



The digital revolution amidst the crowing of roosters: The determining factor for the technological transformation of the kendal "master pitung" chicken farmer

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ABSTRACT

The background of the digital revolution in the chicken farming industry is driven by the urgent need to improve efficiency, overcome operational challenges, and meet increasing market demand. This study has three main objectives, namely, analyzing the influence of financial literacy, digital access, and the characteristics of micro, small, and medium enterprises (MSMEs) on the adoption of peer-to-peer (P2P) lending platforms and access to MSME financing; evaluating the direct influence of the adoption of P2P lending platforms on access to MSME financing; and evaluating whether financial technology (fintech) regulations moderate the relationship between the adoption of P2P lending platforms and access to MSME financing. Quantitative research methods were used, with a causality and correlation survey design. The results of the study indicate that financial literacy, digital access, and MSME characteristics have a positive effect on the adoption of P2P lending platforms. In addition, the adoption of P2P lending platforms has a positive effect on access to MSME financing. However, fintech regulations do not moderate the relationship between the adoption of P2P lending platforms and access to MSME financing. Financial literacy, digital access, and MSME characteristics also have a positive effect on access to MSME financing.

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1. INTRODUCTION

The Indonesian economy relies heavily on micro, small, and medium enterprises (MSMEs), which contribute over 60% of GDP and over 97% of the workforce (Yung et al., 2024). Despite their strategic role, MSMEs in Indonesia still face significant challenges in accessing financing. According to Bank Indonesia data (2022) (BPK, 2023), the financing gap for MSMEs in Indonesia reaches approximately IDR 1,700 trillion, with a credit rejection rate of 74% for micro businesses and 57% for small businesses. The livestock sector, particularly chicken farming, is one of the MSME subsectors facing difficulties accessing capital despite its significant economic potential. Kendal Regency, one of the livestock centers in Central Java, is home to the "Master Pitung" chicken farming group, comprising hundreds of micro and small-scale farmers who face obstacles in developing their businesses due to limited capital. The context of chicken farming in Kendal is important to study academically and empirically because it has significant social, economic, and environmental impacts and presents various real issues and challenges that are relevant to

regional development and the sustainability of the livestock industry. Kendal Regency is often chosen as a location for chicken research because it is considered to have great potential in the poultry farming sector, especially for laying and broiler chickens, and is supported by various specific factors.

On the other hand, the development of financial technology (fintech), especially *peer-to-peer* (P2P) *lending*, has opened up alternative financing opportunities for MSMEs (Nguyen et al., 2024). (Maloney et al., 2024) P2P lending provides flexibility for lenders and helps manage risk more efficiently. According to the Financial Services Authority (OJK, 2024), Indonesia's volume of loans through P2P lending platforms reached IDR 186.7 trillion in 2023, with an annual growth rate of 27.8%. However, P2P *lending penetration* in the livestock sector remains very low, reaching only 3.7% of the total national P2P loan portfolio. Several specific factors contributing to the low adoption of Peer-to-Peer (P2P) lending among chicken farmers include, characteristics of Chicken Farming Businesses, Limited Knowledge and Access, Trust and Cultural Aspects, and Challenges from the P2P Platforms Themselves.

This gap is reinforced by the findings of (Gonzalez, 2023) and (Ali et al., 2023), which show that low financial Literacy and digital access are the main factors in the low adoption of digital financial services. Minimal financial Literacy makes it difficult for MSMEs to understand the concept and benefits of *fintech*, while limited digital access becomes a technical barrier to adopting P2P *lending platforms*. (Rusadi & Benuf, 2020) .This research has significant urgency from several perspectives. Economically, the Central Statistics Agency (BPS Indonesia, 2023) reported that the chicken farming sector contributes 1.7% to Indonesia's GDP, with potential growth of 8.3% per year if financing constraints can be overcome. Developing an inclusive financing model through peer-to-peer *lending* can increase production capacity and create added economic value.

