Peer Reviewed - International Journal

Vol-5, Issue-4, 2021 (IJEBAR)

E-ISSN: 2614-1280 P-ISSN 2622-4771

https://jurnal.stie-aas.ac.id/index.php/IJEBAR

THE INFLUENCE OF FINANCIAL TECHNOLOGY ON THE FINANCIAL PERFORMANCE OF MSMES IN MALANG

Erna Retno Rahadjeng, Sudarmiatin, Agus Hermawan S

¹Universitas Muhammadiyah Malang, Indonesia ^{2,3}Program Doktor Universitas Negeri Malang, Indonesia *Email: ernarena@umm.ac.id*

Abstract: This study aims to determine the effect of using financial technology (Peer To Peer Landing, Risk and Investment Management, Market Aggregator and Payment Gateway) on the financial performance of SMEs in the city of Malang. This research is a quantitative research with the research population is the perpetrators of SMEs in the city of Malang. The analytical model used in this research is descriptive analysis, classical assumption test and multiple regression. The results showed that Peer To Peer Landing, Risk and Investment Management, Market Aggregator and Payment Gateway had an effect on the financial performance of MSMEs in Malang City. The results of the research are expected to be able to contribute to MSME actors who use fintech in carrying out their operational activities

Keywords: financial technology, Peer To Peer Landing, Risk and Investment Management, Market Aggregator and Payment Gateway, financial performance..

1. Introduction

The development of today's technology is no longer something that is considered foreign by people in Indonesia. Development technology that is currently happening is experiencing rapid development which will provide convenience in accessing information as well as convenience in managing resources effectively and efficiently. (Wardani & Darmawan, 2020)

The development of technology that is not limited in today's digital era has become more complete with the presence of fintech. The term fintech is a financial service using a technology base that will further facilitate transactions that we do anywhere and anytime. As a form of application of information technology in the financial sector. Fintech has various functions, it is believed to be able to develop rapidly. Currently, fintech is able to serve electronic money, virtual accounts, aggregators, lending, crowdfunding and other online financial transactions. Currently, some of the fintechs that are currently operating are founded by conventional-based companies, and not a few are start-ups or startups. (Rizal et al., 2018).

Bank Indonesia as the regulator has classified through Junanto Herdiawan as Acting Head of Financial Technology Bank Indonesia regarding Fintech in Indonesia into 4 types, including: (Suyanto & Kurniawan, 2019); (1). Crowdfunding and Peer-to-Peer (P2P) Lending, (2). Market Aggregator, (3). Risk and Investment Management, (4). Payment, Settlement, and Clearing. For MSMEs, Fintech really helps MSMEs in getting convenience and efficiency in the financial sector. Fintech provides many financial solutions, especially for small and medium businesses that want to grow. Fintech developments are expected to be more inclusive. With the many service features

Peer Reviewed - International Journal

Vol-5, Issue-4, 2021 (IJEBAR)

E-ISSN: 2614-1280 P-ISSN 2622-4771

https://jurnal.stie-aas.ac.id/index.php/IJEBAR

of the Fintech application, it will have an impact on the development of MSMEs so this research will examine the role of Fintech in MSMEs. (Winarto, 2020).

The development of MSMEs in Malang City has increased significantly every year. Meanwhile, there are 7000 MSMEs in the city of Malang, of which 30% have made online sales transactions. Many small businesses are already using fintech in their sales activities. This indicates that fintech is already known and the benefits for MSME actors can begin to be felt.

2. Literature Review

In solving the problem, an underlying theory is needed, so that it can be in accordance with what is expected, a theory related to the existing problems is needed, namely;

A. Definition of Fintech

Fintech is a new technology and innovation with the aim of competing with traditional financial services so as to facilitate public access to these services. Bank Indonesia Regulation number 19/12/PBI/2017 explains that fintech is the use of financial system technology that produces new services, products, technology and or business models and can have an impact on financial system stability, smoothness, monetary stability, efficiency, security and reliability in the system. payment.

B. Fundamentals of Fintech Application

Payment methods through fund transfers, loans, fundraising, and even asset management can be easier, as well as accelerated and shortened by the use of technology. So it is natural that fintech becomes a necessity that ultimately changes the lifestyle of many people, especially those who are engaged in technology and finance.

