



## Determinants of Financial Performance of MSMEs in Indonesia in an Islamic Perspective through Payment Gateway

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**Article history:** Received April 27, 2023 | Revised May 1, 2023 | Accepted January 4, 2024 | Available online on April 1, 2024

**To cite this article** [Turabian of style 8th edition]: Budi Gautama Siregar, and Aswadi Lubis Aswadi. "Determinants of Financial Performance of MSMEs in Indonesia Through Payment Gateway". *IQTISHODUNA: Jurnal Ekonomi Islam* 13, no. 1 (April 1, 2024): 397-416. Accessed April 1, 2024.

### ABSTRACT

This study aims to assess the impact of financial literacy and management on the financial performance of MSMEs from an Islamic perspective through the use of payment gateways in Indonesia. A total of 95 Muslim entrepreneurs engaged in micro, small and medium enterprises across Indonesia were sampled in this study. This study uses quantitative method with Structural Equation Model (SEM) approach as an analytical tool, and utilises Smart PLS software version 3.0 to support data analysis. The results of the analysis show that financial literacy and financial management are able to positively and significantly influence payment gateways and financial performance of MSME players in Indonesia, in accordance with the hypothesis proposed in this research. In addition, payment gateway variables can also positively and significantly influence the financial performance of MSMEs in Indonesia. By applying financial literacy and financial management in MSME transaction activities through payment gateways, it is expected to survive and continue to improve the financial performance of MSMEs in Indonesia. The research findings are expected to contribute significantly to stakeholders who play a role in improving financial literacy and management in Indonesia. In addition, financial awareness among the MSME community is crucial, as is an understanding of fintech technologies such as payment gateways. Each individual needs to pay attention to this in order to manage funds wisely and optimally to achieve the expected results.

**Keywords:** financial literacy, financial management, islamic perspective, payment gateway, MSME financial performance.

## INTRODUCTION

Entrepreneur activity or entrepreneurship has a very urgent role in the economic conditions of the Indonesian nation. It is proven that when Indonesia was experiencing a crisis that weakened the nation's economy, MSMEs were able to survive and even become one of the factors restoring the nation's economy. MSMEs have an urgent role in improving the economy of a nation, including levelling the economy by spreading to remote areas so as to meet the daily needs of the community. In addition, MSMEs contribute to reducing poverty through the opening of new jobs so that it will reduce the unemployment rate in the community. Another role is to increase revenue for the country through export activities of local products and service abroad, as well as being an attraction for citizens of other countries to visit Indonesia.<sup>1</sup>

In essence, the financial outcomes of a business MSME indicate how well the management processes are working in term of resources utilization efficiency and effectiveness. The financial performance of MSMEs is of much concern to academics and business people because financial performance has a major impact on the financial health and sustainability of a business.<sup>2</sup> MSMEs contribute to the Indonesian economy by 60.5% in 2021 and are able to accommodate a large number of unemployed people to work, namely 96.9% of the absorption capacity of the business world in 2021. Then MSMEs also contribute to the delivery of local product and services abroad by 14.37% in 2020. and this position continues to experience a proud increase to 15.69% in 2021.<sup>3</sup>

Islamic teaching to its ummah in order to carry out all its activities including in economic activities must always uphold sharia principle. In the implementation of sharia principles, skill is not the only factor needed in the development of MSMEs, but furthermore, every entrepreneur must remain committed and adhere to the application of the best principles in running their business and make it easy for MSME actors to build and develop their business activities. In their business transaction activities with consumers, they must give priority the principle of justice so that no one feels oppressed between each party to the transaction. MSME actors must avoid business activities that contain elements of usury, fraud, taking customer right. In achieving business success, it is hope that MSME actors can manage and operate business activities professionally in line with Islamic principle.

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<sup>1</sup> Mutiara, Melisa, E; Wiratno, Adi; Herwiyanti, "Analyzing the Impact of MSME Performance Due to Payment Gateway, Digitalization, and Financial Literacy," *International Conference on Sustainable Competitiveness Advantage*, 2022, 70.

<sup>2</sup> Rusdin, Suryanto, Meisa R.; Dai, "Fintech as a Growth for Small and Medium Enterprises in Indonesia," *Academy of Strategic Management Journal* 19, no. 5 (2020): 1-12.

<sup>3</sup> Coordinating Ministry for the Economy, "The Development of MSMEs as the Engine of the National Economy Continues to Receive Government Support," [ekon.go.id](http://ekon.go.id), 2022.