From a social perspective, the World Bank (2022) shows that increasing access to financing for livestock MSMEs can reduce the rural-urban economic gap by up to 12.5% and create 5-7 new jobs for every Rp 100 million in revenue growth. Empowering the "Master Pitung" livestock farmer group through inclusive financing access can catalyze local economic growth in Kendal Regency. From a policy perspective, this research aligns with the government's priority programs in the 2025-2029 National Medium-Term Development Plan (RPJMN), which targets increasing financial inclusiveness to 91% by 2025. The developed inclusive financial innovation model can serve as a reference for policymakers in developing a regulatory framework that supports the development of a fintech ecosystem that benefits livestock MSMEs.

Research on fintech adoption among MSMEs reveals significant gaps that require innovative research. The first novelty lies in the specific focus on the livestock sector, which previous research has overlooked. Unlike Yung et al. (2024), who studied platform optimization, Kholidah et al. (2024), who examined the impact of loans, and Rufaidah et al. (2023), who focused on agriculture, this study explores the unique characteristics of livestock MSMEs that have not received adequate attention. The second novelty analyzes the complex interactions of financial Literacy, digital access, and MSME characteristics in adopting P2P lending in the livestock sector, which has not been explored by Widyanto et al. (2022) and Del Sarto (2024). The third novelty integrates platform usability as a moderating variable, filling the gap in research by Gonzalez (2022) and Del Sarto (2024), and strengthening the findings of (Weng et al., 2021) and (Chulawate & Kiattisin, 2023) on the significance of user experience. The main novelty lies in examining the moderating role of regulation in the relationship between P2P lending adoption and access to financing for livestock MSMEs, a topic previously unexplored by Rusadi and Benuf (2020). Combining a multivariate approach with a sector-specific context creates substantial theoretical and practical contributions to the literature on fintech and MSME empowerment.

2. RESEARCH METHOD

The two approaches, namely survey design (which is often descriptive or correlational) and the causal approach (which is usually associated with experimental research), are combined primarily to gain a more comprehensive and complementary understanding of a phenomenon. This study uses a quantitative method with a causality survey design and correlation approach to analyze the adoption of the P2P Lending platform among Master Pitung chicken farmers in Kendal Regency.

The selection of research subjects was strategic, considering that Master Pitung chicken farmers experience limited access to formal financing from traditional financial institutions, making them a relevant sample to study the adoption of P2P Lending as an alternative financing solution. Data were measured using a Likert scale with classifications of 1) point 5 for Strongly Agree (SS); 2) point 4 for Agree (S); 3) point 3 for Undecided (R); 4) point 2 for Disagree (TS); and point 1 for Strongly Disagree (STS). The research model is designed with three categories of variables: endogenous variables in the form of MSME financing access as the primary outcome, exogenous variables including financial Literacy, digital access, and MSME characteristics as predictors, and fintech regulation moderating variables that play a role in strengthening or weakening the relationship between variables in the causality model being tested.

The technique or method of collecting data in this research use primary data obtained from the distribution of questionnaires. The research instruments were tested using validity and reliability tests. The classical assumption test is used as a basis before conducting multiple linear regression tests, namely the normality test, multicollinearity test, and heteroscedasticity test. Hypothesis testing is carried out using the t-test and the coefficient of determination test.

3. RESULTS AND DISCUSSIONS

Validity Test

Table 1. Validity test of variable Y (access to financing for MSMEs Y)

Variable	KMO
y1	0.8715
y2	0.7994
y3	0.7798
y4	0.7847
y5	0.7653
Overall	0.7974

The validity test results for variable Y (Access to MSME Financing) indicate that construct validity is well met based on the Kaiser-Meyer-Olkin (KMO) value. According to the Kaiser criteria, the overall KMO value of 0.7874 is in the pretty good category, indicating that the data is suitable for factor analysis. These results suggest that the correlation between items is sufficient to form the construct of access to MSME financing, so this instrument has adequate construct validity for use in research.

Table 2. Validity test X1 (financial literacy)

Variable	KMO
x1_1	0.9064
x1_2	0.9400
x1_3	0.8617
x1_4	0.8990
x1_5	0.8649
Overall	0.8918

Based on the results of the Kaiser-Meyer-Olkin (KMO) test for variable X1 (Financial Literacy), construct validity was met very well. The overall KMO value of 0.8918 is in the good category, indicating that the data is very suitable for factor analysis and the correlation between items is quite strong. Individually, all items have KMO values above 0.80, indicating good sampling adequacy, and each item contributes positively to the financial literacy construct. These results provide empirical evidence that the financial literacy measurement instrument has sufficient construct validity for further analysis.

