

**THE ROLE OF FINTECH PAYMENT GATEWAY AND PEER TO PEER
LENDING IN THE DEVELOPMENT OF MSMES IN UMBULHARJO :
QUANTITATIVE RESEARCH ANALYSIS**

¹ Reydemtha Nirkansa Degong, Management Study Program, Universitas Sarjana Wiyata Taman Siswa, Jl. Batikan, UH-III Jl. Tuntungan No.1043, Tahunan, Kec. Umbulharjo, Kota Yogyakarta, Daerah Istimewa Yogyakarta, Indonesia, degongpuput2003@gmail.com

² Sri Hermuningsih, Management Study Program, Universitas Sarjana Wiyata Taman Siswa, Jl. Batikan, UH-III Jl. Tuntungan No.1043, Tahunan, Kec. Umbulharjo, Kota Yogyakarta, Daerah Istimewa Yogyakarta, Indonesia,

³ Risal Rinofah, Management Study Program, Universitas Sarjana Wiyata Taman Siswa, Jl. Batikan, UH-III Jl. Tuntungan No.1043, Tahunan, Kec. Umbulharjo, Kota Yogyakarta, Daerah Istimewa Yogyakarta, Indonesia,

DOI : <https://doi.org/10.21107/pamator.v18i1.29655>

Manuscript received January 1st 2025, Revised January 22nd 2025, Published March 31st 2025

Abstract

The development and growth of MSMEs in Indonesia is very rapid, inseparable from the development of the world of information technology. Financial technology (fintech) is an innovation in the financial services sector that adapts developing technology to make financial services and financial systems more efficient and effective. This study aims to determine the Role of Fintech Payment Gateway and Peer to Peer Lending on the Development of MSMEs. This research method uses a quantitative method. The population in the study were MSME actors in the Umbulharjo area. The sample used was 100 MSME actors. The tests used in the study include validity test, reliability test, normality test, heteroscedasticity test, multicollinearity, multiple linear analysis test, partial t test, f test, and determination coefficient test. The results of this study indicate that fintech payment gateway and peer to peer lending have a significant effect on the development of MSMEs.

Keywords: Fintech, Payment Gateway, Peer To Peer Lending, UMKM Development.

© Authors; This is an Open Access Research distributed under the term of the Creative Commons Attribution-ShareAlike 4.0 International License (CC BY-SA 4.0) (<https://creativecommons.org/licenses/by-sa/4.0/>) which allows re-distribution and re-use of a licensed work on the conditions that the creator is appropriately credited and that any derivative work is made available under “the same, similar or a compatible license”.

INTRODUCTION

The development and growth of MSMEs in Indonesia is very rapid, inseparable from the development of the world of information technology. The emergence and development of several technology startup companies in Indonesia are increasingly encouraging the development of

can make a significant contribution to accelerating the structure, namely improving the regional economy and national economic resilience. Fintech is a technology-based financial service, which is applied in the financial sector so that financial transactions can be carried out more practically, easily and effectively. Fintech is interpreted as providing solutions to financial activities that can have a good impact on the wider community (Qatrunnada & Marzuki, 2019). A payment gateway is a technology that allows businesses to accept, process, and manage various payment methods safely and efficiently. It acts as an intermediary in electronic financial transactions, allowing businesses to accept payments via credit cards, debit cards, digital wallets, and other methods. A payment gateway is a type of fintech service that can simplify the payment system. . Peer to peer lending is a financial practice that connects borrowers and lenders directly through an online platform. This eliminates the need for traditional financial intermediaries such as banks, allowing individuals to lend money to other individuals or businesses. The problems in this study include limited access to financial literacy levels, security in transactions, economic growth, increasing competitiveness. This is related to the research that will be conducted to solve the problems faced by UMKM actors in the Umbulharjo area. This study proposes 3 variables, namely fintech (X1), Payment Gateway (X2), and Peer to peer (X3) as independent variables and the development of MSMEs as the dependent variable. The relationship between fintech and the development of MSMEs, the researcher proposes hypothesis 1, namely by using the service features provided by fintech, it makes it easier on the financial side, as used in MSMEs, so that the better the payment service features provided by MSMEs, the more it can increase the development of MSMEs. The relationship between Payment Gateway and the development of MSMEs, researchers propose hypothesis 2, where by using fintech payment-gateway to facilitate financial transactions to be more practical, easy, efficient, and effective because payments are more instant without having to carry cash, maintaining security is more guaranteed without fear of counterfeit money, and payments can be made anytime and anywhere as long as there is an internet network (Nursansiwati & Armiani, 2022a). By implementing the payment gateway method, it will create convenience for MSME actors. The relationship between peer to peer lending and the development of MSMEs, researchers propose hypothesis 3, peer to peer lending is the provision of funding or financing that can be done online, which is usually said to be a bridge between the inequality that occurs between those who need financing and those who have excess funds. Thus, MSME actors can more easily obtain funding in running their businesses

