

The Influence of Financial Literacy and Sharia Financial Technology on Sharia Banking Products in Small and Medium Community Enterprises in the Sibolga Tapteng Region

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ABSTRACT

Introduction: The purpose of this study is to analyze and determine the influence of financial literacy and Islamic financial technology on Islamic banking products in small and medium enterprises in the Sibolga Tapteng area

Methods: This research method uses a quantitative approach, with a population of 30 people. The sample of this study amounted to 30 respondents. The Likert scale was used as a measurement tool in this study. Data collection was carried out through a questionnaire. Data analysis was carried out using multiple linear regression with the help of the SPSS 24 application.

Results: Based on the results of the study, it shows that. The Financial Literacy variable (X1) is 0.325, which is positive. This means that Financial Literacy (X1) has a positive effect on Islamic Banking Products (Y). It is known that the t statistic or t count of Financial Literacy (X1) is $5.309 > t_{table} = 1.97$ and the Sig. value is 0.000, which is < 0.05 significance level, then Financial Literacy (X1) has a significant effect on Islamic Banking Products (Y). So, it is concluded that Financial Literacy (X1) has a positive and significant effect on Sharia Banking Products (Y). The Sharia Financial Technology variable (X2) is 0.241, which is positive. This means that Sharia Financial Technology (X2) has a positive effect on Sharia Banking Products (Y). It is known that the t statistic or t count of Sharia Financial Technology (X2) is $4.445 > t_{table} = 1.97$ and the Sig. value is 0.000, which is < 0.05 significance level, then Sharia Financial Technology (X2) has a significant effect on Sharia Banking Products (Y).

Conclusion and suggestion So it is concluded that Sharia Financial Technology (X2) has a positive and significant effect on Sharia Banking Products (Y).

INTRODUCTION

The business world is growing rapidly in line with increasing societal needs. Micro, Small, and Medium Enterprises (MSMEs) are a sector that produces a wide variety of products and services and plays a vital role in creating jobs as a solution to address unemployment.(Irhamni and Astuti, 2025). By 2024, the contribution of Micro, Small, and Medium Enterprises (MSMEs) to Indonesia's Gross Domestic Product (GDP) is estimated to reach around 65%, up from 61.07% the previous year. The number of MSMEs has also increased significantly, reaching more than 65 million business units, spread across various sectors such as culinary, fashion, handicrafts, and digital technology. MSMEs also play a significant role in absorbing labor, absorbing nearly 97% of the total national workforce. Furthermore, this sector contributes around 15.7% to national exports, although its contribution is still lower than that of neighboring ASEAN countries. The government continues to encourage digital transformation and increase the competitiveness of MSMEs to strengthen their role as the backbone of the Indonesian economy. This role is the basis for the Indonesian government to strengthen its commitment to developing MSMEs, as outlined in the main strategy of the National Medium-Term Development Plan (RPJM).(Zihanuddin, 2024)

The government has long been implementing MSME empowerment and development programs. These programs are implemented by various ministries and agencies with several focus areas: increasing market access, improving access to financial services, improving human resource quality through competency training and mentoring, and improving policies to create a conducive business ecosystem, such as streamlining licensing.(Yolanda, 2024). To address the problem of a financial system that is not yet optimal in covering all levels of society, especially the poor, near-poor, and other vulnerable groups, the government has issued an inclusive financial policy. Financial inclusion is an example of a program aimed at expanding financial access in Indonesia and providing solutions to the factors that cause low financial literacy. To achieve sustainable growth in financial inclusion, understanding, knowledge, skills, and beliefs are needed that influence attitudes and behavior in financial decision-making to achieve prosperity, known as financial literacy.(Theresia Mutiara Chandra, 2024).

A person's knowledge and confidence in financial products or services is known as financial literacy. When someone understands the various aspects of finance, they are more likely to be interested in acquiring and utilizing available financial products and services effectively and efficiently. The community faces various obstacles in accessing financial institutions, there are 23.5% of the Indonesian population who are still unbanked or have not been touched by banking such as low financing for MSMEs, high credit interest rates, limited sources of information, inadequate MSME business management skills, the dominance of banks in the micro sector, and limited infrastructure for distributing financial services.(BPS Data, 2024). Based on the results of the 2024 National Survey on Financial Literacy and Inclusion (SNLIK) conducted by the Financial Services Authority (OJK) in collaboration with the Central Statistics Agency (BPS), the financial literacy rate of the Indonesian people was recorded at 65.43%, while the financial inclusion rate reached 75.02%. Although the level of financial inclusion is relatively high, the lower literacy rate indicates that the public's understanding of financial products and services still needs to be improved. The link between financial literacy and the development of Micro, Small, and Medium Enterprises (MSMEs) is very close. MSMEs, as a main pillar of the Indonesian economy, require a good understanding of financial management, access to financing, and the use of appropriate financial products. The national strategy for financial inclusion aims to increase public access to financial

products, institutions, and services, provide MSMEs with an understanding of sound financial planning, and reduce economic and social inequality within society.(Financial Services Authority (OJK), 2024)