Table 3. X2 validity test (digital access)

Variable	KMO
x2_1	0.9024
x2_2	0.7989
x2_3	0.7670
x2_4	0.8323

Variable	KMO
x2_5	0.8736
Overall	0.8285

The validity test results for variable X2 (Digital Access) indicate that construct validity is well met based on the Kaiser-Meyer-Olkin (KMO) value. According to the Kaiser criteria, the overall KMO value of 0.8285 is in the good category. This indicates that the data is very suitable for factor analysis, and the correlation between items is strong enough to form a digital access construct. These results suggest that each item contributes positively to the formation of the digital access construct and has adequate sampling adequacy, so the digital access measurement instrument has good construct validity and can be relied upon to measure the construct in the study.

Table 4. Validity Test X3 (characteristics of MSMEs)

Variable	KMO
x3_1	0.6139
x3_2	0.6192
x3_3	0.7166
x3_4	0.6283
x3_5	0.6167
Overall	0.6214

The validity test results for variable X3 (Characteristics of MSMEs) indicate that construct validity is met with moderate adequacy based on the Kaiser-Meyer-Olkin (KMO) value. The overall KMO value of 0.6214 is in the mild category according to the Kaiser criteria, which indicates that the data is still suitable for factor analysis even though the quality of the correlation between items is not as good as that of other variables. Although the KMO value does not reach the good category (>0.70), this result is still acceptable for factor analysis because it is above the minimum limit of 0.50.

Table 5. M validity test (P2P lending platform adoption)

Variable	KMO
m1	0.8254
m2	0.8019
m3	0.8799
m4	0.8758
m5	0.8666
Overall	0.8445

The validity test results for variable M (Adoption of P2P Lending Platform) indicate that construct validity is met very well based on the Kaiser-Meyer-Olkin (KMO) value. The overall KMO value of 0.8445 is in the good category according to the Kaiser criteria, which indicates that the data is very suitable for factor analysis and the correlation between items is strong enough to form the construct of P2P lending platform adoption. These results indicate that each item has good sampling adequacy and contributes positively to forming the P2P lending platform adoption construct, so this measurement instrument has good construct validity. It can be relied upon to measure the level of adoption of the P2P lending platform in the study.

Table 6. Z validity test

Variable	KMO
z1	0.7943
z2	0.6259
z3	0.6258
z4	0.7559
z5	0.7925
Overall	0.6846

The validity test results for variable Z (Fintech Regulation) indicate that construct validity is met with moderate adequacy based on the Kaiser-Meyer-Olkin (KMO) value. The overall KMO value of 0.6846 is in the mild category according to the Kaiser criteria, indicating that the data is still

suitable for factor analysis even though the quality of the correlation between items is not as good as that of other variables. Although the overall KMO value does not reach the good category (>0.70), this result is still acceptable for factor analysis because it is above the minimum limit of 0.50.

Reliability Test

Table 7. Reliability test of variable Y (access to financing for MSMEs Y)

Item	Item-test correlation	Item-rest correlation	alpha
y1	0.8315	0.7496	0.8929
y2	0.8946	0.8250	0.8747
y3	0.8669	0.7572	0.8970
y4	0.8496	0.7586	0.8891
y5	0.8718	0.8115	0.8835
Taste scale			0.9078

The reliability test results for variable Y (MSME Financing Access) showed an excellent level of reliability with a Cronbach's Alpha value of 0.9078, which is categorized as very good because it is above 0.90. Thus, the MSME financing access measurement instrument has excellent internal consistency and can be relied upon to measure the construct.

