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## Determination of Financial Literacy and Financial Inclusion on MSME Performance and Sustainability

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### Abstract

*This article draws on the findings of previous studies to determine the effects of financial inclusion and financial literacy on the viability and performance of micro, small, and medium-sized enterprises (MSME). Twenty articles from national and international journals from 2020–2023 were used to compile this Systematic Literature Review (SLR). Where research shows that: Financial Inclusion affects MSMEs' performance; Financial Inclusion affects MSMEs' sustainability; Financial Literacy affects Financial Inclusion of MSMEs; and Financial Literacy affects Financial Inclusion of MSMEs.*

**Keywords:** *Financial Literacy, Financial Inclusion, MSME Performance, MSME Sustainability*

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### INTRODUCTION

The Financial Services Authority (OJK) of Indonesia will conduct their 2022 National Financial Literacy and Inclusion Survey (SNLIK) in order to gauge Indonesians' level of financial participation and literacy. Between July and September of 2022, a total of 14,634 persons (aged 15 to 79) from 34 provinces and 76 cities/districts will participate in SNLIK 2022. In addition, in 2016 and 2019, the National Financial Literacy and Inclusion Survey (SNLIK) was carried out. The financial literacy index is comprised of parameters of knowledge, skills, beliefs, attitudes, and behavior, while the financial inclusion index is comprised of usage parameters, all of which are used in SNLIK 2022. The SNLIK figures for 2022 show that the population of Indonesia has a financial literacy index of 49.68 percent, up from 38.03 percent in 2019. The financial inclusion index rose to 85.10 percent this year, despite the fact that this year's SNLIK period only achieved 76.19 percent. This shows that between 2019 and 2022, the difference between inclusion and literacy rates will shrink, falling from 38.16 to 35.42 percent. When comparing genders, for the first time, women have a higher financial literacy index than men do (50.33 vs. 49.05). From 2020 to 2022, OJK's strategic direction for financial literacy will focus on empowering women. While the financial inclusion index for women is lower than that of men (83.88 percent), it is greater for men (86.28 percent) (OJK, 2022).

The G20 Indonesia presidency re-emphasized the importance of digital financial inclusion and MSME financing in order to reduce inequality (*inequality*) due to global uncertainty as a result of the pandemic and geopolitical conditions. This is in line with the spirit *Recover Together, Recover Stronger* so that economic recovery can be accelerated. For this reason, every country needs a financial inclusion framework to encourage digitalization which has an impact on increasing productivity, as well as an inclusive and sustainable economy, especially for MSMEs, youth and women. At the same time, it is necessary to strengthen MSME financing guidelines. This was raised in the 2nd Global Partnership for Financial Inclusion (GPFI) Plenary Meeting organized by the Indonesian G20 Presidency, led jointly by the Bank of Italy as the co-chair as well as BI and the Ministry of Finance as a whole. *hybrid* from 12 to 13 May 2022 in Nusa Dua, Bali. (Bank Indonesia, 2022).

Indonesia's economy relies heavily on the work of micro, small, and medium enterprises (MSMEs). Statistical data shows that MSMEs dominate the Indonesian economic sector with more than 99%. The importance of the MSME sector is recognized because it contributes greatly to gross domestic product (GDP), where high GDP induces economic growth (Lutfi et al., 2022). Furthermore, MSMEs have helped lower the unemployment rate by creating jobs, and they have helped provide economic fairness to populations with lower incomes. According to statistics provided by the Ministry of Cooperatives and SMEs (2019), SMEs contributed 60.51 percent to national GDP this year. Meanwhile, there are now 65,4 million MSMEs in Indonesia, employing 96.92% of the total population of 123,3 million. Small and medium-sized enterprises (SMEs) account for a disproportionately big fraction of Indonesia's total job market. This means that the existence of MSMEs in Indonesia is considered important because they are able to survive and contribute a large amount of gross domestic product (GDP). MSMEs did receive special attention from the government, both before the co-19 pandemic and during the co-19 pandemic. The existence of MSMEs is very helpful in reducing unemployment and poverty levels. Based on data from Bank Indonesia in 2015, the MSME sector absorbed around 97% of the entire Indonesian workforce and contributed 60% to Gross Domestic Product. In February 2021, there were 8.75 million unemployed in Indonesia. As a result of their efforts to create employment opportunities for those with lower incomes, MSMEs have contributed to a decline in the national unemployment rate (BPS, 2021). The increase in the number of unemployed was due to the layoffs carried out by companies affected by the co-19 pandemic. The company is unable to bear losses by providing salaries to employees, while on the other hand the company's revenue has decreased significantly. Reducing employees is the easiest option for companies to reduce the potential for greater losses in the future. Good financial understanding and knowledge can help run MSME financial management optimally. The past pandemic has had an impact on decreasing income for MSME players (Santika & Maulana, 2020). According to a poll performed by Soetjipto (2020), 1,785 cooperatives and 163,713 MSME owners have seen the detrimental effects of the Covid-19 epidemic on their economic activities. Seventy-five percent saw their sales plummet.

