

Analysis of the effect of financial literacy and financial behavior on the performance of MSMEs Setu Babakan with digital competency as a moderating variable

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Abstract: This study aims to analyze the effect of financial literacy and financial behavior on the performance of MSMEs in Setu Babakan, with digital competence as a moderating variable. MSMEs have an important role in the Indonesian economy, especially in creating jobs and supporting the local economy. In the Setu Babakan area, MSMEs face challenges such as limited digital literacy, business capital, and weak financial management. This research uses a survey method with a quantitative approach, collecting data from 60 MSME respondents, and testing hypotheses using the SEM-PLS (Partial Least Square) model. The results showed that financial literacy does not significantly influence the performance of MSMEs, while financial behavior has a positive effect on performance. Digital competency is proven to improve MSME performance, but cannot moderate the relationship between financial literacy and behavior with MSME performance. The implications of this study indicate the importance of financial behavior training and strengthening digital competencies for MSMEs. These results can be a reference for regional managers and universities to support digital competency training and financial management for MSME actors, so their performance can be more optimal in facing business competition.

Keywords: Digital competency, Financial behavior, Financial literacy, MSMEs, Organizational performance.

1. Introduction

MSMEs (Micro, Small, and Medium Enterprises) have a very important role in the country's economy. MSMEs are able to contribute to the country's GDP, reduce poverty, and help in the absorption of labor. The existence of MSMEs in Indonesia is the foundation of some Indonesian people to get income (Fitria et al., 2021).

Setu Babakan is one of the interesting attractions for tourists who want to enjoy something typical of the countryside or witness the original Betawi culture firsthand. Setu Babakan, apart from being a typical rural natural environment and cultural area, in this village there are also many Betawi specialties served by MSMEs who are assisted by the Setu Babakan area manager and MSMEs around the Setu Babakan area.

Based on sources from BPS South Jakarta City (2023) in an annual report, it provides an overview of the economic conditions and challenges faced by MSMEs in the South Jakarta area, including Setu Babakan. MSMEs in Setu Babakan face several performance issues that hinder their development and growth.

Several key issues are often faced by MSMEs in this area. First, the lack of digital literacy means that many MSMEs in Setu Babakan still have limitations in the use of digital technology. Low digital literacy makes it difficult for them to utilize online platforms for more effective marketing, sales, and business management. Secondly, business capital is limited, which means capital issues are often a major obstacle for MSMEs in Setu Babakan. Access to financing is still limited, and many businesses do not have enough capital to expand their business or improve the quality of products and services. Third, weak financial management, many MSMEs in Setu Babakan are still lacking in terms of business and

financial management. Without a good management system, businesses find it difficult to thrive and face market challenges. This includes disorganized financial management and lack of good record-keeping. Fourth, limited market access means that MSMEs in Setu Babakan often have limited market access. They struggle to reach a wider market outside of their area, resulting in limited opportunities for increased revenue and business growth. Fifth, the quality of products and services means that the quality of products and services offered by MSMEs in Setu Babakan is sometimes less competitive. This is due to a lack of training and knowledge of the quality standards required by the wider market. Sixth, bureaucracy and regulation, bureaucratic and regulatory constraints are also a challenge for MSMEs in Setu Babakan. Complicated licensing processes and frequently changing regulations can make it difficult for businesses to operate legally and efficiently.

By understanding and addressing these issues, MSMEs in Setu Babakan can improve their performance and contribute more significantly to the local economy. Efforts such as improving digital literacy, access to finance, and business management training can be an important first step. Improving MSME performance can encourage MSMEs to survive, be able to compete with other businesses, and not experience bankruptcy. However, due to their limited knowledge of understanding basic financial concepts, MSME actors cannot make decisions related to financial management appropriately (Suindari & Juniariani, 2020).

(Kasenda & Wijayangka, 2019) state that performance is an achievement obtained from a person or company or organization in achieving a goal. The best performance is the main expectation of a business unit in carrying out its operational activities. Performance is the success of a personnel, team, or organizational unit in achieving strategic goals or long-term goals that have been previously set with the expected behavior. Good performance in all areas of production, marketing, finance, and distribution is an absolute requirement for organizations to continue to exist. Good organizational performance is expected to be stronger to become the backbone of the economy which will increasingly play a role in the national economy. Business people must be able to improve their abilities, both in the form of technical skills (knowledge of accounting and financial statements) and managerial skills in order to run the business they run.

1.1. State of The Art

The state of the art in this study was generated by summarizing the main findings of previous studies. Some important points that are part of the state of the art in this study. Previous research conducted by (Lestari, 2013), showed that psychological factors such as religiosity, risk perception, gender cannot influence individual investment decisions. Meanwhile, (Idawati & Pratama, 2020), Kasendra & Wijayangka (2019) financial literacy has a positive effect on the performance and sustainability of MSMEs. Previous research conducted by (Pramestiningrum, 2019) and (Septiani & Wuryani, 2020) found that the level of financial literacy affects business performance. The researchers highlighted the importance of understanding financial information in making better investment decisions.

Previous research conducted by (Fitria et al., 2021) shows that financial literacy and financial behavior have no significant effect on the performance of MSMEs while financial attitudes have a positive and significant effect on the performance of MSMEs.

Previous research conducted by Rustam (2021) highlighted that Financial Literacy, Financial Behavior and Financial Attitudes have a positive effect on Investment Decision. Financial Literacy, Financial Behavior and Financial Attitudes have a negative effect on Firm Bankruptcy.

Research that has been proposed as State of the Art can be observed that previous research did not holistically and comprehensively discuss all related variables, namely Financial Literacy, Financial Behavior and Digital Competency. Previous research tends to only discuss some of these variables in relation to MSME performance.

In other words, this research not only overcomes the limitations of previous studies in the scope of the variables discussed, but also opens new doors to explore aspects not previously explored. This provides significant added value to the understanding of academics and practitioners about the factors

that influence Organizational Performance, as well as the relevance of this research in facing the real challenges faced by MSMEs in the Setu Babakan Area, South Jakarta.

2. Methods

This study aims to empirically test and analyze Financial Literacy, Financial Behavior on the performance of Setu Babakan MSMEs with Digital Competency as a moderating variable. This research design is a causal research design (causal studies) where this research intends to examine the influence between variables. This research is designed using a hypothesis and is an explanation of the object under study (explanatory research). Research hypothesis testing was carried out using the Structural Equation Model (SEM) approach using Smart Partial Least Square (SmartPLS) software.

2.1. Variable Operationalization

1. Organizational Performance Variable (Y = Dependent Variable)
2. Financial Literacy Variable (X_1 = Independent Variable)
3. Financial Behavior Variable (X_2 = Independent Variable)
4. Digital Competency Variable (Z = Moderation Variable)

The population in this study are MSMEs in the Setu Babakan area with a total of 96 MSMEs. Meanwhile, the guidelines for the number of samples used in this study follow the sample formula according to Rao Purba (1996) which tests Consumer Perception as follows:

$$n = N / (1 + N \cdot \text{Moe}^2)$$

where:

n = Sample Quantity

N = Total Population

Moe = *Margin of Error*

In this situation, a margin of error level of 10% would result in 48.97 respondents with the following calculation:

$$n = 96 / (1 + 96 \times 0,10^2)$$

$$n = 96 / (1 + 0,96)$$

$$n = 96 / (1,96)$$

$$n = 48,97 \text{ respondents} = 50 \text{ respondents}$$

In this study, researchers took a sample of 60 respondents with the aim of meeting the limits of the ideal number of research samples with the Structural Equation Model (SEM) approach using Smart Partial Least Square (SmartPLS) software.

