

THE EFFECT OF FINANCIAL TECHNOLOGY AND FINANCIAL INCLUSION ON UMKM PERFORMANCE WITH FINANCIAL LITERACY AS AN INTERVENTION VARIABLE (CASE STUDY OF MSMEs USING BANK MANDIRI'S LIVIN MERCHANT IN BANDUNG CITY)

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Abstract

Data from the Ministry of Cooperatives and SMEs, the number of MSMEs in Indonesia reached 64.2 million and contributed 61.07 percent or 8,573.89 trillion rupiah to GDP. The largest MSMEs throughout Indonesia are dominated by Java Island, the first position as the province with the most MSMEs, namely West Java with 1,494,723 units. MSMEs experience delays in their development and find it difficult to move up a class because MSMEs do not have an innovation concept, an unstructured financial management system and a business pattern that follows current developments due to a lack of financial literacy. Bank Mandiri as a State-Owned Enterprise which is a leading Wholesale Bank in financing, including as a Bank that has the best digital banking product innovation that encourages the growth of MSMEs. Bandung City is one of the cities with the most MSMEs and utilizes services from Bank Mandiri in the form of Livin Merchant, which helps in managing MSME finances and facilitates MSME access to obtain capital loans from the Bank. The research conducted used the Balanced Scorecard as a measure of business performance. Based on the results of a Pre-survey of 30 MSME actors registered as Livin Merchant users in Bandung City randomly, it was obtained that MSME actors had a lack of knowledge in the financial perspective. The variables measured in the study used Financial Technology, financial inclusion and financial literacy as intervening variables on MSME performance.

Keywords: Financial Technology, Financial Inclusion, Financial Literacy, MSME Performance.

Abstrak

Data dari Kementerian Koperasi dan UKM, jumlah UMKM di Indonesia mencapai 64,2 juta dan memberikan kontribusi sebesar 61,07 persen atau 8.573,89 triliun rupiah terhadap PDB. UMKM terbanyak di seluruh Indonesia didominasi oleh Pulau Jawa, posisi pertama sebagai provinsi yang memiliki UMKM terbanyak, yaitu Jawa Barat sebanyak 1.494.723 unit. UMKM mengalami keterlambatan dalam pengembangannya dan sulit naik kelas dikarenakan UMKM tidak memiliki konsep inovasi, sistem pengelolaan keuangan yang belum terstruktur dan pola bisnis yang mengikuti perkembangan zaman dikarenakan kurangnya literasi keuangan. Bank Mandiri sebagai Badan Usaha Milik Negara yang merupakan Bank Wholesale terkemuka dalam pembiayaan, termasuk sebagai Bank yang memiliki produk digital perbankan terbaik yang mendorong pertumbuhan UMKM. Kota Bandung merupakan salah satu Kota dengan UMKM terbanyak serta memanfaatkan layanan dari Bank Mandiri berupa Livin Merchant, yang membantu dalam pengelolaan keuangan UMKM serta mempermudah akses UMKM untuk mendapatkan pinjaman modal dari Bank. Penelitian yang dilakukan menggunakan Balanced Scorecard sebagai pengukuran kinerja sebuah bisnis. Berdasarkan hasil Pre-survei kepada 30 pelaku UMKM yang terdaftar sebagai pengguna Livin Merchant di Kota Bandung secara acak diperoleh bahwa pelaku UMKM memiliki kekurangan pengetahuan pada perspektif keuangan. Variabel yang diukur pada penelitian menggunakan Teknologi Keuangan, inklusi keuangan dan literasi keuangan sebagai variabel intervensi terhadap kinerja UMKM.

Kata Kunci: Teknologi Keuangan, Inklusi Keuangan, Literasi Keuangan, Kinerja UMKM.