Some of the most active areas of financial technology innovation include or revolve around the following areas: (https://www.jojonomic.com/blog/fintech/)

C. Fintech users

There are four broad categories of fintech users:

1. B2B for Bank

The trend towards mobile banking, data, improved information and more accurate analytics and decentralized access will create opportunities for all four groups to interact in an unprecedented way.

- 2. Their Business Clients
- 3. B2C for Small Business
- 4. Consumer

D. Benefits of Fintech in the Community

There are several reasons why fintech affects people's lifestyles, which are as follows:

- 1. Fintech helps the development of new start-up companies
- 2. Fintech can improve the standard of living and lifestyle
- 3. Fintech can stimulate the development of bitcoin
- 4. Fintech can reduce the number of high-interest loans
- 5. Ease of getting Financial Services
- 6. Helping MSMEs to get business capital with lower interest
- 7. Support financial inclusion
- E. Types of financial technology
 - 1. Crowdfunding and Peer-to-Peer Lending.

Crowdfunding involves several parties in doing the financing like someone who needs funds.

Peer Reviewed - International Journal

Vol-5, Issue-4, 2021 (IJEBAR)

E-ISSN: 2614-1280 P-ISSN 2622-4771

https://jurnal.stie-aas.ac.id/index.php/IJEBAR

- a. Crowdfunding is a form of funding for those who need funds in developing their business, where the funding is collected from several people. Crowdfunding is a form of crowdsourcing and alternative finance that is starting to re-emerge and is widely used by people to help entrepreneurs and startup SMEs.
- b. Peer to Peer Lending (also called abbreviated P2P lending), is the practice of lending money to individuals or businesses via online. So the P2P lending service provider website will match the borrower (debtor) with potential investors (creditors).
 - In Indonesia, there are not too many P2P lending websites. The Financial Services Authority (OJK) is very careful with lending and borrowing money. OJK tries to prevent losses to the public (investors), by preventing and suppressing the practice of loan sharks. If studied more deeply, the first practice is the practice of Peer to Peer Lending, which involves at least 3 parties:
- Party 1: the person who borrows money (debtor)
- Party 2: the person providing the loan (creditor)
- Party 3: website owner, for example: www.lendingclub.com (American company) Of course there are other parties (stakeholders), such as the government.
- 2. Market Aggregator.

Market aggregator is a fintech that functions to collect various market information that can be used by consumers according to their needs. This type of Fintech provides product comparisons ranging from prices, features, to benefits.

Market Aggregator as a Portal that collects and collects various information on financial service options to be presented to users. The information can then be compared to determine the best financial products ranging from credit, insurance, credit cards, to investments.

3. Risk and investment management

Risk and investment management is a fintech that provides services such as financial planning or advisory in the fields of platforms, online trading and insurance. Fintech has a concept like a financial planner in digital form. Its functions are like doing financial planning more easily and practically, and can be monitored anytime and anywhere.

4. Payment, Clearing, and Settlement.

Payment gateway is a fintech that provides services with an online payment system through an electronic wallet. This type of Fintech is usually used for payments at merchants, online motorcycle taxis, shopee pay, payments for public transportation such as the Commuter Line or MRT and others.

F. Financial Performance

Financial performance is an analysis used to evaluate the extent to which a company carries out activities in accordance with financial implementation rules (Fahmi, 2012). Financial performance is used to see how much results are obtained in a certain period and can be used to determine strategies.

The financial performance of a business entity or a company is very useful for several parties such as management, investors, creditors, government, financial analysts and consultants (Martono, 2002). Munawir (2007) said that the data obtained from the analysis of financial performance can be used to support the decisions taken.

G. MSME

(UMKM) is a general term in economics which refers to productive economic businesses owned by individuals or business entities in accordance with the criteria stipulated by Law no.

Peer Reviewed - International Journal

Vol-5, Issue-4, 2021 (IJEBAR)

E-ISSN: 2614-1280 P-ISSN 2622-4771

https://jurnal.stie-aas.ac.id/index.php/IJEBAR

20 of 2008. MSMEs mean businesses run by individuals, households, or small business entities. The classification of MSMEs is based on the limits of annual income turnover, total assets, and number of employees. Meanwhile, those that are not included in the MSME category or are included in the calculation of large businesses, namely productive economic businesses run by business entities with total net worth or annual sales results are greater than medium businesses.

