



The Effect Of Financial Technology, Financial Inclusion, And Innovation On MSME Performance Financial Literacy As Moderation

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ABSTRACT

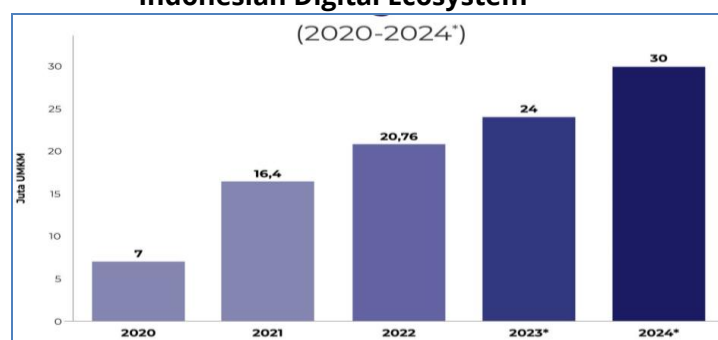
The purpose of this study is to examine the relationship of financial literacy in Magelang district with the influence of fintech, innovation and financial inclusion on the performance of micro, small and medium enterprises (MSMEs). Data from 84 participants were used, which were then analyzed using IBM SPSS version 23. Small and medium enterprise (MSME) participants in the service, trade, and manufacturing sectors of Magelang district were surveyed for this study. Using purposive sampling as its data research technique, this study utilized quantitative methodology. The researcher collected data by having participants fill out an online survey using Google Forms. The analysis approach used SPSS and MRA. The results obtained show that financial technology and inclusion have a significant positive effect, while innovation is not significant. Financial literacy strengthens business performance related to fintech and innovation, but not financial inclusion. While future researchers can explore additional factors that can be reviewed to see the implications of the goal to strengthen the competitiveness of MSMEs in Magelang District.

INTRODUCTION

When a country's economy is strong, micro, small, and medium enterprises (MSMEs) are able to weather financial storms and improve people's lives. Micro, small, and medium enterprises (MSMEs) in Indonesia contribute to the economy in three ways: first, they help reduce poverty; second, they bring in foreign exchange for the government; and third, they distribute income fairly among the country's small population (Ministry of Finance, 2022). The existence of MSMEs is the driver of the economy in Magelang but also in Indonesia. Data from the Office of Small and Medium Enterprises Cooperative of Central Java Province shows that there are 192,162 MSMEs in total. In fact, MSMEs account for 99% of all business units in Indonesia, making them one of the main pillars in maintaining economic stability, especially in the midst of the global crisis. This figure increased from 25,543 MSMEs in 2021

(datago.magelangkota, 2023). Although the performance of MSMEs shows a positive trend, there are challenges experienced by MSME players such as limited access to capital, lack of training and mentoring, and fierce competition. In line with this, there are opportunities such as increasing demand for MSME products and services, government support such as from access to capital, mentoring, and related programmes. MSME performance is the end product of achieving all agreed goals and objectives in the workplace, as measured by industry standards (Daswal, Nursanty, & Fauzi, 2023). To better understand how to foster the development and resilience of micro, small, and medium enterprises (MSMEs) in Magelang district, this study will examine the linkages between financial literacy, financial inclusion, and innovation mediated by financial technology. However, big challenges are still faced by MSME players, especially in regions such as Magelang District. Access to capital, low financial literacy, limitations in utilising digital technology are the main obstacles that reduce the competitiveness of MSMEs in the market. Conversely, the rapid trend of economic digitalisation opens up great opportunities for MSMEs to adopt financial technology and utilise the digital ecosystem to improve their business performance (Dinas Koperasi UMKM, 2024). It can be seen how the economy is growing with digital in Indonesia:

Figure 1: Digital Economy of Indonesian MSMEs Number Of Msmes That Enter The Indonesian Digital Ecosystem



