THE ROLE OF DIGITAL FINANCIAL LITERACY ON FIRM PERFORMANCE IN MICRO INDUSTRY

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ABSTRACT

Most of the businesses in the contemporary era have been touched by technology with all the conveniences it offers. The average growing business has understood digitalization in managing their business, especially digitalization in terms of finance and payments. However, digitalization in business needs to be balanced with good financial literacy so that the firm performance of a company can be measured clearly. The purpose of this study was to find out how the role of digital financial literacy on firm performance of SMEs in East Java. This research is a quantitative research with an explanatory approach. The population used in this study is MSME actors who apply digitalization to their business in East Java. The sampling technique used in this research is purposive sampling. Referring to the specified sample criteria, the research sample used in this study was 100 research respondents. The data collection method used in this study is a questionnaire with a linkert scale of 1 (strongly disagree) to 5 (strongly agree) via google form. The data analysis used in this research is SEM-PLS assisted by SmartPLS software. The results of the study explain that digital financial literacy has a significant effect on firm performance. The level of digital financial literacy allows business actors to understand digital financial products. Not only that, with a good level of digital financial literacy, business actors are also more aware of the risks and threats that arise with access to digital finance.

Keywords: digital financial literacy, firm performance, digital era, digitization

1. INTRODUCTION

In the era of increasingly competitive business competition, companies need to adapt quickly, both in terms of innovation, strategy and management of their resources. The thermometer for the progress of a business in adapting can be represented by the firm's own performance. Therefore, firm performance is a reflection of whether or not a company is healthy to compete in the future. Most of the businesses in the contemporary era have been touched by technology with all the conveniences it offers. The average growing business has understood digitalization in managing their business, especially digitalization in terms of finance and payments. However, digitalization in business needs to be balanced with good financial literacy so that the firm performance of a company can be measured clearly.

SME is a business that is unique in its management. Some of the principles applied in it use the family principle. The negative side that exists is that it has the potential to cause bias that can affect the performance of these SMEs. A small example is in the case of private taking and cash recording. If it is not recorded clearly, it can cause losses for MSMEs. Therefore, the importance of financial digitization in SMEs in order to help the company's performance to be more effective and efficient.

Financial digitization in SMEs needs to be balanced with good financial literacy. Technology is useful as a medium to support the performance of SMEs to be more effective, but there is a need for financial literacy to make various business decisions. As stated by Lo Prete (2022) which states that the use of digital payment tools and platforms is associated with digital literacy, all of which are part of financial literacy. Tony and Desai (2020); and Setiawan et al. (2022) explained in his research that digital financial literacy is a concept formed from a combination of aspects of digital literacy and financial literacy, where digital financial literacy contains several dimensions from these two aspects. Furthermore, digital financial literacy is a concept formed due to advances in financial technology, so literacy is needed to deal with these changes. The measurement of digital financial literacy itself is based on the combined dimensions of digital literacy and financial literacy (Lyons & Kass-Hanna, 2021).

The presence of technology that has penetrated financial digitization from the payment and financing aspect has now made it easier for SMEs, especially in developing countries, to be better. For example, SMEs in Douala, Cameroon, after they started using technology in terms of mobile financial services, saw a positive impact on the financial performance of SME businesses in the country (Talom & Tengeh, 2020). The use of the right technology in SMEs is considered important in order to improve their performance to survive and be able to compete in this increasingly competitive business era.

In developing countries such as Indonesia, the digitization of financial services is starting to occur and needs to be improved in each region. Since the Covid-19 pandemic hit, there has been a change in people's behavior which is now recommended to use an online system for both shopping and other financing to minimize the spread of the Corona virus. Of course, this change in behavior patterns will also have an impact on existing business actors, thus encouraging them, especially SME owners, to adapt and provide safe technology (Seldal & Nyhus, 2022).

The use of digitalization technology in SMEs is expected to be a driving force so that SMEs can keep up with the times and continue to move forward. Research on the importance of digitalization technology in SMEs shows that the Digital Financial Inclusion Index (DFIIC) has a significant positive correlation with the innovation performance of high-tech companies (Han & Gu, 2021). Technology needs to be applied by SME business actors in the country as a whole so as not to be run over by competitors from abroad. Empirical research has found a positive relationship between the technological environment and the survival opportunities of entrepreneurs (Audretsch et al., 2014).

