

## **THE ROLE OF ISLAMIC FINANCIAL LITERACY AND ISLAMIC FINANCIAL INCLUSION ON BUSINESS PERFORMANCE OF MUSLIM GEN Z AND MILLENNIAL ENTREPRENEURS IN INDONESIAN MSMEs.**

**Dita Herdian**

Universitas Gadjah Mada  
ditaherdian@gmail.com

### **ABSTRACT**

#### **KEYWORDS**

Islamic Financial  
Literacy; Islamic  
Financial Inclusion;  
Business  
Performance; Muslim  
Entrepreneurs;  
MSMEs; Gen Z and  
Millennials; Indonesia

The rapid development of Islamic finance presents significant opportunities for strengthening the performance of micro, small, and medium enterprises (MSMEs), particularly those owned by Muslim entrepreneurs. However, limited Islamic financial literacy and low access to Sharia-compliant financial services remain critical challenges, especially among younger generations. This study aims to examine the role of Islamic financial literacy and Islamic financial inclusion in enhancing business performance among Muslim Gen Z and millennial entrepreneurs operating MSMEs in Indonesia. Using a quantitative research approach, primary data were collected through an online questionnaire distributed to Muslim MSME entrepreneurs who have operated their businesses for at least two years. A total of valid responses were analyzed using Partial Least Squares-Structural Equation Modeling (PLS-SEM) with SmartPLS 4.

The results reveal that Islamic financial literacy has a positive and significant effect on Islamic financial inclusion, indicating that higher levels of Sharia-based financial knowledge increase entrepreneurs' access to and use of Islamic financial services. Furthermore, Islamic financial literacy is found to have a direct and significant impact on business performance, suggesting that financially literate Muslim entrepreneurs are better equipped to manage financial decisions, optimize resources, and sustain business growth. Islamic financial inclusion also demonstrates a positive and significant influence on business performance, highlighting the importance of access to Sharia-compliant financing and financial products in improving MSME outcomes. In addition, mediation analysis confirms that Islamic financial inclusion significantly mediates the relationship between Islamic financial literacy and business performance.

These findings underscore the strategic importance of strengthening Islamic financial literacy and expanding Islamic financial inclusion to enhance the performance and sustainability of Muslim-owned MSMEs, particularly among Gen Z and millennial entrepreneurs. The study provides practical implications for policymakers, Islamic financial institutions, and entrepreneurship development programs in designing targeted interventions to support young Muslim entrepreneurs and foster an inclusive Islamic economic ecosystem.

#### **INTRODUCTION**

The advancement of Islamic economics has emerged as one of the most prominent developments within the contemporary global financial landscape, particularly in regions

characterized by large Muslim populations, such as Indonesia. As the country with the largest Muslim-majority population worldwide, Indonesia possesses substantial potential to cultivate a comprehensive and resilient Islamic financial ecosystem capable of supporting inclusive, equitable, and sustainable economic growth (Otoritas Jasa Keuangan [OJK], 2023). In this regard, Islamic finance should not be viewed merely as an alternative to conventional financial systems. Rather, it represents a holistic economic paradigm grounded in Sharia principles that emphasize justice, ethical conduct, risk-sharing, transparency, and the promotion of socio-economic welfare (Iqbal & Mirakhor, 2011; Chapra, 2016). Within this paradigm, Islamic financial literacy and Islamic financial inclusion function as critical mechanisms for enhancing the sustainability and performance of economic actors, particularly micro, small, and medium enterprises (MSMEs).

MSMEs play an indispensable role in Indonesia's economic structure and development trajectory. According to official data from the Ministry of Cooperatives and SMEs and Statistics Indonesia (BPS), MSMEs constitute more than 99 percent of all business entities in the country and account for over 97 percent of total employment (BPS, 2023). Furthermore, MSMEs contribute more than 60 percent of Indonesia's Gross Domestic Product (GDP), underscoring their strategic importance in strengthening economic resilience, fostering inclusive growth, and alleviating poverty (Tambunan, 2019). Despite their dominant presence and economic contribution, MSMEs continue to face persistent structural and operational challenges. These include limited access to formal financial services, inadequate financial capability, and suboptimal business performance, which collectively hinder their capacity to scale up and compete effectively (Beck & Demirgüç-Kunt, 2006; OJK, 2022).

Within the framework of Islamic economics, the challenges faced by MSMEs are further compounded by the relatively low utilization of Islamic financial products and services, even in predominantly Muslim regions. The Indonesian Islamic Financial Literacy and Inclusion Survey conducted by OJK (2022) reveals that the Islamic financial literacy index remains at a modest level of 9.14 percent, while Islamic financial inclusion stands at 12.12 percent. Although these figures indicate gradual improvement compared to previous survey periods, they remain significantly lower than those associated with conventional financial literacy and inclusion. This discrepancy highlights a substantial gap between the potential demand for Sharia-compliant financial services and their actual adoption by Muslim entrepreneurs. It also suggests that many MSME actors lack sufficient understanding of Islamic financial instruments or encounter institutional, informational, and accessibility barriers when attempting to engage with Islamic financial institutions that align with their religious values (Antara et al., 2016; Setiawan et al., 2020).

Islamic financial literacy can be broadly defined as an individual's level of knowledge, awareness, skills, and attitudes related to Islamic financial concepts, principles, and products. This includes an understanding of profit-and-loss sharing mechanisms, zakat, waqf, Islamic savings and financing instruments, and Sharia-compliant risk management practices (Abdullah & Razak, 2015; Rahim et al., 2016). A higher degree of Islamic financial literacy

enables entrepreneurs to make more informed and ethical financial decisions, manage business risks more effectively, and optimize the utilization of Islamic financial services. In this context, Islamic financial literacy is closely intertwined with Islamic financial inclusion, which refers to the availability, accessibility, usage, and quality of Sharia-compliant financial products and services for individuals and businesses (Demirgüç-Kunt et al., 2018; OJK, 2023).