From the results of the data overview, it shows that the growth in the number of MSMEs entering the Indonesian digital economy shows a very positive trend from 2020 to 2024. In 2020 as many as 7 million MSMEs have utilised the digital ecosystem, and this number increased sharply to 16.4 million in 2021, along with the pandemic push that accelerated technology adoption. By 2022, 20.76 million MSMEs will be part of the digital ecosystem, continuing this growth. We anticipate 24 million MSMEs by 2023 and target 30 million by 2024. However, a barrier to MSMEs' optimal use of financial technology is their poor financial literacy. To support this transformation, digital services training is required. With the growing digital ecosystem, MSMEs have great potential to contribute more significantly to economic growth and MSME performance in Indonesia. In other words, fintech is an invention that combines Touch Technology with the financial industry; it is a step forward in the evolution of financial services. (Monica, N., & Ruzikna, 2024). The tools and platforms developed by fintech have made inventory management, access planning, and real-time financial analysis easier for micro, small, and medium enterprises (MSMEs) to handle their finances. To ease financial constraints, one option is to create an online lending platform. The efficiency of micro, small, and medium enterprises (MSMEs) in utilising financial services and products is crucial for the development of a strong performance system, which in turn improves people's lives. (Monica, N., & Ruzikna, 2024). Financial inclusion is access to formal financial service products, such as credit, savings and insurance, which can help MSMEs to obtain capital, conduct financial transactions and manage their business finances more effectively. Financial inclusion can increase the efficiency of capital use, smooth cash flow and make it easier for MSMEs to make investments and business development. According to previous research conducted by (Istan, 2023) it should be

noted that the success of MSMEs is strongly influenced by financial literacy and inclusion. The introduction of new technologies enables innovation, which in turn allows organisations to grow and develop over time. Quality, product, features, and design style are all product qualities that can be used to innovate. Therefore, innovation can help MSMEs in creating new goods and services that attract customers, improve operational efficiency, and penetrate new markets (Hendriyanto, 2015). The aspect of financial literacy in society also plays an important role. MSMEs with good financial literacy can optimally utilise fintech services to improve operational efficiency, expand market reach, and improve access to capital.

LITERATURE REVIEW

Resource Based View

Wernerfelt (1984) and Barney (1991) created the Resource Based View. According to RBV theory, a firm's ability to maintain a competitive advantage depends on its internal resources that are distinctive and difficult to imitate. Property, human resources, organisational skills, and accumulated knowledge are examples of such resources. In other words, according to this notion, a firm's ability to thrive is directly related to the resources it possesses and how well its internal managers handle those resources. Using internal resources that are unique, difficult to reproduce, and irreplaceable can lead to long-lasting competitive advantage, according to the Resource Based View (RBV) (Barney, 1991). This theory emphasises the importance of locating, controlling and optimising resources in the context of micro, small and medium enterprises (MSMEs) to improve performance. Capital and infrastructure are examples of physical assets, while knowledge, skills, and client connections are examples of intangible resources. Acquiring valuable resources through effective resource management to develop winning strategies to achieve competitive advantage in the long term is possible. (Kisin & Setyahuni, 2024). By utilising the Resource Based View (RBV), one can examine the impact of resources such as technology, access to finance, and innovation on the success of Technology Finance, Financial Inclusion, and innovation initiatives. This approach provides an analysis of how the combination of internal resources such as innovation and external resources such as fintech as well as financial inclusion can create sustainable competitive advantage for MSMEs.

Effect Of Financial Technology On MSME Performance

Fintech is a booming financial technology that has the potential to change the way micro, small and medium enterprises (MSMEs) handle their money. Fintech has made it easier for small and medium-sized enterprises (SMEs) to get the financing they need by creating platforms that assist SMEs in financial management tasks including cash budgeting, real-time financial analysis, and general corporate administration. From what we know, SMEs that utilised the old-fashioned manual transaction system have now shifted to non-cash methods that are more convenient and accessible. Fintech has emerged as a viable alternative to conventional banking, opening up a world of online lending and payment gateways for micro, small, and medium enterprises (MSMEs). The resource-based perspective hypothesis says that organisations have an advantage when they can leverage resources that are rare, valuable, and difficult to imitate. Since fintech enables faster transactions and cheaper operational costs in reaching the market, this makes sense. (Monica, N., & Ruzikna 2024), With the help of fintech, the financial performance of micro, small, and medium enterprises (MSMEs) has improved significantly. Many micro, small, and medium enterprises have utilised fintech, a new development in the field of informal financial services. It takes over some of the functions previously performed by traditional financial institutions, such as facilitating payments, creating markets for entrepreneurs, and alleviating the challenges MSMEs face in terms of savings, loans, and equity participation (Kisin & Setyahuni, 2024). An example of a new sector that incorporates technological advancements into financial services is fintech. According to research conducted by (Kisin & Setyahuni, 2024) provides