Entrepreneurs in various aspects of business in Indonesia encounter several obstacles, such as not being able to use the proceeds of their business for savings and ignorance of the importance of investment funds or future emergencies.<sup>4</sup> It is necessary to improve financial knowledge in order to assist business in improving financial literacy and management. Financial literacy encompasses the degree of understanding, expertise, and consistency in shaping personal attitudes and behavior in managing finances, ultimately enhancing the quality of decision-making and contributing to overall well-being.<sup>5</sup> With financial literacy skills, entrepreneurs will certainly use their skill, especially in financial aspects, in decision-making action that benefit their business activities.<sup>6</sup> If business actors want to improve the financial performance of their business, it is certainly inseparable from the continuous improvement of their financial literacy.<sup>7</sup>

Even though they name is micro, small and medium enterprises, it does not mean that these activities do not require financial management. Financial management is a necessary for every business person for their own business because it will have an impact on the improvement of their own business. For entrepreneurs who are serious about financial planning or management, they will definitely fail or will not last long. Because business actors do not manage capital, there is no guarantee that the amount of income and expenses will still be used for business.<sup>8</sup> Effective financial management enhances a business's profitability. The results showed that there is a relationship between financial

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<sup>4</sup> Deka, Anggun, Lestari; et.al, "Payment Gateway in Influencing the Financial Performance of MSMEs," *Journal of Business, Management and Economics* 1, no. 1 (2020): 1-10, <https://doi.org/10.47747/jbme.v1i1.20>; Suryanto, R, and Dai, "Fintech as A Catalyst for Growth of Micro, Small and Medium Enterprises in Indonesia."

<sup>5</sup> Halim and Astuti, "Financial Stressors, Financial Behavior, Risk Tolerance, Financial Solvency, Financial Knowledge, Dan Financial Satisfaction," *Jurnal Finesta* 3, no. 1 (2015): 19-23; Dody Kurniawan and C I Wahyu Putra, "The Effect of Financial Literacy, Performance Expectancy, Effort Expectancy, and Money Saving to Use Decision Financial Technology in the Millennial Generation in North Bekasi," *East Asian Journal of Multidisciplinary Research* 2, no. 1 (2023): 63-72, <https://doi.org/10.55927/eajmr.v2i1.2170>.

<sup>6</sup> Pearl Dahmen and Eileen Rodríguez, "Financial Literacy and the Success of Small Businesses : An Observation from a Small Business Development Center," *Advancing Education in Quantitative Literacy* 7, no. 1 (2014).

<sup>7</sup> Amalya; Miftahul: Jannah; et al., "The Impact of Financial Literacy, Advancedments in Fintech, and Payment Gateway on Financial Management Practies among Economics and Business Faculty Students," *Kilisuci International Conference on Economic & Business* 1, no. 1 (2023): 86-97.

<sup>8</sup> Abdul Kader and Abu Zahar Khan, "Financial Management Practices on Financial Performance," *Globus An International Journal of Management & IT* 11, no. 1 (2019).

management and the achievement of performance achieved by entrepreneurs.<sup>9</sup> MSME actors must also make various innovations in financial management in order to sustain their business in this era of fierce competition.<sup>10</sup>

Financial literacy and management absolutely must be mastered by MSME players in order to survive in the industrial era 4.0, the ability and growth of fintech in terms of payment gateways are factors that influence the financial management actions of MSMEs.<sup>11</sup> Fintech is a financial innovation that provides services related to style activities in operating businesses and multi product that integrate financial circulation with the use of technology.<sup>12</sup> In this study, the focus is on exploring payment gateways within the realm of fintech. A payment gateway is an online transaction system governed by the rules set forth by the service provider.<sup>13</sup> Mutiara and colleagues carried out research on payment gateways and discovered their impact on financial performance.<sup>14</sup>

A wealth of prior research has delved into the financial dynamics of MSMEs, with particular attention to businesses aligning with Islamic economic tenets, which prioritize equitable, transparent, and sustainable financial management practices. This research also makes payment gateways an intervening variable and is an important novelty of this research. The purpose of adding a payment gateways is as an intermediate variable between for MSME financial performance variables, given the pivotal role of technology, it's anticipated to exert a sweeping influence across operational domains, augmenting the acumen and financial stewardship of MSMEs.<sup>15</sup> Seeing the description that has been done, it is necessary to conduct a study in the form of research that applies the variables of literacy and financial management as exogenous variables. As well as adding payment gateway as a mediating variable.

## Theoretical Framework and Research Hypothesis

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<sup>9</sup> Dahmen & Rodríguez (2014)

<sup>10</sup> Haris Fatimah, Feti; Hermawan, "Effectiveness of Sharia Services and Buying Experience in Retail MSMEs Consumer Loyalty," *Iqtishaduna, jurnal Ekonomi Islam* 13, no. 1 (2024), <https://doi.org/10.54471/iqtishoduna.v13i1>.

<sup>11</sup> Suryanto, R, and Dai, "Fintech as A Catalyst for Growth of Micro, Small and Medium Enterprises in Indonesia."