From a theoretical standpoint, financial literacy is widely recognized as a fundamental antecedent of financial inclusion. Individuals who possess adequate financial knowledge and skills are more likely to access, trust, and utilize formal financial services in a responsible and sustainable manner (Lusardi & Mitchell, 2014; Grohmann et al., 2018). This relationship is also evident in the context of Islamic finance, where empirical studies have demonstrated that Islamic financial literacy positively influences Islamic financial inclusion, particularly among Muslim populations. Research conducted in various emerging economies indicates that individuals with higher levels of Islamic financial knowledge are more inclined to engage with Islamic banks and other Sharia-compliant financial institutions (Bongomin et al., 2018; Setiawan & Mauluddi, 2021). However, despite these findings, empirical evidence focusing specifically on young Muslim entrepreneurs remains limited, especially within the Indonesian context.

The emphasis on Gen Z and millennial entrepreneurs is increasingly relevant in light of recent demographic and entrepreneurial trends in Indonesia. Statistical data from national and private research platforms indicate that the entrepreneurial landscape in Indonesia continues to be dominated by older age groups, particularly individuals categorized as pre-elderly and elderly. In contrast, entrepreneurs belonging to the Gen Z and millennial cohorts represent a relatively small proportion of total business owners, despite Indonesia's significant demographic bonus characterized by a large working-age population (GoodStats, 2024). This imbalance raises concerns regarding the long-term sustainability of entrepreneurship and economic dynamism, as younger generations are expected to play a crucial role in driving innovation, productivity, and technological adaptation in the future (Aparicio et al., 2016; Bosma et al., 2020).

The issue becomes even more pronounced when examining Muslim youth entrepreneurship. While Gen Z and millennials are often associated with higher levels of digital literacy, technological adaptability, and openness to innovation, many young Muslim entrepreneurs encounter challenges related to limited financial capability, restricted access to Sharia-compliant financing, and difficulties in scaling up their businesses (Rizvi et al., 2022; Hassan et al., 2023). These challenges suggest that digital proficiency alone is insufficient to ensure strong and sustainable business performance in the absence of adequate Islamic financial literacy and inclusive financial systems that cater to the specific needs of Muslim entrepreneurs.

Moreover, the focus on Muslim entrepreneurs is particularly important due to the normative, ethical, and behavioral dimensions embedded within Islamic business practices. Islamic entrepreneurship is not solely concerned with profit maximization but also

emphasizes ethical responsibility, social justice, transparency, and strict compliance with Sharia principles (Kayed & Hassan, 2011; Ali & Al-Aali, 2019). Muslim entrepreneurs who lack sufficient Islamic financial literacy may unintentionally rely on conventional financial products that are inconsistent with their religious beliefs, potentially leading to moral conflicts, reduced trust in financial institutions, and diminished long-term commitment to business activities (Abdul-Rahman et al., 2014). Consequently, strengthening Islamic financial literacy and inclusion is expected to enhance not only financial performance but also value congruence and ethical consistency among Muslim MSME actors.

Despite the expanding body of literature on financial literacy, financial inclusion, and business performance, several critical research gaps remain. First, the majority of existing empirical studies focus predominantly on conventional financial literacy and inclusion, with relatively limited attention given to Islamic financial constructs (Lusardi & Mitchell, 2014; Klapper et al., 2016). Second, studies examining Islamic financial literacy often concentrate on households, students, or general consumers, rather than entrepreneurs and business owners who face distinct financial decision-making challenges (Rahim et al., 2016; Antara et al., 2016). Third, research that simultaneously examines Islamic financial literacy, Islamic financial inclusion, and business performance within a single integrated empirical model remains scarce, particularly studies employing advanced analytical techniques such as Partial Least Squares Structural Equation Modeling (PLS-SEM) (Hair et al., 2022).

Additionally, empirical investigations that explicitly target Gen Z and millennial Muslim entrepreneurs operating MSMEs in Indonesia remain underdeveloped. This gap is particularly significant given that MSMEs require tailored financial solutions and capacity-building initiatives that differ substantially from those designed for large corporations (Beck et al., 2005; Tambunan, 2019). By focusing on MSMEs that have been operating for at least two years, this study seeks to capture relatively stable business entities while still reflecting the dynamics and challenges associated with early-stage entrepreneurship.

This study offers several theoretical and practical contributions. First, it integrates Islamic financial literacy and Islamic financial inclusion into a unified empirical framework to explain business performance among Muslim MSME entrepreneurs. Second, it specifically targets Gen Z and millennial cohorts, thereby addressing an important demographic and practical gap in the Indonesian entrepreneurship literature. Third, it employs PLS-SEM using SmartPLS 4, enabling a robust examination of both direct and mediating relationships among latent constructs (Hair et al., 2022). Finally, the findings are expected to generate actionable insights for policymakers, Islamic financial institutions, and entrepreneurship development programs aimed at strengthening the Islamic MSME ecosystem in Indonesia.

Conceptually, Islamic financial literacy is hypothesized to enhance Islamic financial inclusion by improving entrepreneurs' understanding, confidence, and trust in Sharia-compliant financial products and institutions. Enhanced financial inclusion, in turn, facilitates improved access to financing, savings instruments, and risk management tools, all of which are essential for improving business performance (Beck & Demirgüç-Kunt, 2006; Bongomin et

al., 2018). Furthermore, Islamic financial literacy may exert a direct influence on business performance by strengthening financial planning, cost control, and investment decision-making in accordance with Islamic principles (Abdullah & Razak, 2015; Setiawan et al., 2020).

Based on the theoretical arguments and empirical evidence discussed above, this study proposes the following hypotheses:

H1: Islamic financial literacy has a positive effect on Islamic financial inclusion.