research results that fintech has no positive effect on sustainability in MSMEs. However, in contrast to research conducted by Lestari & Hwihanus (2023), Alya Hapsari (2023), and (Putri, Wiralaga, & Sebayang, 2024) stated that fintech can affect the performance of MSMEs.

Financial Inclusion On MSME Performance

Financial inclusion itself refers to access to and use of financial products and services by individuals and firms. For MSMEs, financial inclusion can open up opportunities in accessing capital for loans for investment, business expansion and increasing working capital to improve their ability to compete and achieve business goals. The goal of financial inclusion is to promote growth that benefits all segments of society by reducing poverty and strengthening economic security. One of the resources that can give MSMEs a competitive advantage, according to the Resource-Based View theory, is access to formal financial services. Currently, there is no way to isolate MSME growth from financial issues; failing to do so will hinder financial performance and access. This is in line with research conducted by (Amry Mahdan Abrari, 2023) The results showed that micro, small and medium enterprises (MSMEs) benefited greatly from financial inclusion. Research with the same results was conducted by (Fajri, Indriasih, & Indriyati, 2021) who wrote the results of the study had a positive influence on the performance of MSMEs. According to research conducted by (Ayem, Chaerunisak, Prasetyaningtyas, Afrianingrum, & Hanun, 2024) proves that the performance of MSMEs is greatly improved by financial inclusion. In line with this research, there are previous studies that also strengthen this research (Istan, 2023) and (Armawan, I. M. A., Indraswarawati, S. A. P. A., & Yuniasih, 2023) with the results of research that financial inclusion has a positive and significant effect on MSME performance. Based on this description, this study will use the availability or access to formal financial services and welfare to measure the effects of using financial services that affect the cost of living.

Effect Of Innovation On MSME Performance

Organisations can develop and thrive through innovation, which brings new technologies, applications and services, as well as new markets and organisational structures. According to research conducted by (Trisnawati, Utomo, & Styaningrum, 2019), and (Muhammad Kelvin Zudhianshah 2022), confirmed that new ideas have a significant impact on the prosperity of SMEs. To strengthen the link between resource management and improved performance of MSMEs, the resource-based Outlook framework includes innovation as one of its critical components. For micro, small, and medium-sized enterprises (MSMEs), innovation means coming up with new ideas and implementing them to improve operational efficiency, increase market share, and provide more value to consumers. One type of innovation is the emergence of the internet market where previously only face-to-face transactions could be advertised on a local, state, national, and even global scale. According to research conducted by Muhammad Kelvin Zudhianshah (2022), it provides results that innovation has a significant positive effect on the performance of MSMEs. Micro, Small and Medium Enterprises must also be able to carry out a variety of product models as a form of innovating, as well as adding value to the products produced, besides that, individuals can create innovations in forms such as renewing ideas, business premises, making updates in management such as production procedures, marketing activities and others (Bagas Nalendro Ikhsan Sandityo, 2023).

Financial Literacy Strengthens The Relationship Of Financial Technology's Influence On MSME Performance

The financial literacy of MSME employees is critical in shaping their personal and business financial decisions. A moderate level of financial literacy is necessary so that everyone can avoid financial problems; problems in financial affairs are not often caused by low income, but can occur if money transfers are not careful. In line with Astari & Candraningrat's research (2022), the fact that financial literacy can reduce the negative impact of fintech is more evidence of its