This research based on the source is primary data. Respondents will answer the questions used to obtain primary data by selecting the answers that have been provided on a Likert scale. The Likert scale is a scale that provides a score of 1-5 to determine the degree of respondent to a series of questions contained in the questionnaire.

3. Result and Discussion

3.1. Profile of MSME Respondents in the Setu Babakan Area

Setu Babakan is a Village Area located in the suburbs of South Jakarta, precisely on Muhammad Kahfi II Street, Srengseng Sawah Village, Jagakarsa District covering an area of 289 hectares, 65 hectares of which are owned by the government of which only 32 hectares have been managed. Based on the decree of the DKI Jakarta regional government dated January 20, 2020, the area became the Betawi Cultural Village (PBB) which is a place for the preservation and development of Betawi culture. Here you can watch performances that are nuanced with authentic Betawi culture such as Betawi lenong art, Betawi dance, traditional gambang kromong music and other art performances. In addition, there are many Betawi culinary specialties such as kerak telur, selendang mayang, bir pletok and so on that can be enjoyed by visitors.

Tourists visiting Setu Babakan can also watch Betawi cultural arts performances that are often staged. In addition, visits by schools and universities are also in the context of research and community

service activities in the form of training on management, entrepreneurship and financial management of MSMEs. Based on information obtained by researchers through google form, there are at least hundreds of MSMEs that occupy the Setu Babakan area. Some are MSMEs that are directly fostered by the Setu Babakan area manager and some are MSMEs that are located around Setu Babakan but are not fostered by the Setu Babakan manager. The following profile of 60 MSMEs in the Setu Babakan area can be seen as follows:

Table 1.
Number of MSMEs by gender.

No	Gender	Total	Percentage
1	Male	25	41.67%
2	Female	35	58.33%
Total			100%

Table 1. shows the number of MSME respondents based on gender in the Setu Babakan area. From the table it is known that the number of men is 25 people (41.67%), the remaining women are 58 people (58.33%). From this table it can be concluded that the majority of business actors in the Setu Babakan area are women.

Table 2.
Business sector of MSMEs.

No	Line of business	Total	Percentage
1	Culinary	42	70.00%
2	Water tourism services	2	3.33%
3	General trade	2	3.33%
4	Handicrafts	2	3.33%
5	Textile/Fashion	3	5.00%
6	Others	9	15.00%
Total		60	100%

Table 2. shows that the business fields of MSMEs in the Setu Babakan area in South Jakarta are very diverse, based on the culinary category which consists of various kinds of food and drinks such as bir pletok, traditional cakes to frozen food, drinks, a type of fast food and so on which is the largest number, namely (70%). The rest are businesses engaged in general trade, water tourism services and handicrafts each at 3.33% and textiles/fashion at 5% as well as other businesses, in the form of farm produce selling services, suplair, travel and so on as many as 9 MSMEs (15%).

Table 3.
Length of business.

No	Length of business	Total	Percentage
1	< 1 Year	7	11.67%
2	1 - 5 Years	23	38.33%
3	> 5 - 15 Years	19	31.67%
4	>15 - 20 Years	6	10.00%
4	> 20 Years	5	8.33%
Total		60	100%

Table 3 illustrates the characteristics of respondents based on the length of time the business has been running. Of the 60 people studied, 23 people (38.33%) of them have been in business for 1 - 5 years, 19 people (31.67%) of them have been in business for more than 5 - 15 years, 6 people (10%) of them have been in business for more than 15 years - 20 years, and 5 people (8.33%) of them have been

working for more than 20 years. There were only 7 people (11.67) who had been in business for less than one year. Based on this data, it can be concluded that most respondents have worked between more than 1 year and 5 years.

3.2. Descriptive Statistical Analysis of Setu Babakan MSMEs

3.2.1. Respondents' Responses to MSME Business Conditions

Table 4.
Respondents' responses on MSME business conditions.

No	Question list	Percentage	
		Yes	No
1.	I am currently a fostered partner of the Setu Babakan area manager.	19	41
2.	I still have limitations in using digital technology and have difficulty understanding <i>online platforms</i> .	23	37
3.	I have capital problems in running my current business.	37	23
4.	I have participated in training on entrepreneurship/business management organized by the area manager/university in Setu Babakan.	26	34
5.	I felt that I had limited market access and had difficulty reaching a wider market.	45	15
6.	I maintain the quality of my products and services to my customers	58	2
7.	I feel that complicated licensing processes and changing regulations make it difficult for my business to operate.	36	24
Total respondent		60 people	

Table 4. It is known that the number of respondents who have become fostered partners of the Setu Babakan Area manager is 19 people (31.67%), while those who have not become fostered partners of the Setu Babakan Area manager are 34 people (56.67%). The number of respondents who still have limitations in using digital technology and difficulty understanding online platforms is 23 people (38.33%), while those who do not have limitations in using digital technology and difficulty understanding online platforms are 37 people (61.67%) From the table it is also known that the number of respondents who have capital problems in running their current business is still greater as many as 37 people (61.67%). While those who do not have capital problems in running their current business are 23 people (38.33%).

The number of respondents who have attended training on entrepreneurship/business management organized by the area manager/university in Setu Babakan is 26 people (43.33%), and those who have never attended training are 34 people (56.67%). This means that those who have never attended training are more than those who have attended training.

Respondents who felt they had limited market access and difficulty reaching a wider market were 45 people (75%), while those who stated that they did not feel they had limited market access and difficulty reaching a wider market were satisfied as many as 15 people (25%). This means that there are still far more respondents who have limited market access and difficulty reaching a wider market.

Overall the number of respondents maintaining the quality of products and services to customers was 96.67% and only 3.33% were less concerned about maintaining quality. Finally, the number of respondents who stated that they felt that the complicated licensing process and changing regulations made it difficult for their business was 36 people (60%), while the remaining 24 people (40%) stated that they did not feel that the complicated licensing process and changing regulations made it difficult for their business.

3.2.2. Respondents' Responses to the Financial Literacy Variable

Table 5.
Recapitulation of financial literacy variable responses.

