EQUILIBRIUM: Jurnal Ekonomi Syariah
Volume 12, Number 2, 2024, 401-426
P-ISSN: 2355-0228, E-ISSN: 2502-8316
http://journal.iainkudus.ac.id/index.php/equilibrium
http://dx.doi.org/10.21043/equilibrium.v12i2.28577

The Nexus of Islamic Financial Literacy, Inclusion, and Technology with MSMEs Performance: A Study in East Java

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Abstract

This study aims to analyze the influence of Islamic financial literacy, inclusion, and technology on the performance of Micro, Small, and Medium Enterprises (MSMEs) in East Java. MSMEs are vital to economic growth, significantly contributing to Gross Domestic Product (GDP) and employment. However, they face challenges such as limited access to financial resources, inadequate financial management, and underutilization of financial products. This research addresses these gaps using a quantitative approach with Structural Equation Modeling-Partial Least Squares (SEM-PLS). Data was collected from 100 MSME respondents in East Java through questionnaires. The results reveal that Islamic financial literacy, inclusion, and technology significantly enhance MSMEs' performance. Financial inclusion mediates the relationship between Islamic financial literacy, Islamic financial technology, and MSMEs' performance. These findings highlight the importance of integrating Islamic financial principles into MSMEs' financial strategies to address resource and management challenges. This study offers originality by incorporating Islamic-based financial elements in examining MSMEs' performance, focusing on a region with significant economic potential. The research implications include encouraging policymakers, financial institutions, and educators to provide targeted financial literacy programs, foster inclusive financial ecosystems, and innovate Islamic-compliant financial technologies. Future studies could explore broader contexts or compare performance across regions to validate and expand these findings.

Keywords: Islamic financial literacy; financial inclusion; Islamic financial technology performances; MSMEs.

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INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) constitute a cornerstone of national economic development, significantly contributing to Gross Domestic Product (GDP) and employment generation. These enterprises have shown remarkable resilience during periods of financial turbulence, such as the 1998 monetary crisis and the COVID-19 pandemic, underscoring their pivotal role in fostering economic stability. However, MSMEs face persistent challenges, including constrained innovation, limited access to financial resources, and deficiencies in managerial and operational capacities. Addressing these systemic challenges necessitates strategic interventions, particularly enhancing financial literacy and fostering inclusive financial ecosystems.

Several studies have examined the nexus between financial literacy, financial inclusion, and technological integration in MSMES performance. (Gunawan et al., 2023) Demonstrated a positive relationship between financial inclusion, financial literacy, and MSMEs' performance in Medan, although financial inclusion remained underdeveloped. Similarly, (Fadilah et al., 2022) reported significant positive impacts of financial inclusion and financial literacy on MSMEs' performance in Bandung. Putri (2022) emphasized the critical role of Islamic financial literacy in promoting the sustainability of MSMEs in Parepare, highlighting its efficacy in addressing financial constraints. Furthermore, Nasution and Fatira (2020) found that Islamic financial literacy significantly enhances MSMEs' performance by equipping business owners with the knowledge to separate personal and business finances, facilitating better decision-making aligned with Sharia principles. Purnamasari et al. (2020) highlighted the role of Islamic financial technology in simplifying financial transactions and increasing MSMEs' productivity, underscoring the potential of digital platforms to bridge financial inclusion gaps. Lastly, data from the Indonesian Financial Services Authority (OJK) indicates a positive correlation between financial inclusion and MSME growth, particularly when coupled with sharia-compliant practices.

While these studies provide valuable insights, they predominantly focus on specific urban contexts or narrower financial literacy and inclusion aspects. This research addresses these limitations by focusing on East Java, a key economic hub characterized by a diverse and complex MSME ecosystem. The study's novelty lies in examining larger-scale business operations and integrating Islamic-

compliant financial technologies, offering a more comprehensive perspective on MSMEs' performance.

This study aims to evaluate the impact of Islamic financial literacy on MSMEs' performance in East Java, analyze the influence of financial inclusion on MSMEs' performance, and assess the role of Islamic financial technology in enhancing MSMEs' performance. Additionally, it aims to explore the mediating role of financial inclusion in Islamic financial literacy, Islamic financial technology, and MSMEs' performance.

The research contributes significantly by illuminating the interplay between Islamic financial literacy and Islamic financial technology in addressing core challenges faced by MSMEs. It provides robust empirical evidence from East Java, a critical economic region, to guide policymaking and financial sector strategies. Furthermore, the study offers actionable insights into developing inclusive financial ecosystems aligned with Islamic financial principles, fostering sustainable economic growth.