Table 8. Reliability test X1 (financial literacy)

Item	Item-test correlation	Item-rest correlation	alpha
x1_1	0.9104	0.8572	0.9253
x1_2	0.7937	0.7937	0.9370
x1_3	0.8662	0.8662	0.9230
x1_4	0.8049	0.8049	0.9347
x1_5	0.8905	0.8905	0.9193
Taste scale			0.9417

The reliability test results for variable X1 (Financial Literacy) showed an excellent level of reliability with a Cronbach's Alpha value of 0.9417. Thus, the financial literacy measurement instrument has excellent internal consistency and can be relied upon to accurately measure the construct of financial Literacy in this study.

Table 9. X2 reliability test (digital access)

Item	Item-test correlation	Item-rest correlation	alpha
x2_1	0.8397	0.7392	0.8401
x2_2	0.6939	0.5599	0.8802
x2_3	0.9189	0.8673	0.8103
x2_4	0.8668	0.7819	0.8299
x2_5	0.7835	0.6200	0.8773
Taste scale			0.8752

The reliability test results for variable X2 (Digital Access) showed good reliability with a Cronbach's Alpha value of 0.8752. Thus, the digital access measurement instrument has good internal consistency and can be relied upon to measure the digital access construct in this study.

Table 10. X3 reliability test

Item	Item-test correlation	Item-rest correlation	alpha
x3_1	0.7771	0.6216	0.7111
x3_2	0.8152	0.6891	0.6901
x3_3	0.7429	0.6692	0.8255
x3_4	0.7921	0.6334	0.7030
x3_5	0.8157	0.6363	0.7072
Taste scale			0.7768

The reliability test results for variable X3 (MSME Characteristics) showed an acceptable level of reliability with a Cronbach's Alpha value of 0.7768. Thus, the MSME characteristics

measurement instrument has good internal consistency and can be relied upon to measure the digital access construct in this study.

Table 11. M reliability test (P2P lending platform adoption)

Item	Item-test correlation	Item-rest correlation	alpha
m1	0.9036	0.8528	0.8567
m2	0.8952	0.8282	0.8562
m3	0.8179	0.6858	0.8928
m4	0.8139	0.7137	0.8817
m5	0.8102	0.6933	0.8866
Taste scale			0.8972

The reliability test results for variable M (P2P Lending Platform Adoption) showed good reliability with a Cronbach's Alpha value of 0.8972. Thus, the P2P lending platform adoption measurement instrument has good internal consistency and can be relied upon to measure this study's P2P lending platform adoption construct.

Table 12. Z reliability test (fintech regulation)

Item	Item-test correlation	Item-rest correlation	alpha
z1	0.5546	0.3749	0.8243
z2	0.8696	0.7332	0.7219
z3	0.8877	0.7774	0.7006
z4	0.7657	0.6508	0.7585
z5	0.6357	0.4866	0.7986
Taste scale			0.8057

The reliability test results for variable Z (Fintech Regulation) showed an acceptable level of reliability with a Cronbach's Alpha value of 0.8057. Thus, the fintech regulation measurement instrument has good internal consistency and is reliable for measuring the digital access construct in this study.

Descriptive Statistics

Table 13. Descriptive statistics

Variables	Obs	Mean	Std. dev.	Min	Max
MSME Financing (Y)	100	43.92	5,028	28	50
Financial Literacy (X1)	100	44.66	5,369	27	50
digital access (X2)	100	44.03	5,250	27	50
characteristics of MSMEs (X3)	100	45.11	4,380	33	50
adoption of P2P lending platforms (M)	100	44.51	5,157	31	50
fintech regulation (Z)	100	43.7	5,403	24	50

Table 13 on descriptive statistics explains that the research data consists of 100 MSME observations with all variables showing a relatively normal and balanced distribution.

Classical Assumption Test

Normality Test

The results of the Jarque-Bera test (sktest) in table 14 show that the residuals of the research model show a normal distribution at a significance level of 5%, where the individual test for skewness produces a p-value of 0.2055 (> 0.05) which indicates no data skewness problems, while the kurtosis test shows a p-value of 0.0679 (> 0.05) which means no significant kurtosis problems in the residual distribution. The joint test produces a p-value of 0.0855 (> 0.05). It can be concluded that the residual model is normally distributed.