RESEARCH METHODS

Novelty gap in the context of fintech refers to the difference between existing technology or solutions and market needs that have not been fully met. This gap arises because of more advanced innovations or new approaches that have not been implemented in the financial sector before. Examples include cardless payment services, micro-credit for underserved segments, decentralized finance, Crowdfunding with Blockchain-Based Approach. The results of observations conducted by researchers on MSMEs in Umbulharjo found that there are still many MSME actors and consumers who do not know how to make digital payments or sales. So that MSME actors can implement digital payments. Users of digital payments in society make business actors aware that they must implement it in their businesses. If not, it is not impossible that they will be left behind and threatened with extinction. By using digital payments, business actors can also get more consumers without having to do promotions, can reduce operational costs, and have the opportunity to get higher income. This study uses a quantitative research approach. The purpose of quantitative research generally focuses on measuring, analyzing, and generalizing data obtained through structured and systematic

methods. The population in this study were MSME actors in Umbulharjo District, Yogyakarta. Based on the Cochran formula, the error rate is 10% or 0.1 with a total of 100 respondents. Data were collected by distributing questionnaires directly to respondents. The variable measurement scale uses a five-point Likert scale, 1 means strongly disagree to 5 means strongly agree. The expert assessment for the questionnaire instrument in this study was very good. Data collection in this study used a questionnaire instrument model. The questionnaire is a flexible and easy-to-use form of data collection instrument. The data that has been obtained based on the instrument is data that is categorized as factual data (Wiyono, Gendro, Designing Business Research, 2011: 106). Data Quality Test, This study uses measuring variables with a questionnaire instrument which is carried out using a quality test process on the data obtained, with the aim of determining the quality of the research output and knowing the validity and reliability of the use of instruments that result in the truth of the data obtained. This study uses data quality testing with validity testing, reliability testing. The techniques used are normality testing, multilinearity testing, heteroscedasticity testing, multiple linear regression testing, and hypothesis testing including t-test and f-test.

RESULT AND DISCUSSION

Based on the results carried out using SPSS, the following results were obtained:

1. Validity test

The results of data processing show that fintech (X1), payment gateway (X2) and peer to peer lending (X3) as well as the development of MSMEs (Y) obtained a calculated r result greater than r table with an r table value of 0.1946, so it can be concluded that the variable is valid.

2. Reliabilty test

The results of data processing show that the Cronbach alpha of the fintech, payment gateway and peer to peer lending variables is 0.933 with a Cronbach alpha value of 23. It can be concluded that these variables are normally distributed.

3. Normalitas test

The results of processing in the normal P-P plot of regression Standardized Residual graph show that the data is spread around the diagonal line and follows the direction of the diagonal line, which means that the normality test is met.

4. Test of Determination Coefficient (R2)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.903 ^a	.815	.809	1.325

a. Predictors: (Constant), peer to peer lending, payment gateway, fintech

Table shows that the magnitude of R2 is 0.815 or equal to 8.15%. This shows that there is a relationship between independent variables and the development of UMKM and is in the strong category because it is more than 0.67.