No.	Dimensions	Score earned	Max. score	% of max. score	Category
1	Basic knowledge of financial management	651	900	72.33%	Good
2	Insurance	432	600	72.00%	Good
3	Savings and loan management	494	600	82.33%	Good
4	Investment	458	600	76.33%	Good
Total score		2035	2700	75.37%	Good

Table 5. shows respondents' responses about the *Financial Literacy* variable. From the results of data processing presented in the table, it can be seen that the total score for the *Financial Literacy* variable is 2035. The total score is entered on a continuum line whose measurement can be done as follows:

Maximum Index Value = $5 \times 9 \times 60 = 2700$

Minimum Index Value = $1 \times 9 \times 60 = 540$

Interval Distance = (Max. -Min.) : 5

= $(2700 - 540) : 5 = 432$

Percentage Score = (Score : Max.) x 100%

= $(2035 : 2700) \times 100\%$

= 75,37 %

75,37%

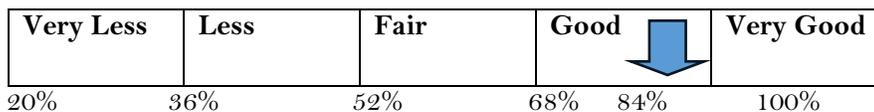


Figure 1.
Financial literacy variable continuum line.

The ideal expected score for respondents' answers to 9 questions is 2700. Based on the calculations in Table 5, it shows that the value obtained is 2035 or 75.37% of the ideal score. Thus it can be concluded that the Financial Literacy variable is in the good category. Meanwhile, the indicator that obtained the highest answer came from the Savings and Loan Management Dimension on the Third Indicator which states I understand the use of separate funds that are not used for other purposes and I know about the benefits of the risks of savings and loans with a score obtained of 82.33%.

Table 6.
Recapitulation of financial behavior variable responses.

No	Dimensions	Score earned	Max. score	% of max. score	Category
1	Obsession	693	900	77.00%	Good
2	Power	478	600	79.66%	Good
3	Effort	423	600	70.50%	Good
4	Inadequacy	715	900	79.44%	Good
5	Retention	468	600	78.00%	Good
6	Security	720	900	80.00%	Good
Total score		3497	4500	77.71%	Good

3.2.3. Respondents' Responses to the Financial Behavior Variable

Table 6. shows respondents' responses about the *Financial Behavior* variable. From the results of data processing presented in the table, it can be seen that the total score for the *Financial Behavior* variable is 3497. The total score is entered on a continuum line whose measurement can be done as follows:

Maximum Index Value = $5 \times 15 \times 60 = 4500$

Minimum Index Value = $1 \times 15 \times 60 = 900$

Interval Distance = (Max. - Min.) : 5
 $= (4500 - 900) : 5 = 720$

Percentage Score = (Score: Max.) x 100%
 $= (3497 : 4500) \times 100\% = 77,71\%$

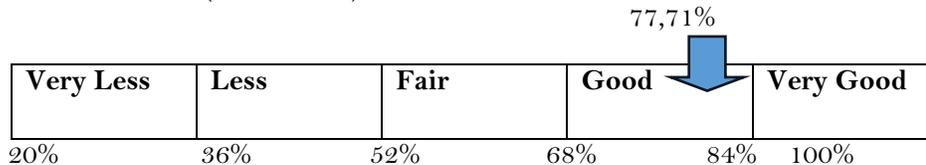


Figure 2.
Financial behavior variable continuum line.

The ideal expected score for respondents' answers to 15 questions is 4500. Based on the calculations in table 6, it shows that the value obtained is 3497 or 77.71% of the ideal score. Thus it can be concluded that the Financial Behavior variable is in the good category. Meanwhile, the indicator that received the highest answer came from the Security Dimension on the Third Indicator which states I believe that my business has control over the financial situation in terms of strength with a score obtained of 81.00%.

Table 7.
Recapitulation of digital competency variable responses.

No	Dimensions	Score earned	Max score.	% of max score	Category
1	Information and data literacy	685	900	76.11%	Good
2	Communication and collaboration	696	900	77.33%	Good
3	Digital content creation	694	900	77.11%	Good
4	Safety	724	900	80.44%	Good
5	Project solving	711	900	79.00%	Good
Total score		3510	4500	78.00%	Good

3.2.4. Respondents' Responses to the Digital Competency Variable

Table 7 shows respondents' responses about the Digital Competency variable. From the results of data processing presented in the table, it can be seen that the total score for the Digital Competency variable is 3510. The total score is entered on a continuum line whose measurement can be done as follows:

Maximum Index Value = $5 \times 15 \times 60 = 4500$

Minimum Index Value = $1 \times 15 \times 60 = 900$

Interval Distance = (Max. - Min.) : 5
 $= (4500 - 900) : 5 = 720$

Percentage Score = (Score : Max.) x 100%
 $= (3510 : 4500) \times 100\%$
 $= 78,00\%$



Very less	Less	Good enough	Good	Very good
20%	36%	52%	68%	84%
			84%	100%

Figure 3.

Digital competency variable continuum line.

The ideal expected score for respondents' answers to 15 questions is 4500. Based on the calculations in table 7, it shows that the value obtained is 3510 or 78.00% of the ideal score. Thus it can be concluded that the Digital Competency variable is in the good category. Meanwhile, the indicator that received the highest answer came from the Safety Dimension which states that I realize the importance of safety and psychological protection in using digital technology with a score of 83.33%.

3.2.5. Respondents' Responses to Organization Performance Variables

Table 8.

Recapitulation of variable responses organization performance.

No	Dimensions	Score earned	Max score.	% of max score.	Category
1	Stakeholders and financial perspective	672	900	74.67%	Good
2	Customer perspective	724	900	80.44%	Good
3	Internal process perspective	693	900	77.00%	Good
4	Innovation and learning perspective	689	900	76.55%	Good
Total score		2778	3600	77.16%	Good

Table 8 shows respondents' responses about the Organization Performance variable. From the results of data processing presented in the table, it can be seen that the total score for the Organization Performance variable is 2778. The total score is entered on a continuum line whose measurement can be done as follows:

$$\text{Maximum Index Value} = 5 \times 12 \times 60 = 3600$$

$$\text{Minimum Index Value} = 1 \times 12 \times 60 = 720$$

$$\begin{aligned} \text{Interval Distance} &= (\text{Max.} - \text{Min.}) : 5 \\ &= (3600 - 720) : 5 = 576 \end{aligned}$$

$$\begin{aligned} \text{Percentage Score} &= (\text{Score} : \text{Max.}) \times 100\% \\ &= (2778 : 3600) \times 100\% \\ &= 77,16\% \end{aligned} \quad 77,16\%$$

Very less	Less	Good enough	Good ↓	Very good
20%	36%	52%	68%	84%
			84%	100%

Figure 4.

Organization performance variable continuum line.

The ideal expected score for respondents' answers to 12 questions is 3600. Based on the calculations in Table 8, it shows that the value obtained is 2778 or 77.16% of the ideal score. Thus it can be concluded that the Organization Performance variable is in the good category. Meanwhile, the indicator that received the highest answer came from the Customer Perspective Dimension on the First Indicator which states My customers are generally satisfied with the products/services I provide with the score obtained of 83.00%.

Descriptive analysis using a continuum line approach to the four variables is a simple technique for mapping respondents' opinions or interpretations of the four variables studied with relevant questions. The scores obtained from all variables are a temporary consideration of the direction of respondents' opinions. Meanwhile, the highest scores of the dimensions of the research variables are as follows:

Financial Literacy variables are indicated by Savings and Loan Management (with a score of 83.22%), Financial Behavior variables are indicated by the Security Dimension (with a score of 80.00%), Digital Competency variables are indicated by the Safety Dimension (with a score of 80.44%), and Organization Performance variables are indicated by the Customer Perspective Dimension (with a score of 80.44%).