<sup>12</sup> Helti Nur Aisyiah, Septi Kurnia Prastiwi, and Asep Maulana Rohimat, "Can Perceived Usefulness and Online Experiences Affect ShopeePay Fintech Usage by Millennial Muslims?," *IQTISHODUNA: Jurnal Ekonomi Islam* 12, no. 148 (2023): 101-120.

<sup>13</sup> Hassanain Haykal, "The Impacts Of Applying National Payment Gateway In The Indonesian Payment System," *Yustisia Jurnal Hukum* 8, no. 3 (2019): 446-458.

<sup>14</sup> Mutiara et al. (2022)

<sup>15</sup> V Chang et al., "How Blockchain Can Impact Financial Services-The Overview, Challenges and Recommendations from Expert Interviewees," *Technological Forecasting and Social Change* 158 (2020): 1-12.

## Financial Literacy

Essentially, Financial education denotes a person's depth of comprehension, proficiency, confidence, enabling them to shape personal attitudes and behaviors in financial management, ultimately enhancing decision-making quality toward prosperity attainment.<sup>16</sup> With financial literacy skill mastered by entrepreneurs, of course, it can achieve improved performance by entrepreneurs, which in turn leads to growth and improvement of their business. With financial knowledge and skill possessed by MSME entrepreneurs, decision-making actions towards purchases will be taken more carefully and based on clear. Data and information. The results show that the use of fintech is associated with better financial literacy.<sup>17</sup> In line with Tay et al,<sup>18</sup> that financial literacy is a factor influencing gateway usage. Then good financial literacy becomes a supervisory system in quality financial management. The result from the investigation into Jannah's financial performance indicate a substantial correlation with financial literacy<sup>19</sup>. In addition, the implementation of fintech-based technology help entrepreneurs to more obtain funding sources in increasing their business, payments are made digitally and make it easier to reach a wider market as well as mitigate problems in preparing financial reports.<sup>20</sup> The hypotheses for this study are formulated as follows:

H1: Financial literacy has a positive and significant influence on the use of payment gateways in Indonesia.

H2: Financial literacy positively and significantly impacts the financial performance of MSME players in Indonesia

H3: Financial literacy can positively and significantly enhance the financial performance of MSMEs through the use of payment gateways in Indonesia

## Financial Management

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<sup>16</sup> Halim and Astuti, "Financial Stressors, Financial Behavior, Risk Tolerance, Financial Solvency, Financial Knowledge, and Financial Satisfaction"; Kurniawan and Wahyu Putra, "Analyzing the Relationship Between Financial Literacy, Performance Expectations, Effort Expectations, and Saving Habits in Influencing the Adoption of Financial Technology Among Millennials in North Bekasi."

<sup>17</sup> Yosuke Kakinuma, "Fintech as a Gateway to Enhance Financial Literacy," *SSRN Electronic Journal* (2023).

<sup>18</sup> Tay et al. (2022)

<sup>19</sup> Jannah et al., "The Influence of Financial Literacy, Development of Fintech and Payment Gateways on Financial Management Behavior of Students of the Faculty of Economics and Business"; Mutiara, Wiratno, and Herwiyanti, "The Effect of Payment Gateway, Digitization, and Financial Literacy on MSME Performance."

<sup>20</sup> Suryanto, R, and Dai, "Fintech as A Catalyst for Growth of Micro, Small and Medium Enterprises in Indonesia."

Financial management involves the efficient and effective coordination, organisation, and administration of monetary transactions.<sup>21</sup> In addition, the payment gateway factor significantly contributes to improving financial management practices, exerting a positive influence on various actions in this area.<sup>22</sup> The analysis shows that the existence of payment gateways and the convenience they offer in transactions have a major impact in improving financial management. Effective financial management directly impacts the overall financial performance of both companies and organizations.<sup>23</sup> Elgaraihy<sup>24</sup> it is emphasized that to sustain business operations and achieve objectives, companies must diligently and efficiently handle their financial affairs. Dahmen and Rodriguez<sup>25</sup> it has been pointed out that there exists a robust connection between financial management and the enhancements in performance seen among business practitioners. With the onset of the Fourth Industrial Revolution, technology is expected to significantly impact the operational dynamics and financial management of MSMEs.<sup>26</sup> From an Islamic perspective, there is a strong emphasis on implementing an efficient management system to ensure success in both worldly matters and the hereafter. For MSME players, they must always carry out a future-oriented management system for the sustainability of their business, of course an orderly, transparent financial management system is needed. According to the teachings of Surah Al-Hasyr verse 18 in the Quran, believers are urged to be mindful of their actions, emphasizing accountability and foresight for the future.<sup>27</sup>

Based on the above description, the following hypotheses can be proposed:

H4: Financial management positively and significantly influences the use of payment gateways in Indonesia.