In addition to financial literacy, various strategies are being implemented to promote financial inclusion and adapt to changing times, including the use of the internet. This is the use of the internet in digital financial services, known as financial technology (fintech). Financial technology is considered an effective way to create opportunities to promote financial inclusion. In an era of rapid technological development, the availability of sophisticated financial features and services through fintech can facilitate public access and is one solution to achieving the financial inclusion goal set by the National Council for Financial Inclusion (DKNI), with a target of 75%. By 2024, President Jokowi has set a financial inclusion target of 90%.(Muzdalifah, 2024).

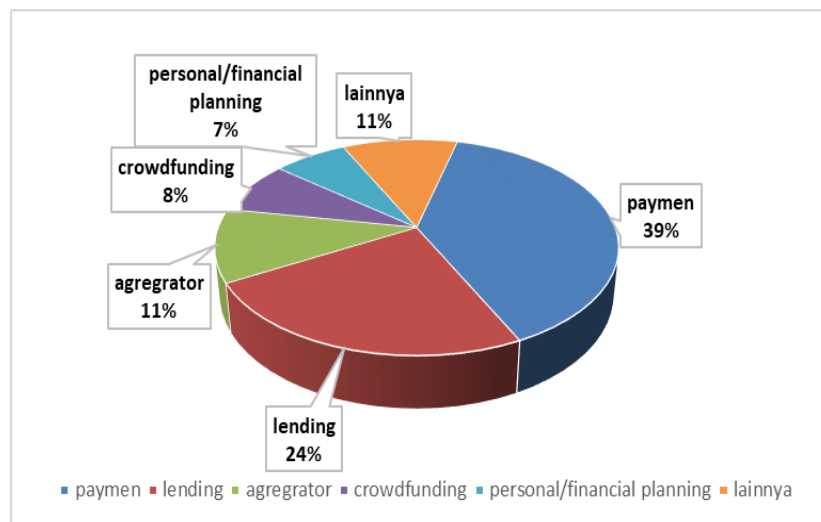


Figure 1. Personal Financial

The figure above shows the proportion of fintech services within the MSME sector, with payments (39%) dominating as the primary digital transaction solution, making it easier for sellers to accept various payment methods. Furthermore, lending (24%) plays a crucial role in providing access to financing for MSMEs often constrained by capital, followed by aggregators (11%) that help businesses compare the best financial products. Crowdfunding (8%) provides a community-based funding alternative, while personal/financial planning (7%) supports MSMEs in managing their business finances in a more targeted manner. Meanwhile, other categories (11%) demonstrate a variety of other services, such as insurtech or wealth management, which complement the MSME digitalization ecosystem. The figure above demonstrates that the use of fintech in Indonesia can facilitate and support various economic activities, especially for MSMEs. There are 49 million MSMEs in Indonesia that are not yet bankable. The presence of fintech can open access to financing for the productive sector for MSMEs, especially MSMEs that still struggle to obtain financing from the banking sector or other financial institutions.(Indra Prawana, 2024).

According to Bank Indonesia Regulation No. 19/12/PBI/2017 concerning the Implementation of Financial Technology, the application of financial technology in the financial system can create new products, services, technologies, and business models that have an impact on monetary stability, financial system stability, efficiency, smoothness, security, and reliability of the payment system. Fintech has a major impact in the banking sector, reaching unbanked populations that cannot be reached by traditional banks. Financial technology offers services such as non-account-based financial transactions, which are more efficient and effective. The presence of fintech provides a bright future for MSMEs, especially in Sibolga City. Currently, more and more people are choosing to use Financial Technology because

they want convenience and speed in conducting transactions without restrictions and strict regulations. This shows that convenience, security, and suitability of transactions (Sipahutar, Atika Wafa, and Asfiryati, 2024),

The main focus of this research is empowering MSMEs by increasing access to financial services, such as financial technology (fintech). The presence of financial technology significantly helps people access financial products and facilitates financial transactions with the touch of technology. Fintech is expected to save time, effort, and costs. The application of technology in financial services significantly assists people in conducting transactions, enabling those who cannot access financial services to utilize financial technology. (Abdul Haris, 2025). One way to improve the financial performance of MSMEs is by leveraging technology. Technology has advanced rapidly in recent times. Technological advancements have significantly influenced today's lifestyles, such as the development of technology-based businesses. Today's technological developments are no longer considered foreign by Indonesians. Current technological developments are experiencing rapid development, which will provide ease in accessing information and ease in managing resources effectively and efficiently. Financial technology services such as the use of payment channels are fintech services frequently used by several MSMEs that provide electronic services as a means of payment. This system will also automatically make it easier to check payments that occur in sales transactions for MSMEs. Banking services are also utilized by MSMEs such as ATMs, internet banking, and mobile banking, which facilitate transaction activities for buyers. (Muzdalifah, 2024).

