Risk-Taking as Moderating Variable for The Impact of Financial Literacy, Financial Inclusion and Digital Technology Utilization on MSMEs' Performance

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Abstract:

This research aims to find out how the superiority of human resources as MSME actors affects the performance of the MSMEs they manage, with moderate risk taking. The measures used as human resource excellence, or as independent variables are financial literacy, financial inclusion, use of digital technology, and moderated risk taking. Meanwhile, the dependent variable is the performance of MSMEs. The research method uses quantitative experiments, namely to test a proposed hypothesis. Structural Equation Modeling (SEM) data analysis technique using the SMARTPLS4 analysis tool. The research population is the alumni association business forum of SMA Negeri 28 Jakarta which consists of 237 MSME players. Of the 132 respondents who filled out the questionnaire, the data that could be used was 99 research samples. The results of the research show that financial literacy and the use of digital technology have a significant positive effect on the performance of MSMEs, risk taking can moderate the effect of financial literacy on the performance of MSMEs in a significantly positive way, financial inclusion has no significant effect on the performance of MSMEs, risk taking cannot moderate the effect of financial inclusion and use digital technology on the performance of MSMEs. The practical implications that can be made by MSME players by increasing the use of digital technology are effectively helping product marketing, learning facilities, and other conveniences that are often done digitally.

Keywords*: Financial Literation, Financial Inclusion, Digital Technology, Risk taking*

1. Introduction

Micro, Small, and Medium Enterprises, abbreviated as MSME, are businesses by individuals or business entities that support the national economy, reduce poverty, and increase the country's foreign exchange. During the Covid-19 pandemic, where large-scale social restrictions were implemented to prevent virus transmission, it in turn reduced MSMEs' income and Gross Domestic Product (GDP). The government then supports MSMEs by giving capital support of around IDR 1,300 to 1,400 trillionin in the year 2022-2023. However, the number of capital support is just 21-22%, it has not reached the target which is 30%.

MSME's sustainability does not only need support on capital. It also needs good management by its resource who has knowledge and skill, especially in finance to encourage him while making decision. These are known as Financial Literacy.

To understand how good financial literacy and financial inclusion for people in

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Indonesia, The Indonesian Financial Services Authority (OJK) has conducted several surveys in the year 2013, 2016, 2019, and 2022. The result is shown in the picture below:
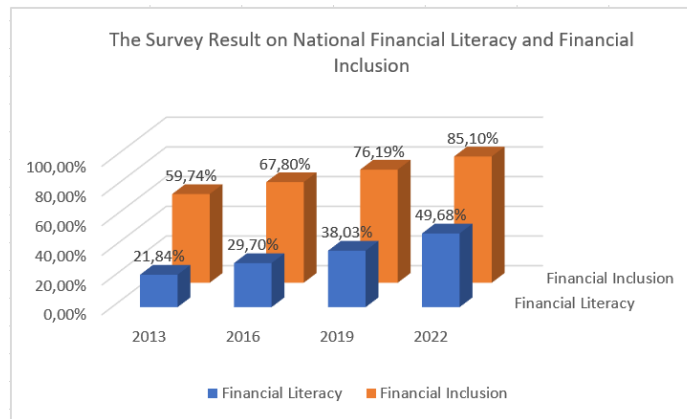
Figure 1. The Survey Result on National Financial Literacy and Inclusion
Source: Indonesian Financial Services Authority

The picture shows that the level of financial literacy and financial inclusion have reached the target of 35% for financial literacy, and 75% for financial inclusion. Unfortunately, the lowest percentage of financial literacy as per survey results is in microfinance institutions which is on 0,85%, whereas LKM is a very important instititions for MSMEs to channel capital to MSMEs.

Besides capital support, the government also provides a program to increase the competitive advantage and productivity of MSMEs known as PROMISE II (Promoting Micro and Small Enterprise through Entrepreneurs Access to Financial Services). This program supports MSMEs by improvements in digital and fintech sectors.

We can see the improvement in the digital sector of the MSMEs from the increasing number of MSMEs to 21,8 million MSMEs who are going digital. This number is higher compared with the era before covid-19 pandemic which was only 12,8 million. The number of Tokopedia seller has increased from 7 million to 14 million whereas the number of Shopee sellers from Indonesia has reached 97%. However, the Ministry of Communications and Information Technology in the year 2022 said that only 19 million units of MSMEs (equal to 29%) were doing business digitally. This number was so small compared to all 64 million MSMEs in Indonesia.