H5: Financial management has a positive and significant effect on the financial performance of MSMEs in Indonesia.

H6: Financial management can positively and significantly enhance the financial performance of MSMEs through the use of payment gateways in Indonesia.

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<sup>21</sup> G M Purani, "A Review Paper on Financial Management and Financial Manager," *International Journal of Research & Review (www.gkpublication.in)* 4, no. May (2017): 37.

<sup>22</sup> Jannah et al., "The Influence of Financial Literacy, Development of Fintech and Payment Gateways on Financial Management Behavior of Students of the Faculty of Economics and Business."

<sup>23</sup> Kader and Khan, "Financial Management Practices on Financial Performance."

<sup>24</sup> Elgaraihy (2015)

<sup>25</sup> Dahmen & Rodríguez (2014)

<sup>26</sup> Chang et al., "How Blockchain Can Impact Financial Services – The Overview, Challenges and Recommendations from Expert Interviewees."

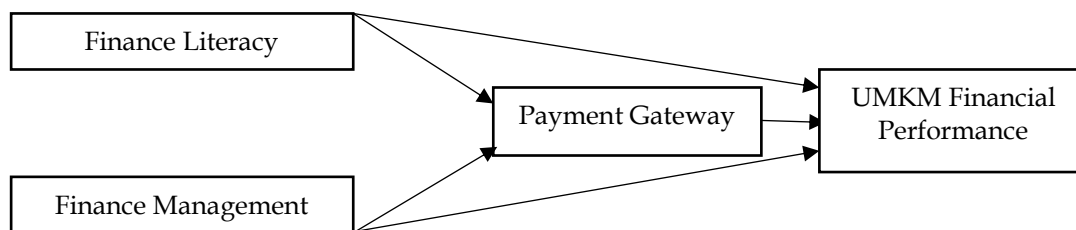
<sup>27</sup> Ministry of Religious Affairs, *Al-Qur'an and its Translation*, (2007)

## Payment Gateway

It has been explained that a payment gateway functions as an online payment service, complying with the regulations established by the service provider<sup>28</sup>. This system facilitates seamless digital financial transactions over the internet, particularly catering to MSMEs engaged in e-commerce, thus enhancing operational efficiency.<sup>29</sup> Knowledge of financial management is very important for every individual including MSME business. They need to invest their fund wisely and optimally to increase the desired result. The findings produced by Lestari et al.<sup>30</sup> concluded that payment gateways significantly affect financial performance. Octavina and Rita's research.<sup>31</sup> the research concluded that the utilization of gateway-based financial technology payments could substantially enhance the financial performance of MSMEs. The description above so that the hypotheses used include:

H7: Payment Gateway Has a Significant Positive Effect on the Financial Performance of MSME in Indonesia

The research model is as shown in Figure 1.



**Figure 1.** Research Model

## METHODS

This research falls under the category of descriptive quantitative research. It employs variables that are well-defined, measurable, and exhibit correlations between each other. The findings of this study are elucidated based on the numerical outcomes derived from specific statistical procedures.<sup>32</sup> The Indonesia

<sup>28</sup> Haykal (2019)

<sup>29</sup> Tay, Tai, and Tan, "Digital Financial Inclusion: A Gateway to Sustainable Development."

<sup>30</sup> Lestari et al. (2020)

<sup>31</sup> Larissa Adella Octavina and Maria Rio Rita, "Digitalisasi UMKM, Literasi Keuangan Dan Kinerja Keuangan : Studi Pada Masa Pandemi Covid-19," *STIE Perbanas Press* 2021 11, no. 1 (2021): 73-92; Mutiara, Wiratno, and Herwiyanti, "The Effect of Payment Gateway, Digitization, and Financial Literacy on MSME Performance."

<sup>32</sup> Anol Bhattacharjee, *Social Science Research: Principles, Methods, and Practices* (University of South Florida Tampa, Florida, USA, 2012).

people were chosen as the population in this study. Bhattacharjee.<sup>33</sup> explained that determining the number of sample to be taken for research can be done by multiplying the number of variable by five. This means five times the variables used (indicators). This research consists of 19 indicators, so the total sample used is 95 respondents. The sampling technique in the research was used through purposive sampling technique.

The total sample used in this research is only 95 respondents as Muslim MSME players by determining the requirements, namely those who run business or businesses in MSMEs. The data analysed in this research is primary, which means that researchers collect data from respondents directly through filling out online questionnaires with the help of google form. The questionnaire consists of 19 questions that are scored using a likert scale.