beneficial impact. If micro, small and medium enterprises (MSMEs) can effectively handle the financial technology resources they have, the resource-based perspective hypothesis suggests that they will experience an increase in financial literacy. A person's level of financial literacy is proportional to their ability to handle their own money well and make reasonable judgements around it. Financial literacy is seen as an important tool for micro, small and medium-sized enterprises (SMEs) to maximise company performance and run their operations ethically. This is because with good financial literacy, SMEs can identify and access their financial resources (Daswal et al., 2023). According to OJK (2021), financial literacy is the ability to understand and manage one's own money, as well as concepts and ideas around money, in a way that encourages sound decision making. According to research conducted by Rahayu (2023), and Astari, P., Rika, N. P., & Candraningrat (2022), recognised that financial inclusion has a beneficial and substantial influence on the operational performance of MSEs. Although Paul's MSMEs are largely unaffected by financial technology, it does not mean that it does not affect their efficiency. To further enhance the link between the performance of micro, small and medium enterprises (MSMEs) with financial inclusion and technology, this study emphasises the need for financial literacy.

Financial Literacy Strengthens The Relationship Between The Effect Of Financial Inclusion On MSME Performance

The goal of financial inclusion is to ensure that all businesses, especially micro, small and medium enterprises (MSMEs), have access to banking services. Facilitating the responsible expansion of MSMEs is one of the strategies to support the Indonesian economy. Financial inclusion aims to ensure that everyone has equal access to financial services by removing all barriers (Aditya and Rita, 2024). In order for MSME players to run smoothly in all their business processes, financial inclusion is a must. Capital is one of the elements that help establish a company. Financially literate people are better able to handle their money, trust their own judgement, and make wiser choices with it, all of which contribute to the success of their company. According to previous research conducted by Aditya & Rita (2024), writing the results of financial inclusion research can be moderated by financial literacy and significant results that strengthen the role of financial inclusion on MSME performance moderated by financial literacy.

Financial Literacy Strengthens The Relationship Of Innovation's Effect On MSME Performance

Small and medium-sized enterprises (SMEs) rely on innovation to improve performance and compete in this ever-changing and disruptive business landscape. Having high financial literacy enables moderation, which is necessary for innovation to have its best effect. To better understand how financial literacy moderates the relationship between innovation and SME success, the Resource-Based View (RBV) theory is a helpful paradigm. Innovation occurs when fresh ideas are developed and implemented to improve current products, services, procedures and/or business models. Innovation can increase productivity and efficiency. Consequently, to succeed in today's dynamic marketplace, MSMEs must have a deep understanding of financial matters and foster a culture of constant innovation. To overcome the future difficulties that small and medium enterprises (SMEs) will face, innovation, technology, digital literacy, productivity, branding, marketing, facilitation and all other players in the business world need to collaborate. When it comes to boosting the competitiveness of Indonesia's national SMEs, the government is ready, provided it means successful digitalisation implementation techniques. Small and medium enterprises (SMEs) have challenges in implementing innovation due to limited resources including finance and technology. This, in turn, affects their market competitiveness. According to research conducted by (Widasari, 2023) and (Nursetiana, Hanifah, & Ismawati, 2022) noticed that accounting data and innovation research findings can mitigate the impact of

financial literacy on the performance of micro, small, and medium enterprises (MSMEs) and have a positive impact on corporate strategy

METHODS

The study population consisted of micro, small, and medium enterprises located in Magelang district. The researchers used purposive sampling, which is selecting people based on specified criteria, to collect data for this study. The interview data used in this study mostly came from MSMEs registered at the Magelang District Cooperative Office of Trade and MSMEs. This approach incorporates many tests, including multiple regression analysis, moderation testing, coefficient of determination, and classical assumptions.

RESULTS

Table 1. Frequency Distribution of Data

No.	Description	Total	Percentage
1.	Commerce	37	44%
2.	Service Provider	20	24%
3.	Culinary Business	25	30%
4.	Manufacturing	2	2%
Total		84	100%

The trade sector dominates with 44% followed by culinary 30% reflecting the high interest in food and beverages and the importance of innovation. The service sector accounts for 24% including services such as rentals, while the manufacturing sector is only 2% of the total sample.

Table 2. Frequency of Financial Technology Data

Category	Interval	Frequency	Percentage
Very High	37 – 40	300	44.64%
High	34 – 36	294	43.64%
Medium	31 – 33	57	8.48%
Low	28 – 30	13	1.93%
Very Low	25 – 27	8	1.19%

Based on the data presented, the application of financial technology (fintech) in Indonesia shows very good development. Most of the respondents were in the very high (44.64%) and high (43.64) categories, reflecting that fintech has been well received by the public and MSMEs. However, a small number of respondents were in the medium (8.48%), low (1.93%) and very low (1.19%) categories, indicating that there are still groups that have not optimally utilised fintech services.