The data as mentioned still shows the gap phenomenon. Even though the survey results show an increase in financial literacy and inclusion, in fact many MSME players do not understand and have financial management skills. Even though the results of the financial inclusion survey have met the target, it turns out that there are still many people who are unbankable. Even though there is an increase in e-commerce users, the percentage is small compared to all MSMEs in Indonesia. The gaps in research results from previous research are summarized as follows.

Table 1. Research Gap

Research Gap	Research result	Researcher
There are differences in the influence of financial literacy on MSME performance	Financial literacy has a significant positive influence on the performance of MSMEs	Adomako et al., (2014) Sanistasya et al., (2019),Usama et al., (2018) Kulathunga et al., (2020), Maulida, (2022), Dwi Krismailinda, (2022)
	Financial literacy (borrowing or budgeting) has no effect on MSME performance	Chepngetich, (2016),Mita Kusumaningrum et al., (2023)
There are differences in the influence of financial inclusion on MSME performance	Financial inclusion has a significant influence on the performance of MSMEs	Sanistasya et al., (2018) Maulida, (2022), Dwi Krismailinda, (2022),Umiati, (2022)
	Financial inclusion has no effect on MSME performance	Mita Kusumaningrum et al., (2023)
There are differences in the influence of digitalization on the performance of MSMEs	Digitalization improves the performance of MSMEs	Khin & Ho, (2019),Kulathunga et al., (2020)
	Digital Technology mediates the impact of business strategy on the performance of MSMEs in NTB	Armiani et al., (2021)
	IT for e-commerce has a significant positive effect on MSME performance	Maulida, (2022)
	Digitalization has not been able to improve the performance of MSMEs	H. Zaied, (2012)
There is a difference in the influence of financial literacy on MSME performance with moderation in risk taking	Risk taking does not moderate the influence of financial literacy on MSME performance	Dwi Krismailinda, (2022)
	Risk taking mediates financial literacy on technological innovation	Duréndez et al., (2023)

Gap phenomenon and research gap are important reasons to do the next research. In this research, financial literacy, financial inclusion and digital technology utilization are used as independent variables which were moderated by risk-taking to prove their impact on MSME's performance.

FORMULATION OF THE PROBLEM

The phenomenon described in the background, attracts the following research questions:

1. How does financial literacy influence MSME performance?
2. How does financial inclusion affect MSME performance?
3. How does the use of digital technology affect the performance of MSMEs?
4. How does financial literacy influence MSME performance by moderating risk taking?
5. What is the effect of financial inclusion on MSME performance by moderating risk taking?
6. How does the use of digital technology affect the performance of MSMEs by moderating risk taking?

Literature Review
Performance

The performance of an organization can be measured by the Balanced Scorecard (BSC) framework. It's a method to measure executive performance to know the movement of an organization. This method uses a comprehensive view approach which is not only focused on the financial aspect. The perspective of organization performance in BSC framework is measured by a balance of financial aspects, customers, internal processesl and learning/growth. These four elements are expected to achieve goals and add value for all stakeholders in the organization (Kaplan & Norton, 2010).

Relation between Variables
The Impact of Financial Literacy on MSME's Performance

Financial literacy has a positive impact on the performance of MSMEs. A manager who has a good financial literacy will make a good business decision and then increase the business' performance. The business decision mentioned here is about the strategy and sustainability of the financial plan (Lusardi & Mitchell, 2014). The research by Adomako et al. (2014), Maulida (2022), Kulathunga et al. (2020), Dwi Krismailinda (2022) concluded that financial literacy impacts the performance of MSME positively. On the contrary, the mistakes in the financial aspect are caused by the lack of financial literacy (Lusardi & Mitchell, 2014). It can be concluded that higher financial literacy will increase the ability to financial management, and then will increase business sustainability. Based on this, researhcer proposed a hypothesis:

H1: Financial Literacy Has a Positive Impact on MSME's Performance

The Impact of Financial Inclusion on MSME's Performance

MSME needs capital for its production cost. MSME could use the capital that is supported by the government only if MSME has access to the financial institution or if the MSME is already bankable. Therefore, financial inclusion opens access for the MSMEs to get capital to make their business easier so it can increase their income. This is the same as the result of research by Usama et al. (2018) dan (Onuka, 2016). Based on this, researcher proposed a hypothesis:

H2 : Financial Inclusion Has Positive Impact on MSME's Performance

The Impact of Digital Technology Utilization on MSME's Performance

In the research by Kulathunga et al. (2020), technology literacy has a positive impact on the performance of MSMEs and the practice of ERM. IT for e-commerce has a positive impact on financial inclusion and MSME's performance (Maulida, 2022). Digital capability by network capability will increase MSME's performance. Digital orientation and digital capability have an impact on MSME's performance in financial and nonfinancial aspects through digital innovation mediators (Cenamor et al., 2019). Digital orientation and digital capability have an impact on the financial and nonfinancial performance of an organization (Khin & Ho, 2019). Based on the previous research, the researcher proposed a hypothesis:

H3 : Digital Technology Utilization Has Positive Impact on MSME's Performance

The Impact on Financial Literacy to MSME's Performance with Risk-taking as a Moderating Variable

When an entrepreneur makes a decision, he will face risk(s), but he should decide one. A good decision on complex risks will determine the successful goals and performance (Wekesa L, Maalu JK, Gathungu J, & Wainaina G., 2016). A good performance will be achieved by an organization if the business manager makes a good plan so he can achieve both his vision and mission in responsibly ways(Cavezzali & Gardenal, 2012). On the contrary, if a manager doesn't dare to take risks, the performance of an organization is not good if compared with the one who dares to take the risk (Mollah et al., 2017). Therefore, a hypothesis is proposed:

H4 : Risk-taking Could Moderat Positively an Impact of Financial Literacy on MSME's Performance

The Impact of Financial Inclusion to MSME's Performance with Risk-taking as a Moderating Variable

The existence of access of business managers to financial products and services not only helps them with the adequacy of capital, but also encourages him to make business decisions even though it's risky. The decision will increase the business performance if it's supported by a clear vision and mission in responsible ways. Therefore, the researcher proposed hypothesis:

H5 : Risk-taking Could Moderated Positively an Impact of Financial Inclusion to MSME's Performance

The Impact of Digital Technology Utilization to MSME's Performance with Risk-taking as a Moderating Variable

There are many things that MSMEs could improve its business by using digital technologies. They can use QRIS for payment, social media for marketing, digital courier, and also learning from webinars to know market taste and also to increase product quality and variety. All of these digital utilization are the risks that should be taken by the MSME's actor to achieve its organizational performance. A manager should dare to make changes with the support of digital technology to increase organizational performance. That's why the researcher proposed the hypothesis:

H6 : Risk-taking Could Moderat Positively an Impact of Digital Technology Utilization on MSME's Performance

Thinking Framework

Based on the proposed hypothesis, the theoretical thinking framework is shown on the picture below:
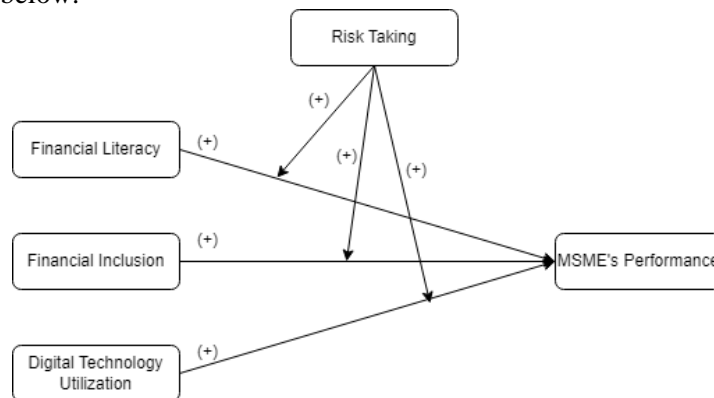
Figure 2. Theoretical Thinking Framework

2. Methodology

Research design

The research method uses quantitative experiments, namely to test a proposed hypothesis. Using Structural Equation Modeling (SEM) analysis techniques using the SMARTPLS4 analysis tool.

Population

The population in this research is MSME actors from various types of businesses at the SMAN 28 Jakarta alumni association business forum.

Sample

The sampling technique used in this research uses non-probability sampling with a purposive sampling method, namely sampling based on the availability of respondents, or representative based on the researcher's considerations. The criteria used in the research sample are:

(a) MSME players who understand financial products,
(b) Have simple money management knowledge,
(c) Be bankable, that is, have a savings account,
(d) As well as utilizing digital technology to help run its business.