The data in this research will be analysed through the Partial Least Square (PLS) method. The PLS method aims to bridge researchers to produce values of latent variables that will be used for prediction, as well as to predict the impact of independent variables on dependent variables and explain the theoretical correlation between the both.<sup>34</sup> According to Astrachan, Patel, and Wanzanried,<sup>35</sup> PLS SEM method has several advantages over CB SEM and is therefore suitable for this study: 1) Can be used to predict or develop new theories; 2) It can be used in small data sets; 3) It fits recursive models for both recursive and reflective indicators; and 4) No normal data distribution is required. Smart PLS 3.0 is a data estimation tool. In the PLS test, it is carried out through three stages: 1) measurement model assessment (Outer Model), 2. Structural model assessment (Inner Model), 3. Hypothesis proving.<sup>36</sup>

## RESULT AND DISCUSSION

### Descriptive Analysis of Respondents

The research started in October 2022 and ended in February 2023. Researchers distributed questionnaires to respondents who are entrepreneurs or MSMEs in Indonesia. The google form link was distributed thoroughly to respondents who included MSMEs, then 167 respondents filled out the questionnaire. Because this study uses criterion techniques in determining the sample, 95 suitable respondents are carried out data testing analysis in order to obtain the desired results of this study. There are four demographic

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<sup>33</sup> Bhattacharjee (2012)

<sup>34</sup> J.C Anderson and D.W Gerbing, "Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach," *Psychological Bulletin* 103, no. 3 (1998): 411.

<sup>35</sup> C. B Astrachan, V. K Patel, and G Wanzanried, "A Comparative Study of CB-SEM and PLS-SEM for Theory Development in Family Firm Research," *Journal of Family Business Strategy* 5, no. 1 (2014): 116-128.

<sup>36</sup> J. F Hair et al., "A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM). Thousand Oaks," in *Sage*, 2017, 165.

characteristics of respondents ranging from gender, age, length of business, type of business carried out.

Table 1. Respondent Demographics

Characteristic	Frequency	Percentage (%)
<b>Gender</b>		
Woman	59	62.10
Male	36	37.90
Totally	95	100
<b>Age</b>		
20-30	24	25.26
31-40	46	48.43
41-50	23	24.21
Above 50	2	2.10
Totally	95	100
<b>Length of Business (in years)</b>		
< 1	8	8.43
1 - 3	43	45.27
3 - 5	37	38.94
> 5	7	7.36
Totally	95	100
<b>Form of Payment Gateway</b>		
OVO	23	24.21
FUNDS	18	18.95
Link Aja Sharia	27	28.42
Shopee Pay	15	15.79
GOPAY	12	12.63
Totally	95	100
<b>Type of Business</b>		
Micro	34	35.79
Small	29	30.53
Medium	32	33.68
Totally	95	100

Source: Data Processed (2023)

### Assessment of Measurement Model (Outer Model)

#### Convergent Validity

In this study, convergent validity validates indicators against variables. The assessment of convergent validity relies on the load factor value, which is deemed acceptable if it exceeds 0.7. The accompanying table provides details of the convergent validity test.

Table 2. Convergent Validity Value

Variable	Indicator	Outer loading	Description
Financial Literacy (X <sub>1</sub> )	X <sub>1.1</sub>	0.835	Valid
	X <sub>1.2</sub>	0.771	
	X <sub>1.3</sub>	0.748	
	X <sub>1.4</sub>	0.714	
	X <sub>1.5</sub>	0.718	
	X <sub>1.6</sub>	0.723	
Financial Management (X <sub>2</sub> )	X <sub>2.1</sub>	0.829	
	X <sub>2.2</sub>	0.790	
	X <sub>2.3</sub>	0.709	
	X <sub>2.4</sub>	0.763	
	X <sub>2.5</sub>	0.762	
	X <sub>2.6</sub>	0.728	
Payment Gateway (Z)	Z.1	0.893	
	Z.2	0.705	
	Z.3	0.750	
	Z.4	0.713	
MSME Performance (Y)	Y.1	0.866	
	Y.2	0.873	
	Y.3	0.816	

Source: Data Processed (2023)

The presented data indicates that the research indicators satisfy the convergent validity criteria MSME Performance, as the constructs' loading values exceed 0.70. Consequently, based on the gathered data, all indicators are deemed valid for this study.

### Discriminant Validity

Discriminant validity clarifies the degree to which a construct differs from others, illuminating its distinct attributes and separateness.<sup>37</sup> This ensures that a construct encapsulates unique phenomena that are not mirrored by other constructs. Discriminant validity is enforced to validate that the hypothesized structural pathways are genuinely significant and not merely the consequence of statistical discrepancies. If the relationship between the construct and the measurement items is stronger than the relationship between other constructs, then the underlying constructs is better able to predict the block size than other constructs. A loading factor value above 0.70 is considered as developing the measurement scale, a loading factor value between 0.50 to 0.60 is considered adequate.