Table 14. Skewness and kurtosis test for normality

Variable	Obs	Pr(skewness)	Pr(kurtosis)	Joint Test	
				Adj chi2 (2)	Probability>chi2
Residuals	100	0.2055	0.0679	4.92	0.0855

Multicollinearity Test

The Variance Inflation Factor (VIF) test results in Table 15 show that this research model does not experience serious multicollinearity problems because all independent variables show VIF values below 10.

Table 15. Multicollinearity test

Variable	VIF	1/VIF
X2	5.61	0.178
X1	4.96	0.201
X3	3.93	0.254
Z	3.08	0.324
M	1.00	1,000
Mean VIF	3.72	

Heteroscedasticity Test

The results of the heteroscedasticity test using the Breusch-Pagan/Cook-Weisberg method showed no heteroscedasticity problems at the 5% significance level. The test results showed a chi-square value of 3.47 with 1 degree of freedom, which resulted in a p-value of 0.0624. Because the p-value (0.0624) is greater than the significance level of $\alpha = 0.05$, it can be concluded that the assumption of homoscedasticity is met in this research model

Table 16. Heteroscedasticity test

Test Components	Mark
Chi-square (X^2)	3.47
Degrees of Freedom	1
P-value (Prob>chi2)	0.0624

Multiple Linear Regression

The first model tests the direct influence of three independent variables on MSME financing. The analysis results show that financial Literacy (X1) has a positive and significant impact with a coefficient of 0.410 (t-value 4.48), indicating that increasing financial Literacy will improve access to MSME financing. Digital access (X2) also has a significant positive influence with a coefficient of 0.277 (t-value 2.74), indicating that easy access to digital technology encourages increased MSME financing. Similarly, the MSME variable (X3) has a coefficient of 0.246 (t-value 2.42) and is significant, confirming that the characteristics of the MSME itself play an important role in determining access to financing. This model has an R-squared of 80% with a highly significant F-statistic of 128.16, indicating that the three independent variables can explain 80% of the variation in MSME financing.

The second model focuses on factors influencing the mediating variable (M), namely the adoption of P2P lending platforms. Financial Literacy (X1) shows a significant positive effect with a coefficient of 0.336 (t-value 6.52), indicating that MSMEs with better financial Literacy tend to adopt P2P lending platforms more easily. Digital access (X2) has the most substantial effect with a coefficient of 0.523 (t-value 9.19), indicating that the ability to access digital technology is a major predictor of adopting P2P lending platforms. The MSME variable (X3) also has a positive effect with a coefficient of 0.152 (t-value 2.66). This model has very high predictive power with an R-squared of 93% and a highly significant F-statistic of 497.87, indicating that the model is very fit in explaining the factors that drive the adoption of P2P lending platforms.

The third model tests the mediating role of P2P lending platform adoption in the relationship between independent variables and MSME financing. The results show that all three independent variables have a significant effect. Financial Literacy (X1) has a coefficient of 0.410 (t-value 4.87), digital access (X2) has a coefficient of 0.277 (t-value 2.98), and MSMEs (X3) have a coefficient of 0.246 (t-value 2.63). The mediating variable, P2P lending (M), shows a significant positive effect with a coefficient of 0.720 (t-value 4.31), proving that P2P lending platform adoption significantly increases MSME financing access. With a substantial R-squared of 83% and an F-statistic of 118.38, this model confirms the occurrence of partial mediation, where the independent

variables remain directly influential on MSME financing and indirectly through P2P lending platform adoption.

The fourth comprehensive model includes the moderating variable fintech regulation (Z) with its interaction effect. There is a change in the relationship pattern, where financial literacy (X1) increases the coefficient to 1.764 (t-value 2.15) and remains significant. At the same time, digital access (X2) becomes insignificant with a coefficient of 0.654 (t-value 0.78). The MSME variable (X3) changes to a considerable adverse effect with a coefficient of -2.202 (t-value -2.84). The mediating variable, P2P lending (M), becomes insignificant with a coefficient of 1.556 (t-value 1.14), indicating that the complexity of the interactions in the model replaces its mediating effect. The interaction effect shows that fintech regulation weakens the relationship between financial literacy and MSME financing (X1Z: -0.032, t-value -1.73), but strengthens the relationship between MSMEs and financing (X3Z: 0.356, t-value 3.11). This model has an R-squared of 86% with a significant F-statistic of 64.87, providing a more comprehensive understanding of the dynamics of MSME financing in the context of fintech regulation.