5. T test

Table 1 1

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.603	1.464		.412	.681
	Fintech	.250	.105	.208	2.38	.019
	payment gateway	.230	.107	.186	2.14	.034
	peer to peer lending	.598	.065	.588	9.14	.000

a. Dependent Variable: perkembangan umkm

Based on table above, the significance value (Sig) is 0.681, with degrees of freedom (df) = n-k-1 or 100-4-1 using a two-sided test of 0.05 partially, the t table obtained is 1.661.

6. F test

Table 1 2

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	741.956	3	247.319	140.91	.000 ^b
	Residual	168.484	96	1.755		
	Total	910.440	99			

a. Dependent Variable: perkembangan umkm

b. Predictors: (Constant), peer to peer lending, payment gateway, Fintech

Table shows that the results of the model feasibility test obtained an F-count value of 140.919 with a significance level of 0.000 (<0.05). So it can be concluded that the model used is appropriate.

The Role of Fintech in the Development of MSMEs

The results of this study indicate that there is a positive influence from respondents around the Umbulharjo area on fintech services. This shows the increasing level of trust felt by respondents, namely MSME actors, towards fintech services. The trust of MSME actors in fintech services includes capital loans offered in developing businesses, digital payment services that are easy to use in transactions so that they are more effective and efficient, and

trust in financial management services that provided by this feature to ensure the continuity of transactions, maintain the confidentiality of information, and maintain the security of customer account privacy, in order to avoid the rampant crime. These results are in line with research conducted by (Winarto, 2020) which found that the development of Fintech carried out by financial institutions, both banking, savings and loan cooperatives and other financial institutions, can increase financial literacy and financial inclusion in MSMEs. For the development of MSMEs, fintech provides many financial solutions, especially for small and medium businesses that want to grow. With the many new features of fintech, it has an impact on the development of MSMEs. Other studies suggest that the role of fintech has a major influence on the performance of MSMEs, so MSME actors are expected to be more confident in running their businesses, especially in determining financial decisions and financial management to develop their businesses to be better than most people and in decision making it is necessary to reduce factors that can reduce the level of error in decision making. This can be done by exploring data and information that can support business development plans (Rohmah et al., 2022).

The Role of Payment Gateways in the Development of MSMEs

The results of this study indicate that there is a positive influence of payment gateways on the development of MSMEs. For respondents who choose to transact digitally, payment gateways are the key whose processes are carried out automatically and in real time. This is indicated by the respondents' sense of trust where they feel that this payment gateway is easy to learn how to use in developing their business. Other feelings of trust that are felt such as being able to control its use, more flexibility, and payment gateways are clearly understood and easy to operate. This is in line with research conducted by (Sukma et al., 2024) which shows that payment gateways have a positive effect on the development of MSMEs in Karawang Regency. The acceptance of Payment Gateways by the community results in increased income which in turn contributes to the financial performance of MSMEs. Electronic money payments are fast, convenient, and can increase transaction volume which is a presentation of MSME financial performance, where the existence of Payment Gateways can increase the efficiency of non-cash payments. Another study conducted by (Nursansiwati & Armiani, 2022), Utilization of payment gateways in the digital era and post Covid-19 is a business strategy for MSME actors so that they can survive, play a role, and be enthusiastic about national economic recovery and in particular can improve MSME performance and business sustainability, supported by increased human resource capacity, government regulations, and digital technology network infrastructure, to support the business transactions that will be carried out.

The Role of Peer to Peer Lending in the Development of MSMEs

The results of this study indicate that there is a positive influence felt by MSME actors with the existence of Peer to Peer Lending loans. This is indicated by a sense of trust such as easy financing procedures by providing convenience through the features available on peer to peer lending. This service also has a good impact where it can minimize time and increase productivity. Peer to peer lending can bridge MSME borrowers who are worthy / credit worthy to become bankable by providing loans without collateral. Peer to peer lending services are more flexible and can allocate capital or funds to anyone, in any amount, effectively and transparently, and with low interest. This is in line with research conducted by (Kurniawan et al., 2019) where peer to peer lending services can be accepted by the people of the Special Region of Yogyakarta. This is also in line with research conducted by (Serlika Aprita, 2021) The role of Peer to Peer Lending for MSMEs has a positive impact on the economy and industry. Especially the growth of micro-industry in various regions. Ease of technology,

provides enlightenment on the difficulties of capital in industrial activities.