<sup>37</sup> J. F Hair et al., "A Primer on Partial Least..."

Table 3. Discriminant Validity Value

	FL	PM	PG	MP
FL	0.821			
FM	0.559	0.888		
PG	0.562	0.741	0.814	
MP	0.797	0.613	0.599	0.821

Source: Smart PLS Processed Result (2023)

From the information presented in table above, it can be seen that all indicators meet the discriminant validity requirements, because their cross-loading values are higher than the predetermined loading factor values.

#### Composite Reliability and AVE

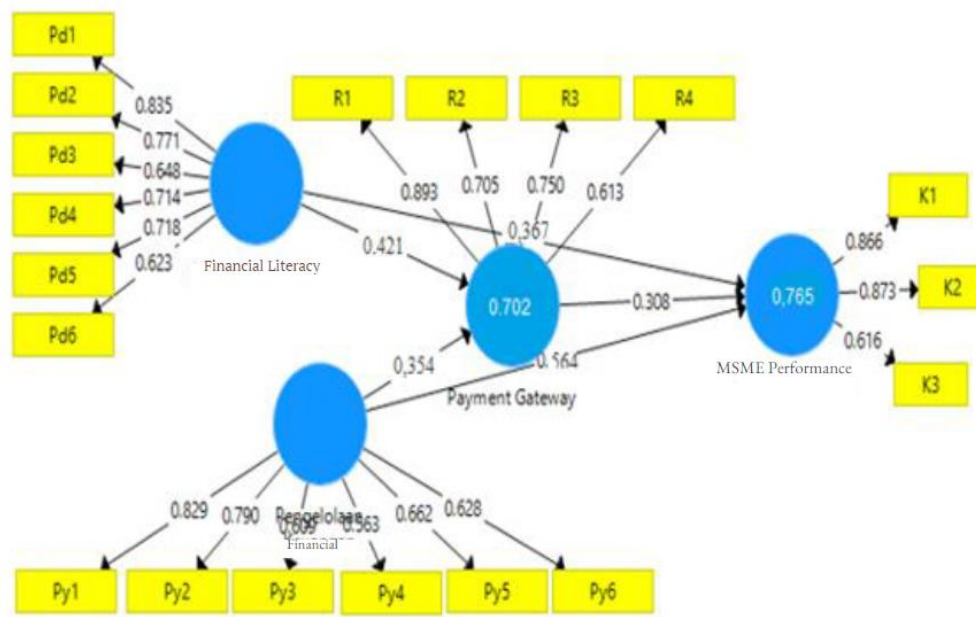
Composite reliability is used in assessing the result of the latent variable coefficient and must meet two criteria: composite reliability and Cronbach's alpha, both of which must be greater than 0.70 to be considered valid and reliable. The average Variance Extracted (AVE) value is also at least 0.50. The result of this measurement shown the in following table:

**Table 4.** Composite Reliability and AVE Value

Variables	Cronbach's Alpha	Composite Reliability	AVE
Financial Literacy	0.823	0.866	0.722
Financial Management	0.794	0.840	0.794
Payment Gateway	0.745	0.823	0.895
MSME Performance	0.722	0.833	0.748

Source: Smart PLS Processed Result (2023)

Table 4 shows that the composite reliability and Cronbach's alpha values all exceed 0.70. in addition, all AVE values are also above 0.50. therefore, the data is considered valid and reliable, so it can be continued to the next test. The outer model results in this study are also presented in figure 2.



**Figure 2.** Outer Model Research Model  
 Source: Smart PLS Processed Result (2023)

### Structural Model Assessment (Inner Model)

The assessment of the structural model (inner model) in the research includes the R-Squared ( $R^2$ ), Q-Square and path coefficient tests.

### Test Analysis of R-Square ( $R^2$ ) and Q-Square

The evaluation of the model's efficacy in explaining the variance in the dependent variable was conducted through R-square ( $R^2$ ) and Q-square analysis. The structural model predicts the interrelationship between latent variables. An R-square value of 0.75 denotes robustness, while 0.5 suggests moderate strength, and 0.25 indicates a weak model.