MSME players who are members of the SMA Negeri 28 Jakarta Alumni Association Business Forum. Of the 132 respondents who filled out the questionnaire, data was used for 99 respondents who met the criteria.

3. Empirical Findings/Result

General Description of Research Objets

Respondent characteristics who filled the quistionarie are shown in the table below :

Tabel 2. Description of Research Objets

Respondent by Type of Business		
Type of Business	Number of Respondent	Percentage
Culinary	67	67,68%
Fashion	15	15,15%
Services	7	7,07%
Handicrafts	5	5,05%
Health products	3	3,03%
Beauty products	2	2,02%
Respondent by Operation Period		
Operation Period	Number of Respondent	Percentage
< 5 years	47	47,47%
5-10 years	40	40,40%
10-15 years	7	7,07%
15-10 years	3	3,03%
>20 years	2	2,02%
Respondent by Ages		
Age range	Number of Respondent	Percentage
<25 years	3	3,03%
25-35 years	14	14,14%
35-40 years	13	13,13%
40-45 years	18	18,18%
>45 years	51	51,52%
Respondent by Educational Background		
Educational Background	Number of Respondent	Percentage
Junior High School	1	1,01%
Senior High School	18	18,18%
Bachelor Degree	67	67,68%
Master Degree	12	12,12%
Doctoral Degree	1	1,01%
Respondent by Gender		
Gender	Number of Respondent	Percentage
Man	21	21,21%
Woman	78	78,79%
Respondent by Side Job/Main Job		
Side Job	58	58,59%
Main Job	41	41,41%

Structural Equation Model (SEM) Analysis

There are measurement models (outer model) and structural models (inner model) in SEM. The measurement model is used to determine the relation between latent variables and with manifest variables. It covers convergent validity, discriminant validity, and Construct Reliability. Structural model is used to make sure that the builted model is robust and accurate. The structural model is shown from indicator of Coefficient of Determination/R-Square (R^2) and Goodness of Fit (GoF).

Measurement Model (Outer Model)

The Measurement model explains the proportion of variance of each manifest variable (indicators) that can be explained in the latent variables. The measurement model will show which indicator is dominant to form latent variables. In this research, there are 34 manifest variables and 5 latent variable. Financial Literacy (X_1) was measured by

8 manifest variables, Financial Inclusion (X₂) was measured by 6 manifest variables, digital technology utilization (X₃) was measured by 7 manifest variables, Risk-taking (Z) was measured by 6 manifest variables, and MSMEs' performance (Y) measured by 7 manifest variables.

Convergent Validity

According to (W. Chin, 2010), each latent variable should explain its indicator variant at least 50%, while according to (Hair et al., 2000) it should be more than 0.7. If the cross loading value is more than 0.7 then the measure of individual reflexive indicators is considered high.
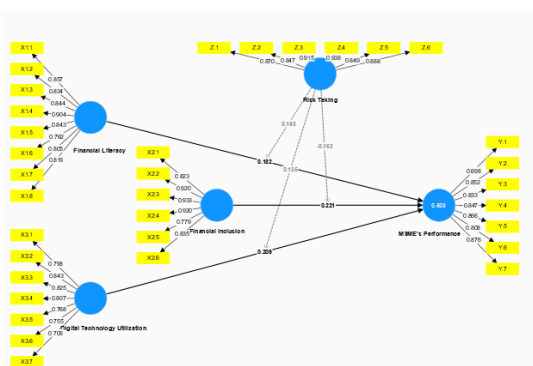
Figure 3. Research Structural Model
Sources: Result of Primary Data Processing, 2024

The Loading factor value is shown in the table below:

Table 3. Loading Factor

	Financial Literacy	Financial Inclusion	Digital Technology Utilization	Risk Taking	MSME's Performance
X1.1	0.857				
X1.2	0.834				
X1.3	0.844				
X1.4	0.904				
X1.5	0.843				
X1.6	0.762				
X1.7	0.805				
X1.8	0.819				
X2.1		0.823			
X2.2		0.920			
X2.3		0.933			
X2.4		0.920			
X2.5		0.779			
X2.6		0.835			
X3.7			0.706		
X3.6			0.755		
X3.5			0.768		
X3.1			0.798		
X3.4			0.807		
X3.3			0.825		
X3.2			0.843		
Z.1				0.870	
Z.2				0.847	
Z.3				0.915	
Z.4				0.938	
Z.5				0.849	
Z.6				0.888	
Y.1					0.698
Y.2					0.852
Y.3					0.833
Y.4					0.847
Y.5					0.866
Y.6					0.808
Y.7					0.876

Sources: Result of Primary Data Processing, 2024

Table 3 shows that almost all the outer loading values of each variable are more than 0.7 except 1 indicator with a value of 0.698. This value still meets the requirement

(W. Chin, 2010). This result proves that all indicators meet the requirement of *convergent validity*.