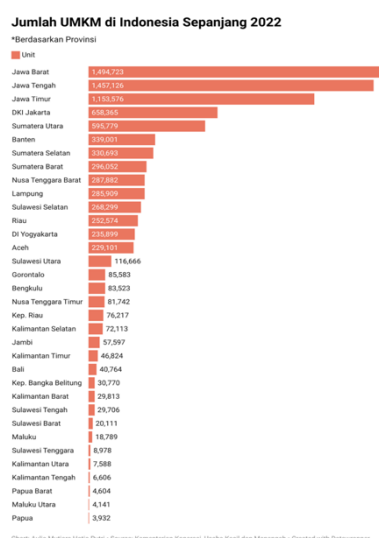
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INTRODUCTION

Indonesia has experienced resilience and continues to recover after the Covid19 pandemic that hit all countries in the world in 2019. The national economy recovered rapidly through increased consumption.¹ The potential for economic development is also driven by people's behavior in shopping by utilizing digitalization.² As a motor of national economic growth, empowering MSMEs is one of the The ability to maintain competitiveness through digitalization is one of the components of success in developing and strengthening MSMEs during the pandemic. Small and medium businesses (MSMEs) must change and adopt new ways to conduct operations and transactions online, such as using e-commerce services and cashless payments.³ Currently, there are more than 60 million MSMEs spread across all provinces in Indonesia. Based on data obtained from the Ministry of Cooperatives and Micro, Small and Medium Enterprises processed by the data calculation agency on the Databook page, West Java Province is the Province with the most MSMEs in Indonesia.

Figure 1 Distribution of MSMEs in Each Province in Indonesia



Source; Ministry of Cooperatives, processed by DataBooks 2022

Based on data obtained by researchers, Java Island is the island with the most MSMEs in all of Indonesia, this is in line with the large number of people living on Java Island. 1MSMEs on Java Island are dominated by West Java which occupies the first position as the province with the most MSMEs, namely 1,494,723 units, followed by Central Java Province with 1,457,126 MSME units, East Java Province with 1,153,576 and DKI Jakarta with 658,365. Based on data calculated

¹ Gaguk Apriyanto, "Financial Capital on SME Performance and Financial Literacy," 2021.

² Susanna Falle et al., "Sustainability Management with the Sustainability Balanced Scorecard in SMEs: Findings from an Austrian Case Study," Sustainability (Switzerland, 2016.

³ Rinaldi Maulana et al., "The Influence of Financial Literacy, Financial Inclusion, and Fintech toward Business Sustainability in SMEs," *Jurnal Ilmiah Manajemen*, 2022.

by the West Java Central Statistics Agency which was processed by researchers, it shows that there has been an increase and decrease in the number of MSMEs in all regions in West Java.

Table 1 Number of MSMEs in West Java 2018-2022 Period

No	Regency/City	2018	2019	2020	2021	2022	Amount
1	Bandung	46,575	62,792	60,721	62,366	59,394	291,848
2	Garut	38,703	54,701	54,630	62,842	69,365	280.241
3	Tasikmalaya	37.175	53,708	53,601	46,132	77,632	268.248
4	Sukabumi	30,428	52,971	52,953	51,796	51,307	239,455
5	Bogor	30,008	52,640	52,852	45,013	43.138	223,651
6	Cianjur	25,766	37,442	37,807	44,089	36,331	181,435
7	The Great Plains	37,613	28,405	28,762	26,634	33,468	154,882
8	City of Tasikmalaya	25,680	33.101	33,089	30,306	26,706	148,882
9	Ciamis	25,759	27,736	28,161	29,628	30,454	141,738
10	The Place	36,183	27,468	28.111	12,906	32,043	136,711

Source; BPS West Java, processed by researchers, 2024

The data displayed are the 10 cities and regencies with the most MSMEs in West Java, out of a total of 9 cities and 17 regencies. Bandung City is a city with 287 million people living and residing in it. The standard of living of the people of Bandung City is quite high, with easy access to the capital city, making Bandung City a city that is targeted by tourists from the capital who are bored and need a vacation or entertainment. Bandung City is one of the cities whose people are customers from dependence on third party financing or banking. The research was conducted by examining MSME actors who are Bank Mandiri customers and use the Livin Merchant Application in their business activities. Livin 'Merchant is an entrepreneurial application owned by Bank Mandiri that can help sales with sales recording features, checking product stock to disbursing sales money, thus helping MSME owners in more structured financial management. MSME owners can download the application easily without being charged any fees, on condition that the business actor is a Bank Mandiri customer. The ability of an MSME to survive in difficult times is a strength that needs to be maintained. The decline in the number of MSMEs in the city of Bandung that occurred in 2022 shows the inability of MSMEs to survive in running their businesses. This ability can be in the form of capital support and the ability of MSMEs in structured financial management, which can be measured through performance.