According to Law No. 20 of 2008, MSMEs are productive business entities run by individuals or sole proprietorships that meet the criteria for MSMEs. Financial literacy is crucial for MSMEs in managing their businesses, and one way to achieve this is by enriching their knowledge of financial concepts. MSMEs' understanding and ability to understand and access financial resources will have a positive impact on their growth. Without a basic understanding of financial concepts, they will struggle to make effective financial management decisions. Those with sound financial knowledge will be able to make better financial decisions, including those regarding loans, investments, and insurance. Conversely, those without sound financial knowledge will face losses and bankruptcy. Problems faced by micro, small, and medium enterprises (MSMEs) include limited development, limited human resources for MSME management, lack of capital, and minimal application of modern technology. Furthermore, there is a lack of entrepreneurial spirit among urban communities. Currently, challenges faced include low investment rates, high unemployment rates, and the inability to fully access MSME economic empowerment. (Putri, Waluyo, and Farhani, 2024).

The presence of financial technology innovation has provided significant benefits for MSMEs in Sibolga City by simplifying transaction processes (digital payments/QRIS), opening access to alternative financing (lending, crowdfunding), and assisting financial management through planning applications, thereby increasing efficiency and the possibility of market expansion. Various local studies confirm the role of fintech in promoting financial inclusion and literacy for MSMEs in general. Fintech allows businesses to easily access financial products and services. MSMEs can utilize financial technology to obtain financing for their businesses. The role of financial technology is not limited to business financing but encompasses various aspects, including digital payment services for financial management. The presence of financial technology-based financial services has become a necessity along with the development of information and communication technology. Collaboration between financial technology and financial institutions has the potential to increase financial inclusion for MSMEs in Sibolga City. The rapid advancement of financial technology has reached various sectors, including the financial sector. When technology is applied in the financial sector, it will transform the industry into the digital era. The implementation of financial technology in the banking industry will make it easier for MSMEs to access financial services and apply for financing directly without having to visit a branch office. (Panggabean & Sihotang, 2025). Research conducted by Solikin et al. (2025) shows that financial literacy has a positive and significant influence on financial inclusion, while fintech does not have a significant positive influence on financial inclusion. Research conducted by Muhammad Hisyam Zulfa (2025)

shows that financial literacy has a positive influence on financial inclusion, and financial technology (fintech) has a positive influence on financial inclusion. This is in line with research conducted by Pulungan & Ndruru (2024), which shows that financial literacy has a positive and significant influence on financial inclusion, and fintech has a significant positive influence on financial inclusion. Furthermore, research conducted by Nathalia et al. (2024) shows that financial literacy has no influence on financial inclusion, while fintech does influence financial inclusion.

LITERATURE REVIEW

Financial Literacy

Financial literacy is a series of activities or processes designed to increase people's confidence, skills, and knowledge, enabling them to effectively manage their personal finances. This understanding is expected to help people use financial services and products not only by understanding and understanding financial institutions and services, but also by improving or changing their financial management behaviors to increase their prosperity.(Yusmelia and Suryadi, 2024). Financial literacy also relates to a person's competence in managing finances. Financial literacy is defined as: "The ability to read, analyze, manage, and communicate about personal financial conditions that affect material well-being. It includes the ability to discern financial choices, discuss money and financial issues without (or despite) discomfort, plan for the future, and respond competently to life events that affect everyday financial decisions, including events in the general economy." Financial literacy can also be understood as the knowledge and ability to manage finances to improve well-being. Meanwhile, personal financial literacy is defined as knowledge of financial concepts. Personal financial literacy includes basic personal finance, cash management, credit and debt, savings and investment, and risk.(Tuti Anggraini, 2025). Based on Financial Services Authority Regulation Number 76/POJK.07/2016 concerning Increasing Financial Literacy and Inclusion in the Financial Services Sector for Consumers and/or the Community, financial literacy is knowledge, skills, beliefs, which influence attitudes and behavior to improve the quality of decision-making and financial management in order to achieve prosperity.