**Table 5.** R-Square Value ( $R^2$ )

Variabel	R-Square
Payment Gateway	0.702
MSME Performance	0.765

Source: Smart PLS Processed Result (2023)

According to the findings presented in Table 5, the R-Square ( $R^2$ ) value pertaining to the payment gateway falls within the moderate model range, surpassing the threshold of 0.5. This suggests that the collective impact of all independent variables contributes to approximately 70% of the variation in the payment gateway, while the remaining 29.8% is attributed to external factors not

examined in this study. Similarly, the payment gateway accounts for 76.5% of the variance in MSME performance, leaving 23.5% influenced by unexplored factors. The  $Q^2$  value can be used in measuring which observations are generated from the model and its parameters. A value of  $Q^2 > 0$  can be said to be a good model. The Q-square value can be measured by calculations as below:

$$\begin{aligned} Q^2 &= 1 - (1 - R^2 \text{ Payment Gateway}) \times (1 - R^2 \text{ MSME Performance}) \\ &= 1 - (1 - 0.702) \times (1 - 0.765) \\ &= 1 - (0.298) \times (0.235) \\ &= 1 - 0.07003 \\ &= 0.92997 \end{aligned}$$

The result above show that the value of 0.92997 is the Q-square value, meaning that the *predictive relevance* model is good.

### Path Coefficient

Hypothesis testing using Smart PLS software by performing the Smart PLS bootstrapping resampling method. To test the significance value of the acceptance of the hypothesis with the original sample requirement as a positive or negative influence on the grounds of the t-statistics value  $> 1.65$  and p-value  $< 0.05$ . Table 6 will show the value of path coefficients and to show the results of the hypothesis to answer the research phenomenon.

**Table 6.** Path Coefficients Value

	Original Sample	T-Statistik	P-Values	Conclusion
Financial Literacy -> Payment Gateway	0.876	56.730	0.004	Accepted
Financial Literacy -> Financial Performance of MSME	0.565	6.638	0.011	Accepted
Financial Literacy -> Payment Gateway-> Financial Performance of MSME	0.512	8.216	0.027	Accepted
Financial Management -> Payment Gateway	0.657	5.781	0.002	Accepted
Financial Management -> Financial Performance of MSME	0.769	31.980	0.000	Accepted
Financial Management ->	0.639	4.339	0.020	Accepted

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Payment Gateway-> Financial  
Performance of MSME

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Payment Gateway -> Financial Performance of MSME	0.561	6.780	0.023	Accepted
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### **Financial Literacy Toward Payment Gateway**

The outcomes derived from hypothesis testing, as illustrated in Table 6, indicate a notable and affirmative correlation between financial literacy and the utilization of payment gateways within the Indonesian context. Financial literacy, broadly construed, pertains to the proficiency of individuals, particularly MSME entrepreneurs, in comprehending, scrutinizing, administering, and conveying matters related to personal finances. It can be said that good use of payment gateway-based fintech result in better financial literacy as well. Basically, financial literacy will also have an impact on the use of technology. The findings from this hypothesis examination align with prior research endeavors, affirming the pivotal role of financial literacy in shaping the adoption of gateways.<sup>38</sup>

### **Financial Literacy on Financial Performance of MSME**

The research outcomes reveal that financial literacy exerts an influence on the financial outcomes of MSMEs in Indonesia, thereby substantiating and endorsing the second hypothesis with empirical evidence. This finding indicates that the performance of MSMEs will experience a considerable improvement if the actors have financial behaviors that are able to continuously create value added for their business. The importance of financial literacy can be seen from the ability to identify and respond to business operational, economic and financial conditions wisely so that the decisions made can be produce qulaity, targeted and measurable solutions to improve business performance and sustainability.<sup>39</sup> This result is in line with Dahmen and Rodriguez<sup>40</sup> who found a strong correlation between financial literacy and the performance of entrepreneurs

### **Financial Literacy on Financial Performance of MSMEs through Payment Gateway**

This research found that financial literacy is able to positively and significantly influence the financial performance of MSME players through payment gateway. The finding of this research expalin that if entrepreneurs or MSMEs that utilise digital-based financial sevicees in the form of payment

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<sup>38</sup> Tay, Tai, and Tan, "Digital Financial Inclusion: A Gateway to Sustainable Development."

<sup>39</sup> Elgaraihy, "Measuring the Impact of Corporate Social Responsibility Practices on Competitive Advantage : A Mediation Role of Reputation and Customer Satisfaction."

<sup>40</sup> Dahmen & Rodríguez (2014)

gateways are getting better, it will support the acceleration of achieving good financial literacy implementation. The use of digital technology helps MSME business more quickly obtain funding sources, digital payments and expand market access while overcoming problems in preparing quality business financial reports.<sup>41</sup>

### **Financial Management on Payment Gateway**

The test results show that management has a significant positive effect on payment gateways in Indonesia is accepted. Thus, the data from the study corroborates and validates the acceptance of the third hypothesis proposed in this research. According to Baihaqie, payment gateway is a service that is tasked with authorising the processing of financing activities through e-commerce platforms, and this service is very popular among our society today. As explained in Jannah, et.al. research, fintech is able to positively and significantly influence financial management behaviour.