MSME performance is the result of the work of MSME actors starting from the establishment of the business to achieving the planned goals through several works and assessments that have been determined by the company.^{4,5} Performance management needs to be the main focus of a business including micro, small and medium-sized businesses, this is because through performance management, companies can build a high performance culture in the company, therefore, performance must be measured objectively. The statement put forward strengthens previous research conducted by Kaplan Norton in research conducted by Nada and Györi⁶ Balanced Scorecard is a collection of measures that can be used by a business to help management evaluate company performance. The research conducted uses theoretical references in research conducted by Kaplan and Norton 2009. The study uses the Balanced Scorecard as a benchmark for business performance. Balanced Scorecard consists of 4 important aspects in the management of a business, the research conducted using theoretical references in research conducted by Kaplan and Norton 2009. The research uses Balanced Scorecard as a benchmark for business performance. Balanced Scorecard consists of 4 important aspects in the management of a business, the 4 aspects are financial perspective, consumer perspective, business operational perspective and the last is employee development perspective. A pre-survey was conducted on 30 MSME actors registered as Livin Merchant users in Bandung City randomly. The pre-survey was conducted by providing a questionnaire consisting of 8 questions representing 4 main dimensions of performance, namely the perspective on the Balanced Scorecard,

The pre-survey conducted stated that out of 30 MSME business actors, the results obtained that from a financial perspective, MSMEs that were the objects of the study still did not understand this aspect. Through the pre-survey, the researchers obtained results that MSME actors who were research respondents were 2.84 on a scale of 5 or said to disagree that they had made the Cost of Production on the products they sold. Furthermore, a value of 3.13 was obtained on a scale of 5 which means that it does not match the statement that respondents have recorded their business process expenses and income. The customer perspective dimension is the dimension that obtained the highest value, in the respondent's statement recognizing who their business customers are, the results were 4.23 on a scale of 5 which means strongly agree. The respondent's statement can increase my customer purchases through the offers given obtained a value of 4.2 on a scale of 5

⁴ S. Marija et al., "Pengaruh Financial Capital dan Literasi Keuangan terhadap Kinerja Usaha Kecil dan Menengah (UKM) di Kota Malang," *Jurnal Akuntansi dan Perpajakan* 7, no. 1 (2021): 31–38.

⁵ Eugene T. Maziriri and Abigail Chivandi, "Modelling Key Predictors That Stimulate the Entrepreneurial Performance of Small and Medium-Sized Enterprises (SMEs) and Poverty Reduction: Perspectives from SME Managers in an Emerging Economy," 2020.

⁶ Omar Hassan Ali Nada and Zsuzsanna Györi, "Measuring the Integrated Reporting Quality in Europe: Balanced Scorecard Perspectives," *Journal of Financial Reporting and Accounting*, 2023.

which means strongly agree. The business process dimension in the respondent's statement that they already have a production process flow for the products sold obtained a value of 3.70 on a scale of 5 which means agree and in the respondent's statement that they already have suppliers who are easy to work with obtained a value of 3.57 on a scale of 5 which means agree. The employee development dimension, in the respondent's statement helping employees understand the work they do, obtained a value of 3.53 on a scale of 5, which means that the respondent agrees and in the respondent's statement that they have taught employees to apply the work process flow according to the workflow that has been created, obtained a value of 3.37 on a scale of 5, which means that they quite agree.

Based on the pre-survey conducted by the researcher, it was assumed that the respondents who were the owners and actors of MSMEs had not maximized their financial perspective. Financial perspective is one of the important things for sustainable business development. In line with the theory put forward by Helmond and Samara, which states that the main objective of performance management is to ensure that the organization as a system and its subsystems work together in an integrated manner to achieve optimal results or achievements. MSME performance can be maximized by efforts towards good and correct financial performance management. The research conducted measures financial performance through the Financial Literacy variable by utilizing financial technology and the role of Financial Inclusion for MSMEs.