H2: Islamic financial literacy has a positive effect on business performance.

H3: Islamic financial inclusion has a positive effect on business performance.

H4: Islamic financial literacy has a positive effect on business performance through Islamic financial inclusion.

## **METHOD RESEARCH**

### **Research Design**

This study employs a quantitative research approach with an explanatory design to examine the causal relationships among Islamic financial literacy, Islamic financial inclusion, and business performance of Muslim MSME entrepreneurs from Generation Z and millennials in Indonesia. A quantitative approach is appropriate because this research aims to test hypotheses and measure the strength and direction of relationships among latent variables using statistical techniques (Creswell, 2018; Hair et al., 2022). Explanatory research is particularly suitable for identifying direct and indirect effects between constructs within a theoretical framework (Sekaran & Bougie, 2020).

The conceptual model of this study positions Islamic financial literacy as an exogenous variable, Islamic financial inclusion as a mediating variable, and business performance as an endogenous variable. This structure allows for the examination of both direct effects and mediation effects, which are critical for understanding how Islamic financial capability translates into improved MSME performance.

### **Population and Sample**

The population of this study consists of Muslim micro, small, and medium enterprise (MSME) entrepreneurs from Generation Z and millennials in Indonesia. Generation Z is defined as individuals born between 1997 and 2012, while millennials (Generation Y) are those born between 1981 and 1996 (Dimock, 2019). The focus on these cohorts is justified by their strategic role in sustaining future economic growth and entrepreneurship development (Bosma et al., 2020).

To ensure relevance and data reliability, the study applies several inclusion criteria. Respondents must (1) be Muslim or Muslimah, (2) own and manage an MSME, (3) operate their business for a minimum of two years, and (4) actively engage in daily business decision-making. The minimum two-year operational requirement is intended to ensure that respondents have sufficient experience in financial management and business performance assessment (Beck et al., 2005).

The sampling technique used is purposive sampling, which is commonly applied in entrepreneurship and MSME research when specific respondent characteristics are required (Etikan et al., 2016). Data were collected through online questionnaires distributed to Muslim entrepreneur communities, MSME networks, and digital business forums across Indonesia. This approach is consistent with previous studies focusing on young entrepreneurs and digitally connected populations (Rizvi et al., 2022).

Regarding sample size adequacy, this study follows the PLS-SEM sample size rule, which requires a minimum sample equal to ten times the maximum number of structural paths directed at a particular construct (Hair et al., 2022). Given that the most complex construct in this model receives two direct paths, the minimum sample requirement is satisfied.

### Data Collection Method

This study uses primary data, collected through a structured questionnaire administered online using digital survey tools. Online data collection is particularly suitable for Gen Z and millennial respondents, who are more accustomed to digital platforms and online communication (Priporas et al., 2017). Moreover, online surveys enable wider geographic coverage and cost efficiency while maintaining data quality (Evans & Mathur, 2018).

The questionnaire consists of two main sections. The first section captures respondents' demographic and business profile information, including age, gender, education level, business sector, business size, and length of operation. The second section measures the research constructs using multiple indicators adapted from validated scales in prior studies. All measurement items are assessed using a five-point Likert scale, ranging from 1 ("strongly disagree") to 5 ("strongly agree"), which is widely used in behavioral and financial research (Sekaran & Bougie, 2020).

### Measurement of Variables

All constructs in this study are measured using reflective indicators adapted from prior empirical studies indexed in Sinta and Scopus. The measurement items are contextualized to fit the characteristics of Muslim Gen Z and millennial entrepreneurs operating MSMEs in Indonesia, while preserving the conceptual meaning of the original scales. A five-point Likert scale is employed for all items, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*), which is commonly applied in financial literacy and entrepreneurship research (Sekaran & Bougie, 2020).

### Islamic Financial Literacy

Islamic financial literacy reflects the extent to which Muslim entrepreneurs possess knowledge, understanding, and skills in managing financial decisions in accordance with Sharia principles. The measurement of this construct is adapted from Masrizal et al. (2022) and supported by previous studies on Islamic financial literacy (Abdullah & Razak, 2015; Rahim et al., 2016). The items capture entrepreneurs' ability to understand Islamic financial



products, Sharia-compliant investment instruments, and financial management practices relevant to MSME operations.

The indicators used to measure Islamic financial literacy are as follows:

- IFL1: I continuously improve my knowledge and skills related to Islamic finance to support my business.
- IFL2: I have a good understanding of Islamic financial products and services offered by Islamic financial institutions.
- IFL3: I understand well how to invest my business funds using Sharia-compliant financial instruments.
- IFL4: I understand how to manage investment portfolios based on Islamic financial principles.
- IFL5: I prefer saving or investing my business income in Islamic financial institutions rather than keeping it idle.

These indicators reflect both cognitive and behavioral dimensions of Islamic financial literacy, which are essential for informed financial decision-making among Muslim entrepreneurs (Masrizal et al., 2022).

### **Islamic Financial Inclusion**

Islamic financial inclusion refers to the degree to which Muslim entrepreneurs can access, use, and benefit from Sharia-compliant financial products and services. The measurement items are adapted primarily from Masrizal et al. (2022), with additional conceptual alignment to the Islamic financial inclusion framework proposed by OJK (2022) and Demirgüç-Kunt et al. (2018). The indicators emphasize accessibility, convenience, service quality, and perceived usefulness of Islamic financial institutions for MSME activities.

The indicators used to measure Islamic financial inclusion are as follows:

- IFI1: I can easily access Islamic bank offices or Islamic financial service points when needed for my business.
- IFI2: I prefer conducting financial transactions through Islamic banks because they meet my business needs.
- IFI3: Transactions with Islamic banks are easier, faster, and more efficient for my business operations.
- IFI4: The documentation and administrative requirements of Islamic banks do not make it difficult for me to conduct transactions.