3. Research Methods

A. Type of Research

This type of research is an explanatory research type. Explanatory research is research that explains the causal relationship (cause and effect) between variables that affect the hypothesis (Sugiyono, 2014:11). The causal relationship in this study reveals the influence of Financial Technology on the financial performance of MSMEs in the city of Malang. The approach in this study is a quantitative approach, namely research data in the form of numbers and analyzed using statistics (Sugiyono, 2014:9).

B. Population and Sample

The population in this study are all MSMEs in the city of Malang which are engaged in the food and beverage sector. In this study, the determination of the number of samples was carried out according to Fraenkel and Wallen that the standard sample for the study was 100 (Widayat, 2004: 104-105), so in this study 100 respondents were taken because it was deemed sufficient to be used as a sample in the study. The sampling technique in this study used a purposive sampling tool, namely the determination of the sample based on certain considerations (Sugiyono, 2014:85).

C. Variable Operational Definition

Operational definitions in this study were compiled from various experts, sources and previous research. Considering that the operational definition is based on one or more references accompanied by the reasons for using the definition. The operational definition of research variables is broken down into empirical indicators. It can be seen in table 1 below:

Table 1 Definitions of Operational Variables and Indicators

Variable	Operational definition	Indicator
	Utilization of technology in the	a. Peer to peer landing (P2P)
	financial system which then produces	b. Risk and Invesment
Financial	new services, products and business	Management
Tchnology	models that have an impact on	c. Payment, Clearing, dan
Tellilology	financial system stability, monetary	Settlement.
	stability, security, efficiency and	d. Market Aggregator
	reliability in payments.	
	Financial performance is a picture of	a. Total income increased.
Performance	financial success for MSMEs thanks to	b. Can pay off capital loans on
SMEs	the activities carried out in a certain	time
	period	

Peer Reviewed – International Journal

Vol-5, Issue-4, 2021 (IJEBAR)

E-ISSN: 2614-1280 P-ISSN 2622-4771

https://jurnal.stie-aas.ac.id/index.php/IJEBAR

D. Types and Sources of Data

The type of data used in this research is quantitative data. Quantitative data is a type of data that can be measured and calculated directly, which is expressed in numbers or in the form of numbers (Sugiyono, 2014: 92).

Primary data sources are data that directly provide data to data collectors (Sugiyono, 2014:93). The primary data in this study are data obtained from the results of distributing questionnaires and interviews with respondents.

E. Data Collection Techniques

The data collection technique used in this study was to distribute the research instrument in the form of a questionnaire to the respondents. This technique is done by distributing questionnaires to food and beverage MSME owners in Malang City, taking 2 weeks, with details of 5-10 questionnaires per day.

F. Data Measurement Techniques

The data measurement technique used in this study is the Likert scale. The Likert scale is used to measure attitudes, opinions and perceptions of a person or group of people regarding social phenomena. The variables to be measured are translated into indicators that are used as a reference for compiling instrument items which can be in the form of questions or statements (Sugiyono, 2014:93). Each question or statement is measured by a Likert scale which has five levels of answer preference, each of which is weighted 1 to 5 with details as shown in table 2:

Table 2. Scoring of Questionnaire Answers

Answer options	score
Strongly Disagree	1
Disagree	2
Neutral	3
agree	4
Strongly Agree	5

Source: Sugiyono (2016)

4. Results And Discussion

A. Data and Data analysis

To analyze the data, some information is needed from the respondents, so that the results of the analysis obtained are unquestionable and can be used as evidence for researchers in discussing the existing problems. The following information is needed;

1. Characteristics of Respondents by Type of Business.

Data on the characteristics of respondents by type of business can be seen in table 3. below:

Table 3. Characteristics of Respondents by Type of Business.