## **METHODS**

This study uses the Systematic Literature Review method or commonly referred to as the systematic literature review research method, which is one of the methods in research that identifies, assesses, and interprets the problems that exist in a topic problem, and to answer the research questions that have been explained (Rizkar Saputra, M., & Nunung Herlina, 2021).

Information for this study came from 20 recognized national and international online journals where researchers had already published their findings. The researcher for this study looked for academic articles in electronic journals or online sources by using Google Scholar, Mendeley, ScienceDirect, and the Garuda portal with the keywords: financial literacy, financial inclusion, MSME performance and MSME sustainability. In this study, data was collected using a documentation approach. The data that has been obtained from various sources is collected in one document used to answer the problems that have been formulated. Journal criteria taken in this study are:

1. Journal publication timeframe is 5 years (2019-2023)
2. International journals and national journals
3. Full text original research article
4. Journal contents regarding literacy relations kfinance, financial inclusion, MSME performance and MSME sustainability

This study formed 5 research questions or RQ from the definitions made. According to (Thuan, N.H., et al., 2019) several characteristics that must be met by an RQ, these characteristics include:

1. A statement of curiosity or there is a question word in the statement made.
2. Obtained through an iterative and systematic process that is influenced by the scientific background of the researcher
3. Directing research activities.
4. Stimulate discussion regarding the results obtained or the estimated results to be obtained

Based on the above shared information, as well as the characteristics, the following is a proposed conceptual model for how to construct research questions or RQ.

RQ1 Effect of Financial Literacy on MSME Performance

RQ2 Effects of Financial Literacy on the Sustainability of MSMEs

RQ3 Effect of Financial Inclusion on MSME Performance

RQ4 The Effect of Financial Inclusion on the Sustainability of MSMEs

RQ5 The Effect of Financial Literacy on MSME Financial Inclusion

The research questions or RQ above are described in the form of a conceptual model as follows.

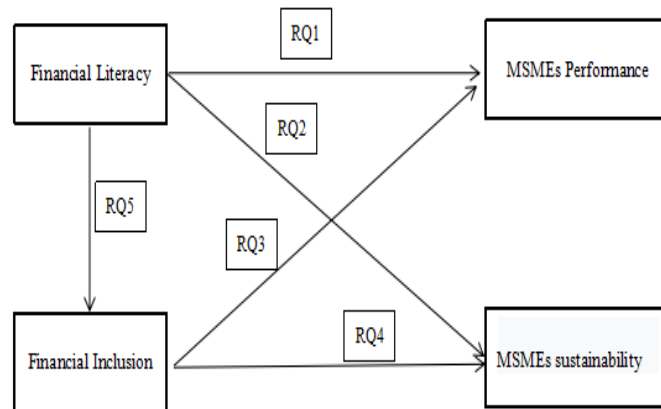
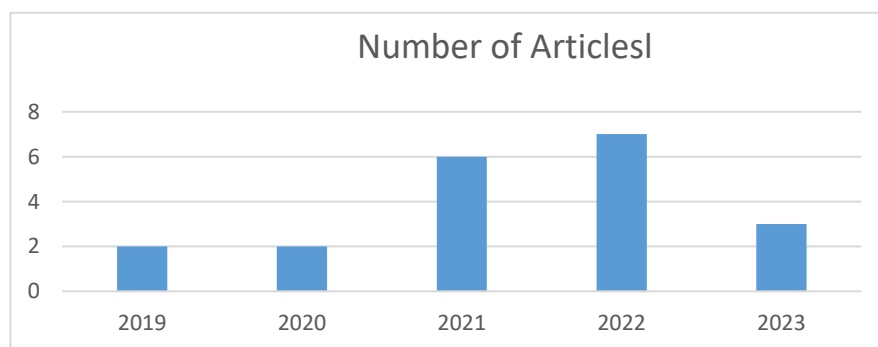


Figure 1. Conceptual framework

## RESULTS AND DISCUSSION

### Number of Periodical Articles

This section explains the number of journal publications from 2019 to 2023 which are used as material for discussion. There are 20 journals published both nationally and internationally as well as Scopus indexed related to literacy, financial inclusion, MSME performance and MSME sustainability. The distribution of articles can be seen in the following chart.