3.3. Analysis Structural Equation Model-Partial Least Square (SEM-PLS)

In this study there are 4 latent variables and 51 manifest variables (indicators). Testing the results of Structural Equation Modeling (SEM) with the Partial Least Square (PLS) approach is done by looking at the results of the measurement model (Outer Model) and the results of the structural model (Inner Model) of the model under study.

3.3.1. Testing the Measurement Model (Outer Model)

Convergent Validity relates to the principle that the manifest variables of a construct should be highly correlated. Convergent Validity with PLS software can be seen from the loading factor for each construct indicator, as for assessing Convergent Validity the loading factor value must be more than 0.70 and the Average Extracted (AVE) and communality values must be greater than 0.5, the following results are obtained:

Table 9.
Final loading factor.

Variable (Symbol)	Dimensions	Indicator	Loading factor	Note
Financial literacy (X1)	Basic knowledge of financial management	X1.3	0.840	Valid
	Insurance	X1.5	0.750	Valid
	Savings and loan management	X1.6	0.711	Valid
		X1.7	0.832	Valid
	Investment	X1.8	0,794	Valid
		X1.9	0,723	Valid
Financial behavior (X2)	Obsession	X2.1	0.715	Valid
	Power	X2.5	0.748	Valid
	Effort	X2.7	0.784	Valid
	Incompetence	X2.8	0,828	Valid
		X2.9	0,793	Valid
		X2.10	0,813	Valid
	Retention	X2.11	0,803	Valid
		X2.12	0,824	Valid
		Security	X2.13	0,850
X2.14	0,841		Valid	
X2.15	0,816		Valid	
Digital competency (Z)	Information and data literacy	Z1	0.848	Valid
		Z2	0.844	Valid
		Z3	0.824	Valid
	Communication and collaboration	Z4	0.844	Valid
		Z5	0,781	Valid
		Z6	0,854	Valid
	Digital content creation	Z7	0,830	Valid
		Z8	0,889	Valid
		Z9	0,899	Valid
	Safety	Z10	0,925	Valid
		Z11	0,790	Valid

Organization performance (Y)	Project solving	Z13	0.838	Valid
		Z14	0.841	Valid
		Z15	0.843	Valid
	Stakeholders and financial perspective	Y1	0.836	Valid
		Y2	0.832	Valid
		Y3	0.803	Valid
	Customer perspective	Y4	0.784	Valid
		Y5	0.777	Valid
		Y6	0.828	Valid
	Internal process perspective	Y7	0.817	Valid
		Y8	0.797	Valid
		Y9	0.825	Valid
Innovation and learning perspective	Y10	0.797	Valid	
	Y11	0.840	Valid	
	Y12	0.851	Valid	

Table 9. provides information about the Loading Factor value for each manifest variable, the Loading Factor value of all indicators on latent variables shows > 0.70 so that the indicator is declared valid.

Table 10.
Average variance extracted (AVE).

Variable	Average variance extracted (AVE)
FL	0.642
FB	0.657
DC	0.720
OP	0.666

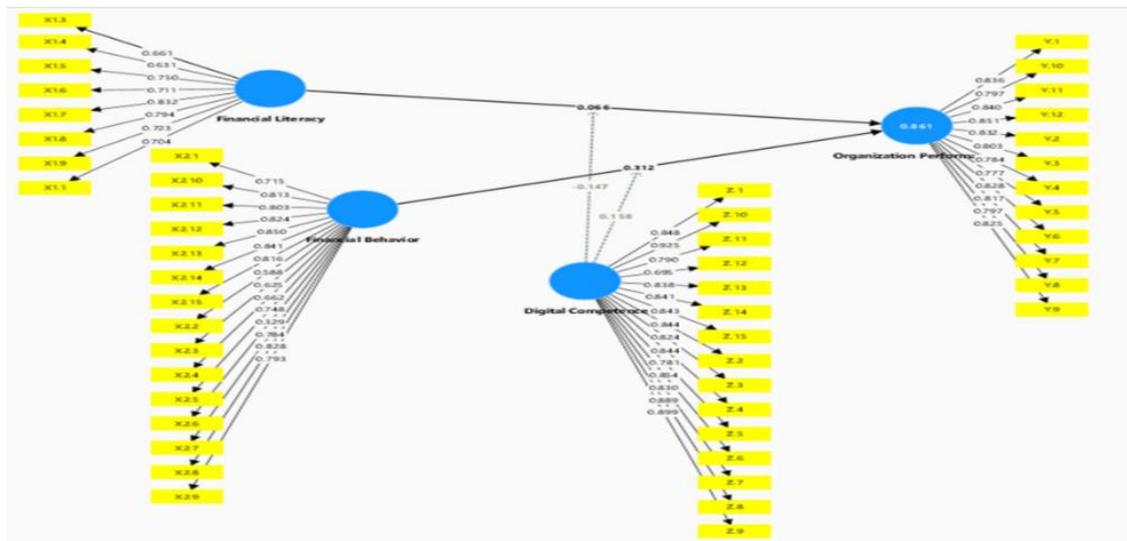


Figure 5.
Reestimated loading factor.

In Table 10. it can be seen that the four latent variables have an AVE value greater than the specified value of 0.5 so that all variables are declared valid in explaining their latent variables which indicates that the use of these manifest variables meets the AVE requirements.

All manifest variables are declared to have met the Convergent Validity requirements. Convergent Validity itself is validity that is proven if the scores obtained by instruments that measure concepts or measure concepts with different methods have a high correlation.

3.3.2. Discriminant Validity

Discriminant Validity can be seen from the measurement of the Cross Loading Factor with the construct and the comparison of AVE with the latent variable correlation. If the construct correlation with the main measurement (each indicator) is greater than the size of the other constructs, it is said that the variable has high discriminant validity. The Cross Loading value is presented as follows:

Table 11.
Cross loading factor.

Variable	Indicator	FL	FB	DC	OP
FL	X1.3	0.810	0.683	0.645	0.611
	X1.5	0.789	0.767	0.705	0.669
	X1.6	0.774	0.606	0.727	0.602
	X1.7	0.878	0.717	0.777	0.553
	X1.8	0.787	0.678	0.710	0.752
	X1.9	0.766	0.724	0.630	0.665
FB	X2.1	0.705	0.706	0.543	0.511
	X2.5	0.588	0.742	0.671	0.543
	X2.7	0.590	0.802	0.597	0.668
	X2.8	0.711	0.843	0.857	0.302
	X2.9	0.661	0.813	0.413	0.773
	X2.10	0.695	0.825	0.607	0.658
	X2.11	0.656	0.771	0.578	0.645
	X2.12	0.826	0.852	0.686	0.797
	X2.13	0.610	0.849	0.899	0.445
	X2.14	0.833	0.860	0.784	0.425
DC	X2.15	0.622	0.839	0.865	0.559
	Z1	0.636	0.665	0.859	0.586
	Z2	0.759	0.847	0.854	0.619
	Z3	0.731	0.805	0.831	0.578
	Z4	0.721	0.595	0.842	0.331
	Z5	0.870	0.714	0.777	0.538
	Z6	0.653	0.709	0.849	0.374
	Z7	0.693	0.602	0.835	0.574
	Z8	0.638	0.701	0.897	0.486
	Z9	0.574	0.601	0.906	0.454
	Z10	0.563	0.716	0.926	0.590
	Z11	0.515	0.681	0.780	0.339
	Z13	0.678	0.838	0.838	0.495
	Z14	0.678	0.827	0.834	0.576
	Z15	0.610	0.592	0.842	0.474
	Y1	0.704	0.521	0.538	0.836
	Y2	0.648	0.579	0.444	0.831
	Y3	0.647	0.533	0.491	0.802
	Y4	0.747	0.742	0.629	0.786
	Y5	0.704	0.521	0.538	0.779
Y6	0.581	0.360	0.452	0.829	