Financial Technology

Based on OJK Regulation No. 10/POJK.05/2022, developments in information technology have significantly impacted the financial services industry (IJK). The digitalization of IJK has encouraged them to innovate rapidly and adapt to public needs. One IJK that has experienced rapid growth in recent years is the fintech industry.(Yusmelia and Suryadi, 2024). According to Santoso, financial technology, also known as fintech, has had a significant impact on every aspect of financial services and is revolutionizing the entire financial industry through virtual transformation. Fintech integrates finance and technology, providing a variety of innovative business services and leading a global economic revolution. The implementation of fintech in financial inclusion practices will promote social welfare and economic growth in various countries. In recent years, fintech has grown rapidly globally, including in Indonesia. Companies' business patterns through digital service offerings have also changed. Indonesia is a country with a high fintech growth rate because it has entered various business sectors, including payment systems, investments, and online lending funds.(Mizanulhaq, 2024). Meanwhile, the use of technology, data, and software has made fintech more efficient and effective. Fintech itself has a very broad definition. The fintech industry encompasses innovations in financial services, which have become increasingly recognized in the current digital era, with digital payments among the fastest-growing areas within the fintech space.(A'mala et al., 2024).

Sharia Bank Products

These products are based on Sharia principles, such as profit-sharing (mudharabah, musyarakah) and buying and selling (murabahah, salam, istishna). Sharia banks also offer

savings products such as checking and savings accounts based on wadiah principles, as well as financing products such as ijarah (leasing). (Saparuddin Siregar, 2025).

Here are some important points that are usually discussed in this chapter:

- a. Fundraising Products (Funding) (Nurfazilah, 2025). Wadi'ah Principle: The bank accepts funds from customers and is responsible for their security. Its products include: Wadiah Giro: Giro savings with the wadiah principle, providing easy transactions.
Wadiah Savings: Savings deposits based on the wadiah principle customers can withdraw their funds at any time.
Mudharabah Principle: The bank and the customer collaborate in a business, and profits are shared according to an agreed ratio. Products include:
Mudharabah Savings: Savings based on the profit sharing principle.
Mudharabah Deposit: A deposit based on a profit-sharing principle, usually for a specific period.
- b. Financing Products (Irhamni and Astuti, 2025). Murabahah Principle: Buying and selling goods with a profit agreed upon between the bank and the customer.
Musyarakah Principle: Cooperation between a bank and a customer in a business, where profits and losses are shared according to agreement.
Mudharabah Principle: The bank provides funds and the customer manages the business, profits are shared according to the agreed ratio, losses are borne by the bank.
Salam Principle: Purchase and sale of orders, where the goods will be delivered at a later date.
Istishna Principle: Financing for the manufacture of goods, the bank orders goods from a third party and sells them to customers.
Ijarah Principle: Renting goods or services between a bank and a customer.
- c. Other Financial Services Products (Nurfazilah, 2025). Bank Guarantee: A guarantee given by a bank to a third party on behalf of a customer.
Clearing: The process of transferring funds between accounts without involving the physical movement of money
Collection: Collection of promissory notes or other valuable documents.
Transfer: Transfer of funds between accounts.
Social Products (Nurfazilah, 2025):
Qardhul Hasan: A loan of good deeds without compensation, given to customers or people in need.
Zakat, Infak, Sedekah: Sharia banks can receive and distribute social funds.

Micro, Small, and Medium Enterprises (MSMEs)

According to Law No. 20 of 2008, MSMEs are productive businesses owned by individuals or business entities that meet the criteria for micro-enterprises. A country's progress can be determined by several factors, one of which is the welfare of its people. Micro-enterprises are productive businesses owned by individuals or individual business entities that meet the criteria for micro-enterprises. (Nugraha et al., 2024) A small business is a stand-alone productive business, carried out by an individual or business entity that is not a subsidiary or branch of a company owned, controlled or part of, either directly or indirectly, a medium-sized business or large business. A medium-sized business is a stand-alone productive business, carried out by an individual or business entity that is not a subsidiary or branch of a small business or large business. which meets the criteria for a small business as referred to in the law. (Pramita, 2024).