CONCLUSION

This study aims to determine the Role of Fintech, Payment Gateway and Peer to Peer Lending on the Development of MSMEs in Umbulharjo. This study used 100 respondents as a sample. This study refers to the formulated hypothesis and a confidence level of 95% ($\alpha = 0.05$), then several things can be concluded as follows:

1. Fintech (X1) has a positive and significant impact on encouraging the development of MSMEs. With fintech services, MSMEs can improve financial literacy among MSME actors. The use of financial applications and knowledge of existing digital financial products can help MSME actors in managing their business finances.
2. Payment gateway (X2) has a positive and significant impact on the development of MSMEs. Payment gateway is an important infrastructure for MSMEs to develop in the digital era. The ease of this service increases customer convenience in shopping, thus encouraging increased transactions and sales of MSMEs.
3. Peer to Peer Lending (X3) has a positive and significant impact in encouraging the development of MSMEs. By providing easier and faster access to capital, it makes it easier for MSMEs to run their businesses. With easier access to capital, MSMEs can develop their businesses, increase production and expand market reach.

In the end, the suggestion from this research is how can fintech reach communities that are not yet served by traditional financial institutions?

Bibliography

- Khafidloh, S. N., Hermuningsih, S., & Maulida, A. (n.d.). Peran Fintech Terhadap Perkembangan UMKM di Yogyakarta. *Jurnal Manajemen*.
- Khafidloh, S. N., Hermuningsih, S., & Maulida, A. (2021). Peran Fintech Terhadap Perkembangan UMKM di Yogyakarta. *Inovator : Jurnal Manajemen*, 10(2), 93–99.
- Fitriani, F. S., Harahap, R. D., & Nurlaila, N. (2023a). Perkembangan UMKM Di Indonesia: Peran Pemahaman Akuntansi, Teknologi Informasi dan Sistem Informasi Akuntansi. *Owner*, 7(3), 2518–2527. <https://doi.org/10.33395/owner.v7i3.1427>
- Hasyim, T. M., & Hasibuan, D. R. (2022). ANALISIS PERANAN FINTECH DAN E-COMMERCE TERHADAP PERKEMBANGAN UMKM. *KEUNIS*, 10(2), 19. <https://doi.org/10.32497/keunis.v10i2.3490>
- Hermuningsih, S., Sari, P. P., & Rahmawati, A. D. (2022). The moderating role of bank size: Influence of fintech, liquidity on financial performance. *Jurnal Siasat Bisnis*, 106–117. <https://doi.org/10.20885/jsb.vol27.iss1.art8>
- Hidayah, N., & Setiawan, A. H. (n.d.). *ANALISIS PERKEMBANGAN UMKM BINAAN YANG MEMPEROLEH KREDIT WIBAWA DARI DINAS KOPERASI DAN UMKM KOTA SEMARANG*.
- Moch. Zainul Arif, Fikri Dwi Anto, Sri Rahayu, & Naela Karima. (2024). Analisis Efektivitas Penggunaan Fintech Terhadap Pendapatan UMKM di Tulungagung: Studi Kasus Dinova Store. *Transformasi: Journal of Economics and Business Management*, 3(3), 96–104. <https://doi.org/10.56444/transformasi.v3i3.1957>

Mujiatun, S., Jasin, H., Fahmi, M., & Jufrizen, J. (2022). Model Financial Technology (Fintech) Syariah di Sumatera Utara. *Owner*, 6(3), 1709–1718.
<https://doi.org/10.33395/owner.v6i3.893>