Discussion

The technological transformation of the "Master Pitung" chicken farmer in Kendal is driven by the adoption of a modern closed-house system and the use of digital technologies such as the Internet of Things (IoT) and Artificial Intelligence (AI). This transformation is driven by the need to increase efficiency, productivity, and competitiveness of livestock farming in the digital age. Financial literacy significantly increases the adoption of P2P lending platforms by enabling potential users to understand the benefits, manage the risks, and make wiser financial decisions. Here are some reasons why this "disempowering" perception might arise. Among them, fintech increases access, not replaces literacy. Regulation creates trust and consumer protection. And, literacy helps navigate regulations and risks. The problem may not be the "disempowering" regulations, but rather the challenges in implementation on the ground, such as gaps in digital infrastructure and technological literacy in some regions.

Financial Literacy has a positive influence on the Adoption of P2P Lending Platforms

The first hypothesis, stating that financial Literacy positively affects the adoption of P2P lending platforms, is accepted based on the analysis results of Model 1. These results align with research (Lestari et al., 2022; Faradila & Rafik, 2022; Aditya & Rita, 2024).

Digital Access Has a Positive Influence on the Adoption of P2P Lending Platforms

The second hypothesis, regarding the positive influence of digital access on the adoption of P2P lending platforms, is accepted with robust empirical evidence. This is in line with Laziva & Atieq (2024).

The characteristics of MSMEs positively influence the adoption of P2P lending platforms

The third hypothesis regarding the positive influence of MSME characteristics on the adoption of P2P lending platforms is accepted based on the results of Model 1, which shows a coefficient of 0.152 with a t-value of 2.66 and is significant at the 99% confidence level. This is in line with research by Sutarmin & Budiarti (2020).

Adoption of P2P Lending Platforms has a positive impact on MSME Financing Access

The fourth hypothesis, which states that adopting P2P lending platforms positively affects MSME financing access, is accepted with strong empirical support from Model 3. A coefficient of 0.720 with a t-value of 4.31, significant at the 99% confidence level, indicates that the adoption of P2P lending platforms has a positive and substantial impact on increasing MSME financing access (Salsabilla et al., 2025).

Fintech Regulations Cannot Moderate the Relationship Between P2P Lending Platform Adoption (M) and MSME Financing Access

The fifth hypothesis regarding the moderating effect of fintech regulations on the relationship between P2P lending platform adoption and MSME financing access is rejected based on the analysis results of Model 4.

Financial Literacy Influences Access to Financing for MSMEs

The sixth hypothesis, regarding fintech regulations on MSME financing access, is accepted based on the results of Model 2 with a coefficient of 0.410 and a t-value of 4.48. These research findings align with Mohammad Chaidir et al.'s (2025) findings.

Digital Access Has a Positive Impact on MSME Financing Access

The seventh hypothesis regarding the positive effect of digital access on access to financing was accepted. This is supported by research by Sulastrri & Janssen (2023).

The characteristics of MSMEs have a positive influence on access to MSME financing

The eighth hypothesis regarding the influence of MSME characteristics on access to financing was accepted (Sutarmin & Budiarti, 2020).

4. CONCLUSION

The main conclusion is that the digital revolution is a crucial factor in the technological transformation of chicken farmers in Kendal, particularly in boosting efficiency, productivity, and business competitiveness. However, the adoption of this technology still faces significant challenges, particularly related to the digital readiness and literacy of small-scale farmers. This research recommends that MSMEs actively participate in financial training, digital workshops, or fintech education programs organized by the government or financial institutions. A good understanding of digital financial products will facilitate access to P2P lending platforms and improve their ability to manage financing. Platform-based Sustainable Education Programs should develop easy-to-understand financial literacy programs that MSMEs can understand, including webinars, application tutorials, and user-friendly guides to encourage wider adoption. The government needs to continue refining fintech regulations that protect consumers and encourage innovation. Clear and supportive regulations will increase MSME trust in P2P lending platforms.