Table 3. Frequency of Financial Inclusion Data

Category	Interval	Frequency	Percentage
Very High	34 – 35	298	50.68%
High	32 – 33	226	38.44%
Medium	29 – 31	50	8.50%
Low	26 – 28	10	1.70%
Very Low	23 – 25	4	0.68%

Furthermore, the frequency distribution of financial inclusion data is also classified as very good, with the majority of respondents in the very high (50.68%), high (38.44%) categories. This indicates that the community's access to formal financial services is getting wider. However, there is a small group in the moderate (8.50%), low and very low categories of 1.70% and 0.68% respectively, indicating the need to improve financial access and understanding among certain groups.

Table 4. Frequency of Innovation Data

Category	Interval	Frequency	Percentage
Very High	24 – 25	208	49.52%
High	22 – 23	166	39.52%
Medium	20 – 21	30	7.14%
Low	18 – 19	15	3.57%
Very Low	16 – 17	1	0.24%

In terms of innovation, most respondents were in the very high (49.52%) and high (39.52%) categories. This shows that innovation in the MSME environment has developed significantly, encouraging competitiveness and creativity. However, there are still 7.14 per cent of respondents in the medium category, and 3.57 per cent and 0.24 per cent in the low and very low categories respectively, which need to be improved through training and innovation support.

Table 5. Frequency of MSME Performance Data

Category	Interval	Frequency	Percentage
Very High	23 – 25	205	48.81%
High	21 – 22	194	46.19%
Medium	19 – 20	21	5.00%
Low	17 – 18	0	0.0 %
Very Low	15 – 16	0	0.0 %

Meanwhile, data on MSME performance reflects excellent results with 48.81% in the very high category and 46.19% in the high category. This confirms that the majority of MSMEs have achieved optimal performance. Very few MSMEs fall into the medium category (5.00%) and none into the low or very low categories, indicating positive developments in the MSME sector.

Table 6. Frequency of Financial Literacy Data

Category	Interval	Frequency	Percentage
Very High	43 – 45	389	33.33%
High	39 – 42	32	26.67%
Medium	35 – 38	62	20.00%
Low	31 – 34	17	13.33%
Very Low	27 – 30	19	6.67%

As for financial literacy, although most respondents were in the very high (33.33%) and high (26.67%) categories, there were still groups in the medium (20.00%), low (13.33%) and very low (6.67%) categories. This indicates that more efforts are needed to improve people's understanding of financial management and the use of digital services.

Overall, the figures highlight the importance of fintech, financial inclusion/innovation and financial literacy in supporting the success of MSMEs. However, to ensure it is felt across the community, we need to focus more on low- and middle-income groups, especially in terms of financial literacy

Simultaneous Test (Test f)

Table 8. F-test

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	121,542	3	40,514	15,335	.000b
	Residual	211,351	80	2,642		
	Total	332,893	83			

The data shows that the independent factors (Fintech, financial inclusion, innovation) can explain why the MSME performance variable is statistically significant ($0.000 < 0.05$), resulting in an F-count value of $15.530 > F\text{-table value of } 3.109$. It can be said that innovation, financial inclusion, and fintech all have an impact on MSME success at the same time.

R2 Coefficient of Determination Test

One way to measure the impact of independent variables on the dependent variable is to use the coefficient of determination (R^2) test. A lower R^2 number indicates that the independent variables have a harder time explaining changes in the dependent variable, and likewise, a higher R^2 value indicates the opposite. The R^2 test results are shown in the table below.

Table 9. R2 Determinant Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.604 ^a	.365	.341	1,625

Sumber : Data primer diolah, 2024

The adjusted coefficient of determination (squared R) is 0.341, according to the table, which means that the independent variables have a total influence of 34.1% on the dependent variable and other unobserved factors account for the remaining 65.9%.