Source: Secondary data, 2023 (processed)

Figure 2 Number of published articles per year

### RQ 1 The Effect of Financial Literacy on MSME Performance

Findings from the study (Xu Nana et al. Only company proprietors in hukou villages saw a statistically significant positive correlation. On the other hand, there was no statistically significant correlation between enterprises and kotahukou, suggesting that the impact of financial literacy was minor. In Table 1, we can see that urban homeowners had a much higher mean FL score (1.34 vs. 1.11) and FL index (0.38 vs. 0.18) than their rural counterparts. According to studies (Melia Kusuma et al., 2021) MSMEs performance is impacted by financial literacy. Based on the hypothesis testing conducted, it is known that the value  $P$ -values of 0.003 is smaller than 0.050 and concludes that the hypothesis is accepted. Knowledge of MSME owners about banking products

makes the work carried out always planned and carried out according to the work program. Work errors or inaccuracies in decisions made in the past by MSME owners do not recur because of their financial knowledge. MSMEs will use financing products when it is felt that the running business is not in a high-risk position. The results of this study imply that financial literacy has an impact on MSMEs' effectiveness. Financial literacy is associated with improved business performance. The test for a correlation between financial knowledge (LIKA) and company success (KIUS) yielded a path coefficient of 0.600. The significance level is set at  $\alpha = 0.05$ , therefore the value is above 0.1. We therefore accept Hypothesis 2 (H2) in this investigation. According to (Mei Ruli & Kusumaningtias, 2021). The significance level is in the  $t$ -range, and the  $b1X1$  coefficient value for the financial literacy variable is around 0.555 (Timuneno, et al., 2023). The beta coefficient value is positive, indicating that an increase in the proportion of the value of the financial literacy variable is assumed to result in an increase in the proportion of the value of the financial performance variable. Financial literacy was proven to lessen the impact of financial limitations and boost technical innovation among MSME. For the long-term success of businesses, MSME performance takes the form of MSME technological innovation initiatives. This analysis used an empirical study with a sample size of 310 Spanish-speaking SMEs. Empirical evidence on how financial literacy affects technical innovation in MSME. For micro, small, and medium-sized businesses, easier access to financing is correlated with higher CEO financial literacy. This is significant because small and medium-sized firms in Spain have a difficult time accessing funding (de Lema et al., 2021).

### **RQ 2 Effects of Financial Literacy on MSME Sustainability**

As stated in their third hypothesis, MSMEs in Solo Raya are less likely to survive if their owners lack the financial literacy to keep their businesses afloat (Kusuma et al., 2021), based on the tests carried out it is known that the  $P$ -values are 0.480 greater than 0.050, these results conclude that the hypothesis is accepted. This research was conducted during the Covid-19 pandemic and there were restrictions on the movement of community activities which resulted in a decrease in MSME sales and income. A good level of financial inclusion in MSME owners makes financial management decisions more efficient. The application of online-based sales makes the income received by MSME owners still above the Break Even Point (BEP). MSME owners who lack capital make efforts to get capital assistance from various parties (family or friends) and seek bank loan restructuring, so that these efforts enable MSMEs to continue to carry out business continuity. The hypothesis that financial literacy has an effect on company continuity is also tested by looking at the path coefficient between LIKA and KEUS, which turns out to be 0.547 (INKA KEUS). Since this number is larger than 0.1 and statistically significant at the  $\alpha = 0.05$  level, the null hypothesis is rejected. (Mei Ruli N.H., Kusumaningtias R. 2021). Since the value of sig. 0.00 is less than the critical value of 0.05, we can conclude that  $H_a$  or the second hypothesis is correct. The data



analysis output shows that the significant value (sig) of the financial literacy variable (X) is 0.00. This suggests that knowing how to handle money has an impact on the longevity of a company. According to Ardiansyah et al. (2023), t-count for Financial Literacy in the study by Rinaldi Maulana et al., (2022) is 3.108, which is less than the t-table (1.965), and the significant value (sig) of 0.002 is higher than 0.05. Therefore, the first hypothesis is correct; financial literacy does have an effect on the longevity of businesses.