Discriminant Validity
Discriminant validity testing is shown by Fornell-Larcker and Heterotrait-monotrait-ratio (HTMT) (Henseler et al., 2015) as shown in the table below:

Table 4. Fornell-Larcker Criterion

Discriminant validity – Fornell-Larcker criterion					Copy t
	Digital Technology Utilization	Financial Inclusion	Financial Literacy	MSME's Performance	Risk Taking
Digital Technology Utilization	0.787				
Financial Inclusion	0.212	0.870			
Financial Literacy	0.205	0.208	0.834		
MSME's Performance	0.359	0.539	0.311	0.828	
Risk Taking	0.346	0.576	0.343	0.606	0.885

Sources: Result of Primary Data Processing, 2024

The values from Table 4 show that the value of square root AVE has a bigger validity discriminant compared to the correlation between other latent constructs. The values on the table show that financial literacy, financial inclusion, digital technology utilization, and risk-taking variables have good discriminant validity.

Table 5. Heterotrait-Monotrait Ratio (HTMT)

Discriminant validity – Heterotrait-monotrait ratio (HTMT) – List	
	Heterotrait-monotrait ratio (HTMT)
Financial Inclusion <-> Digital Technology Utilization	0.221
Financial Literacy <-> Digital Technology Utilization	0.229
Financial Literacy <-> Financial Inclusion	0.230
MSME's Performance <-> Digital Technology Utilization	0.381
MSME's Performance <-> Financial Inclusion	0.576
MSME's Performance <-> Financial Literacy	0.321
Risk Taking <-> Digital Technology Utilization	0.365
Risk Taking <-> Financial Inclusion	0.614
Risk Taking <-> Financial Literacy	0.359
Risk Taking <-> MSME's Performance	0.645

Sources: Result of Primary Data Processing, 2024

According to Henseler et al (2015), to produce discriminant validity, the value of HTMT should be less than 0,9. The research result in table 4 above shows that all HTMT is less than 0,9 and therefore meets the discriminant validity criterion.

Construct Reliability and Validity
Table 6. Construct Reliability and Validity

Construct reliability and validity – Overview				
	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
X1	0.938	0.948	0.948	0.696
X2	0.935	0.936	0.949	0.757
X3	0.898	0.912	0.919	0.620
Y	0.922	0.925	0.938	0.685
Z	0.944	0.946	0.956	0.783

Sources: Result of Primary Data Processing, 2024

Value of Cronbach's alpha of a variable is said to meet construct realibility on a structural model if the value of composite reliability is more than 0.7 (Chin, 1998). All of the research result values of Cronbach's alpha is more than 0.7 therefore it can be concluded that all variables have good and valid reliability.

To measure the level of consistency of respondent's data, we use construct reliability. If the value of composite reliability is more than 0.7 then it meets the requirement of construct reliability. From Table 5, the result of the research shows that all composite reliability values are more than 0.7. So they meet the criteria and we could continue to the next testing.

Structural Model (*Inner Model*)
Coefficient of Determination / R-Square Testing
Table 7. R-Square

R-square - Overview	R-square	R-square adjusted
MSME's Performance	0.508	0.470

Sources: Result of Primary Data Processing, 2024

R testing is the determination coefficient of an endogen construct. There are 3 (three classifications of R-value according to Sarwono & Narimawati (2015) which are 0.33 considered substantial, 0.19 considered moderate dan 0.508 considered weak. The result testing value of 0.508 means that it has moderate prediction ability to the exogen variable financial literacy, financial inclusion, digital technology utilization, and risk-taking.