	Y7	0.680	0.400	0.267	0.817
	Y8	0.671	0.722	0.660	0.798
	Y9	0.559	0.466	0.386	0.825
	Y10	0.747	0.742	0.629	0.796
	Y11	0.498	0.480	0.267	0.839
	Y12	0.605	0.515	0.429	0.851

Based on Table 11, it can be seen that the Cross Loading Factor correlation value of each latent construct for the corresponding indicator is higher than other constructs, so it can be concluded that the indicators used to measure latent variables have met the requirements.

3.3.3. Reliability Test

Reliability tests in Partial Least Square (PLS) can use two methods, namely Composite Reliability (CR) and Cronbach's Alpha (CA) which are presented as follows:

Table 12.
Reliability test results.

	Cronbach's alpha	Composite reliability	Conclusion
Financial literacy (FL)	0.888	0.915	Reliable
Financial behavior (FB)	0.947	0.955	Reliable
Digital competency (DC)	0.970	0.973	Reliable
Organization performance (OP)	0.954	0.960	Reliable

From the test results it can be seen that the Composite Reliability (CR) value is greater than 0.7, and the Cronbach's Alpha (CA) value is greater than 0.6, so it can be concluded that the data is reliable which indicates that all indicators have consistency in measuring each variable.

3.3.4. Structural Model Testing (Inner Model)

This structural model measurement is to test the effect of one latent variable on other latent variables. Testing is done by looking at the path value to see whether the effect is significant or not seen from the t value of the path value (t value can be obtained by doing Boothstraping). The following is a picture of the bootstrapping results conducted in this study:

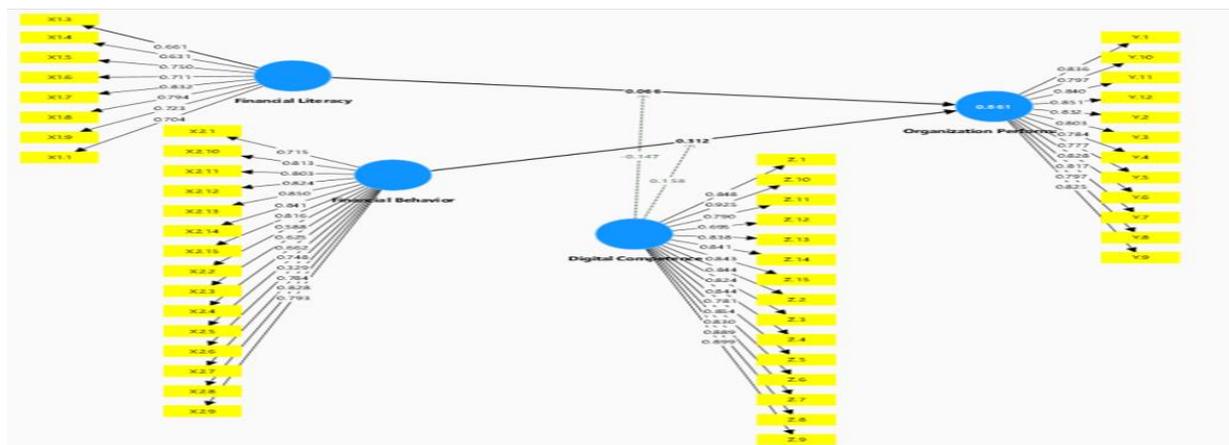


Figure 6.
Bootstrapping.

3.3.5. Hypothesis Testing

The hypothesis in this study will be tested using the path coefficient value and t values to see whether there is a significant effect or not. In addition, the results of the path significance test also show the parameter coefficient value (Original sample). The parameter coefficient shows the significant value of the effect of each research variable.

Table 13.
Path significance test.

Variable	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	t Statistics (O/STDEV)	P values
FL → OP	-0.083	-0.072	0.113	0.740	0.459
FB → OP	0.415	0.419	0.164	2.531	0.011
DC → OP	0.635	0.623	0.121	5.259	0.000
DC x FL → OP	-0.088	-0.094	0.132	0.663	0.507
DC x FB → OP	0.116	0.114	0.119	0.981	0.327

Table 14.
Hypothesis test matrix.

H	Variable	Correlation	t-value	t-table	Description
H ₁	Financial literacy → Organization performance	-0.083	0.740	1,96	No effect
H ₂	Financial behavior → Organization performance	0.415	2.531	1,96	Positively affected
H ₃	Digital competency → Organization performance	0.635	5.259	1,96	Positively affected
H ₄	Digital competency x Financial literacy → Organization performance	-0.088	0.663	1,96	No effect
H ₅	Digital competency x Financial behavior → Organization performance	0.116	0.981	1,96	No effect

In this study, researchers used a confidence level of 95%. The Path Coefficient score indicated by the t-statistic value must be above 1.96 for a two-tailed hypothesis. Based on the Path Coefficient and t-statistic in the table, the following conclusions can be drawn:

3.4. Effect of Financial Literacy on Investment Decision

H₀: Financial Literacy has no significant effect on Organization Performance

H₁: Financial Literacy has a significant effect on Organizational Performance

Reject H₀ and accept H₁ if t-value > t-table

To test the above hypothesis, the t-value is used to see the effect of Financial Literacy on Organization Performance with a t-value of 0.740, this value is smaller than 1.96 with $\alpha=0.05$, so it can be concluded that H₀ is accepted, meaning that there is no significant effect of Financial Literacy and

Organization Performance. The Financial Literacy variable on Organization Performance has an original sample of -0.083 with a negative direction, meaning that the better the Financial Literacy, the Organization Performance will decrease by 0.083.

3.5. *The Effect of Financial Behavior on Investment Decision*

H₀: Financial Behavior has no significant effect on organizational performance

H₁: Financial Behavior has a significant effect on Organization Performance

Reject H₀ and accept H₁ if t-value > t-table

To test the above hypothesis, the t value is used to see the effect of Financial Behavior on Organization Performance with a t value of 2.531, this value is greater than 1.96 with $\alpha=0.05$, so it can be concluded that H₁ is accepted, meaning that there is a significant effect of Financial Behavior on Organization Performance. The Financial Behavior variable on Organization Performance has an original sample of 0.415 with a positive direction, meaning that the better the Financial Behavior, the greater the Organization Performance will be 0.415.

