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.503 ^a	.253	.231	2.947

The Adjusted R-square value of 0.231, also known as the coefficient of determination (KD), is presented in Table 8. This value indicates that 23.1% of the variation in UMKM in Pangkalpinang’s intention to use P2P lending applications is simultaneously explained by loan interest rates, loan flexibility, and risk perception. In other words, these three variables together have a 23.1% influence on the intention to use P2P lending applications, while the remaining 76.9% is affected by other factors not included in this study.

4.5 Simultaneous Test

The simultaneous hypothesis to be tested is the impact of the loan interest rate, loan flexibility, and risk perception on the intention to use P2P lending applications by UMKM in Pangkalpinang. Determine whether the loan interest rate, loan flexibility, and risk perception simultaneously affect the intention to use P2P lending applications. To test this hypothesis, a simultaneous test using the F-test was performed, and the results are shown in the following ANOVA table:

Table 9. ANOVA Table for simultaneous effect on intention to use P2P lending

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	291.894	3	97.298	11.2	.000 ^b
	Residual	860.029	99	8.687		
	Total	1151.922	102			

As shown in Table 9, the F-statistic is 11.2 with a significance level (Sig.) of 0.000. Since the significance level is less than 0.05 ($\alpha = 0.05$), it can be concluded that loan interest rates, loan flexibility, and risk perception simultaneously have a significant effect on the intention to use P2P lending applications by UMKM in Pangkalpinang.

4.6 Partial Test

The partial hypothesis to be tested is the effect of each independent variable (loan interest rate, loan flexibility, and risk perception) on the intention to use P2P lending applications by UMKM in Pangkalpinang. To determine whether each independent variable individually affects the dependent variable, a statistical hypothesis test was conducted as follows:

Table 10. Partial test results

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.102	2.266		0.486	.628
	Loan Interest Rate	.644	.178	.423	3.612	.000
	Loan Flexibility	.341	.086	.346	3.983	.000
	Perceived Risk	-.175	.208	-.099	-.84	.403

The results of partial hypothesis testing (t-test) are presented in Table X. The findings for each independent variable are as follows:

- 1) The Loan Interest Rate has a t-value of 3.612 with a significance level of 0.000. Although the significance is less than 0.05 ($\alpha = 0.05$), indicating a significant effect, the direction of the effect is positive. This is contrary to the initial hypothesis, which predicted a negative effect. Therefore, Hypothesis 1 (H_1) is rejected in terms of the hypothesized direction, meaning that the loan interest rate has a significant effect on the intention to use P2P lending applications, but not in the expected negative direction.
- 2) Loan flexibility has a t-value of 3.983 with a significance level of 0.000. This shows that Hypothesis 2 (H_2) is accepted, indicating that loan flexibility also has a significant positive effect on the intention to use P2P lending applications.
- 3) Risk perception had a t-value of -0.84 with a significance level of 0.403. As the significance was greater than 0.05, Hypothesis 3 (H_3) was rejected, indicating that risk perception did not have a significant effect on the intention to use P2P lending applications.

Loan interest rates and loan flexibility significantly influence UMKM intention to use P2P lending applications. However, only loan flexibility aligns with the hypothesized direction, whereas risk perception shows no significant effect.

5. Conclusions

5.1 Conclusion

Based on the research results regarding the influence of loan interest rates, loan flexibility, and risk perception on the intention to use P2P lending applications by UMKM in Pangkalpinang, the following conclusions can be drawn:

- 1) Loan interest rate has a significant positive effect on the intention to use peer-to-peer lending applications by UMKM in Pangkalpinang.
- 2) Loan flexibility has a significant positive effect on the intention to use peer-to-peer lending applications by UMKM in Pangkalpinang.
- 3) Perceived risk does not significantly affect UMKM in Pangkalpinang's intention to use peer-to-peer lending applications.
- 4) Loan interest rates, loan flexibility, and perceived risk simultaneously affect UMKM owners' intention to use P2P lending applications in Pangkalpinang, with a contribution of 23.1%, as indicated by the adjusted R-squared value.

5.2 Research Limitations

This study has several limitations that should be considered. First, the research focuses on a single region, specifically MSMEs in Pangkalpinang, which may limit the generalizability of the findings to other regions or industries. The results may not apply to MSMEs in other areas with different economic conditions, digital readiness, or financial behaviors. Second, the sample size of 103 respondents may not fully represent the diverse characteristics of MSMEs, especially in larger or more heterogeneous populations. Future studies could expand the sample size and incorporate other regions or countries to obtain more robust results. Additionally, the study relies on self-reported data, which may introduce biases, as respondents might overstate their knowledge or intentions regarding P2P lending. Lastly, the study does not consider other potentially influential factors such as regulatory policies, market competition, or external economic shocks, which could also impact MSMEs' intention to use P2P lending platforms

5.3 Suggestions and Directions for Future Research

Given the limitations mentioned above, future research should consider expanding the geographical scope to include multiple regions or countries, which would help assess the broader applicability of the findings. A larger and more diverse sample could improve the generalizability of the results. Additionally, future studies could explore longitudinal research designs to track changes in MSMEs' attitudes and behaviors over time, providing a clearer picture of the adoption process of P2P lending. Incorporating objective measures of MSMEs' actual usage of P2P lending platforms, rather than relying solely on self-reported intentions, could provide more accurate insights into their actual adoption and

use. Furthermore, future research could investigate other factors that influence MSMEs' decisions to use digital financial services, such as regulatory environments, technological infrastructure, and market competition. Exploring these factors would offer a more comprehensive understanding of the barriers and drivers of P2P lending adoption in the MSME context.

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