LITERATURE REVIEW

Islamic Financial Literacy

Financial literacy refers to an individual's ability and understanding of financial tools, encompassing fundamental financial concepts such as managing personal finances, separating personal and business finances, savings, loans, insurance, and investments (Djuwita & Yusuf, 2018). Financial literacy has a goal, namely, improving the quality of a person in making a decision and changing one's attitude and behavior in financial management properly to take advantage of the financial services and products needed to achieve prosperity (Nasution & Fatira, 2020).

Meanwhile, financial literacy emphasizes conventional financial understanding of financial management, investment, savings, loans, and insurance. Islamic financial literacy emphasizes more deeply the incorporation of ethical aspects and Islamic law into financial management. Islamic financial literacy describes individuals' knowledge and cognitive abilities in decision-making and applying concepts relevant to finance without violating Islamic law.

According to Nasution and Fatira (2020), Islamic financial literacy is based on Islamic law. *Halal, haram*, and *mushbooh* are the three categories that make up Islamic law. Under Islamic law, halal is everything acceptable and lawful. Haram is anything that is forbidden, unusable, and invalid. As for mushbooh, which translates to "black and white" (mashbuh, shubhat, and syubhat), it is doubtful or suspected and should be avoided. In the concept of sharia, there is also a prohibition on usury, *gharar*, and *maysir*, as has been emphasized in the Al-Quran in Surah Al-Baqarah [2:275] (The Qur'an, 2004):

وَاَحَلَّ اللّٰهُ الْبَيْعَ وَحَرَّمَ الرِّبٰوا۟

"But God has allowed trade and forbidden usury."

According to this verse, Allah the Almighty strictly prohibits the practice of usury in all forms. Islamic financial literacy becomes a reference for consumers to choose Islamic financial services and products that best suit their needs. With the hope that these Islamic financial products and services can improve their welfare through halal sharia principles and values, this requires knowledge of the benefits and risks and an understanding of the rights and obligations that have been determined.

Financial Inclusion

Financial inclusion encompasses the accessibility and effective utilization of financial services by underserved populations, including MSMEs. Grounded in the Inclusive Growth Theory, financial inclusion posits that equitable access to financial resources mitigates socioeconomic disparities and promotes widespread economic participation. In Islamic finance, financial inclusion is underpinned by principles of justice (adl) and cooperation (ta'awun), fostering an environment where financial resources are distributed equitably and sustainably.

Financial inclusion refers to the ability of individuals and businesses to access and use essential financial services like savings accounts, loans, and insurance in a safe, flexible, and convenient manner (Ibor et al., 2017). According

to Medias et al. (2022), financial inclusion is described as a comprehensive approach aimed at removing barriers to accessing financial institutions and making financial services available to everyone. A central objective is to ensure that all individuals have the right to access timely and well-informed financial products while maintaining affordability and convenience. This improved accessibility enhances the efficiency of capital distribution, supporting economic growth and lowering barriers to obtaining productive credit, ultimately helping to improve community welfare.

The success of financial inclusion depends not only on accessibility but also on the suitability of products and services to meet diverse community needs (Financial Services Authority, 2017). The National Strategy for Financial Inclusion, as outlined in Presidential Regulation Number 114 of 2020, emphasizes its role in fostering economic growth, stabilizing the financial system, reducing poverty, and narrowing social and regional inequalities. In addition, Hassan et al. (2020) highlight that financial inclusion encourages informed financial decision-making by offering suitable financial products, helping businesses develop, and promoting community prosperity.

Islamic Financial Technology

Financial technology addresses unique challenges by creating innovative financial products, services, or business models (Chuen & Low, 2018). Bank Indonesia defines financial technology as the use of technology to develop new financial products, services, and strategies that impact monetary stability, financial systems, and payment systems. Islamic financial technology (Islamic fintech) represents a convergence of innovation and Islamic finance, offering digital solutions that adhere to sharia principles. Anchored in the Disruptive Innovation Theory, Islamic fintech revolutionizes traditional financial ecosystems by introducing transformative technologies that create new value networks. According to Christensen (1997), disruptive innovation is characterized by creating products or services that initially cater to underserved markets but ultimately redefine industry standards. In the context of sharia fintech, this translates into platforms that provide inclusive, ethical, and efficient financial services to MSMEs.