Moderated Regression Analysis (MRA) Test

Through the table, it can be seen that the results of the MRA test in the study show that fintech has a negative regression coefficient of -1.153, indicating a negative relationship with MSME performance. However, the significant value of $0.077 > 0.05$ means that this effect is not significant, this could be due to the implementation of financial technology that is not fully optimal in supporting MSMEs. Financial literacy also shows a negative coefficient of -0.868, but not significant $p = 0.112 > 0.05$.

This shows that financial literacy may still be low, so it has not been able to have a positive impact on the performance of MSMEs. In the moderation results fintech * literacy has a positive coefficient of 0.034 and significant $p = 0.044 < 0.05$. And the value of t count $2.004 > t\text{ table } 1.663$.

Table 11. MRA Test of Financial Inclusion x Financial Literacy

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1.	(Constant)	50.044	20.783		2.408	.018
	Fintech	-1.153	.644	-1.986	-1.789	.077
	Litkeu	-.868	.540	-1.692	-1.609	.112
	Fintech*Litkeu	.034	.017	3.771	2.044	.044

Source: Primary data processed, 2024

Through the table, it can be seen that the results of the MRA test in the study show that fintech has a negative regression coefficient of -1.153, indicating a negative relationship with MSME performance. However, the significant value of $0.077 > 0.05$ means that this effect is not significant, this could be because the implementation of financial technology is not fully optimised in supporting MSMEs. Financial literacy also shows a negative coefficient of -0.868, but not significant $p = 0.112 > 0.05$. This shows that financial literacy may still be low, so it has not been able to have a positive impact on the performance of MSMEs. In the moderation results fintech * literacy has a positive coefficient of 0.034 and significant $p = 0.044 < 0.05$. And the value of t count $2.004 > t$ table 1.663.

Table 11. MRA Test of Financial Inclusion x Financial Literacy

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	30.894	14.253		2.168	.033
InklusiKeu	-.626	.516	-.983	-1.215	.228
Litkeu	-.388	.378	-.756	-1.026	.308
Inklusi*Litkeu	.021	.013	2.180	1.589	.116

Source: Primary data processed, 2024

There is no statistically significant relationship between financial inclusion and the performance of micro, small, and medium enterprises (MSMEs), as the table shows that the negative regression coefficient of -0.626 is not ($p = 0.228 > 0.05$). The fact that many MSMEs do not have access to or use conventional financial services may be a contributing factor. With financial literacy showing a negative and low coefficient, its effect on MSME performance is less pronounced. Moderated by financial inclusion * financial literacy shows results that cannot moderate the relationship between inclusion and MSME performance.

Table 12. MRA Test of Innovation x Financial Literacy

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	34.078	17.362		1.963	.053
	Inovasi	2.114	.807	2.237	2.619	.011
	Litkeu	1.382	.462	2.694	2.992	.004
	Inovasi*Litkeu	.051	.021	3.134	2.391	.019

Source: Primary data processed, 2024

A positive coefficient of 2.114 and a significance level of $p = 0.011 < 0.05$ were observed for the moderated innovation factor. This suggests that MSMEs (micro, small, and medium enterprises) are much more successful in innovating. Productivity and competitiveness are two areas where SMEs that can innovate tend to excel. Both the t-count value of 2.391 and the t-table value of 1.663 are more than 0.05, and the moderation sig value of 0.019 is still smaller. This means that if SMEs are better informed about money and how to handle their finances, they will be able to improve their performance.

DISCUSSION

Small and medium enterprises (SMEs) in Magelang Dec. Nagar district are the focus of this study. Muntalan region. Nice to meet you, Borobudur and the impossible areas. The researchers used a questionnaire with 84 defined samples as their primary data collection approach in this investigation. To facilitate the analysis of the data generated, the questionnaires were processed using IMB SPSS software version 23 which allows for simpler data formulation. Here we can summarise the findings of hypothesis testing in this study from the data analysis conducted using IMB SPSS version 23:

The Effect Of Financial_Technology On MSME Performance

With the help of modern financial technology, unbanked small and medium-sized enterprises can more easily access the capital they need. Isnaini (2024) reported this. The results showed that financial technology has a significant impact on the performance of MSMEs in five districts in Magelang Regency. The t-district value of 2.476 > tablet of 1.663 and the standardised beta coefficient of 0.264, both of which are related to the fintech variable (X1), prove this. With a value of only 0.015, it is much lower than the significance criterion of 0.05. Therefore, the null hypothesis of this study is correct. To improve the quality of its business transactions, the company has decided to use fintech. Similar to previous studies by Purwati (2024), (Astari & Candraningrat, 2022), and (Putri et al., 2024) Since this study shows that fintech significantly improves the performance of MSMEs, with financial literacy as a moderator, it can help MSMEs develop their business by highlighting financial literacy needs.