- IFI5: The services provided by Islamic banks meet my expectations.
- IFI6: Overall, the services provided by Islamic banks are satisfactory for supporting my business activities.

These indicators reflect both access and usage dimensions, which are central components of financial inclusion in the Islamic finance context (Masrizal et al., 2022; Setiawan & Mauluddi, 2021).

### **Business Performance**

Business performance refers to the extent to which MSMEs achieve desired financial and operational outcomes as perceived by the entrepreneur. Consistent with MSME and entrepreneurship literature, this study employs subjective performance measures, which have been shown to be reliable proxies when objective financial data are unavailable or confidential (Dess & Robinson, 1984; Rauch et al., 2009). The measurement items are adapted from Masrizal et al. (2022) and adjusted to reflect the business performance of MSMEs owned by Muslim Gen Z and millennial entrepreneurs.

The indicators used to measure business performance are as follows:

- BP1: Islamic financial institutions make it easier for me to conduct business transactions with my customers.
- BP2: Islamic banks support my business by providing convenience for customers who transact through Islamic financial services.
- BP3: The use of Islamic financial services helps increase my business profits and revenue.
- BP4: After becoming a customer of Islamic financial institutions, my business has grown and developed.
- BP5: Overall, my business performance has improved since utilizing Islamic financial services.

These indicators capture growth, profitability, and operational improvement dimensions, which are widely used in MSME performance assessment (Wiklund & Shepherd, 2005; Masrizal et al., 2022).

### **Data Analysis Technique**

The data analysis is conducted using Partial Least Squares–Structural Equation Modeling (PLS-SEM) with SmartPLS 4 software. PLS-SEM is chosen because it is suitable for predictive-oriented research, complex models with mediation effects, and studies involving latent



constructs measured by multiple indicators (Hair et al., 2022). In addition, PLS-SEM does not require strict assumptions of normal data distribution and performs well with relatively small to medium sample sizes, making it appropriate for MSME research (Sarstedt et al., 2017).

The analysis follows a two-stage approach. First, the measurement model (outer model) is evaluated to assess construct validity and reliability. This includes tests for indicator reliability, internal consistency reliability (Cronbach's alpha and composite reliability), convergent validity (average variance extracted), and discriminant validity (Fornell–Larcker criterion and HTMT ratio) (Hair et al., 2022). Second, the structural model (inner model) is assessed by examining path coefficients, coefficient of determination ( $R^2$ ), effect size ( $f^2$ ), and predictive relevance ( $Q^2$ ).

Hypothesis testing is conducted using the bootstrapping procedure with a recommended number of resamples to evaluate the significance of path coefficients. Mediation analysis is performed to test the indirect effect of Islamic financial literacy on business performance through Islamic financial inclusion, following the procedures recommended by Hair et al. (2022).

## **RESULT AND DISCUSSION**

### **Result**

This section presents and discusses the empirical findings of the study, focusing on the relationships among Islamic financial literacy, Islamic financial inclusion, and business performance of Muslim Gen Z and millennial entrepreneurs operating micro, small, and medium enterprises (MSMEs) in Indonesia. The discussion integrates statistical results from the PLS-SEM analysis with relevant theoretical perspectives and findings from prior empirical studies.

#### **Evaluation of the Measurement Model**

The measurement model assessment is a critical step to ensure that the constructs used in this study are valid and reliable representations of the underlying theoretical concepts. The results demonstrate that the measurement instruments adapted from Masrizal et al. (2022) and other established studies perform well in the context of Muslim Gen Z and millennial MSME entrepreneurs.

Convergent validity is achieved as all indicators exhibit strong outer loading values above the recommended threshold. This finding indicates that each indicator meaningfully contributes to explaining its latent construct. For the business performance construct, the indicators reflect entrepreneurs' perceptions of business growth, revenue improvement, and operational development after engaging with Islamic financial services. These aspects are particularly relevant for MSMEs, where performance is often evaluated subjectively due to limited availability of audited financial statements. Prior studies have consistently shown that subjective performance measures are reliable proxies for objective performance indicators, especially in small business research (Wiklund & Shepherd, 2005; Rauch et al., 2009).

The Islamic financial inclusion construct is also well captured by its indicators, which emphasize accessibility, convenience, service efficiency, and satisfaction with Islamic financial institutions. These dimensions align closely with the conceptualization of financial inclusion proposed by Demirgüç-Kunt et al. (2018), who argue that inclusion extends beyond mere access to include effective usage and quality of financial services. In the Islamic finance context, ease of transaction, compliance with Sharia principles, and service satisfaction are particularly important for Muslim entrepreneurs, as religious considerations strongly influence financial behavior (Abdul-Rahman et al., 2014).

Similarly, Islamic financial literacy is robustly measured through indicators reflecting knowledge, understanding, and behavioral preferences related to Sharia-compliant finance. The relatively high loading values indicate that respondents possess varying but meaningful levels of Islamic financial knowledge, ranging from understanding Islamic financial products to managing investments based on Islamic principles. This result supports the notion that Islamic financial literacy is a multidimensional construct encompassing both cognitive and practical aspects (Abdullah & Razak, 2015; Rahim et al., 2016).

The Average Variance Extracted (AVE) values for all constructs exceed the recommended minimum of 0.50, indicating that each construct explains more than half of the variance of its indicators. This further confirms the adequacy of convergent validity. In addition, the reliability analysis shows that Cronbach's alpha and composite reliability values are well above the acceptable thresholds, suggesting strong internal consistency among indicators within each construct. These findings demonstrate that the adapted measurement scales are reliable and suitable for examining Islamic financial behavior among young Muslim entrepreneurs.