Islamic fintech leverages disruptive innovation by addressing inefficiencies and barriers in conventional financial systems, such as high transaction costs, limited accessibility, and lack of transparency. Examples include peer-to-peer (P2P) lending and crowdfunding platforms that operate on Sharia principles, facilitating capital acquisition while ensuring compliance with Islamic ethical standards. These innovations disrupt traditional banking models by offering cost-effective alternatives tailored to the unique needs of MSMEs.

Islamic financial technology has grown rapidly, integrating Islamic principles into financial products and services. According to Usman et al. (2022), Islamic financial technology combines technological innovation with Islamic-based financial services to streamline business transactions, investment, and fund distribution. Islamic principles guide digital financial services under *Fatwa* of the National Sharia Council-Indonesian Ulema Council (DSN-MUI) No.117/DSN-MUI/II/2018, ensuring that transactions avoid usury, *gharar*, *maysir*, *tadlis*, and *dharar*. As narrated by Muslims, Prophet Muhammad PBUH condemned those involved in usury, highlighting its prohibition. Additionally, financial products must adhere to Sharia contracts and ethical business practices. This fatwa addresses the need for clear regulations in response to rapid technological advancements and growing access to financial services. As Hidayatullah et al. (2021) explain, Islamic financial technology benefits MSMEs by offering P2P lending and crowdfunding services. Islamic P2P lending provides an alternative capital source, particularly for MSMEs, and avoids prohibited elements like usury in conventional financing (Adinugraha, 2017).

Hypothesis Development

The influence of Islamic financial literacy on MSMEs performance

Financial literacy can enable people to make efficient decisions with all their financial resources (Hidajat, 2015). A person with financial expertise, especially obtained through financial literacy, tends to be able to make financial decisions such as debt management (Tello-Gamarra et al., 2022). The obstacles commonly experienced in the development of MSMEs are limited funding sources. Enhancing the performance of MSMEs requires a strategic focus, one of which is improving entrepreneurs' knowledge of capital management through Islamic financial literacy. Understanding the Islamic financial system, particularly in the

muamalah aspect, is crucial for business actors, as it promotes a humanistic and ethical approach (Nabila et al., 2023). Islamic financial literacy has been shown to positively impact MSMEs' performance (Puschmann, 2017), indicating that when Islamic financial literacy increases, MSMEs tend to perform better (Deviana, 2020). Barus et al. (2024) further suggest that MSMEs in Indonesia can achieve significant growth when their owners possess a strong understanding of Islamic financial literacy.

H1: Islamic financial literacy significantly positively influences the performance of MSMEs.

The influence of financial inclusion on MSMEs performance

Financial inclusion in business operations and financial services enables MSME actors to enhance sales growth, create jobs, and improve capital and profit development (Fadilah et al., 2022). It directly contributes to better MSMEs' performance (Gomber et al., 2017), suggesting that expanding access to financial services positively impacts the welfare of users, leading to improved business outcomes (Ratnawati, 2020). For MSME owners, having access to diverse financial products and services tailored to their financial circumstances is essential for meeting business needs and improving their overall welfare, both in the present and the future (Rahim & Balan, 2021).

H2: Financial inclusion has a significant positive influence on the performance of MSMEs.

The influence of Islamic financial technology on MSME's Performance

The prohibition of usury and gharar transactions safeguards MSMEs from losses associated with transaction uncertainties and escalating installment costs (Nabila et al., 2023). Adhering to halal principles in business operations can enhance MSMEs' performance, particularly given the growing number of Muslim consumers (Armiani et al., 2021). Additionally, Islamic financial technology plays a crucial role in building trust and redirecting transaction activities (Demirgüç-Kunt et al., 2020), thereby increasing security and comfort for MSMEs and contributing to improved business performance (Nugraha et al., 2022).

H3: Islamic financial technology has a significant positive influence on the performance of MSMEs.

Islamic financial literacy on MSMEs performance through the mediation of financial inclusion

MSMEs that have been able to carry out financial management, inspection, and control by utilizing the ease of accessibility of products and services of Islamic financial institutions can be said to be good. This is because MSMEs cannot build a business without having insufficient knowledge and understanding of Islamic finance (Hassan et al., 2020); besides that, MSMEs must understand the problems that occur by deciding to get various financial solutions (Wulandari, 2023). With good Islamic financial literacy and assistance from adequate financial inclusion, MSMEs can apply their abilities to make various decisions. MSME owners with literacy knowledge and an understanding of managing finances, assisted by utilizing access to financial products and services, can maximize welfare and minimize obstacles to improving their performance (Sohilauw, 2018).