Goodness of Fit (GoF)
Hypothesis Testing
The next testing is to evaluate the relation between latent construct of reseach hypothesis. To test hypothesis is based on T-*Statistic* and *P-values*. A hypothesis is said accepted if Statistics value more than 1,96 and P-Values less than 0,05 (using 0,5 confidence level). The result testing is shown in the table below:

Table 8. Hypothesis Testing Result

Hipotesis	Original Sample (O)	T Statistic	P-Values	Keterangan
Financial Literacy (X1)--> MSME's Performance(Y)	0,182	2,2	0,028	**Accepted**
Financial Inclusion(X2) --> MSME's Performance (Y)	0,221	1,958	0,050	**Rejected**
Digital Technology Utilization(X3) --> MSME's Performance (Y)	0,209	2,918	0,004	**Accepted**
Risk-taking(Z) x Financial Literacy (X1)--> MSME's Performance (Y)	0,163	2,004	0,045	**Accepted**

Hipotesis	Original Sample (O)	T Statistic	P-Values	Keterangan
MSME's Performance (Z) x Financial Inclusion (X2)--> MSME's Performance (Y)	-0,153	1,721	0,085	**Rejected**
Rik Taking(Z) x Digital Technology Utilization (X3)--> MSME's Performance (Y)	0,135	1,77	0,077	**Rejected**

Sources: Result of Primary Data Processing, 2024

Table 8 shows that all T statistics of hypothesis testing are more than 1.96. The impact of financial literacy on MSME's performance, the impact of digital technologies utilization on MSME's performance, and the impact of financial literacy with risk-taking as a moderating variables resulting in P-values less than 0.05 which means showing their positive significance for the 5 % level of confidence (alpha). But the impact of financial inclusion on MSME's performance, the impact of financial inclusion to MSME's performance with risk-taking as moderating variable, and the impact of digital technology utilization on MSME's performance with risk-taking as a moderating variable showing P values bigger than 0.05 which means insignificant for the 5% level of confident. If using 10% level of confidence, all relation have T-statistic more than 1.65 and P-values less than 0.1 which means all the relations show their significance.

DISCUSSION
The Impact of Financial Literacy on the MSME's Performance
The result of the research shows that financial literacy has a big impact to the increase of MSME's performance. The stronger financial literacy, the more success the MSME is. This result of research is the same as the result of research by (Adomako et al., 2014), (Sanistasya et al., 2019), (Usama et al., 2018), (Kulathunga et al., 2020), (Maulida, 2022), (Dwi Krismailinda, 2022).

With these results, it can be said that financial literacy has a significant influence on improving the performance of MSMEs. The stronger financial literacy will increase the success of MSME businesses. Thus, the first hypothesis which states that financial literacy has an influence on the performance of MSMEs is accepted.

The Impact of Financial Inclusion on the MSME's Performance
The result of the research shows that financial inclusion has an insignificant impact on the MSME's performance. Stronger financial inclusion doesn't increase business performance. This is the same as the result of research by (Mita Kusumaningrum et al., 2023).

Based on the description of the financial inclusion variable which has an average index of 76.5 (high), there is one indicator with the lowest index value of 75, namely related to knowledge of how to get money loans as business capital. The number 75 is included in the high index criteria, but it affects the average financial inclusion index and the results of hypothesis testing. If it is related to the theory of financial inclusion,

which means the existence of access to financial products and services needed by society so that they can achieve prosperity, it turns out that based on the data collected, knowledge related to access to financial products and services assessed with an index of 75 is not enough to prove the significance of the influence financial inclusion on MSME performance with a significance level of 5%.

The Impact of Digital Technology Utilization on the MSME's Performance
The result of the research shows that digital technology utilization has a big impact on the MSME's performance. The more we use digital technology will increase business performance. This result of research is the same as the result of research by (Khin & Ho, 2019), (Kulathunga et al., 2020), (Armiani et al., 2021), (Maulida, 2022).

With these results, it can be said that the use of digital technology has quite a big influence on improving the performance of MSMEs. The increasing use of digital technology will increase the success of MSME businesses. Thus, the third hypothesis which states that the use of digital technology has an influence on the performance of MSMEs is accepted.

The Impact of Financial Literacy on the MSME's Performace Moderated by Risk-taking
The result of the research shows that risk-taking could moderate the impact of financial literacy to the MSME's performance. The higher financial literacy of MSME's users, if it's moderated by risk-taking, will increase the successful of the business. We can conclude that Z or risk-taking is a quasi moderation, a variable that can strengthen the relation between the independent variable and dependent variable, and also could be an independent variable.