Effect Of Financial Inclusion On MSME Performance

Financial inclusion (X2) has a positive effect on MSME performance, according to the second hypothesis. This is supported by the t-count of 3.195 > t-table of 1.663, which is significantly lower than the 0.05 threshold of 0.002 and the standardised beta coefficient of 0.345. In other words, this proves hypothesis (H2). Therefore, it is clear that financial inclusion has a significant impact on MSME performance. Business success and expansion will be better if MSMEs are able to utilise it well.

The results of this study are in line with research conducted by Erawati & Pitaloka (2023), which has a positive effect on the performance of umkm with the research results of t count of 5.447 > 1.983 for t table and also research from Yanti (2019) and Trisnawati (2020) which states financial inclusion. According to Suyanto (2022), one of the most important aspects of financial inclusion is the ease with which individuals and businesses can access various goods, services, and institutions. Economic disparities will be reduced at different socioeconomic levels and the country's economy will recover faster if more people have access to financial services. Since financial inclusion can improve people's welfare, reach people from all walks of life who need financial assistance, and increase people's economic resilience through increased demand, it is crucial to evaluate how well it is being implemented. When individuals are able to use financial inclusion effectively, it facilitates their access to a wide range of financial goods and services.

Effect Of Innovation On MSME Performance

According to the third hypothesis, innovation improves the performance of micro, small and medium enterprises (MSMEs). However, this study found no support for this hypothesis (H3) as the innovation variable (X3) has a t-count of 1.902 > t-table of 1.663, which is significantly higher than the 0.05 level of 0.061 and the standardised beta of 0.175. Therefore, innovation does not seem to have a significant impact on the performance of micro, small, and medium-sized enterprises (MSMEs). Daswal et al. (2023) found similar results, which are consistent with our study. Innovation has no significant impact on MSME performance, according to the authors. Small and medium-sized enterprises (SMEs) are considered innovative when they develop new products, services or systems with the aim of making customers happier. When activities that were once local, such as buying and selling, can now be done on a national scale, that is an example of innovation. With the help of fresh and original ideas for things like product development, process improvement, and market penetration, micro, small, and medium-sized enterprises (MSMEs) will be able to boost their sales, improve their performance in the face of challenges, and gain an edge over their competitors. There are three types of innovation: product, process, and marketing. The findings of the study show that innovation is not the only factor affecting the performance of micro, small, and medium-sized enterprises (MSMEs). This is because innovations implemented by MSMEs often require extensive adaptation before they can arouse consumer interest in purchasing the marketed products. This is because, at times, consumer interests and needs, along with the addition of technology-based services and costs associated with innovative products, can be negatively impacted and difficult to adjust to. This research gives credence to the experiences of micro, small and medium-sized enterprises (MSMEs) that have introduced innovations but not seen improved performance, as well as those that have not introduced innovations but have seen reasonable progress as a result of their efforts.

Financial Literacy Strengthens The Relationship Between Financial Technology And MSME Performance

Supporting the fourth hypothesis that financial literacy can enhance the link between financial technology and MSME performance, this study found a positive correlation between financial literacy and fintech moderation, with a coefficient of 0.034 and a significant p value of 0.044 < 0.05. We may conclude that the fourth hypothesis holds water. The t-value of 2.004 exceeds the value of 1.663 in the table. This means that the relationship between MSME performance and independent factors is strengthened by moderation. This research is in line with research conducted by Astari, P., Rika, N. P., & Candraningrat (2022) With a p value lower than 0.05, the study shows that fintech has a positive effect on MSME performance. Moreover, as the level of financial literacy of MSMEs increases, so does the optimal utilisation of fintech to boost their performance, according to this study. The phrase 'fintech' refers to a new category of non-traditional financial services that MSMEs are beginning to rely on. Businesses, particularly SMEs, need to focus on fintech to ensure their survival. Financial technology (fintech) can replace traditional banks in many ways, according to Bank Indonesia (2024). This includes making payments easier, helping with savings and loans, and removing capital barriers for micro, small, and medium enterprises.