Discriminant validity is confirmed through both the HTMT ratio and the Fornell–Larcker criterion. The results indicate that Islamic financial literacy, Islamic financial inclusion, and business performance are empirically distinct constructs. This distinction is important because, although these variables are theoretically related, they represent different stages in the financial capability performance continuum. Islamic financial literacy reflects knowledge and understanding, Islamic financial inclusion represents access and usage of financial services, and business performance captures the outcomes of financial decisions. The clear discriminant validity among these constructs strengthens the credibility of subsequent structural model analysis.

### **Evaluation of the Structural Model**

The hypothesis testing results show that all proposed relationships in the model are statistically significant. Islamic financial literacy has a positive and significant effect on Islamic financial inclusion, indicating that Muslim entrepreneurs with higher levels of Sharia-based financial knowledge are more likely to access and utilize Islamic financial services. This finding confirms that financial capability is a key driver of financial inclusion in the Islamic finance context.

Islamic financial literacy also demonstrates a direct and significant effect on business performance. This result suggests that entrepreneurs who understand Islamic financial concepts and instruments are better able to manage business finances, allocate resources efficiently, and make informed investment decisions, which ultimately enhance MSME performance.

Furthermore, Islamic financial inclusion is found to have a positive and significant influence on business performance. Access to Islamic banking services, financing facilities, and transaction convenience enables entrepreneurs to improve operational efficiency, expand market reach, and sustain business growth.

The mediation analysis reveals that Islamic financial inclusion significantly mediates the relationship between Islamic financial literacy and business performance. This indicates that Islamic financial literacy not only affects business performance directly but also indirectly through increased access to and usage of Islamic financial services. Thus, financial inclusion serves as an important mechanism through which financial literacy translates into tangible business outcomes.

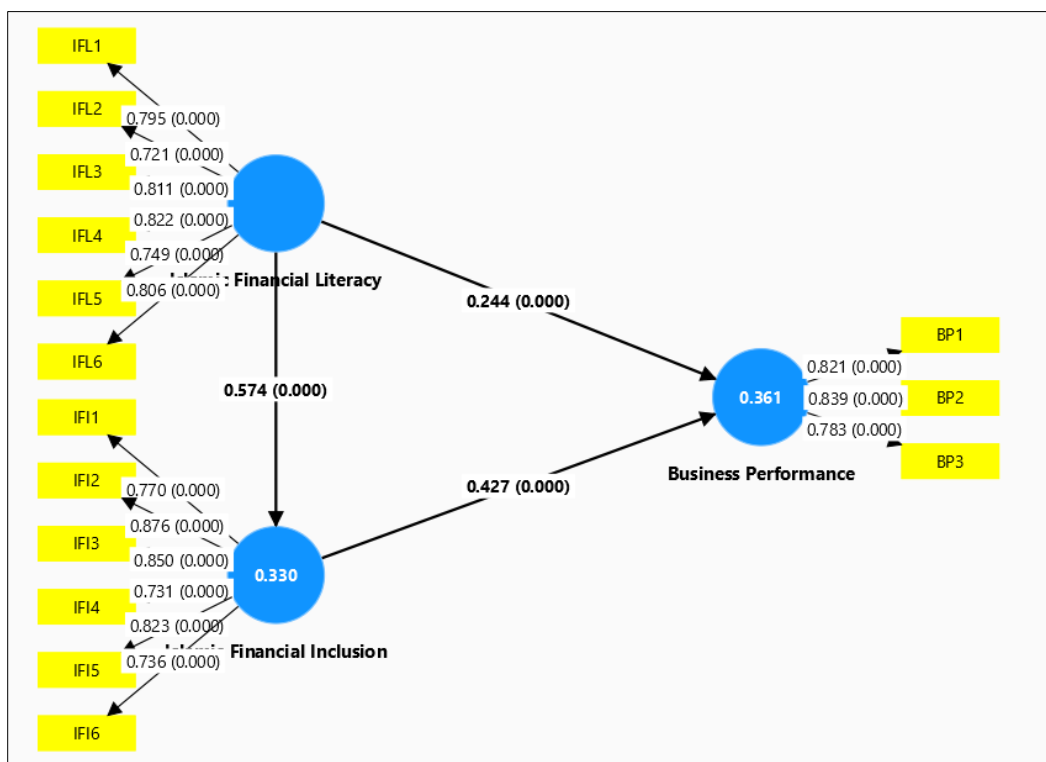


Figure 1 Structural Model Result

Table 1 Structural Model Path Coefficients

Relationship	Original Sample	T Statistics	Sig.	Result
H1: Islamic Financial Inclusion -> Business Performance	0.427	8.386	0.000	Accepted

<b>H2:</b> Islamic Financial Literacy -> Business Performance	0.244	5.157	0.000	Accepted
<b>H3:</b> Islamic Financial Literacy -> Islamic Financial Inclusion	0.574	14.100	0.000	Accepted
<b>H4:</b> Islamic Financial Literacy -> Islamic Financial Inclusion -> Business Performance	0.245	7.749	0.000	Accepted

## Discussion

### The Effect of Islamic Financial Literacy on Islamic Financial Inclusion

The results demonstrate that Islamic financial literacy has a positive and significant effect on Islamic financial inclusion. This finding indicates that Muslim Gen Z and millennial entrepreneurs who possess higher levels of Sharia-based financial knowledge are more likely to access and utilize Islamic financial products and services.

This result is consistent with human capital theory, which posits that knowledge and skills enhance individuals' ability to engage with economic institutions effectively (Becker, 1964). In the Islamic finance context, financial literacy reduces informational barriers and perceived complexity associated with Sharia-compliant financial products. Entrepreneurs who understand Islamic contracts such as murabaha, musharaka, and mudaraba are more confident in engaging with Islamic banks and less likely to perceive these institutions as inaccessible or difficult to use.

Empirically, this finding aligns with previous studies showing a strong linkage between Islamic financial literacy and Islamic financial inclusion. Bongomin et al. (2018) found that Islamic financial literacy significantly enhances financial inclusion among Muslim households, while Setiawan and Mauluddi (2021) reported similar results in the Indonesian context. Masrizal et al. (2022) also emphasized that financial knowledge is a key determinant of Islamic bank usage among small business actors.