One of the variables influencing MSME performance is financial technology. Financial technology, also known as fintech, is a technological innovation that works with the financial sector to create financial products that are intended to accelerate, accelerate, and expand public access to financial products.⁷ In line with the theory put forward. MSMEs can also take advantage of fintech to easily get products and various financial services wherever they want. This shows that the fintech industry is one of those that plays a role in economic recovery.

Lontchi et al, 2022 stated that financial inclusion is the accessibility, availability, and utilization of financial services for many people which includes access and utilization of formal financial services that are available, affordable, convenient, high-quality, and long-term for individuals and MSMEs. In line with the research conducted by Sha'ban et al., stated that access to financial services is globally recognized as a key factor for economic and social development, therefore financial inclusion allows MSMEs and micro businesses to access financial products and services that are tailored to their needs, so that they can improve economic welfare and business sustainability.

⁷ Enni Savitri et al., "The Effect of Teknologi Keuangan, Innovation, Business Strategy, and Market Orientation on Business Performance among Indonesian SMEs: A Study in Riau Province," 2023.

The performance of an organization in this study in the form of MSMEs cannot be separated from the role of financial literacy in its owners.⁸ Research conducted by Bamiro et. Al 2024 stated that, Financial literacy is a very important aspect for organizational performance. Financial literacy also includes knowledge of the state of the economy so that business actors can understand the financial system, risk analysis, and its impact on organizational performance. Based on the description above, researchers are interested in conducting research that aims to test and analyze the influence of Financial Technology and financial inclusion on the performance of MSMEs. As a form of development, research is carried out by adding financial literacy which plays a role in moderating financial technology and financial inclusion on the performance of MSMEs that use Bank Mandiri's Livin Merchant in their business.

RESEARCH METHODS

Research Model

The research conducted quantitative research method, with a descriptive approach to find out each result of the distributed questionnaire. Measurement of each independent variable, dependent variable and intervening variable using a Likert scale. The study used research and surveys using questionnaires containing questions related to the independent variables, namely Financial Technology and financial inclusion, the dependent variable in the form of MSME performance and the intervening variable, namely financial literacy. The source of information in this study is primary data. Primary data is a source of information obtained directly from respondents who have been determined by the researcher. Primary data sources can be obtained in this research through questionnaires that are directly distributed to respondents. The study uses multiple regression analysis, with the help of the SmartPLS 3.0 analysis tool.

Population and Sample Determination

In this study, Sugiyono⁹ stated that a sample is a small part of the population that is relevant to the research problem, and that a population is a group of people who meet certain criteria that are the source of the sample. The Greatest Showman Probability sampling is a sampling technique that gives each element of the population an equal opportunity to be selected as a sample, so that the research results can be generalized to the population. To take a sample, a study can use sample probability, with the Sample cluster technique. In the study used were customers of Bank Mandiri

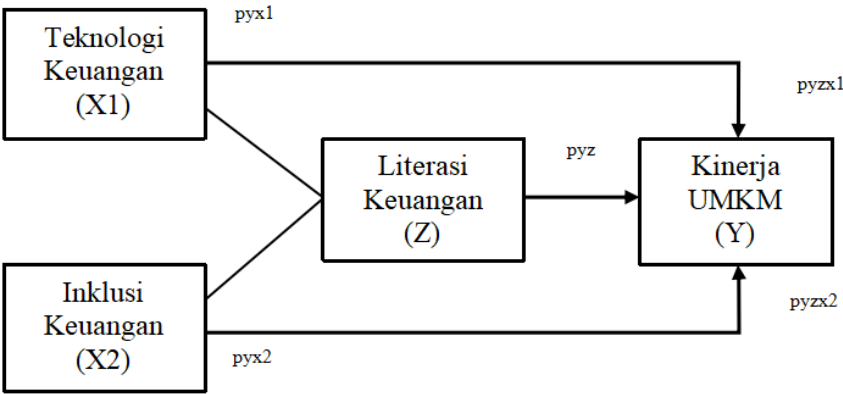
⁸ Nagian Toni et al., "Investigating the Effect of Financial Literacy and Financial Inclusion on Operational and Sustainable Supply Chain Performance of SMEs," 2024.