There are several studies that explain the importance of financial literacy in improving company performance (Adomako et al., 2016; Adomako & Danso, 2014; Agyapong & Attram, 2019; Ali & Li, 2021; Ishtiaq et al., 2020; Tuffour et al., 2020; Wahyono & Hutahayan, 2021), but research related to digital financial literacy on company performance has only begun to be studied in the last two years and is very limited (E & Swarupa, 2022; Matita & Chauma, 2018; OECD, 2019). Starting from these problems, this research was conducted to see the role of digital financial literacy on the performance of MSMEs in the digital era in East Java. This study consists of four parts, namely the first in the form of an introduction, the second part of the research method, the third part of the results and discussion, and the fifth part of the conclusion and suggestions.

2. RESEARCH METHOD

This study was conducted to determine the role of digital financial literacy on the performance of MSMEs in East Java. This research is included in quantitative research with an explonatory approach. The population in this study is MSME actors in East Java who implement a digitalization program in their business, but the total population of this study is not known for sure (infinite population). There is no definite information and data explaining the MSMEs that have implemented the MSME digitization program in East Java. In connection with this, the sampling technique used in this study is purposive sampling, with the following criteria:

a. MSMEs that implement business/finance digitization programs
b. MSMEs in the East Java region
c. Minimum age of 1 year (Skala, 2019).
d. MSMEs with a minimum annual sales turnover of IDR 3,000,000 (Law No. 20 of 2008, 2008).

The research data was collected using a questionnaire with a linkert scale of 1-5, and the data obtained were 100 research respondents. Research data collection was done online, with an estimated time of retrieval for seven weeks. Analysis of the data used in this study is SEM-PLS.

3. RESULT AND DISCUSSION

Characteristics of Respondents

The characteristics of the research respondents describe the demographic distribution of the research sample as shown in table 1. Table 1 shows that the percentage of the number of research respondents mostly came from women as many as 51 respondents or by 51 percent. This condition illustrates that the sample of this study is dominated by female business actors. Based on the category of education level, the highest percentage came from the category of diploma/bachelor education level as many as 52 respondents or 52 percent. These results illustrate that most of the respondents in this study have a good level of education. Table 1 shows that the highest percentage of respondents for the business category is the culinary business by 40 percent or as many as 40 respondents. The results of this data collection illustrate that most of the businesses run by business actors in this study are culinary businesses. The highest percentage of respondents for operating income per year in the less than 300 million categories is 86 percent or as many as 86 respondents (See Table 1). This condition illustrates that business actors are micro business actors, so the level of business sales is still low. This result is also supported by the highest percentage of respondents for the duration of the business in the 12 months' category by 27 percent or as many as 27 respondents. This condition explains that most of the respondents in this research are start-up businesses where the category of start-up business is if the age of the business is less than three years. In this condition, the focus of business is to increase sales for business growth, so it is not surprising that business income is still low.

Table 1: Characteristics of Respondents

Personal Demography	Indicator	Frequency	Procentage (%)
Gender	Male	49	49.00
	Female	51	51.00
Total		**100**	**100**
Education Level	Elementary	1	1.00
	Junior High School	3	3.00
	Senior High School	37	37.00
	Undergraduate	52	52.00
	Master	7	7.00
Total		**100**	**100.00**
Business Category	Culinary	40	40.00
	Service	3	3.00
	Agribusiness	14	14.00
	craft	9	9.00
	Beauty	2	2.00
	Fashion	20	20.00
	Technology	7	7.00
	Automotive	3	3.00
	Health	2	2.00
Total		**100**	**100.00**
Sales of The Year	Less than 300 Million	86	86.00
	300 Million – 2,5 Billion	11	11.00
	More than 2,5 Billion	3	3.00
Total		**100**	**100**
SME's Age	12 Months	27	27.00
	12 Months – 24 Months	24	24.00
	24 Months – 36 Months	18	18.00
	36 Months – 48 Months	7	7.00
	48 Months – 60 Months	5	5.00
	More than 60 Months	19	19.00
Total		**100**	**100**