H4: Islamic financial literacy significantly positively influences the performance of MSMEs through the mediation of financial inclusion.

Islamic financial technology on MSMEs performance through the mediation of financial inclusion

MSMEs who use Islamic fintech find it easier to access services provided by Islamic financial institutions so that users can take advantage of this technology to manage and avoid or reduce unexpected financial risks in the future in the business they run (Bachtiar et al., 2021). The higher the use of Islamic fintech by MSMEs, the higher the achievement of MSMEs performance results. Suppose MSMEs can maximize the facilities and benefits of Islamic fintech with easy access to services. In that case, it will increase sales of MSMEs, especially when the perpetrators become calm, especially in Sharia-compliant facilities (Nasution & Fatira, 2020).

H5: Islamic financial technology has a significant positive effect on the performance of MSMEs through the mediation of financial inclusion

Islamic financial literacy on financial inclusion on MSME performance

The existence of a public understanding of Islamic financial literacy can increase the use of Islamic financial service information that can be used for financial decision-making in financial management, making it easier for MSMEs to achieve business prosperity (Bachtiar et al., 2021). Financial inclusion has not been achieved optimally. If there is an information asymmetry problem in financial knowledge, it can hamper the ability of MSMEs to compete (Septiani & Wuryani, 2020). Therefore, one way that can help improve the performance of MSMEs is by enriching the financial knowledge of MSMEs actors so that management and accountability for finances can be accounted for properly (Aribawa, 2016).

H6: Islamic financial literacy significantly has a positive influence on financial inclusion and the performance of MSMEs.

Islamic financial technology on financial inclusion on MSMEs performance

According to Nugraha et al. (2022), there is a significant relationship between the use of fintech and financial inclusion. The higher use of financial technology will support better financial inclusion. Financial institutions facilitating Islamic financial technology make innovations in business activities to facilitate practicality in making easy and fast transactions. With the advancement of information technology, the public using digital financial services will find it easy to access Islamic financial services and products that facilitate their business needs (Nurfalah & Rusydiana, 2019).

H7: Islamic financial technology significantly positively influences financial inclusion on MSMES performance.

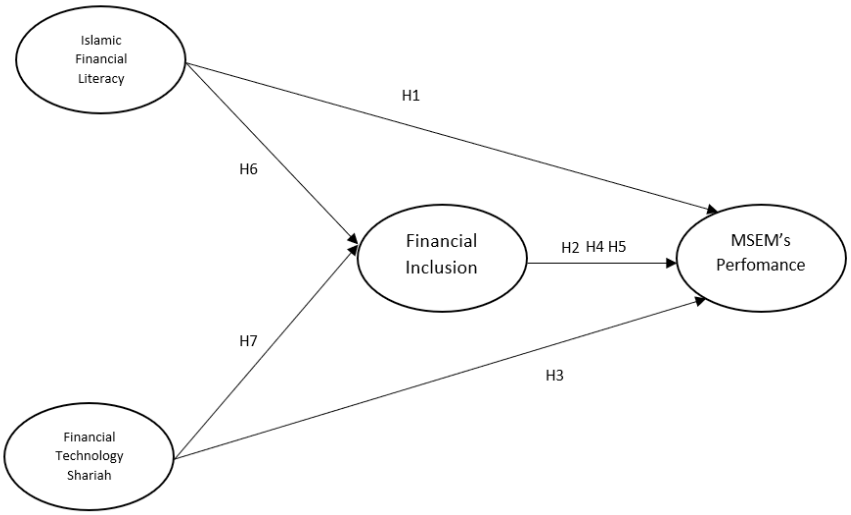


Figure 1 *Model Analysis*

Source: Developed as part of this research.

RESEARCH METHOD

The study adopts a quantitative research design to evaluate the relationships between Islamic financial literacy, financial inclusion, Islamic financial technology, and MSME performance. The variables were measured using validated scales adapted from previous studies, ensuring reliability and relevance within the context of this research. For Islamic financial literacy, the questionnaire items were adapted from Nasution and Fatira (2020), focusing on halal financial practices, financial planning, and risk management. Financial inclusion was measured using indicators adapted from Ibor et al. (2017), covering accessibility to financial services and their usage. Islamic financial technology was evaluated using a scale adapted from Purnamasari et al. (2020), which includes aspects like peer-to-peer lending, crowdfunding, and compliance with Sharia principles. MSME performance was measured using a combination of financial and non-financial indicators as adapted from Rofiaty (2012).