Type of business	Amount	Percentage
Food (stall, depot) Drinks	50	50%
Pastry	38	38%
cafe	7	7%
Total	5	5%
	100	100%

Source: Primary data processed

Peer Reviewed – International Journal

Vol-5, Issue-4, 2021 (IJEBAR)

E-ISSN: 2614-1280 P-ISSN 2622-4771

https://jurnal.stie-aas.ac.id/index.php/IJEBAR

The characteristics of the type of business according to questionnaire data that have been distributed to 100 respondents of MSME actors in Malang City, it is known that the stall business is a type of business that uses a lot of financial technology as many as 50 MSMEs or 50%. This stall business includes restaurants, depots and food sellers (street vendors). Then the type of beverage business is in the position of 38 SMEs or 38%. Beverage businesses that use financial technology, especially payment gateways, are online beverage sellers. In third place is the pastry business as many as 7 MSMEs or 7%. The type of business in the cafe sector is in fourth place as many as 5 MSMEs or by 5%, and this business is an online business.

2. Characteristics of Respondents based on Respondent Profile

Table 4. Profile of Respondents

Gender				
Man	34	34%		
Woman	66	66%		
Amount	100	100%		
Education				
Bachelor	33	33%		
senior High School	67	67%		
Amount	100	100%		

Source: Primary data processed

Table 5.2 characteristics of respondents based on gender and education shows that most of the respondents as business actors are female as many as 66 MSMEs or 66% and male as many as 34 MSMEs, MSME respondents who have high school education more than undergraduate education. It is evident that there are more women than men in MSMEs, while MSMEs have more high school education than bachelors.

3. Characteristics of Respondents by Business Location

Data on the characteristics of respondents based on business location can be seen in the table below:

Table 5: Characteristics of Respondents Based on Business Location

Business Location	Amount	Percentage
(District)		
Lowokwaru	38	38%
Blimbing	27	27%
Klojen	8	8%
Sukun	12	12%
Kedung Kandang	15	15%
Total	100	100%

Source: Primary data processed

Based on table 5 the frequency of business locations according to questionnaire data that has been distributed to 100 respondents of MSME actors in Malang City, Lowokwaru is the business location that uses financial technology the most with a percentage of 38%. Then the business location in Blimbing is in second position with a total of 27 MSMEs or 27%. Followed by Kedung Kandang sub-district with a value of 15%, and Sukun District with a percentage of

<u>Peer Reviewed – International Journal</u>

Vol-5, Issue-4, 2021 (IJEBAR)

E-ISSN: 2614-1280 P-ISSN 2622-4771

https://jurnal.stie-aas.ac.id/index.php/IJEBAR

12%. Klojen sub-district is the location of the least business, namely as many as 8 MSMEs or 8%. From the statement above, it can be concluded that the largest MSMEs that use financial technology in their business activities are MSMEs located in the Districts of Lowokwaru, Blimbing, Kedung Kandang, Sukun and finally Klojen.

4. Research Results

The evaluation of the construct model was carried out to evaluate and see whether the manifest variables were able to measure the latent variables studied in this study properly and reliably. Evaluation of the construct model in this study consisted of three evaluations, namely: 1) evaluation of convergent validity; 2) evaluation of discriminant validity; and 3) evaluation of construct reliability.

a) Convergent Validity Evaluation

This evaluation is done by looking at the value of the loading factor (outer loading) on each indicator. If the value is greater than 0.50 (Hartono, 2009), it can be said that the indicator is valid. Based on the above calculation, df = 98, where r table df = 980 with a significance value of 5%. The following presents the results of the validity test of the variables used in the study. The expected value exceeds the limit of 0.6 as the minimum limit of the factor loading value, then it is said to be valid

Table 6. Convergent Validity Test Results

Hasil Uji Validasi	Latent	Keterangan
	variabel	
X1 (Payment gateway)	0,796	Valid
X2 (Peer to peer landing)	0,863	Valid
X3(Risk and Invesment Management)	0,770	Valid
X4(Market Aggregator)	0,600	Valid
Y1 (Total income increased)	0,939	Valid
Y2 (Can pay off capital loans on time)	0,807	Valid

Source: Primary data processed 2021

Based on table 6. it can be seen that all statement items in the questionnaire have a value of r arithmetic > r table, it can be said that all statement items in the questionnaire are valid and can be used to measure variables in research. This can be seen from the latent value of each variable having a value greater than or equal to 0.6. it can be said that all statement items in the questionnaire are valid.