### **RQ 3 The Effect of Financial Inclusion on MSME Performance**

It has been established, as stated by Kusuma et al. (2021), that the financial inclusion hypothesis influences the efficiency of MSMEs in Solo Raya. Based on the tests conducted, it is known that the P-values of 0.048 are smaller than 0.050, so these results indicate that the hypothesis is accepted. The good level of financial inclusion of MSME owners makes MSME owners able to manage their finances better than before the pandemic. A good financial understanding allows MSMEs to carry out their business according to the established program so that cost management can be lower than before the pandemic and able to improve MSME performance and generate business growth. Testing the path coefficient between financial inclusion (INKA) and MSME performance (KIUS) shows the INKA → KIUS path coefficient value of 0.028. This value is in the range -0.1 to 0.1 and not significant at  $\alpha = 0.05$ . So, it can be concluded that the hypothesis in this study was rejected (Mei Ruli NH, and Rohmawati Kusumaningtias 2021). Financial inclusion in the form of ease of access, quality and use of financial institution services by MSMEs. These three things have no effect on the performance of MSME businesses. Currently, there is a Financial Technology (Fintech) that replaces the working system of traditional financial institutions. Timuneno et al. (2023) shows that the  $b_{2X2}$  coefficient value for the financial inclusion variable is around 0.356, the beta coefficient value is positive. This shows the effect of the financial inclusion variable. It can be assumed that any increase in the proportion of the value of the financial inclusion variable (X2) will automatically increase the value proportion of financial performance which is strengthened by a significance level that is in the range of 5% (significance level  $<5\%$ ). From the second hypothesis test, Susilo et al. (2022) deduced that t count (2.512), t table (1.99254), and Sig. (0.014) (0.05). That's why we can rule out H0 and accept H2. This lends credence to the second hypothesis, which proposes that financial inclusion influences the efficiency of MSMEs.

Basic financial knowledge is the most essential booster of financial literacy, according to an analysis of financial inclusion research data utilizing trial decision making and laboratory evaluation (DAMATEL). There is a need for policymakers to educate the populace about fundamental financial concepts including inflation, currency rates, interest rates, and taxation systems. Integration of financial education into K-12 and higher education, regular sessions and workshops on financial literacy, promotion of FinTech, open budget discussions with the public, promotion of cashless use, promotion of banking culture, simplification of tax regulations, increased financial knowledge penetration among women, and

increased financial inclusion are all examples of activities that aim to improve people's foundational understanding of money and finance. Given the widespread adoption of smartphones, FinTech's role in spreading news is very important. People are also keenly conscious of the need to save and invest for their future requirements, which motivates them to do so. Because most people's choices to save money don't yield the expected returns, this behavior does not ensure that the saver is financially savvy. Therefore, providing knowledge to make the right decisions is also very important for the government. (Swati Sharma, 2022)

#### **RQ 4 The Effect of Financial Inclusion on the Sustainability of MSMEs**

Kusuma et al. (2021) states that hypothesis 1 provides an explanation of financial inclusion influencing the sustainability of MSMEs in Solo Raya. Based on the testing carried out by hypothesis 1, it can be seen that the P-value of 0.010 is smaller than 0.050, so these results conclude that Hypothesis 1 (H1) is accepted. During the Covid-19 pandemic there were restrictions on the movement of community activities which resulted in a decrease in MSME sales and income. A good level of financial inclusion in MSME owners makes financial management decisions more efficient. The application of online-based sales makes the income received by MSME owners still above the Break Even Point (BEP). MSME owners who lack capital make efforts to get capital assistance from various parties (family or friends) and seek bank loan restructuring, so that these efforts enable MSMEs to continue to carry out business continuity. According to Ruli and Kusumaningtias (2021), access to financial services impacts a company's ability to stay open for business. A -0.031 result for the INKA KEUS path coefficient was found when the two concepts were tested for a correlation. The significance level at  $\alpha = 0.05$  is not reached because this result is in the insignificant range of -0.1 to 0.1. This leads us to infer that the hypothesis is false. Maulana et al. (2022) also found that the calculated t value of the financial inclusion variable produces a value of -2.416 which is smaller than the t-table (1.9653) and a significance value (sig) of 0.016 is greater than 0.05. This indicates that there is a substantial and negative impact on company continuity caused by financial inclusion. Since the P-value of 0.010 is less than 0.050, the research indicates that the hypothesis is accepted and financial inclusion affects the sustainability of MSMEs in Solo Raya (Kusuma et al. 2021). During the Covid-19 pandemic there were restrictions on community activities/activities which resulted in a decrease in MSMEs sales and income. A good level of financial inclusion in MSME owners makes financial management decisions more efficient. The application of online-based sales makes the income earned by MSME owners still in the range above the Break Even Point (BEP). MSME owners who lack capital make efforts to obtain capital assistance from various parties and seek bank loan restructuring, so that these efforts enable MSMEs to continue to carry out business continuity.