Financial Literacy Strengthens The Relationship Of Financial Inclusion To MSME Performance

The fifth hypothesis suggests that financial education can strengthen the link between the success of micro, small, and medium enterprises (MSMEs) and access to credit. There is no statistical significance ($p = 0.228 > 0.05$) in the regression coefficient of -0.626, as shown in the table. This suggests that micro, small and medium enterprises (MSMEs) have not benefited much from financial inclusion. This may be because micro, small and medium enterprises (MSMEs) are

underserved or have limited access to traditional banking services. We can conclude that MSMEs do not benefit much from financial literacy programmes that aim to increase their level of financial inclusion. This study is in line with the research results from Rahayu (2023), according to which financial literacy cannot hinder the impact of financial inclusion on the performance of micro, small and medium enterprises (MSMEs). The findings suggest that the link between financial inclusion and MSME performance has not been strengthened. While this finding has not significantly improved MSME performance, it is worth noting. Possible causes include lack of financial literacy knowledge, inefficient use of financial services, and limited access to formal financial services. In the context of financial literacy, while there have been efforts to improve MSMEs' understanding of financial management, these results suggest that improving financial literacy alone is not enough to ensure financial inclusion has a significant impact on MSME performance. While important, it is necessary to integrate other efforts such as expanding the reach of formal financial services, providing practical training and creating financial products that suit the needs of MSMEs.

Financial Literacy Strengthens The Relationship Between Innovation And MSME Performance

The moderated innovation factor shows a positive value of 2.114 and a significance level of $p = 0.011 < 0.05$. This shows that MSMEs (micro, small and medium enterprises) are much more successful in innovating. Productivity and competitiveness are two areas where SMEs that can innovate tend to excel. Both the t-count value of 2.391 and the t-table value of 1.663 are more than 0.05, and the nazi moderation sig value of 0.019 is still smaller. Therefore, MSMEs can increase their output through improved money management enabled by financial literacy. This study found that micro, small and medium enterprises (MSMEs) are much more successful when they innovate. Financial literacy moderation initiatives have the potential to improve the link between innovation and the performance of micro, small and medium enterprises (MSMEs). The results of this study are in line with the results of research conducted by Nursetiana (2022), who made an affirmative and substantial claim that innovation moderates financial literacy. In conclusion, innovation has a significant direct influence on the performance of MSMEs. However, good financial literacy can enhance that impact by allowing MSMEs to utilise their resources more efficiently. This suggests the importance of encouraging MSMEs to not only innovate but also improve their financial literacy through relevant training and education. These efforts will help create more competitive, productive and sustainable MSMEs.

CONCLUSION

Based on the research results and the researcher's remarks, fintech has a significant impact on MSME performance. Having access to capital has a favourable and substantial influence on the success of small and medium enterprises. There is no correlation between innovation and the performance of micro, small, and medium enterprises (MSMEs), and although financial literacy does improve the impact of fintech and innovation on MSME performance, there is no correlation between innovation and financial inclusion. The results of this study are expected that the government of Magelang Regency can pay special attention to the development of micro and small enterprises in the financial knowledge section. This research for business actors is expected to make more information about increasing income and can find out the factors that affect the performance of MSEs. Then for further research is expected to add samples, indicators and choose different research objects and look for more relevant theories widely so that researchers can produce better information than previous research. In this study, the financial inclusion indicator in the questionnaire statement still has limitations in detecting financial literacy, so further research can be carried out with more appropriate statement indicators.

LIMITATION

The data collected for this study only represents the opinions of respondents because the questionnaire is the main means of data collection. On the other hand, there are limitations to questionnaires, such as the fact that respondents may not always answer honestly or take the claims seriously. Financial accessibility, digital transformation, MSME Empowerment, Trust, and other factors can be further researched as the variables included only impact 60.4%.

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