(Source: Primary Data, 2022)

Evaluation Model

The evaluation of the research model is used to evaluate whether the indicators that make up the research and the research construct have met the testing criteria, so it can be said that the research construct is good. Evaluation of the research model is done by measuring the validity and reliability of the research first. The measurement of the validity of the research is done by looking at the value of the outer loading of the study. The research indicator is said to be valid if the outer loading value is above 0.6, with a note that several other items have a value above 0.7 (Chin, 1998; Santoso, 2018). The results of the validity test show that there are two outer loading items that must be eliminated because they have a value less than 0.6, namely DFL 2.2 and DFL 2.3 items. This action is in accordance with the suggestions of research conducted by Chin (1998); Muafi and Roostika (2014) which explains that items that have a value of less than 0.6 should be eliminated and then tested for validity and reliability. The results of the retest show that all outer loading values are above 0.6 (see table 2), so the research items obtained are declared valid.

Apart from the outer loading results, the validity test results are also seen based on the AVE (Average Variance Extracted) value. The results of the study are said to be valid if the AVE value is above 0.50 (J. Hair et al., 2015; J. F. Hair et al., 2010). The test results show that the AVE value of all research variables is above 0.50, so it is said to be valid. In addition to the results of validity testing, this study also meets reliability testing. The research indicator is said to be reliable if the composite reliability value is above 0.7 and Cronbach's alpha is above 0.6. The results showed that the Cronbach alpha and composite reliability tests were both above 0.7 and 0.6, so the indicators of this study were said to be reliable. Thus, overall the research indicators are declared valid and reliable (see table 2).

Table 2: Validity and Reability

Variabel Laten	Items	Outer Loading	Cronbachs Alpha	AVE	CR	Keterangan
Digital Financial Literacy	**DFL1.1**	0.643	0.918	0.508	0.930	**Valid**
	DFL1.2	0.703				
	DFL1.3	0.701				
	DFL2.1	0.651				
	DFL2.4	0.701				
	DFL2.5	0.680				
	DFL3.1	0.702				
	DFL3.2	0.612				
	DFL3.3	0.744				
	DFL4.1	0.824				
	DFL4.2	0.868				
	DFL4.3	0.632				
	DFL4.4	0.753				
Firm Performance	**FP1.1**	0.853	0.957	0.724	0.963	**Valid**
	FP1.2	0.894				
	FP1.3	0.798				
	FP2.1	0.780				
	FP2.2	0.905				
	FP2.3	0.823				
	FP2.4	0.902				
	FP3.1	0.869				
	FP3.2	0.861				
	FP3.3	0.815				

(Source: Primary Data, 2022)

The result of the next evaluation is the coefficient of determination. The coefficient of determination is carried out to measure how far the model's ability to explain the variation of the dependent variable is. The coefficient of determination of firm performance is 0.648. This value explains that firm performance is influenced by digital financial literacy variables as much as 64.8%, while the remaining 35.2% is influenced by other variables not included in this study. In addition to measuring the coefficient of determination, the evaluation of the model is also seen based on the value of Q-Square predictive relevance (Q2).

Tabel 3. Coefficient Determination and Measurement of *Predictive Relevance* (Q^2)

	R Square Adjusted
FIRM PERFORMANCE(Y)	0.648
$Q^2 = 1 – [(1 – R_1^2)]$ $Q^2 = 1 – [(1 – 0.648)]= 0.648$	

(Source: Primary Data, 2022)

Note: Q^2 (*Q-Square predictive relevance)*, R_1^2 (R-Square dari *Firm performance*)

Q-Square predictive relevance (Q2) is used to see how well the observed values are generated by the model and also the estimated parameters. The value of Q-Square predictive relevance (Q2) is said to be relevant when the value of Q-Square predictive relevance (Q2) is close to 1. The calculation results show that the value of Q-Square predictive relevance (Q2) is 0.648, so it can be said that the research model is said to be relevant. The next test of construct evaluation is the Goodness of Fit Model (GoF). The Goodness of Fit Model (GoF) value was used to validate the overall research construct. The following are the results of the calculation of the Goodness of Fit Model (GoF) as follows:

$$GOF = \sqrt{\overline{Communality} \; x \; \overline{R^2}}$$
$$GOF = \sqrt{0.947 \; x \; 0.648}$$
$$GOF = \sqrt{0.614}$$
$$GOF = 0.784$$

The results of these calculations indicate that the Goodness of Fit Model (GoF) is 0.784, so the calculation results indicate that the Goodness of Fit Model (GoF) is strong or large. Thus, it can be concluded that the overall research model is feasible.