⁹ Sugiyono, *Metode Penelitian Kuantitatif* (Alfabeta, 2019).

Asia Africa Branch in the first quarter of 2024, totaling 156 respondents, where all customers are located in the city of Bandung and have the same type of business in the trade sector.

Based on the description explained in the framework of thought, several hypotheses were formed in the research conducted. These hypotheses are stated in the research paradigm in Figure 1 below and then tested on a statistical tool in the form of SmartPLS 3.0. The research paradigm carried out is described as follows;

Figure 2 Research Paradigm



Hypothesis Testing

Researchers formulate hypotheses by comparing the bootstrapping results and then selecting a direct effect test with a significance level of $\alpha = 0.05$. The partial hypothesis is explained as follows:

- 1. Hypothesis 1
 $H_0: \text{pyx}_1 = 0 \rightarrow$ The financial technology variable (X1) has no influence on MSME performance (Y).
 $H_1: \text{pyx}_1 \neq 0 \rightarrow$ Variables *financial technology*(X1) has an influence on MSME performance (Y).
- 2. Hypothesis 2
 $H_0: \text{pyx}_2 = 0 \rightarrow$ Financial Inclusion Variable (X2) has no influence on MSME Performance (Y).
 $H_1: \text{pyx}_2 \neq 0 \rightarrow$ Financial Inclusion Variable (X2) has an influence on MSME performance (Y).
- 3. Hypothesis 3
 $H_0: \text{pyz} = 0 \rightarrow$ The Financial Literacy variable (Z) has no influence on MSME Performance (Y).

$H_1: \rho_{zy} \neq 0 \rightarrow$ Financial Literacy Variable (Z) has an influence on MSME Performance (Y).

4. Hypothesis 4

$H_0: \rho_{zyx_1} = 0 \rightarrow$ Variables *financial technology* (X1) has no influence on MSME Performance (Y) which is moderated by Financial Literacy (Z)

$H_1: \rho_{zyx_1} \neq 0 \rightarrow$ Variables *financial technology* (X1) has an influence on MSME Performance (Y) which is moderated by Financial Literacy (Z)

5. Hypothesis 5

$H_0: \rho_{zyx_2} = 0 \rightarrow$ Financial Inclusion Variable (X2) has no influence on MSME Performance (Y) which is moderated by Financial Literacy (Z)

$H_1: \rho_{zyx_2} \neq 0 \rightarrow$ Financial Inclusion Variable (X2) has an influence on MSME Performance (Y) which is moderated by Financial Literacy (Z).

RESULTS AND DISCUSSION

Validity and Reliability Test

Quantitative research must conduct validity tests to avoid errors in measurement and ensure the accuracy of research data, while reliability tests are used to measure the level of consistency and reliability of the data used.¹⁰ The following are the validity and reliability tests conducted in research using the variables Financial Technology (X1), Financial Inclusion (X2), MSME Performance (Y) and Financial Literacy (Z);

Based on the results of data processing using *SmartPLS 3.0*, then the following results are obtained:

Validity Test

The validity test conducted in this study used the outer loading value generated from processing the questionnaire items on the SmartPLS data processing tool. The outer loading value of the latent variable with its indicator is called convergent validity. If the correlation value reaches 0.7, the indicator is considered valid. Ghozali¹¹ explained that in the early stages of the study, a correlation value between 0.5 and 0.6 was still acceptable and used in subsequent studies. The following are the results of the validity test on the Financial Technology variable (X1);

¹⁰ Imam Ghozali and Hengky Latan, *Partial Least Squares: Konsep, Teknik dan Aplikasi dengan Program Smart PLS 3.0* (Universitas Diponegoro, 2015).

¹¹ Ghozali and Latan, *Partial Least Squares: Konsep, Teknik dan Aplikasi dengan Program Smart PLS 3.0*.