For Gen Z and millennial entrepreneurs, this relationship is particularly relevant. Although these generations are generally more digitally literate, digital familiarity does not automatically translate into financial capability. Without adequate Islamic financial literacy, young Muslim entrepreneurs may rely on informal financing sources or conventional financial institutions that do not align with their religious values. The findings of this study suggest that improving Islamic financial literacy is a crucial step toward increasing the inclusivity of the Islamic financial system for young entrepreneurs.

### The Effect of Islamic Financial Literacy on Business Performance

The analysis further reveals that Islamic financial literacy has a direct and significant effect on business performance. This finding suggests that Muslim entrepreneurs with higher levels of Islamic financial knowledge tend to achieve better business outcomes, including improved profitability, growth, and sustainability.

From a theoretical perspective, this result supports the resource-based view (RBV) of the firm, which considers intangible resources such as knowledge and skills as critical sources of competitive advantage (Barney, 1991). Islamic financial literacy equips entrepreneurs with the ability to manage cash flows effectively, select appropriate financing instruments, and make investment decisions that are both financially sound and Sharia-compliant.

This finding is consistent with prior empirical research indicating that financial literacy positively influences MSME performance. Abdullah and Razak (2015) found that Islamic financial literacy enhances financial decision-making quality among entrepreneurs, while Masrizal et al. (2022) demonstrated that financially literate MSME owners are more capable of leveraging Islamic financial services to support business growth. Moreover, Lusardi and Mitchell (2014) argued that financial literacy plays a crucial role in entrepreneurial success by improving planning and risk management.

In the context of Muslim Gen Z and millennial entrepreneurs, Islamic financial literacy also contributes to value congruence between business practices and religious beliefs. Entrepreneurs who understand Islamic finance principles are more likely to feel confident and committed to their business activities, as their financial decisions align with their ethical and religious values. This alignment can enhance long-term business sustainability by reducing moral conflict and increasing intrinsic motivation.

### **The Effect of Islamic Financial Inclusion on Business Performance**

The results also show that Islamic financial inclusion has a positive and significant effect on business performance. This finding highlights the importance of access to Sharia-compliant financial services in improving MSME outcomes.

Financial intermediation theory suggests that access to financial services facilitates capital accumulation, risk diversification, and efficient resource allocation, all of which contribute to firm performance (Beck & Demirgüç-Kunt, 2006). Islamic financial inclusion provides MSMEs with access to financing, savings, payment systems, and risk management tools that support business operations and expansion.

Empirical studies have consistently shown that financial inclusion enhances MSME performance. Beck et al. (2005) found that firms with better access to financial services exhibit higher growth rates, while Bongomin et al. (2018) reported that Islamic financial inclusion positively affects enterprise performance in Muslim-majority contexts. The findings of this study extend this literature by demonstrating that Islamic financial inclusion is particularly beneficial for young Muslim entrepreneurs operating MSMEs.

For Gen Z and millennial entrepreneurs, Islamic financial inclusion also offers operational advantages. Digital Islamic banking services, for example, enable faster transactions, easier payment processing, and improved customer convenience. These features are especially important for young entrepreneurs who often operate in competitive and digitally driven

markets. By facilitating smoother transactions and providing access to working capital, Islamic financial inclusion contributes directly to improved business performance.

### **The Mediating Role of Islamic Financial Inclusion**

One of the key contributions of this study is the examination of Islamic financial inclusion as a mediating variable in the relationship between Islamic financial literacy and business performance. The mediation analysis reveals that Islamic financial inclusion significantly mediates this relationship, indicating that Islamic financial literacy influences business performance both directly and indirectly through increased financial inclusion.

This finding underscores the process through which financial knowledge translates into tangible business outcomes. While Islamic financial literacy enhances entrepreneurs' decision-making capability, its impact on performance is amplified when entrepreneurs actively engage with Islamic financial institutions. In other words, knowledge alone is insufficient unless it is accompanied by actual access to and usage of financial services.

This result is consistent with prior mediation-based studies in financial inclusion research. Grohmann et al. (2018) argued that financial literacy improves economic outcomes primarily through its effect on financial behavior and inclusion. In the Islamic finance literature, Setiawan et al. (2020) emphasized that Islamic financial inclusion serves as a critical channel linking financial knowledge to welfare and performance outcomes.

For Muslim Gen Z and millennial entrepreneurs, this mediating effect highlights the importance of an integrated approach to MSME development. Programs that focus solely on financial education without improving access to Islamic financial services may have limited impact. Conversely, expanding Islamic financial services without enhancing literacy may result in underutilization. The findings of this study suggest that both dimensions must be addressed simultaneously to maximize business performance.

### **Implications for Theory and Practice**

The findings of this study contribute to the Islamic finance and entrepreneurship literature by providing empirical evidence on the interconnected roles of Islamic financial literacy and Islamic financial inclusion in shaping MSME performance. The study extends existing theories by demonstrating that Islamic financial inclusion functions not only as an outcome of financial literacy but also as a mechanism that enhances business performance.

From a practical perspective, the results have important implications for policymakers, Islamic financial institutions, and entrepreneurship development organizations. Policymakers such as OJK and the Ministry of Cooperatives and SMEs should prioritize Islamic financial literacy programs targeted specifically at young Muslim entrepreneurs. These programs should be integrated with efforts to expand Islamic financial inclusion through innovative and accessible financial products.



Islamic financial institutions can also benefit from these findings by designing financial products and educational initiatives tailored to the needs of Gen Z and millennial MSME owners. By enhancing financial literacy and simplifying access to services, Islamic banks can strengthen their role in supporting the growth and sustainability of Muslim-owned MSMEs.