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REFERENCES

- Aditya, N. B., & Rita, M. R. (2024). Inklusi Keuangan, P2P Lending dan Kinerja UMKM: Peran Moderasi Literasi Keuangan. *Ekonomis: Journal of Economics and Business*, 8(1), 583. <https://doi.org/10.33087/ekonomis.v8i1.1590>
- Ali, S., Simboh, B., & Rahmawati, U. (2023). Determining Factors of Peer-to-Peer (P2P) Lending Avoidance: Empirical Evidence from Indonesia. *Gadjah Mada International Journal of Business*, 25(1), 1–27. <https://doi.org/10.22146/gamaijb.68805>
- BPK. (2023). *Laporan Keuangan Tahunan Bank Indonesia Tahun 2022 Bank Indonesia Annual Financial Statements 2022*. 1–137.
- BPS Indonesia, S. I. (2023). Catalog : 1101001. *Statistik Indonesia 2023*, 1101001, 790.
- Chulawate, N., & Kiattisin, S. (2023). Success Factors Influencing Peer-to-Peer Lending to Support Financial Innovation. *Sustainability (Switzerland)*, 15(5). <https://doi.org/10.3390/su15054028>
- Del Sarto, N. (2024). Exploring peer-to-peer lending: key influences of firm uncertainty, loan features and venture quality. *International Journal of Bank Marketing*, 43(3), 591–614. <https://doi.org/10.1108/IJBM-04-2024-0239>
- Faradila, D., & Rafik, A. (2022). Pengaruh Literasi Keuangan terhadap Perilaku Keuangan dan Intensi Meminjam dari Pinjaman Online / P2P Lending pada Mahasiswa Universitas Islam Indonesia. *Selekta Manajemen: Jurnal Mahasiswa Bisnis & Manajemen*, 02(03), 63–76.
- Gonzalez, L. (2023). Financial literacy in for-profit vs pro-social peer-to-peer lending. *Managerial Finance*, 49(2), 315–337. <https://doi.org/10.1108/MF-07-2021-0329>
- Haryanti, N. (2024). *Peningkatan Akses Permodalan bagi Usaha Mikro Kecil Menengah (UMKM)*. 1(2), 122–136.