### **Financial Management on Financial Performance of MSME**

The fifth hypothesis, it is found that financial management can positively and significantly affect the performance of MSME players in Indonesia. Financial management is a cornerstone in enhancing the financial performance of all entities, as it plays a pivotal role in optimizing profitability and operational efficiency. The study findings echo the sentiments expressed by Dahmen and Rodriguez, highlighting a robust association between financial management practices and entrepreneurial performance.

### **Financial Management on Financial Performance of MSMEs through Payment Gateway**

In the path coefficients test results above, it can be seen that the sixth hypothesis test is accepted. The result show that financial management significantly and positively affects the financial performance of MSMEs through the use of payment gateway in Indonesia. Technology acts as a catalyst in the growth of MSMEs, helping to overcome problems such as limited access to funding, minimal promotion budgets, difficulties in making business financial reports, and inefficiencies in cash transactions in the management of MSMEs.<sup>42</sup>

### **Payment Gateway on MSME Financial Performance**

The statistical analysis reveals a noteworthy impact of payment processors on the financial result of MSMEs in Indonesia. Therefore, the hypothesis concerning payment processors is validated and reinforced by previous research findings.

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<sup>41</sup> Suryanto, R, and Dai, "Fintech as A Catalyst for Growth of Micro, Small and Medium Enterprises in Indonesia."

<sup>42</sup> Suryanto, "Fintech as A Catalyst..."

This study substantiates that the adoption of payment gateways significantly shapes the landscape of the MSME sector by streamlining transactions and boosting revenue generation from product or service sales. Moreover, this hypothesis underscores the pivotal role of payment gateways among various factors contributing to the enhancement of financial performance among MSME stakeholders.<sup>43</sup>

## CONCLUSION

The hypothesis advanced in this study has garnered validation, affirming that financial literacy exerts a positive and substantial impact on both the utilization of payment gateways and the financial performance of MSME actors. Financial management is also shown to have a positive and significant influence on payment gateways and the financial performance of MSMEs in Indonesia. Equally, the use of payment gateways itself is proven to be able to positively and significantly influence the financial performance of MSME players in Indonesia. Implementing financial literacy and financial management in business transaction activities through payment gateways can improve the financial performance of MSME players in Indonesia. The utilisation of payment gateway-based fintech is also related to improving financial literacy and good financial management.

This study provides additional insights to stakeholders who have an important role in promoting financial literacy and management in Indonesia. In this context, the government (including Bank Indonesia, the Financial Services Authority, and relevant Ministries) is expected to act as a coordinator or good service provider for MSME players, facilitate knowledge sharing and success among successful MSME entrepreneurs in financial literacy and good financial management, and strengthen partnerships between MSMEs, academia, local communities, and the private sector (both in the financial and non-financial sectors). By mobilising a community of financially literate MSMEs, this move is expected to provide greater support for the advancement of MSMEs in Indonesia.

In addition to the importance of understanding finance, knowledge of fintech-based technology such as payment gateways is also a necessity for every member of society, including MSME players. The use of technology must be directed wisely and effectively to increase the expected results. In addition,

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<sup>43</sup> Erna R Rahadjeng, Sudarmiati, and Agus Hermawan, "THE INFLUENCE OF FINANCIAL TECHNOLOGY ON THE FINANCIAL PERFORMANCE OF MSMEs IN MALANG," *International Journal of Economics, Business and Accounting Research (IJEBAAR)* 5, no. 4 (2021): 1346-1356; Octavina and Rita, "Digitalisasi UMKM, Literasi Keuangan Dan Kinerja Keuangan: Studi Pada Masa Pandemi Covid-19"; Lestari, Purnamasari, and Setiawan, "Pengaruh Payment Gateway Terhadap Kinerja Keuangan UMKM"; Mutiara, Wiratno, and Herwiyanti, "The Effect of Payment Gateway, Digitization, and Financial Literacy on MSME Performance."

Muslim MSME players are also reminded to always pay attention to sharia principles in running their businesses, so that they can provide benefits both in this world and the hereafter for them and their customers. This study also has important implications for the Creative Economy Agency, as a guide to understand that financial literacy, financial management, and the use of paymet gateway can be key elements in supporting the Creative Economy Development 2025 roadmap.

#### **Author's Contribution**

Budi Gautama Siregar: Contribute to formulating research ideas, collecting data, processing data, and interpreting data.

Aswadi Lubis: Contributing to writing systematics, research methods, analyzing interpretation results, the language proofread.

#### **Acknowledgements**

The author is grateful to those who helped in the completion of this article, especially during the data collection process and article review.

#### **Declaration of Competing Interest**

The author declares that there is no conflict of interest.

#### **Ethical Approval`**

Ethical approval No patient-identifying parts in this paper were used or known to the authors. Therefore, no ethical approval was requested.

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