## **CONCLUSION**

This study aims to examine the role of Islamic financial literacy and Islamic financial inclusion in influencing the business performance of Muslim Gen Z and millennial entrepreneurs operating micro, small, and medium enterprises (MSMEs) in Indonesia. Using a quantitative approach and Partial Least Squares–Structural Equation Modeling (PLS-SEM), this research provides empirical evidence on how Sharia-based financial capability and access to Islamic financial services contribute to MSME performance within a young entrepreneurial demographic.

The empirical findings confirm that Islamic financial literacy has a positive and significant effect on Islamic financial inclusion. This result indicates that Muslim entrepreneurs who possess a stronger understanding of Islamic financial principles and products are more likely to access and utilize Sharia-compliant financial services. In addition, Islamic financial literacy is found to have a direct and significant impact on business performance, suggesting that financial knowledge and skills rooted in Islamic principles play a crucial role in improving decision-making quality, financial management, and business sustainability among MSMEs.

Furthermore, Islamic financial inclusion is shown to positively and significantly affect business performance. Access to Islamic financial institutions, financing instruments, and transaction services enables Muslim entrepreneurs to enhance operational efficiency, expand market reach, and achieve better financial outcomes. Importantly, the mediation analysis reveals that Islamic financial inclusion significantly mediates the relationship between Islamic financial literacy and business performance. This finding demonstrates that Islamic financial literacy influences business performance not only directly but also indirectly through increased engagement with Islamic financial services. Thus, Islamic financial inclusion serves as a critical mechanism that translates financial knowledge into tangible business benefits.

From a theoretical perspective, this study contributes to the Islamic finance and entrepreneurship literature by integrating Islamic financial literacy and Islamic financial inclusion into a single empirical framework to explain MSME performance. The findings support human capital theory and the resource-based view by highlighting financial knowledge as an intangible asset that enhances entrepreneurial capability and competitive advantage. Moreover, the study extends financial inclusion theory by demonstrating its mediating role in the relationship between financial literacy and business performance, particularly within an Islamic economic context. By focusing on Gen Z and millennial Muslim entrepreneurs, this research also addresses a significant demographic gap in existing studies, which have largely concentrated on households, students, or older business owners.

In terms of practical implications, the results underscore the importance of developing integrated policies and programs that simultaneously enhance Islamic financial literacy and

expand Islamic financial inclusion among young Muslim entrepreneurs. Policymakers and regulators, such as the Financial Services Authority (OJK), should prioritize targeted Islamic financial education initiatives tailored to the needs of Gen Z and millennial MSME owners. These initiatives should be complemented by efforts to improve access to user-friendly, affordable, and digitally enabled Islamic financial products. Islamic financial institutions are also encouraged to actively engage in educational outreach and product innovation to better serve young entrepreneurs and strengthen the Islamic MSME ecosystem.

Despite its contributions, this study has several limitations. First, the use of self-reported data may introduce subjective bias in measuring business performance. Second, the cross-sectional design limits the ability to capture dynamic changes in financial literacy, inclusion, and performance over time. Third, this study focuses exclusively on Muslim entrepreneurs in Indonesia, which may limit the generalizability of the findings to other cultural or institutional contexts.

Future research is encouraged to address these limitations by employing longitudinal designs, incorporating objective performance indicators, and expanding the scope of analysis to include comparative studies across regions or countries. Further studies may also explore additional variables, such as digital financial literacy, Islamic social finance instruments, or entrepreneurial orientation, to provide a more comprehensive understanding of MSME performance in the Islamic economic framework.

In conclusion, this study provides robust empirical evidence that Islamic financial literacy and Islamic financial inclusion are critical drivers of business performance among Muslim Gen Z and millennial MSME entrepreneurs in Indonesia. Strengthening these dimensions is essential for fostering sustainable Islamic entrepreneurship and supporting inclusive economic growth in the long term.

## REFERENCES

- Abdul-Rahman, A., Latif, R. A., Muda, R., & Abdullah, M. A. (2014). Failure and potential of profit-loss sharing contracts: A perspective of Islamic finance. *Pacific-Basin Finance Journal*, 28, 136–151. <https://doi.org/10.1016/j.pacfin.2014.01.004>
- Abdullah, M. A., & Razak, A. L. A. (2015). Exploratory research into Islamic financial literacy in Brunei Darussalam. *Journal of Islamic Economics, Banking and Finance*, 11(2), 31–43. [https://ibtra.com/pdf/journal/v11\\_n2\\_article3.pdf](https://ibtra.com/pdf/journal/v11_n2_article3.pdf)
- Ali, A. J., & Al-Aali, A. (2019). Islamic perspectives on profit maximization. *Journal of Business Ethics*, 156(4), 1035–1048. <https://doi.org/10.1007/s10551-017-3607-6>
- Antara, P. M., Musa, R., & Hassan, F. (2016). Bridging Islamic financial literacy and halal literacy: The way forward in halal ecosystem. *Procedia Economics and Finance*, 37, 196–202. [https://doi.org/10.1016/S2212-5671\(16\)30113-7](https://doi.org/10.1016/S2212-5671(16)30113-7)