Table 2 Results of the Validity Test of Financial Technology Variables

Dimensions	Indicator	r Count	r Table	Note
Convenience	Livin Merchant is a financial application that is easy for me to understand.	0.78	0.5	Valid
	I can register as a Livin Merchant partner only by registering as a Bank Mandiri customer.	0.79	0.5	Valid
Use	Livin Merchant can be used as a cashier application that is integrated with my business processes.	0.82	0.5	Valid
	Livin Merchant helps me have better cash management and financial records than before.	0.81	0.5	Valid
Benefit	I get the benefit of neater financial records	0.81	0.5	Valid
	I get more profit because I improve my business financial system.	0.76	0.5	Valid

Source: Researcher Data Processing 2025

Based on table 2, the results of the research conducted on SmartPLS show that 6 statement items represent 3 dimensions in the variable Financial Technology declared valid because all the values of the questionnaire items are > 0.5 . The results of the data processing carried out can be continued in further research, this is because all the questionnaire items are valid and appropriate for measuring the variables Financial Technology for Livin Merchant users. Furthermore, research was conducted to measure the validity of the questionnaire items that measure the Financial Inclusion variable through the following table;

Table 3 Results of the Validity Test of Financial Inclusion Variables

Dimensions	Indicator	r Count	r Table	Note
Financial access	I can easily get information about bank financial products and services in my area.	0.85	0.5	Valid
	I feel the procedures and requirements for applying for financial services are easy to do.	0.85	0.5	Valid
Use	I use financial services to save money regularly.	0.87	0.5	Valid
	I use digital applications and services for transactions carried out in my business.	0.84	0.5	Valid

Dimensions	Indicator	r Count	r Table	Note
Welfare	Financial applications and services help me manage the finances of my business better than before.	0.85	0.5	Valid
	Financial applications and services are considered more financially secure due to the support from financial institutions.	0.55	0.5	Valid

Source: Researcher Data Processing 2025

Based on table 3, the results of the research conducted on SmartPLS show that 6 statement items represent 3 dimensions in the variable Financial Inclusion declared valid because all the values of the questionnaire items are > 0.5 . The results of the data processing carried out can be continued in further research, this is because all the questionnaire items are valid and appropriate for measuring the variables Financial Inclusion for Livin Merchant users. Furthermore, research was conducted to measure the validity of the questionnaire items that measure the MSME Performance variable through the following table;

Table 4 Results of the Validity Test of MSME Performance Variables

Dimensions	Indicator	r Count	r Table	Note
Financial Perspective	I have experienced an increase in business income over the last 3 months.	0.57	0.5	Valid
	Financial apps help me record and manage cash flow regularly.	0.55	0.5	Valid
Marketing Perspective	The products I sell have patent rights and are registered in Indonesia.	0.60	0.5	Valid
	I have developed my business through the Marketplace so that I have a wider market share.	0.62	0.5	Valid
Operational Perspective	I am able to maintain the quality of the products and services I sell consistently.	0.68	0.5	Valid
	Livin Merchant helps me in evaluating operational processes through proper stock recording.	0.63	0.5	Valid

Dimensions	Indicator	r Count	r Table	Note
Employee Development Perspective	I build harmonious and supportive relationships with my employees.	0.53	0.5	Valid
	I provide employee skills training periodically	0.60	0.5	Valid

Source: Researcher Data Processing 2025

Based on table 4, the results of the research conducted on SmartPLS show that 8 statement items represent 4 dimensions in the variable MSME Performance declared valid because all the values of the questionnaire items are > 0.5 . The results of the data processing carried out can be continued in further research, this is because all the questionnaire items are valid and appropriate for measuring the variables MSME Performance for Livin Merchant users. Furthermore, research was conducted to measure the validity of the questionnaire items that measure the Financial Literacy variable through the following table;