#### **RQ 5 The Effect of Financial Literacy on MSME Financial Inclusion**

Research (Bakhtiar, F., et al., 2022) which discusses the financial literacy variable (X) shows a sig value  $< \alpha$  (0.014 > 0.05). meaning that the financial literacy

variable (X) has a significant positive effect on financial inclusion (Y). This proves that financial literacy skills, which are a combination of financial knowledge and skills, help MSME owners, especially women, make choices or decisions related to finance, which increase in line with developments in financial inclusion. MSME owners take advantage of the services of various banks that develop financial services by facilitating the reach of their service users. The banks not only built several branches (offices) in various regions, but also provides ATM machines in various places that are easily accessible to customers. Not only that, the bank has also increased the convenience of the services they provide to their customers by issuing online services / online financial applications for their customers which can be applied via their respective smartphones. To better equip MSME owners in Makassar with the knowledge and skills necessary to manage finances, especially their financial decisions and policies, this endeavor seeks to remove various types of hurdles to the use of financial services by the public (financial inclusion). As well as the oblique result of financial education on financial inclusion via monetary mechanization. Financial literacy (X1) has a direct effect of 0.260 on financial inclusion (Y), and an indirect effect of  $0.858 \times 0.641 = 0.375$ , for a total effect size of  $0.260 + 0.375 = 0.792$ . As a result, there is a connection between financial literacy and the use of financial technology. The calculation value in Financial Literacy (X) obtained a t-count value of 13.440 and a t-table value with dk ( $dk = 100 - 2 = 98$ ) of 1.662, as described in a table by Kusuma (2019). Therefore, the sig value (0.000) is less than 0.05 and t count (13.440) > t table (1.662). If this is the case, then H1 is true and H0 is false. This shows that Financial Literacy has a major impact on people's ability to participate in the financial system. The study found that a p-value 0.05 alpha = 0.600 indicates a significant relationship between financial literacy and success (Pradana and Suarmanayasa, 2022).

## **CONCLUSION**

Previous study that has involved mapping and literature evaluation has led to the following conclusion: Financial Literacy affects the performance of micro, small, and medium-sized enterprises.

1. Financial Literacy affects the sustainability of MSMEs
2. Financial Inclusion on MSMEs Performance
3. Financial Inclusion affects the sustainability of MSMEs
4. Financial Literacy influences Financial Inclusion

Most of the influences between variables have a positive effect but there are also those that have a negative effect, namely the relationship between the financial inclusion variable and MSME performance. This is possible because the ease of access to financial products and services makes it easy for MSME players to get complacent in seeking or increasing capital from access to credit from financial institutions without thinking about the high risk of adding credit to develop their business without measuring how much risk they will face. For this reason, the researcher provides suggestions for further research in order to add the financial intelligence variable as a moderating variable in further research.