The sampling technique employed is purposive sampling, targeting MSME owners in East Java who meet specific criteria. Participants must be over 18 years old, have active MSME operations, and utilize financial services that align with

Sharia principles. A sample size of 100 respondents was determined to ensure adequate representation and statistical power for the analysis. Data collection was conducted through structured online and in-person questionnaires, providing flexibility and broad accessibility to the target population.

Structural Equation Modeling-Partial Least Squares (SEM-PLS) was utilized for data analysis, allowing for the examination of complex relationships between variables, including mediating effects. This approach ensures robust and reliable insights into the dynamics between Islamic financial literacy, financial inclusion, Islamic financial technology, and MSME performance, aligning with the study's objectives.

RESULTS AND DISCUSSION

Results

The research object is MSMEs in East Java Province. This province is one of the largest contributors to the national GDP and has many economic sectors, such as agriculture, manufacturing industry, trade, and services.

Table 1 *Respondent Demographics*

Respondent Profile	Number	Percentage
Gender		
Female	41	41%
Male	59	59&
Age		
17 – 26	6	6%
27 – 42	43	43%
43 – 58	39	39%
>58	12	12%
Length of MSMEs Activity		
1 year	11	11%
1 – 3 Years	14	14%

3 – 5 Years	28	28%
>5 Years	47	47%
Sales Turnover		
<25 million	10	10%
25 – 50 million	70	70%
50 – 100 million	10	10%
101 – 500 million	7	7%
>500 million	3	3%
Field of MSMEs		
Travel & Tourism	7	7%
Jewelry	14	14%
Fashion	21	21%
F&B	31	31%
Property	6	6%
Electronics & Gadgets	5	5%
Beauty & Skincare	4	4%
Retail	2	2%
Building Materials	2	2%
Others	8	8%

Sources: Respondents Result (2024)

Following the respendent characteristics analysis, the next step involves using Smart PLS 4 software for analysis. The PLS method comprises two stages: the outer and inner models. According to Ghozali (2016), the outer model is employed to assess validity and reliability by examining the correlation between latent variables and their indicators. Construct validity is evaluated by ensuring a strong association between a concept and its associated question items while maintaining a weaker relationship with other variables.

The validity test for reflective indicators is that the loading factor value must be> 0.7 (Latan & Noonan, 2017). Based on the data tested, the research indicators are appropriate and representative of the variables.

Table 2 *Construct Reliability and Validity Values*

	Cronbach's alpha	Composite reliability	Composite reliability	Average variance extracted (AVE)
Financial Technology Sharia	0.841	0.845	0.883	0.556
Financial Inclusion	0.879	0.882	0.904	0.541
Performance of MSMEs	0.886	0.894	0.909	0.555
Islamic financial literacy	0.897	0.898	0.917	0.580

Sources: Result of Smartpls 4.0 (2024)

Cronbach's alpha is considered a less suitable reliability metric in the context of SEM-PLS than composite reliability. Composite reliability allows a minimum value of >0.7. Cronbach's alpha and who are reported to be above the minimum level in Table 2. Each variable in this study can be said to be reliable.

The minimum average variance extracted (AVE) value is 0.5 or greater than 0.5. The higher the AVE value, the better the construct or latent variable in explaining the variance of each indicator. Based on Table 2, it shows that the AVE value is appropriate and meets the requirements. This shows that all latent variables have absorbed> 50% of the variance of each indicator.

Table 3 *Discriminant Validity – Cross Loadings*

	Islamic Financial Technology	Financial Inclusion	Performance of MSMEs	Islamic Financial Literacy
FTS1	**0.770**	0.457	0.450	0.520
FTS2	**0.774**	0.452	0.503	0.452
FTS3	**0.716**	0.452	0.423	0.481
FTS4	**0.764**	0.453	0.552	0.481
FTS5	**0.728**	0.412	0.421	0.353