Table 5 Results of the Validity Test of Financial Literacy Variables

Dimensions	Indicator	r Count	r Table	Note
Knowledge Finance	Livin Merchant provides knowledge to create business financial planning such as recording bookkeeping.	0.79	0.5	Valid
Financial Planning	I do financial planning and evaluation regularly to find out what strategies my business can use.	0.80	1.5	Valid
Understanding Financial Institutions for Savings	Financial applications make it easier for me to save and get credit for the business I am running.	0.77	0.5	Valid
Ease of Access to Loans	The facilities offered by financial institutions help me to develop the business I am currently running.	0.84	0.5	Valid
Risks of Saving in Financial Institutions	I understand that there is a risk of losing the value of my savings due to inflation even if I save my savings in a reputable bank.	0.77	0.5	Valid
Impact of Using Loans	I understand that improper use of loans will cause financial difficulties in the future.	0.79	0.5	Valid

Dimensions	Indicator	r Count	r Table	Note
Using Efficient Funds in Working Capital	I can manage working capital effectively and efficiently for business operational needs.	0.70	0.5	Valid
Knowing the Worthy Investments	I am able to calculate the benefits and risks of the chosen investment.	0.61	0.5	Valid

Source: Researcher Data Processing 2025

Based on table 5, the results of the research conducted on SmartPLS show that 8 statement items represent 8 dimensions in the variable Financial Inclusion declared valid because all the values of the questionnaire items are > 0.5 . The results of the data processing carried out can be continued in further research, this is because all the questionnaire items are valid and appropriate for measuring the variables Financial Literacy for Livin Merchant users. Furthermore, research was conducted to measure reliability on all variables used in this study.

Reliability Test

Reliability testing is used by research to ensure that the questionnaire items used in the study are reliable. All questionnaire items must meet the reliability requirements to be used as answers to the research hypothesis. According to Ghozali,¹² a construct or variable is considered reliable if the Cronbach's Alpha value is more than 0.6. This value indicates that the indicators in the reflective model have a high level of consistency, so that each indicator consistently measures the latent construct it represents.

Table 6 Results of Reliability Test of Research Variables

Variables	Cronbach's Alpha	Critical Value	Information
Financial Technology	0.89	0.7	Reliable
Financial Inclusion	0.89	0.7	Reliable
MSME Performance	0.87	0.7	Reliable
Financial Literacy	0.83	0.7	Reliable

Source: Researcher Data Processing 2025

¹² Ghozali and Latan, *Partial Least Squares: Konsep, Teknik dan Aplikasi dengan Program Smart PLS 3.0*.

Based on table 4.6, the results of the study show that all dependent variables consisting of Financial Technology (X1) have a value of 0.89, which means > 0.7 , so that the questionnaire items used are declared reliable. The next independent variable, namely Financial Inclusion (X2), has a value of 0.89, which means > 0.7 , so that the questionnaire items used are declared reliable. The study used MSME Performance (Y) as the dependent variable, the value obtained was $0.87 > 0.7$, so that the results of the questionnaire items were reliable and could be used in the study. Finally, the study used the moderating variable Financial Literacy (Z) which obtained a value of $0.83 > 0.7$, so that all questionnaire items were reliable and could be used in this study.

Hypothesis Testing

Table 7 Hypothesis Testing Results

Hipotesis	Jalur	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistic (IO/STDEVI)	P Values
Hipotesis 1	Teknologi Keuangan -> Kinerja UMKM	0,208	0,207	0,076	2,745	0,006
Hipotesis 2	Inklusi Keuangan -> Kinerja UMKM	0,289	0,290	0,067	4,346	0,000
Hipotesis 3	Literasi Keuangan -> Kinerja UMKM	0,346	0,353	0,064	5,415	0,000
Hipotesis 4	Teknologi Keuangan -> Literasi Keuangan -> Kinerja UMKM	0,096	0,100	0,029	3,326	0,001
Hipotesis 5	Inklusi Keuangan -> Literasi Keuangan -> Kinerja UMKM	0,151	0,154	0,037	4,082	0,000

Source: Researcher Data Processing 2025

From the table above, the results of hypothesis testing are obtained for all relationships between variables.

Tcount is greater than Ttable. So it can be concluded that all hypotheses in this study have a positive and significant effect.