3.6. *Effect of Digital Competency on Organizational Performance*

H₀: Digital Competency has no significant effect on Organization Performance

H₁: Digital Competency has a significant effect on Organizational Performance

Reject H₀ and accept H₁ if t-value > t-table

To test the above hypothesis, the t-value is used to see the effect of Digital Competency on Organization Performance with a t-value of 5.295, this value is greater than 1.96 with $\alpha=0.05$ so it can be concluded that H₁ is accepted, meaning that there is a significant effect of Digital Competency on Organization Performance. The Digital Competency variable on Organization Performance has an original sample of 0.635 with a positive direction, meaning that the better the Digital Competency, the Organization Performance will also increase by 0.635.

3.7. *Moderation of Digital Competency on Financial Literacy on Organization Performance*

H₀: Digital Competency in Financial Literacy does not significantly moderate organizational performance

H₁: Digital Competency in Financial Literacy moderates significantly on Organization Performance

Reject H₀ and accept H₁ if t-value > t-table

To test the above hypothesis, the t-value is used to see the effect of Digital competency on Financial Literacy on Organization Performance with a t-value of 0.663, this value is smaller than 1.96 with $\alpha=0.05$ so it can be concluded that H₀ is accepted, meaning that Digital Competency on Financial Literacy does not moderate significantly on Organization Performance. The Digital Competency variable on Financial Literacy on Organization Performance has an original sample of -0.088 with a negative direction, meaning that the greater the Digital Competency on Financial Literacy, the more Organization Performance will decrease by 0.088.

3.8. *Moderating Digital Competence on Financial Behavior to Organizational Performance*

H₀: Digital Competency in Financial Behavior does not significantly moderate organizational performance

H₁: Digital Competency on Financial Behavior Significantly Moderates Organization Performance

Reject H₀ and accept H₁ if t-value > t-table

To test the above hypothesis, the t-value is used to see the effect of Digital competency on Financial Behavior on Organization Performance with a t-value of 0.981, this value is smaller than 1.96 with $\alpha=0.05$ so it can be concluded that H₀ is accepted, meaning that Digital Competency on Financial Behavior does not moderate significantly on Organization Performance. The Digital Competency variable on Financial Behavior on Organization Performance has an original sample of 0.116 with a positive direction, meaning that the greater the Digital Competency on Financial Behavior, the more Organization Performance will increase by 0.116.

3.9. R Square Test

The influence of the dependent variable can be displayed by the R square value. The following is the acquisition of the R Square value.

Table 15.
R square results.

	Adjusted R square
Organization performance (OP)	0.861

Through the coefficient of determination (R Square) value contained in Table 15. it can be seen in the first sub-structure that the R Square value of the Organization Performance (OP) variable is 0.861, which indicates that the Organization Performance (OP) variable can be explained by 86.1% by the Financial Literacy (FL), Financial Behavior (FB), and Digital Competency (DC) variables.

3.10. Predictive Relevance

Q Square measures how well the observed values are generated by the model as well as its parameter estimates. A Q Square value greater than 0 (zero) shows that the model has predictive relevance, while a Q Square value of less than 0 (zero) shows that the model has no predictive relevance. To calculate Q^2 , the following formula can be used:

$$Q^2 = 1 - (1 - R^2)$$

$$Q^2 = 1 - (1 - 0,861)$$

$$Q^2 = 0,861$$

The achieved Q^2 value of 0.861 means that Q^2 above zero provides evidence that the model has Predictive Relevance.

3.11. Direct Effect and Moderating Effect Relationship

Table 16.
Direct and moderation effect.

Direct influence		Moderating effect	
FL → OP	-0.083		
FB → OP	0.415		
DC → OP	0.635		
		DC x FL → OP	-0.088
		DC x FB → OP	0.116

Based on Table 16, it is known that from testing the moderating effect of Digital Competency on Financial Literacy and Financial Behavior on Organization Performance, there is no greater influence when compared to the direct effect of Digital Competency on Organization Performance. This is supported by a t-statistic smaller than 1.96 or a p value greater than 0.05 which can be seen in Table 13.

Financial Literacy is the ability of an individual or organization to understand basic financial concepts such as savings, investment, and budget management. However, a high level of literacy does not necessarily result in better investment decisions as external factors such as market conditions and economic dynamics also play an important role in organizational investments. Therefore, financial literacy alone cannot be considered a key determinant of organizational performance.

Financial Behavior encompasses the way an individual or organization manages the organization's finances, including spending, investing, and other financial decisions. While financial mismanagement can have a negative impact on organizational performance, other factors such as business strategy and changing market conditions also affect investment returns. Therefore, financial behavior is not always the only determinant in relation to organizational performance.

Overall, Financial Literacy, Financial Behavior, and Digital Competency are important elements in organizational financial decision-making. However, the resulting direct influence on organizational performance is often complex and dependent on various other factors that must be considered in a more in-depth analysis.

4. Discussion of Findings

Based on the results of statistical data processing presented as the basis for answering the formulation of this research problem, each hypothesis can be systematically explained as follows:

4.1. *The Effect of Financial Literacy on Organizational Performance*

The results showed that Financial Literacy has no effect on organizational performance. In this case, it is known that the research results show a high level of Financial Literacy, but not higher than other variables. Many MSMEs in Setu Babakan still rely on traditional business models that may not fully rely on formal financial knowledge. Some MSMEs in Setu Babakan are family businesses that prioritize social relationships over profitability, so financial literacy may not be a top priority. Setu Babakan MSMEs can cope by relying on a deep understanding of financial and investment aspects due to the relatively small business capacity. Thus, individual or group Financial Literacy is not the main determining factor in determining the organizational performance of Setu Babakan MSMEs.

For large companies, organizational performance is influenced by strong managerial factors and business strategies. Good managerial skills, such as effective planning, organizing, and controlling abilities can have a greater impact on organizational performance than the level of Financial Literacy of individuals or groups. In addition, organizational success is also determined by the right business strategy and good implementation. If the organization has a strong business strategy and is able to implement it well, the level of individual or group Financial Literacy becomes a less significant factor in determining organizational performance.

Financial Literacy can be improved through proper education and training. If organizations recognize the importance of Financial Literacy and make efforts to improve the financial understanding of individuals or groups within them, the impact of Financial Literacy on organizational performance can be strengthened. Through financial training, teaching financial management, or consulting with financial experts, individuals or groups within the organization can improve their ability to manage finances and make smart investment decisions.

It is important for organizations to consider these factors and adopt appropriate measures to ensure optimal organizational performance. The results of this study provide full support to previous research by (Fitria et al., 2021) and research by (Mulyadi et al., 2023) which states that Financial Literacy has no effect on organizational performance. The results of this study refute research conducted by (Kasenda & Wijayangka, 2019), (Idawati & Pratama, 2020), (Pramestiningrum, 2019), and (Septiani & Wuryani, 2020) showing Financial Literacy has a positive effect on Organization Performance.