Results

The results of the evaluation of the research model as a whole meet the criteria for evaluating the model, so that hypothesis testing can be carried out. The results of hypothesis testing are said to be accepted if the p-value of the research construct is less than a significance value of 5% (<0.05). On the other hand, the results of hypothesis testing are said to be accepted if the p-value of the research construct is greater than the significance value of 5% (>0.05). The test results shown in table 4 show that the p-value of the influence of digital financial literacy on firm performance is 0.000 (β = 0.805, p-value = 0.000 <0.05), so H1 is **accepted.** The test results explain that digital financial literacy has a positive and significant effect on firm performance. The value of = 0.805, explaining that every one unit increase in digital financial literacy will have an impact of 0.805 on increasing firm performance.

Tabel 4 Result

Hipotesis	Keterangan	Path Coefficient	SE	P- Value	Intepretasi
H1	***Digital Financial Literacy –> Firm Performance***	0.805	0.039	0.000	Accepted

(Source: Primary Data, 2022)

Discussion

The results of this study indicate that digital financial literacy has a positive and significant effect on firm performance. These results explain that the level of digital financial literacy has an impact on increasing firm performance. This condition is because digital financial literacy is an important factor in improving firm performance. Hussain et al. (2018) said that financial literacy in a modern economy is considered an important skill and resource for SMEs to maintain their survival. Increased organizational knowledge base will enable financial literacy to improve financial performance (Ali & Li, 2021). Several previous studies also explain the importance of financial literacy in improving financial performance (Adomako et al., 2016; Adomako & Danso, 2014; Agyapong & Attram, 2019; Ali & Li, 2021; Ishtiaq et al., 2020; Tuffour et al., 2020; Wahyono & Hutahayan, 2021).

Huston (2010) emphasizes the importance of financial literacy in suppressing failure to make choices in financial decision making and enabling it to achieve the desired results. The study also explains that financial literacy is closely related to the use of alternative loan products (Huston, 2010), where this can have an impact on financial performance. This is because the use of alternative loan products is closely related to the management of business funding. When an individual does not have a good level of financial literacy, it allows companies to obtain loans with high interest costs. The high interest costs can affect the addition of the company's operating costs, and will affect the company's net profit. In aspects of financial literacy, it has offered many opportunities to produce high-quality finance, if it is evaluated correctly, such as broad knowledge aspects and the ability to estimate and evaluate financial information will create opportunities for companies to choose opportunities that arise efficiently at a cost. relatively low (Adomako et al., 2016).

4. CONCLUSION, LIMITATION, AND SUGGESSION

This study aims to determine how the role of digital financial literacy in firm performance. The results of the study explain that digital financial literacy has a positive and significant effect on firm performance. This condition is also possible because an understanding of financial literacy is balanced with an understanding of digital literacy, so that this knowledge can be applied in the use and understanding of digital finance products that function to improve firm performance. Not only that, a good level of digital financial literacy for business actors will make it easier for business actors to conduct financial transactions and open access to capital for their businesses. The ease of transactions and the opening of access to capital can later improve firm performance.

This study also has limitations in its research, such as the collection of research data during the pandemic, so that data dissemination can only be done online. The condition of distributing data online causes the time used to collect data to be longer. In addition, the sample of this study is MSME actors in East Java without classifying the type of business. In addition to the limitations of the study, this study also suggests adding research samples, so that the research results can better describe field conditions.

Each paper must have abstract with total amount of 200-300 words followed by keywords. It has to be a brief description of the problem, approach, results and conclusion of the work. The abstract format includes background, objective, methods, results and conclusion.

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