- Aparicio, S., Urbano, D., & Audretsch, D. (2016). Institutional factors, opportunity entrepreneurship and economic growth. *Small Business Economics*, 47(2), 373–391. <https://doi.org/10.1007/s11187-016-9732-3>
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- Beck, T., & Demirgüç-Kunt, A. (2006). Small and medium-size enterprises: Access to finance as a growth constraint. *Journal of Banking & Finance*, 30(11), 2931–2943. <https://doi.org/10.1016/j.jbankfin.2006.05.009>
- Beck, T., Demirgüç-Kunt, A., & Maksimovic, V. (2005). Financial and legal constraints to growth: Does firm size matter? *The Journal of Finance*, 60(1), 137–177. <https://doi.org/10.1111/j.1540-6261.2005.00727.x>
- Becker, G. S. (1964). *Human capital: A theoretical and empirical analysis, with special reference to education*. University of Chicago Press.
- Bongomin, G. O. C., Ntayi, J. M., Munene, J. C., & Malinga, C. A. (2018). Financial inclusion in rural Uganda: Testing interaction effect of financial literacy and networks. *Journal of African Business*, 19(4), 530–554. <https://doi.org/10.1080/15228916.2017.1416214>
- Bosma, N., Hill, S., Ionescu-Somers, A., Kelley, D., Levie, J., & Tarnawa, A. (2020). *Global Entrepreneurship Monitor 2019/2020 Global Report*. GEM. <https://www.gemconsortium.org>
- Chapra, M. U. (2016). *The future of economics: An Islamic perspective*. Islamic Foundation.
- Creswell, J. W. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.
- Demirgüç-Kunt, A., Klapper, L., Singer, D., Ansar, S., & Hess, J. (2018). *The Global Findex Database 2017: Measuring financial inclusion and the fintech revolution*. World Bank. <https://doi.org/10.1596/978-1-4648-1259-0>
- Dess, G. G., & Robinson, R. B. (1984). Measuring organizational performance in the absence of objective measures. *Strategic Management Journal*, 5(3), 265–273. <https://doi.org/10.1002/smj.4250050306>
- Dimock, M. (2019). Defining generations: Where Millennials end and Generation Z begins. *Pew Research Center*. <https://www.pewresearch.org>
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1–4. <https://doi.org/10.11648/j.ajtas.20160501.11>
- Evans, J. R., & Mathur, A. (2018). The value of online surveys. *Internet Research*, 28(4), 854–887. <https://doi.org/10.1108/IntR-03-2017-0083>
- Grohmann, A., Klühs, T., & Menkhoff, L. (2018). Does financial literacy improve financial inclusion? *World Development*, 111, 84–96. <https://doi.org/10.1016/j.worlddev.2018.06.020>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). *A primer on partial least squares structural equation modeling (PLS-SEM)* (3rd ed.). SAGE Publications.
- Hassan, M. K., Aliyu, S., Huda, M., & Rashid, M. (2023). Islamic finance and entrepreneurship: A systematic review. *Journal of Islamic Accounting and Business Research*, 14(2), 229–251. <https://doi.org/10.1108/JIABR-03-2021-0095>
- Iqbal, Z., & Mirakhor, A. (2011). *An introduction to Islamic finance: Theory and practice*. Wiley.
- Kayed, R. N., & Hassan, M. K. (2011). Islamic entrepreneurship. *Routledge Handbook of Islamic Economics*, 165–176.
- Klapper, L., Lusardi, A., & van Oudheusden, P. (2016). *Financial literacy around the world*. World Bank. <https://www.worldbank.org>

- Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy. *Journal of Economic Literature*, 52(1), 5–44. <https://doi.org/10.1257/jel.52.1.5>
- Masrizal, M., Huda, N., & Rini, N. (2022). Islamic financial literacy, Islamic financial inclusion, and business performance of MSMEs. *Journal of Islamic Monetary Economics and Finance*, 8(2), 315–336. <https://doi.org/10.21098/jimf.v8i2.1501>
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). McGraw-Hill.
- Otoritas Jasa Keuangan. (2022). *Survei nasional literasi dan inklusi keuangan syariah Indonesia*. OJK. <https://www.ojk.go.id>
- Otoritas Jasa Keuangan. (2023). *Sharia financial development report*. OJK. <https://www.ojk.go.id>
- Priporas, C. V., Stylos, N., & Fotiadis, A. K. (2017). Generation Z consumers' expectations of interactions in smart retailing. *Journal of Retailing and Consumer Services*, 36, 66–75. <https://doi.org/10.1016/j.jretconser.2017.01.007>
- Rahim, S. H. A., Rashid, R. A., & Hamed, A. B. (2016). Islamic financial literacy and its determinants among university students. *Journal of Islamic Accounting and Business Research*, 7(3), 208–226. <https://doi.org/10.1108/JIABR-10-2014-0030>
- Rauch, A., Wiklund, J., Lumpkin, G. T., & Frese, M. (2009). Entrepreneurial orientation and business performance. *Entrepreneurship Theory and Practice*, 33(3), 761–787. <https://doi.org/10.1111/j.1540-6520.2009.00308.x>
- Rizvi, S. A. R., Naqvi, B., & Tanveer, A. (2022). Islamic finance and MSME growth. *Emerging Markets Finance and Trade*, 58(8), 2257–2274. <https://doi.org/10.1080/1540496X.2021.1889002>
- Sarstedt, M., Ringle, C. M., & Hair, J. F. (2017). Partial least squares structural equation modeling. *Handbook of Market Research*. [https://doi.org/10.1007/978-3-319-05542-8\\_15-1](https://doi.org/10.1007/978-3-319-05542-8_15-1)
- Sekaran, U., & Bougie, R. (2020). *Research methods for business* (8th ed.). Wiley.
- Setiawan, M., & Mauluddi, H. A. (2021). Islamic financial literacy and financial inclusion. *Journal of Islamic Monetary Economics and Finance*, 7(1), 1–18. <https://doi.org/10.21098/jimf.v7i1.1298>
- Tambunan, T. (2019). *Recent evidence of the development of micro, small and medium enterprises in Indonesia*. Springer.
- Venkatraman, N., & Ramanujam, V. (1986). Measurement of business performance. *Academy of Management Review*, 11(4), 801–814. <https://doi.org/10.5465/amr.1986.4283976>
- Wiklund, J., & Shepherd, D. (2005). Entrepreneurial orientation and small business performance. *Journal of Business Venturing*, 20(1), 71–91. <https://doi.org/10.1016/j.jbusvent.2004.01.001>