FTS6	**0.721**	0.323	0.395	0.309
IK1	0.453	**0.734**	0.508	0.488
IK2	0.386	**0.737**	0.509	0.455
IK3	0.361	**0.725**	0.464	0.471
IK4	0.453	**0.724**	0.468	0.584
IK5	0.432	**0.754**	0.514	0.438
IK6	0.386	**0.709**	0.387	0.386
IK7	0.378	**0.731**	0.629	0.539
IK8	0.516	**0.770**	0.554	0.541
KU1	0.452	0.498	**0.726**	0.415
KU2	0.469	0.452	**0.721**	0.345
KU3	0.405	0.484	**0.770**	0.393
KU4	0.575	0.658	**0.777**	0.674
KU5	0.464	0.513	**0.781**	0.549
KU6	0.466	0.570	**0.748**	0.545
KU7	0.440	0.439	**0.716**	0.425
KU8	0.366	0.445	**0.714**	0.388
LKS1	0.334	0.428	0.423	**0.718**
LKS2	0.491	0.549	0.496	**0.785**
LKS3	0.485	0.559	0.525	**0.803**
LKS4	0.386	0.568	0.475	**0.742**
LKS5	0.444	0.537	0.427	**0.744**
LKS6	0.447	0.476	0.548	**0.785**
LKS7	0.493	0.487	0.522	**0.753**
LKS8	0.483	0.459	0.502	**0.759**

Sources: Result of Smartpls 4.0 (2024)

The cross-loading method tests whether an indicator is better and adequate by comparing the loading value on the desired construction and whether an indication is superior or sufficient when compared to the loading value on other constructs. The ideal cross-loading value is> 0.7. The loading value between financial technology sharia and FTS1 is 0.770, higher than that between FTS1 and other variables. This shows that FTS1 enters the financial technology Sharia latent variable and applied to the loading values of other variables.

Table 4 *Discriminant Validity – Fornell – Larcker Criterion*

	Islamic Financial Technology	Financial Inclusion	Performance of MSMEs	Islamic Financial Literacy
Islamic Financial Technology	0.746			
Financial Inclusion	0.574	0.736		
Performance of MSMEs	0.619	0.693	0.745	
Islamic Financial Literacy	0.587	0.669	0.645	0.762

Sources: Result of Smartpls 4.0 (2024)

The method assesses discriminant validity by comparing the square root of the Average Variance Extracted (AVE) value for a latent variable with the correlation values between those variables and other latent variables. Discriminant validity is considered satisfactory if the square root of the AVE for each construct exceeds the correlations between that latent variable and others. According to the table provided, the square root of the AVE for the Islamic financial technology variable is 0.746, which is higher than the correlation of 0.574 between Islamic financial technology and financial inclusion. This indicates that the study demonstrates good discriminant validity according to the Fornell-Larcker criterion.

Table 5 *R-Square*

	R-square	R-square adjusted
Performance of MSMEs	0.579	0.566

Sources: Result of Smartpls 4.0 (2024)

The influence of the dependent variable on the independent variable is determined by looking at the R-square percentage. The R-square value can be

said to be getting better when the number is getting closer to one. In the Table 5, financial inclusion, Islamic financial technology, and Islamic financial literacy have an impact of 57% on the MSMEs performance variable.

Table 6 *Path Correlation*

	Original sample	Sample mean	Standard deviation	T -statistics	P -values
Islamic Financial Technology-> Financial Inclusion	0.277	0.279	0.102	2.725	0.006
Islamic Financial Technology-> Performance of MSMEs	0.259	0.253	0.093	2.776	0.006
Financial Inclusion-> Performance of MSMEs	0.388	0.387	0.103	3.769	0.000
Islamic Financial Literacy-> Financial Inclusion	0.507	0.507	0.097	5.224	0.000
Islamic Financial Literacy -> Performance of MSMEs	0.233	0.241	0.117	1.987	0.047

Sources: Result of Smartpls 4.0 (2024)

The results of the study revealed significant relationships among the variables. Islamic financial technology has a positive and significant effect on financial inclusion, with a path coefficient of 0.277 and a p-value of 0.006. As highlighted by Purnamasari et al. (2020), this finding supports the notion that Sharia-compliant financial technology enhances access to financial services. Moreover, Islamic financial technology directly impacts MSMEs' performance

with a path coefficient of 0.259 and a p-value of 0.006, aligning with Hidayatullah et al. (2021), who emphasized the transformative potential of fintech in MSMEs' operations. Financial inclusion itself demonstrated a strong positive effect on MSME performance, with a path coefficient of 0.388 and a p-value of 0.000. This result underscores the critical role of equitable access to financial services in fostering business growth (Ibor et al., 2017) .