With these results, it can be said that risk taking can moderate the relationship between financial literacy and MSME performance. The higher the financial literacy of MSME players, if moderated by risk taking, the more successful the MSME business will be. Thus, the fourth hypothesis which states that risk taking moderates the relationship between financial literacy and MSME performance is accepted.

The Impact of Financial Inclusion on the MSME's Performance Moderated by Risk-taking
The result of the research shows that risk-taking could weaken the relation between financial inclusion to the MSME's performance insignificantly. Insignificantly, more financial inclusion if moderated by risk-taking will weaken the MSME's performance insignificantly. Thus, we can conclude that Z or risk-taking is a moderated predictor of the model.

With these results, it can be said that risk taking weakens the relationship between financial inclusion and MSME performance, but is not significant. The higher risk taking will weaken the influence of financial inclusion on improving MSME performance. Thus, the fifth hypothesis which states that risk taking moderates the relationship between financial inclusion and MSME performance is rejected.

The Impact of Digital Technology Utilization to MSME's Performance Moderated by Risk-taking.

The sixth hypothesis in this research is that risk taking moderates the relationship between the use of digital technology and the performance of MSMEs. With an original sample value (O) of 0.135, a T-statistic value of 1.77, a significance level of 0.077 (>0.05) and a p-value of the moderating variable (Z) on MSME performance (Y) of 0.0000 (<0.05), it can be it is concluded that Z or risk taking here functions as a moderating (independent) predictor in the model formed.

With these results, it can be said that risk taking cannot moderate the relationship between the use of digital technology and the performance of MSMEs. The higher the risk taking, the less influence the use of digital technology will have on the performance of MSMEs. Thus, the sixth hypothesis which states that risk taking moderates the relationship between the use of digital technology and the performance of MSMEs is rejected.

Research Limitation

There are some research limitations that could be enhanced in the next research, such as:

1. Choosing respondents who meet the required criteria, that is, respondent who optimally uses financial products and services.
2. Choosing respondent with a specific age range, and respondent with specific experience periode, so will impact their tought of financial decisions and also their courage to changes (to take the risk).

Future Research

1. Using mixed methods: Combining quantitative and qualitative approaches, for example by conducting in-depth interviews to gain a more comprehensive understanding of the factors that influence the use of financial inclusion and its impact on MSME performance.
2. Consider moderator or mediator variables: Test other variables that might moderate or mediate the relationship between financial inclusion and MSME performance, such as individual characteristics (age, experience, education level) or business characteristics (sector, scale, market access).
3. Expanding geographic coverage: Conduct research on MSMEs in a wider area, not just limited to the MSME Business Forum, to obtain more representative and generalizable results.

Practical Implications

It's hoped that this research could recommend MSME in order to increase its business by:

1. Increasing financial management and planning, which results a good financial decisions for an organization;
2. Increasing access to financial products and services to get capital easily;

3. Increasing the digital technology utilization to make marketing easier, to get more lessons on business, and other digital facilities utilization;
4. Increasing knowledge to increase the courage to take risks furthermore dare to change as an implication of knowledge of MSME's users

4. Conclusions

Based on testing and analysis of the answer of respondent on MSME's questionnarie, we can conclude as follows:
1. The more financially literate the MSME actor, the more increase MSME's performance will. The MSME's performance, especially in the financial aspect, will increase if there's an increase in knowledge of products by financial institutions, there's a separation between private accounts and business accounts, there's financial planning, and last, there's credit understanding.
2. The increasing access to the financial institution doesn't cause improvement on MSME's performance. Even though the existence of access of MSME user to the financial institution index average is high, but it's not enough to show that it impacts MSME's performance significantly.
3. The more utilization of digital technology will increase MSME's performance. Digital technology utilization such as e-commerce, advertising for social media, and features at financial institutions significantly impacts on the MSME's performance both in financial and nonfinancial aspects.
4. The research result shows that the more courage of MSME's players to take the chance, which of course has its risks, will increase the MSME's performance in both financial and nonfinancial matters.
5. The convenience offered by financial institutions to MSME's players who already have access to financial institutions doesn't encourage them to take advantage of these convenience. It can be concluded that risk-taking cannot strengthen nor weaken the influence of financial inclusion on the MSME's performance.
6. The courage of MSMEs' player to modify their product, or to offer different or new products couldn't strengthen nor weaken the impact of digital technology utilization on the MSME's performance

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