Discussion

The Influence of Financial Technology on the Performance of MSMEs in Bandung City

The results of this study indicate that The original sample value (O) of the variable between Financial Technology and MSME performance is 0.208 so that Financial Technology affects 20.8% of MSME performance. The calculated t value is $2.745 > 1.976$ t table, the results indicate that Financial Technology has a positive and significant influence on MSME Performance. This means that the better a business actor utilizes financial technology to support the financial performance of MSMEs, the better the performance of the MSME. In line with Research by Arner et al., (2015) Frost, (2020) Da Silva (2018) in Sangaa & Aziakpono¹³ stated that financial technology is present in society with the aim of being a financial service that utilizes technological developments to improve efficiency, security, accessibility and customer experience by facilitating financial

¹³ Bahati Sanga and Meshach Aziakpono, "FinTech and SMEs Financing: A Systematic Literature Review and Bibliometric Analysis," 2023.

activities in an organization so that it can obtain maximum benefits for the development of the business being run.

The Influence of Financial Inclusion on MSME Performance in Bandung City

The original sample value (O) of the financial inclusion variable on MSME performance is 0.289, so that patient satisfaction affects 28.9% of MSME performance. The calculated t value is $4.346 > 1.976$ t table, these results indicate that financial inclusion has a positive and significant influence on MSME performance. Research results In line with researchSha'ban et. al 2019 stated that access to financial services is globally recognized as a key factor for economic and social development. Individuals and businesses that have difficulty accessing mainstream financial services are vulnerable to various risks, such as social exclusion and loss of business opportunities. The greater the opportunity for business actors to gain access to financial inclusion, the greater the opportunity for business actors to continue to develop their businesses so that they can become sustainable businesses and help strengthen the country's economy.

The Influence of Financial Literacy on MSME Performance in Bandung City

The original sample value (O) of the financial literacy variable on MSME performance is 0346, so that patient satisfaction affects 34.6% of MSME performance. The calculated t value is $5.415 > 1.976$ t table, these results indicate that financial literacy has a positive and significant influence on MSME performance. The better the financial literacy or in simple terms the knowledge of the finances of MSME owners, the better the development of the MSME performance that is being run. The results of this study are in line with researchBamiro et. Al 2024 stated that, Financial literacy is a very important aspect for organizational performance. Financial literacy also includes knowledge of the state of the economy so that business actors can understand the financial system, risk analysis, and its impact on organizational performance.

The Influence of Financial Technology on MSME Performance with Financial Literacy as an Intervening Variable

The original sample value (O) of the Financial Technology variable with financial literacy as a moderating variable that influences MSME Performance is 0.096, or 9.6%. The calculated t value is $3.326 > 1.976$ t table, the results indicate that Financial Technology with the moderating variable of financial literacy has an effect on MSME Performance. The research conducted shows a positive direction, so that when MSME ownersUsing Financial Technology will increase financial literacy which will then maximize the performance of MSMEs.

The Influence of Financial Inclusion on MSME Performance with Financial Literacy as an Intervening Variable

The original sample value (O) of the financial inclusion variable with financial literacy as a moderating variable that influences MSME Performance is 0.151, or 15.1%. The calculated t value is $4.082 > 1.976$ t table, these results indicate that financial inclusion with the moderation variable of financial literacy has an effect on MSME Performance. The research conducted shows a positive direction, so that when MSME owners getting funding will increase financial literacy which will then maximize the performance of MSMEs.

CONCLUSION

Based on the research conducted starting from collecting data in the form of information and questionnaires distributed to respondents and then processed to produce descriptive data and data analysis and discussion of the results. So the research conducted concluded that there is an influence of financial technology with a positive and significant direction on the Performance of MSMEs using Livin Merchant in Bandung City. There is a positive and significant influence of financial inclusion on the performance of MSMEs using Livin Merchant in Bandung City.. There is a positive and significant influence of financial literacy on the performance of MSMEs using Livin Merchant in Bandung City.. There is a positive influence of financial technology of 9, The performance of MSMEs using Livin Merchant in Bandung City is moderated by Financial Literacy. There is a positive and significant influence of financial inclusion on the performance of MSMEs using Livin Merchant in Bandung City, which is moderated by Financial Literacy.. It is hoped that the research conducted can be a useful source of reference for developing knowledge for both MSME actors and other researchers.

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