b) Evaluation of Discriminant Validity

This evaluation is done by comparing the value of the square root of average variance extracted (AVE) with the correlation between constructs in the structural model. Evaluation of the measurement model with the AVE root square is to compare the AVE root value with the correlation between constructs. If the AVE root value is greater than the correlation between constructs, then good discriminant validity is achieved. Following are the results of the Discriminant Validity test of the variables used in the study:

Peer Reviewed - International Journal

Vol-5, Issue-4, 2021 (IJEBAR)

E-ISSN: 2614-1280 P-ISSN 2622-4771

https://jurnal.stie-aas.ac.id/index.php/IJEBAR

Table 7. Discriminant Validity Test Results

Table 7. Discriminant variatty Test Results		
	FINTECH	FINANCIAL
	(X1)	PERFORMANCE
		(X2)
FINTECH (X1)	0,764	
FINANCIAL PERFORMANCE (X2)	0,549	0,876

Based on table 7, it is found that the financial performance value of 0.876 indicates a higher value than the fintech variable, so it is said to have an adequate discriminant.

c) Evaluation of Construct Reliability

Evaluation of construct reliability of the construct model is done by looking at the composite reliability value to determine whether the construct has high reliability or not. A construct is declared reliable if the composite reliability value is greater than 0.60. (For evaluation of construct reliability, you can choose composite/ Cronbach alpha only). Reliability test performed with SMART PLS is a facility to measure reliability with Cronbach's alpha statistical test. A variable is said to be reliable if Cronbach's alpha value is > 0.60. Following are the results of the reliability test of the variables used in this study, namely:

Table 8. Reliability Test Results

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
FINTECH (X1)	0,761	0,807	0,846	0,583
FINANCIAL PERFORMANCE (X2)	0,714	0,863	0,867	0,767

Source: Primary data processed 2021

Based on the table above, it can be seen that all variables in this study have a Cronbach Alpha coefficient value of more than 0.6 so it can be concluded that the instrument used in this study is reliable. Similarly, the AVE value of the two latent variables has a value of 0.583 for latent variable 1 and 0.767 for latent variable 2. The second value shows that all items from the questionnaire are declared reliable.

d) Coefficient of Determination Assessment (R-Square)

The corrected coefficient of determination was used to assess the role of exogenous variables on endogenous variables in this study. From the analysis results show that a construct is able to explain the model by 30.2%, meaning that the ability of the Fintech variable to be able to explain the performance variable is only 30.2% while the 69.85 is explained by other variables not studied so far.

Table 9. Coefficient of Determination

Variabel	Adj.R-Square	R-Square
FINANCIAL	0,295	0,302
PERFORMANCE (Y)		

Peer Reviewed - International Journal

Vol-5, Issue-4, 2021 (IJEBAR)

E-ISSN: 2614-1280 P-ISSN 2622-4771

https://jurnal.stie-aas.ac.id/index.php/IJEBAR

5. Path Coefficient Testing (Research Hypothesis)

Testing the hypothesis by testing the significance of the path coefficient of the partial least square (PLS), the path coefficient shows the magnitude of the influence of one exogenous variable on the endogenous variable. If the path coefficient value is significant, it can be stated that the exogenous variable has a significant effect on the endogenous variable.



Figure 1. Path Coefficient Test Results

Live Effect Test

There is a direct influence in the research, there is a direct influence. The results of testing the relationship between research variables are completely described through the path coefficients in the structural model. Based on the results of the PLS analysis on the structural model, the path coefficients obtained through these coefficients can be seen the influence between variables in this research hypothesis. The explanation of the effect of each exogenous variable on the endogenous is used to answer the research hypothesis. Based on Figure 1 shows that the value of the variable coefficient has a value of 0.6. This means that each indicator has a loading value above 0.6.

Table 10. Hypothesis Testing

		<i>-</i>	0	
HYPOTHESIS	Standard	T	p-Value	DESCRIPTION
	Deviation	Statistik		
	(STDEV)			
H1→	0,059	9,348	0,000	SIGNIFICANT

The hypothesis testing rules are carried out as follows, if a p-value = 0.01 (alpha 1%) is obtained, it is said to be highly significant, if a p-value = 0.05 (alpha 5%) is obtained, it is said to be significant, if a p-value = 0.10 is obtained. (alpha 10%) then it is said to be weakly significant (Solimun et al., 2017).