Furthermore, Islamic financial literacy strongly influences financial inclusion, with a path coefficient of 0.507 and a p-value of 0.000, corroborating the findings of Nasution and Fatira (2019), who identified financial literacy as a key enabler of inclusive financial practices. Islamic financial literacy also has a significant direct effect on MSME performance, although with a lower path coefficient of 0.233 and a p-value of 0.047. This result highlights the importance of Sharia-compliant financial knowledge in improving decision-making and resource management, consistent with Putri (2022). Additionally, financial inclusion mediates the relationship between Islamic financial literacy and Islamic financial technology with MSME performance, emphasizing its pivotal role in translating knowledge and technological advancements into tangible business outcomes. These findings collectively provide robust evidence for the interconnected impact of Islamic financial literacy, financial inclusion, and Islamic financial technology on MSMEs' performance, aligning with both theoretical frameworks and prior empirical studies.

Table 7 *Specific Indirect*

	Original sample	Sample mean	Standard deviation	T-statistics	P-values
Islamic Financial Technology -> Financial Inclusion -> Performance of MSMEs	0.108	0.111	0.055	1.972	0.049
Islamic Financial Literacy -> Financial Inclusion -> Performance of MSMEs	0.197	0.198	0.069	2.852	0.004

Sources: Result of Smartpls 4.0 (2024)

The P-value of 0.049 and T-statistic of 1.972 indicate that Islamic financial technology has a significant positive indirect effect on MSMEs' performance through financial inclusion. Similarly, Islamic financial literacy shows a positive indirect effect on MSMEs' performance with a P-value of 0.004 and a T-statistic of 2.852. Both results highlight that increases in Islamic financial technology and Islamic financial literacy improve MSMEs' performance via financial inclusion (Klapper et al., 2015).

Directly, Islamic financial literacy has a P-value of 0.047 and a T-statistic of 1.987, showing a significant impact on MSMEs' performance in East Java. Key indicators of Islamic financial literacy include knowledge of Islamic finance principles, ability, attitude, and trust in Islamic products, which help MSMEs make informed decisions. (Barus et al., 2024) support this, noting that Indonesian MSMEs thrive when owners possess strong Islamic financial literacy.

Discussion

According to Nabila et al. (2023), the constraints experienced by MSMEs are mostly in capital and capital management. Therefore, with the existence of Islamic financial literacy, MSMEs in East Java have attitudes and abilities that can help them understand the benefits and risks of choosing the right financial product according to their needs. In addition, understanding the benefits and risks can advance their welfare based on sharia principles. The results of this study align with research (Deviana, 2020) that Islamic financial literacy affects the performance of MSMEs, which means that the higher the Islamic financial literacy of individuals, the better their business performance.

Islamic financial literacy on the performance of MSMEs through the mediation of financial inclusion of 0.004, which means below <0.05 indicates that Islamic financial literacy significantly influences MSMEs' performance through the mediation of financial inclusion. While the value of t-statistics on the variable has also met the requirements of 2.852> 1.96, it can be concluded that financial inclusion has a significant strength in mediating the effect of Islamic financial literacy on the performance of MSMEs in East Java.

MSMEs in East Java with good knowledge of the basic concepts of Islamic finance and the ability to apply them can access various Islamic financial

services that aim to improve the performance of MSMEs in East Java. Sohilauw (2018) states that MSMEs with literacy knowledge and an understanding of financial management assisted by utilizing access to financial products and services can maximize welfare and minimize obstacles in improving MSMEs' performance. This is because financial inclusion helps improve the welfare of MSMEs by providing broader access to various financial products and services so that positive attitudes and trust of MSMEs towards financial products and services enable MSMEs to manage risks more effectively and improve their operational efficiency.

The influence of Islamic financial literacy on financial inclusion on the performance of MSMEs in East Java is seen from the p-value of 0.000, which shows <0.05, meaning that Islamic financial literacy significantly influences the performance of MSMEs in East Java. In addition, the value of t-statistics on the variable has also met the requirements, namely 5.224> 1.96, which means that Islamic financial literacy has a significant strength on financial inclusion in the performance of MSMEs in East Java.

The data indicates that the impact of Islamic financial literacy on MSMEs' performance, mediated by financial inclusion, is attributed to a deeper understanding of Sharia principles and trust in the Islamic financial system. This understanding aids MSMEs in comprehending various Islamic financial products, thereby increasing their engagement with these products and facilitating access to additional financial services. Armiani et al. (2021) suggest that enhancing the financial knowledge of MSME actors can improve their financial management and accountability.