## **REFERENCES**

- Adhitya G.B.P. & Suarmanayasa, IN, (2022). Effects of financial literacy and social capital on financial inclusion in freight workers in the market banyuasri. *Bisma: Journal of Management*, 8 (2), 273 - 281.
- Alamsyah, MF (2020). The Influence of Financial Literacy and Quality of Financial Management on Financial Performance in Furniture SMEs in Gorontalo City. *Economic Forum*, 22(2), 245–255.
- Ardiansyah, LY, (2023). The Effect of Digital Financial Literacy on Business Development: Case Study of MSMEs in Praya Regency Central Lombok. *Journal : management, programming, economics and business*, 1(1). 1 - 8.
- Bank Indonesia. (2022). Financial Inclusion and Financing of the Key in MSMEs Encouraging an Inclusive Economy. Bank Indonesia.  
[https://www.bi.go.id/id/publikasi/ruang-media/news-release/Pages/sp\\_2412822.aspx](https://www.bi.go.id/id/publikasi/ruang-media/news-release/Pages/sp_2412822.aspx).
- BPS. (2021). Business survey results during the COVID-19 pandemic in 2021.  
<https://www.bps.go.id/publication/2021/12/20/6f33d7296975e65db707fade/hasil-survei-kegiatan-usaha-pada-masa-pandemi-covid-19.html>.
- Bakhtiar, F., et al., (2022). Analysis of financial and financial literacy technology towards financial inclusion in female MSME owners. *ACCOUNTABLE: Journal of Accounting and Finance*, 19 (2), 260 – 268.
- Hilmawati, MRN, & Kusumaningtias, R. (2021). Nominal: Accounting Research Barometer and Financial Inclusion and Literacy Management Finance on the Performance and Sustainability of the Micro, Small and Medium Enterprises Sector. *Nominal : Accounting and management research barometer*, 10(1), 135 – 152.
- Idawati, IAA, & Pratama, IGS (2020). Effect of Financial Literacy on Performance and The sustainability of MSMEs in Denpasar City. *Warmadewa Management and Business Journal (WMBJ)*, 2 (1).
- Inne Fadilah et al., (2022). Analysis of the effect of Financial Literacy, Financial Inclusion, and Financial Technology on the performance of Micro Enterprises Small and Medium Enterprises (MSMEs) in Bandung City. *Fair Value : Scientific Journal of Accounting and Finance*, 5 (3), 1347 - 1354.
- Kusuma, I, N, P. (2019). The Effect of Financial Literacy on Financial Inclusion Through Financial Technology for MSMEs in Bandar Lampung. *Journal of Business Management and Entrepreneurship*, , 4(5), 247–252.
- Melia Kusuma et al., (2021). Ifinancial inclusion and financial literacy to performance and sustainability of umkm in solo raya. *economic & journal business among makarti*, 14 (2), 63 - 72.
- Muhammad Ferdi (2020). Financial Literacy and Inclusion in the Indonesian Economy: An Application of Panel Data. *Journal of Economics and Social Dynamics*, 1(2), 51-70.

- OJK. (2022). Press Release: 2022 National Literacy and Financial Inclusion Survey. <https://www.ojk.go.id/id/berita-dan-kegiatan/siaran-pers/Pages/Survei-Nasional-Literasi-dan-Inklusi-Kuangan-Tahun-2022.aspx>.
- Pérez de Lema, et al., (2021).Analyzing the roles of CEO's financial literacy and financial constraints on Spanish SMEs technological innovation. *Journals Technology in Society*, 64 (2021) 101519, 1 - 12.
- Santika & Maulana. (2020).Decrease in MSME Income Due to Covid-19. *unpkediri proceedings*, 1 (1), 150 - 159.
- Saputra, M.R.,&Herlina, N. (2021).Relationship Between Socioeconomic Status, Literature Review Study. *Journal of Borneo student research*, 2 (3),1772-1780.
- Soetjipto, M.N. (2020).The resilience of the East Java umkm through the COVID-19 pandemic. *K-media: Yogyakarta*.
- Susilo, J. Yuneita, A. Azhari, S. (2022). Effect of Financial Literacy, Inclusion Finance, and Innovation on Umkm Performance. *Journal of Accounting Studies And Current Business*, 3(1), 1–10.
- Swati Sharma, (2022).Eneblers to financial literacy : A DEMATEL approach. *Journal processia computer science*. 214(2022), 520-527.
- Thuan, NH, et al., (2019). Construction of design science research questions. *Communications of the Association for Information Systems*, 44(1), 20.
- Timuneno, et al., (2023). Analysis of the Contribution of Financial Literacy and Inclusion Finance on the Financial Performance of the MSME Sector.Owner: Research & *JournalAccounting*, 7(2), 1540 - 1552.
- Yanti, WIP (2019). The Influence of Financial Inclusion and Financial Literacy on the Performance of MSMEs in North Moyo District. *Journal of Management and Business*, 2(1), 1–10.
- Xu Nanaet al., (2020).Financial Literacy and Formal Credit Accessibility: Evidence from Informal Businesses in China.*Finance Research Letters*, S1544 - 6123(19), 1-17.