4.2. *The Effect of Financial Behavior on Organizational Performance*

The results showed that Financial Behavior has a positive effect on organizational performance. One of the reasons Financial Behavior has a significant effect on organizational performance is when Setu Babakan MSMEs have implemented good internal control within a limited scope of business. With good financial management, Setu Babakan MSMEs can minimize the risk of adverse financial behavior. For example, by adopting controlled monitoring and reporting mechanisms, organizations can identify and address inappropriate or adverse actions in a timely manner.

The influence of Financial Behavior on organizational performance can be suppressed if the organization has a strong and focused business strategy. If the organization has a clear strategic direction, well-defined goals, and a mature implementation plan, then organizational performance is more likely to be influenced by the successful implementation of the strategy rather than individual or group financial behavior. In this case, the success of the organization depends more on the fulfillment of an effective business strategy than on financial behavioral factors.

It is important for Setu Babakan MSMEs to develop effective control mechanisms, pay attention to relevant external factors, and have a strong business strategy to ensure their business performance remains optimal. The results of this study provide full support to previous research by (Rustan, 2021) which states that Financial Behavior affects Organization Performance. Meanwhile, other research conducted by (Fitria et al., 2021) and (Mulyadi et al., 2023) states that Financial Behavior has no effect on Organization Performance.

4.3. Effect of Digital Competency on Organizational Performance

The results showed that Digital Competency has a positive effect on organizational performance. When individuals or groups within an organization have a good understanding of the digital capabilities at hand and are able to effectively evaluate the benefits, this can help MSMEs in Setu Babakan make better decisions, manage digital capabilities more efficiently, and achieve better performance overall.

Digital Competencies include information and data literacy, communication and collaboration, digital content creation, security, and problem-solving projects. Now that digital skills have been recognized in the digital era, the benefits of digital competency are vast. An important part of the nature of learning is how Setu Babakan MSMEs utilize learning assets, as technology develops in today's digitalized world, Setu Babakan MSMEs develop their skills to utilize digital technology in their business development. The most popular thing today is the use of social media to market their products. Such as WhatsApp, Instagram, Facebook, and so on.

This study supports research conducted by (Liesander & Diah Dharmayanti, 2017); (Marguna, 2020); and (Andriana & Ardi, 2022) which states that digital competency has a direct effect on organizational performance.

4.4. Moderation of Digital Competency on Financial Literacy on Organization Performance

The results showed that Digital Competency on Financial Literacy on Organization Performance had no significant effect. In other words, Digital Competency cannot moderate Financial Literacy on Organization Performance. This can happen because the direct effect of Digital Competency on Organization Performance (UMKM Setu Babakan performance) is very strong.

Digital competence is a moderating variable, namely a variable that can strengthen or weaken the direct relationship between the independent variable, namely Financial Literacy with the dependent variable, namely Organization Performance. This means that the Digital Competency variable cannot moderate the Financial Literacy variable on the Organization Performance variable.

4.5. Moderation of Digital Competency on Financial Behavior on Organization Performance

The results showed that Digital Competency on Financial Behavior on Organization Performance had no significant effect. In other words, Digital Competency cannot moderate Financial Behavior on Organization Performance. This can happen because the direct effect of Digital Competency on Organization Performance (performance of Setu Babakan MSMEs) is very strong.

The same thing can be said that Digital competence is a moderating variable, namely a variable that can strengthen or weaken the direct relationship between the independent variable, namely Financial literacy with the dependent variable, namely Organization Performance. So in this case it means that the Digital Competency variable cannot moderate the Financial Behavior variable on the Organization Performance variable.

5. Conclusions and Suggestions

Based on the results of the analysis and evaluation of research data, it is concluded that Financial Literacy does not have a significant effect on the organizational performance of Setu Babakan MSMEs, which may be due to the small scale of the business and the lack of adequate managerial skills. On the other hand, Financial Behavior has a positive influence on investment decisions, because good financial behavior encourages more rational investment decision-making. Digital Competency plays a positive role in improving organizational performance, especially in the use of digital technology such as social

media for marketing. However, Digital Competency is not able to moderate the relationship between Financial Literacy and Financial Behavior with organizational performance, because the direct influence of digital capabilities on MSME performance is strong enough.

5.1. Advice

For the Setu Babakan Area Manager, based on the survey results, 60% of MSMEs feel that the complicated licensing process and frequently changing regulations make it difficult for them. The manager is expected to simplify the licensing process. In addition, 75% of MSMEs claimed to have difficulties in reaching a wider market, so efforts are needed from managers to help overcome this limited market access. For universities, 38% of MSMEs stated that they still experience difficulties in using digital technology and online platforms. It is expected that universities can work together with area managers to provide digital competency training and capital management through community service activities. From a theoretical perspective, this study developed a questionnaire to evaluate the factors affecting the performance of Setu Babakan MSMEs, and future researchers can utilize or develop this questionnaire for further research, including testing other variables beyond financial literacy, financial behavior, and digital competence.

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References

- [1] Andriana, M., & Ardi, A. (2022). Pengaruh servant leadership dan digital competence terhadap job satisfaction dan work performance dengan mediasi work motivation di sekolah XYZ Jakarta Barat. *JIIP-Jurnal Ilmiah Ilmu Pendidikan*, 5(9), 3397–3408.
- [2] Fitria, I., Soejono, F., & Tyra, M. J. (2021). Literasi keuangan, sikap keuangan dan perilaku keuangan dan kinerja UMKM. *Journal of Business and Banking*, 11(1), 1–15.
- [3] Idawati, I. A. A., & Pratama, I. G. S. (2020). Pengaruh Literasi Keuangan Terhadap Kinerja dan Keberlangsungan UMKM di Kota Denpasar. *Warmadewa Management and Business Journal (WMBJ)*, 2(1), 1–9.
- [4] Kasenda, B. S., & Wijayangka, C. (2019). Pengaruh literasi keuangan terhadap kinerja UMKM. *Almana: Jurnal Manajemen Dan Bisnis*, 3(1), 153–160.
- [5] Lestari, W. (2013). Religiusitas dan persepsi risiko dalam pengambilan keputusan investasi pada perspektif gender. *Journal of Business & Banking*, 3(2), 189–200.
- [6] Liesander, I., & Diah Dharmayanti, S. E. (2017). Pengaruh Digital Marketing Terhadap Organizational Performance Dengan Intellectual Capital Dan Perceived Quality Sebagai Variabel Intervening Pada Industri Hotel Bintang Lima Di Jawa Timur. *Jurnal Strategi Pemasaran*, 1, 13.
- [7] Marguna, A. M. (2020). Pengaruh kompetensi digital (e-skills) terhadap kinerja pustakawan di UPT Perpustakaan Universitas Hasanuddin. *Jupiter*, 17(2), 104–117.
- [8] Mulyadi, M., Widyastuti, T., & Zulkifli, Z. (2023). Analysis of Factors Affecting Investment Decisions and its Implications on Organizational Performance. *Interdisciplinary Journal and Humanity (INJURITY)*, 2(9), 784–794.
- [9] Pramestiningrum, D. R. (2019). *Pengaruh Literasi Keuangan, Financial Capital Dan Kebijakan Pemerintah Terhadap Kinerja Usaha Pada Ukm Di Jawa Timur*. STIE Perbanas Surabaya.
- [10] Rustan, D. M. (2021). Financial Literacy, Financial Behavior and Financial Attitudes Towards Investment Decisions and Firm Bankruptcy. *ATESTASI: Jurnal Ilmiah Akuntansi*, 4(1), 79–87.
- [11] Septiani, R. N., & Wuryani, E. (2020). *Pengaruh literasi keuangan dan inklusi keuangan terhadap kinerja UMKM di Sidoarjo*. Udayana University.
- [12] Suindari, N. M., & Juniariani, N. M. R. (2020). Pengelolaan Keuangan, Kompetensi Sumber Daya Manusia Dan Strategi Pemasaran Dalam Mengukur Kinerja Usaha Mikro Kecil Menengah (Ukm). *KRISNA: Kumpulan Riset Akuntansi*, 11(2), 148–154. <https://doi.org/10.22225/kr.11.2.1423.148-154>
- [13] Aini, N., Syafitri, L., & Wijaya, T. (2016). Pengaruh Literasi Keuangan dan Faktor Demografi terhadap Keputusan Investasi di Pasar Modal. *Jurnal Ilmu Manajemen*, pp. 1–12.
- [14] Arianti, B. F. (2018). The Influence of Financial Literacy, Financial Behavior, and Income on Investment Decisions. *Economics and Accounting Journal*, 1(1), pp. 1–10
- [15] Arif, K. (2015). Financial Literacy and Other Factors Influencing Individuals' Investment Decision: Evidence from a Developing Economy (Pakistan). *Journal of Poverty, Investment, and Development*, 12, pp. 74–84.
- [16] Armstrong, M. (2006). *A Handbook of Human Resource Management Practice*. London: Kogan Page.