- Kholidah, H., Fianto, B. A., Herianingrum, S., Ismail, S., & Mohd Hidzir, P. A. (2024). Do Islamic fintech lending promote microenterprises performance in Indonesia? Evidence of difference-in-difference model. *International Journal of Islamic and Middle Eastern Finance and Management*, 224–246. <https://doi.org/10.1108/IMEFM-08-2023-0310>
- Laziva, N., & Atieq, M. Q. (2024). Studi Literatur Digitalisasi UMKM (Usaha Mikro, Kecil, dan Menengah) di Era Masyarakat 5.0: Strategi dan Faktor. *Magister Manajemen Fakultas Ekonomi Dan Bisnis Universitas Tanjungpura*, 7, 1050–1079.
- Lestari, R. I., Arifin, Z., & Sudarmanto, K. (2022). Literasi Keuangan Digital Peer-To-Peer (P2P) Lending Kepada Pelaku UMKM Di Sendangmulyo Semarang. *Journal of Dedicators Community*, 6(3), 241–254. <https://doi.org/10.34001/jdc.v6i3.3644>
- Maloney, D. D., Hong, S. C., & Nag, B. (2024). Loan Pricing in Peer-to-Peer Lending. *Journal of Risk and Financial Management*, 17(8). <https://doi.org/10.3390/jrfm17080331>
- Manggala, B. S., Mahendra, R. S., Tambunan, Y. G., & Nugroho, A. A. (2024). *Media Hukum Indonesia (MHI) Analisis Regulasi Fintech dan Implikasinya Terhadap Operasional Bank Digital Dalam Studi Kasus Indonesia*. 2(3), 60.
- Mohammad Chaidir, Grace Yulianti, & Ruslaini Ruslaini. (2025). Pengaruh Literasi Keuangan terhadap Keberlanjutan Bisnis UMKM di Indonesia. *JUMBIWIRA : Jurnal Manajemen Bisnis Kewirausahaan*, 4(1), 218–220. <https://doi.org/10.56910/jumbiwira.v4i1.2079>
- Nguyen, L., Ahsan, M., & Haider, J. (2024). Reimagining Peer-to-Peer Lending Sustainability: Unveiling Predictive Insights with Innovative Machine Learning Approaches for Loan Default Anticipation. *FinTech*, 3(1), 184–215. <https://doi.org/10.3390/fintech3010012>
- OJK. (2024). *Penguatan Sektor Jasa Keuangan Dalam Menjaga Pertumbuhan Ekonomi: Laporan Kinerja OJK Tahun 2023*.
- Purnamasari, S. (2020). Literasi Keuangan dan Keputusan untuk Berkonsultasi dengan Profesional. *Jemap*, 3(1), 52–71. <https://doi.org/10.24167/jemap.v3i1.2551>
- Rufaidah, F., Karyani, T., Wulandari, E., & Setiawan, I. (2023). A Review of the Implementation of Financial Technology (Fintech) in the Indonesian Agricultural Sector: Issues, Access, and Challenges. *International Journal of Financial Studies*, 11(3). <https://doi.org/10.3390/ijfs11030108>
- Rusadi, F. A. R. P., & Benuf, K. (2020). Fintech Peer to Peer Lending as a Financing Alternative for the Development MSMEs in Indonesia. *Legality: Jurnal Ilmiah Hukum*, 28(2), 232–244. <https://doi.org/10.22219/ljih.v28i2.12865>
- Salsabilla, D., Rofiani, S. A., & Wahjono, S. I. (2025). Strategi Pemanfaatan P2P Lending Bagi UKM untuk Meningkatkan Akses Pembiayaan. *Journal of Innovative and Creativity*, 5(2), 676–688.
- Sulastri, R., & Janssen, M. (2023). Challenges in designing an inclusive Peer-to-peer (P2P) lending system. *ACM International Conference Proceeding Series*, 55–65. <https://doi.org/10.1145/3598469.3598475>
- Sutarmin, -, & Budiarti, W. (2020). Karakteristik Umkm Pengepul Dan Bandar Barang Bekas Pendekatan Fenomenologis (Studi Kesuksesan Orang Madura Sebagai Pengepul, Bandar barang Bekas Di Keputih Surabaya). *Jurnal Studi Manajemen Dan Bisnis*, 7(2), 141–151. <https://doi.org/10.21107/jsmb.v7i2.9138>
- Wang, Q., Xiong, X., & Zheng, Z. (2021). Platform Characteristics and Online Peer-to-Peer Lending: Evidence from China. *Finance Research Letters*, 38(February), 101511. <https://doi.org/10.1016/j.frl.2020.101511>
- Weng, G., Kim, J., & Won, K. J. (2021). VeTra: a tool for trajectory inference based on RNA velocity. *Bioinformatics*, 37(20), 3509–3513. <https://doi.org/10.1093/bioinformatics/btab364>
- Widyanto, H. A., Syahrivar, J., Genoveva, G., & Chairy, C. (2022). Intention to use Peer-to-Peer (P2P) Lending: The Roles of Perceived Structural Assurance and Perceived Critical Mass. *Organizations and Markets in Emerging Economies*, 31(1), 183–208. <https://doi.org/10.15388/omee.2022.13.76>
- World Bank. (2022). Building Physical Public Infrastructure. *World Bank Annual Report*.
- Yung, S., Langi, A. Z. R., Arman, A. A., & Simatupang, T. M. (2024). Choosing and Evaluating P2P Lending with Value Engineering as a Decision Support System: An Indonesian Case Study. *Information*, 15(9), 544. <https://doi.org/10.3390/info15090544>
- Zilfadila. (2023). Akses Digital dan Status Kesehatan Masyarakat di Asia Tenggara: Studi Deskriptif di Indonesia, Malaysia, dan Thailand. *Jurnal Rekam Medik Dan Informasi Kesehatan*, 5(1), 44–53. <https://doi.org/10.25047/j-remi.v5i1.4261>