Financial inclusion positively affects MSMES performance in East Java, as evidenced by a P-value of 0.000 (less than 0.05), demonstrating a significant impact. Additionally, the T-statistics value of 3.769 exceeds the threshold of 1.96, confirming that financial inclusion has a substantial positive effect on MSMEs' performance in the region. Enhanced accessibility and convenience of financial products and services enable MSMEs to secure the necessary funding for business expansion and daily operations. This supports the study from Ratnawati (2020), who found that financial inclusion directly improves MSMEs' performance, with better access to financial products enhancing user welfare and thus boosting MSMEs' performance. There is a significant positive correlation between

Islamic financial technology and MSME's performance in East Java. The inner model results indicate a direct effect of Islamic financial technology on MSME's performance, with a P-value of 0.006 (less than 0.05), confirming a significant relationship. The T-statistics value of 2.776 further supports the significant impact of Islamic financial technology on MSMEs' performance (Leong, 2018).

Through its innovative financial products and services, Islamic financial technology assists MSMEs by providing interest-free financing options such as Islamic P2P Lending. This helps alleviate capital constraints faced by MSMEs in East Java. Nabila et al. (2023) note that prohibiting usury and gharar transactions protects MSMEs from losses and high installment costs. Additionally, Islamic financial technology improves transaction efficiency and security, aids cash flow management, and offers broader funding opportunities through Islamic crowdfunding. Sharia investment and insurance options also provide halal funding growth and asset protection. The P-value for the effect of Islamic financial technology on MSMEs' performance through financial inclusion mediation is 0.049 (less than 0.05), indicating a significant impact. The T-statistics value of 1.972 (greater than 1.96) confirms that financial inclusion significantly mediates the effect of Islamic financial technology on MSMEs' performance in East Java. The results of the above data are because the services in Islamic financial technology are designed to provide MSMEs with access to ethical and Sharia-compliant financial resources to help them better manage their business operations and improve business competitiveness (Sarma & Pais, 2011). With increased access and utilization of powerful Islamic financial products and services, Islamic financial technology can improve the financial welfare of MSMEs. In addition, Nugraha et al. (2022) state that the higher the use of Islamic financial technology by MSMEs, the higher the achievement of MSMEs' performance results. If MSMEs can maximize the facilities and benefits of Islamic financial technology with easy access to services, it will increase MSMEs sales, especially Sharia-compliant facilities.

The p-value of Islamic financial technology on financial inclusion on the performance of MSMEs in East Java is 0.006, which shows <0.05 means that there is an influence of Islamic financial technology on financial inclusion on the performance of MSMEs in East Java significantly. Furthermore, the value of t-statistics on these variables amounted to 2.725, which means that it has met

the requirements, namely> 1.96, indicating that Islamic financial technology has a significant strength on financial inclusion in the performance of MSMEs in East Java.

The influence of Islamic financial technology on financial inclusion on the performance of MSMEs in East Java is due to the use made by MSMEs triggered by trust in the quality and safety of good Islamic financial products and services. Thus, this Islamic financial technology can improve the performance of MSMEs in East Java. Financial institutions facilitating Islamic financial technology make innovations in their business products and services to facilitate practicality in making transactions easily and quickly. This is in line with research by Rofiaty (2012), which states that with the increasingly advanced and developing information technology, the public using digital financial services will find it easy to access Islamic financial products and services in facilitating their business needs. The results of this study are also found in the study by Putri and Friantin (2021), who state that Islamic financial technology influences financial inclusion to improve the performance of MSMEs.

CONCLUSION

This research provides empirical evidence on the relationships between Islamic financial literacy, financial inclusion, Islamic financial technology, and MSME performance, offering both theoretical and practical implications. The research logic is grounded in the interconnections among these variables, where Islamic financial literacy and Islamic financial technology act as enablers of financial inclusion, which in turn enhances MSMEs' performance. The theoretical contribution lies in validating the Theory of Planned Behavior, Inclusive Growth Theory, and Disruptive Innovation Theory in the context of MSMEs operating under Sharia principles. These frameworks provide a nuanced understanding of how knowledge, inclusivity, and technological advancements interact to drive sustainable business outcomes.

Practically, the findings emphasize the need for policymakers and financial institutions to prioritize initiatives that enhance Islamic financial literacy and expand access to Sharia-compliant financial technology. These efforts can bridge financial inclusion gaps, particularly for MSMEs in emerging markets. For practitioners, the study underscores the importance of integrating ethical

and practical financial solutions to foster trust, efficiency, and competitiveness. Future research can explore broader geographical contexts and longitudinal analyses to deepen the understanding of these relationships and their long-term implications for MSME development.

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