- [17] Asmara, S. N., Lako, A. & Trimeiningrum, E. (2020). The Impact of Employee Characteristics in the Relation of Financial Knowledge, Financial Management Behavior and Personal Income with Investment Decision of Employee. *Journal of Management and Business Environment*, 1(2), pp. 195–209. DOI: 10.24167/jmbe.v1i2.2408
- [18] Chen, H. & Volpe, R. P. (1998). An Analysis of Personal Financial Literacy among College Students. *Financial Services Review*, 7(2), pp. 107-128.
- [19] Drucker, P. F. (1990). *Managing for Results: Economic Tasks and Risk-Taking Decisions*. New York: HarperCollins.
- [20] Fachrudin, K. F. & Fachrudin, K. A. (2016). The Influence of Education and Experience toward Investment Decision with moderated by Financial Literacy. *Polish Journal of Management Studies*, 14(2), pp. 51-60
- [21] Furnham, A. (1984). *Financial Behavior*. Methuen.
- [22] Ghozali, I., & Latan, H. (2012). *Partial least square: Konsep, teknik dan aplikasi SmartPLS 2.0 M3*. Semarang: Badan Penerbit Universitas Diponegoro.
- [23] Huston, S.J. (2010). Measuring Financial Literacy. *The Journal of Consumer Affairs*, 44(2), pp. 296-316.
- [24] Ida & Dwinta, C. Y. (2010). Pengaruh Locus of Control, Financial Knowledge, dan Income terhadap Financial Management Behavior. *Jurnal Bisnis dan Akuntansi*, 12(3), pp. 131-144.
- [25] Kaplan, Robert S., & Norton, David P. (1996). *The Balanced Scorecard: Translating Strategy into Action*. Boston: Harvard Business School Press.
- [26] Lusardi, A., & Mitchell, O. S. (2007). Baby Boomer Retirement Security: The Roles of Planning, Financial Literacy, and Housing Wealth. *Journal of Monetary Economics*, 54, pp. 205-224.
- [27] Moeheriono. (2012). *Pengukuran Kinerja Berbasis Kompetensi*. Jakarta: PT RajaGrafindo Persada.
- [28] Mutegi, H. K., Njeru, P. W., & Ongesa, N. T. (2015). Financial Literacy and Its Impact on Loan Repayment by Small and Medium Entrepreneurs. *International Journal of Economics, Commerce and Management*, 3(3).
- [29] Nofsinger, J. R. (2001). The Impact of Public Information on Investors. *Journal of Banking & Finance*, 25(7), pp. 1339–1366. DOI:10.1016/S0378-4266(00)00133-3
- [30] Potrich, A. C. G., Vieira, K. M., & Mendes-Da-Silva, W. (2016). Development of a Financial Literacy Model for University Students. *Management Research Review*, 39(3), pp. 356-376.
- [31] Rahayu, M. (2013). *Manajemen Strategik Kewirausahaan*. Malang: Universitas Brawijaya Press.
- [32] Ricciardi V. & Simon H. K. (2000). What is Behavioral Finance?. *Business, Education and Technology Journal*.
- [33] Roberton, Gordon. (2002). Balanced Scorecard Applications in Governmental Organizations. *The Journal of Government Financial Management*, 51(2), pp. 46-51.
- [34] Sabri, Mohamad Fazli. (2011). *Pathways to Financial Success: Determinants of Financial Literacy and Financial Well-Being among Young Adults*. *Graduate Theses and Dissertations, Digital Repository Iowa State University*.
- [35] Shefrin, H., & Statman, M. (2000). Behavioral Portfolio Theory. *The Journal of Financial and Quantitative Analysis*, 35(2), 127. DOI:10.2307/2676187
- [36] Tandelilin, E. (2010). *Portofolio dan Investasi Teori dan Aplikasi (Edisi Pertama)*. Yogyakarta: Kanisius
- [37] Tekçe, B., Yılmaz, N. & Bildik, R. (2016). What Factors Affect Behavioral Biases? Evidence from Turkish Individual Stock Investors. *Research in International Business and Finance*, 37, pp. 515-526.
- [38] Tiessen, P., & Waterhouse, J. H. (1983). Towards a descriptive theory of management accounting. *Accounting, Organizations and Society*, 8(2-3), 251–267. DOI: 10.1016/0361-3682(83)90033-8
- [39] Wang, F.A. (2001). Overconfidence, Investor Sentiment, and Evolution. *Journal of Financial Intermediation*, 10(2), pp. 138-170.
- [40] Website Resmi Otoritas Jasa Keuangan (OJK). “Survei Nasional Literasi dan Inklusi Keuangan (SNLIK) 2022”. <https://www.ojk.go.id/id/berita-dan-kegiatan/info-terkini/Pages/Infografis-Survei-Nasional-Literasi-dan-Inklusi-Kuangan-Tahun-2022.aspx>. Diakses pada 13 Mei 2023. ss
- [41] Website Resmi Organization for Economic Cooperation and Development (OECD). “PISA 2015 Assessment and Analytical Framework: Science, Reading, Mathematic, Financial Literacy, and Collaborative Problem Solving”. <https://www.oecd.org/education/pisa-2015-assessment-and-analytical-framework-9789264281820-en.htm>. Diakses pada 13 Mei 2023
- [42] Zaenal, A. (2012). *UMKM Sebagai tulang Punggung Perekonomian Nasional*. Bandung: Alfabeta