5. Conclusions And Suggestions

The results of the analysis show that the Fintech variable (X1) has an effect on Financial Performance with a path coefficient of 0.549 with p-value = 0.05. The p value obtained is 0.05, so it is said to be significant, so the hypothesis H1 is accepted

Suggestion

The research is expected to be able to contribute to MSME actors who use fintech in carrying out their operational activities. Especially in applying for credit to be more careful.

Peer Reviewed - International Journal

Vol-5, Issue-4, 2021 (IJEBAR)

E-ISSN: 2614-1280 P-ISSN 2622-4771

https://jurnal.stie-aas.ac.id/index.php/IJEBAR

Acknowledgments

Write briefly acknowledgments / acknowledgments, especially acknowledging the source of funding that made this research or service possible. During the writing process, many parties have provided assistance both morally and materially. As an expression of gratitude, the author would like to take this opportunity to express his gratitude to:

- 1. Dr. H. Fauzan, M.Pd, Chancellor of the University of Muhammadiyah Malang, who has given the author the opportunity to conduct research
- 2. Dr. Idah Zuhro, M.M., Dean of the Faculty of Economics and Business, University of Muhammadiyah Malang who has provided support to the author in the research.
- 3. Dr. Aniek Rumijati, M.M., Head of PPBEK, Faculty of Economics and Business, University of Muhammadiyah Malang who has provided opportunities and support to the authors in the research.
- 4. Dr. Marsudi, M.M., Head of Management Study Program, Faculty of Economics and Business, University of Muhammadiyah Malang, who has provided opportunities and support to the author in conducting research.

References

- Ghozali, I. (2008). *Structural Equation Modeling, Method Alternatif dengan Partial Least Square*. Semarang: Badan Penerbit Universitas Diponegoro.
- OJK.(2017). *Kajian Perlindungan Konsumen Sektor Jasa Keuangan*: Perlindungan Konsumen Pada Fintech Jakarta. Departemen Perlindungan Konsumen OJK, 2017.
- Rizal, M., 1*, Maulina, E., 2, & Kostini, N. (2018). FINTECH SEBAGAI SALAH SATU SOLUSI PEMBIAYAAN BAGI UMKM. 3(3), 116–120.
- Silalahi, R., & Pramedia, D. P. (2018). Analisis Faktor Keberhasilan Fintech Payment Dengan Menggunakan Model DeLone dan McLean. *Jurnal Ekonomi Dan Perbankan Syariah*, *3*(1), 1–24.
- Sugiyono. (2019). Metode Penelitian Kualitatif Kuantitatif dan R&D. Alfabeta.
- Sutrisno. (2001). Manajemen Keuangan Teori, Konsep dan Aplikasi. Ekonisia.
- Suryana (2013) Kewirausahaan : *Kewirausahaan (Kiat dan Proses Menuju Sukses)* e4, Penerbit Salemba Empat, Jakarta
- Suyanto, S., & Kurniawan, T. A. (2019). Faktor yang Mempengaruhi Tingkat Kepercayaan Penggunaan FinTech pada UMKM Dengan Menggunakan Technology Acceptance Model (TAM). *Akmenika: Jurnal Akuntansi Dan Manajemen*, *16*(1). https://doi.org/10.31316/akmenika.v16i1.166
- Wardani, A. P. Y. K., & Darmawan, N. A. S. (2020). Peran Financial Technology pada UMKM: Peningkatan Literasi Keuangan Berbasis Payment Gateway. *Jurnal Ilmiah Akuntansi Dan Humanika*, 10(2), 170. https://doi.org/10.23887/jiah.v10i2.25947

Peer Reviewed - International Journal

Vol-5, Issue-4, 2021 (IJEBAR)

E-ISSN: 2614-1280 P-ISSN 2622-4771

https://jurnal.stie-aas.ac.id/index.php/IJEBAR

Winarto, W. W. A. (2020). Peran Fintech dalam Usaha Mikro Kecil dan Menengah (UMKM). *Jesya (Jurnal Ekonomi & Ekonomi Syariah*), 3(1), 61–73. https://doi.org/10.36778/jesya.v3i1.132