METHOD

This type of research uses a quantitative research method, which involves the use of numerical data or numbers as the basis for the research. Based on this explanation, the population in this study is MSME business actors located in Sibolga City. In this study,

sampling used a non-probability sampling method, a sampling technique that does not provide an equal opportunity or chance to each member of the population to be selected as a sample member. (Azwar, 2024) Sampling was conducted using purposive sampling, which is random sampling. The researcher determined a sample size of 30 respondents. The data source in this study is primary data. Primary data is information collected from observations made in the field during the research. (Khoiron, 2024) The primary data for this study comes from a questionnaire distributed to MSMEs in Sibolga City. Multiple linear regression and moderated regression analyses were used in SPSS 24 for the technical data analysis required to test the hypotheses

RESULT AND ANALYSIS

Respondent Characteristics

This study was conducted by distributing questionnaires to 30 respondents, who are MSME business owners located in Sibolga City. These respondent characteristics were used to analyze the identity description of the respondents according to the predetermined sample. Providing an overview of the research sample is one of the objectives of the respondent characteristics. Respondent characteristics were obtained from personal data contained in the respondent identity data section, including gender, age, type of business, and length of business. To further clarify the respondent characteristics, the respondent data table can be seen below: Presentation of respondent data based on gender for MSME business actors located in Sibolga City can be seen in table 1 below:

Table 1. Respondent Characteristics Based on Gender

Gender	Number of respondents	Presentation
Man	16	60%
Woman	14	40%
Amount	30	100%

Source: Primary data processed 2026x

Based on Table 1, it is known that male respondents outnumbered female respondents, with a total of 16 respondents (60%). Meanwhile, female respondents numbered 14 respondents (40%). This indicates that in this study, there were more male respondents than female respondents, by a significant margin. The distribution of respondent characteristics based on age is presented in table 2 as follows.

Table 2. Respondents by Age

Age	Number of respondents	Presentation
20 – 25 years	5	15%
26 – 30 years old	10	35%
31 – 35 years old	8	26%
36 – 40 years old	5	15%
>40 years	2	9%
Amount	30	100%

Source: Primary data processed 2026

Based on Table 2, it is known that respondents aged 20-25 years numbered 5 people (15%). Meanwhile, respondents aged 26-30 years numbered 10 people (35%), respondents aged 31-35 years numbered 8 people (26%), respondents aged 36-40 years numbered 5 people (15%). And finally, respondents aged >40 years numbered 2 people (9%). From this, it can be concluded that the majority of respondents in this study were young people. The

distribution of respondent characteristics based on business type is presented in table 3 as follows.

Table 3. Respondents Based on Business Type

Type of business	Number of respondents	Presentation
Culinary	17	63%
Services	6	17%
Fashion	2	8%
Shop/Wholesale	5	12%
Amount	30	100%

Source: Primary data processed 2026

Table 3 shows that the majority of respondents with culinary businesses, with 17 respondents (63%), followed by respondents with services (6%) and fashion (2%) followed, followed by shops/wholesalers (5%) and wholesalers (12%). The distribution of respondent characteristics based on Business Age is presented in table 4 as follows.

Table 4. Respondents Based on Business Age

Type of business	Number of respondents	Presentation
<1 year	12	43%
1-5 years	9	28%
6-10 years	7	21%
>10 years	2	8%
Amount	30	100%

Source: Primary data processed 2026

Based on Table 4, it can be seen that respondents with businesses aged less than 1 year are the majority, with 12 respondents (42%). Furthermore, respondents with businesses aged 1-5 years are 9 respondents (28%). Respondents with businesses aged 6-10 years are 7 respondents (21%). Respondents with businesses aged >10 years are 2 respondents (8%).

Validity Test

These results show that all statement items have a calculated $r >$ table r and are at a significance value below 0.05, so all statement items in this questionnaire are declared valid and can be used for further testing.

Table 5. Validity Test Results

Variables	Indicator	r Count	r Table	Information
Financial Literacy (X1)	X1.1	0.769	0.1966	Valid
	X1.2	0.846	0.1966	Valid
	X1.3	0.802	0.1966	Valid
	X1.4	0.749	0.1966	Valid
	X1.5	0.704	0.1966	Valid
	X1.6	0.750	0.1966	Valid
	X1.7	0.797	0.1966	Valid
	X1.8	0.796	0.1966	Valid
	X1.9	0.857	0.1966	Valid
	X1.10	0.866	0.1966	Valid
Sharia Financial Technology (X2)	X2.1	0.839	0.1966	Valid
	X2.2	0.791	0.1966	Valid
	X2.3	0.829	0.1966	Valid
	X2.4	0.537	0.1966	Valid

Variables	Indicator	r Count	r Table	Information
Sharia Banking Products (Y)	X2.5	0.794	0.1966	Valid
	X2.6	0.843	0.1966	Valid
	X2.7	0.744	0.1966	Valid
	X2.8	0.664	0.1966	Valid
	X2.9	0.858	0.1966	Valid
	X2.10	0.553	0.1966	Valid
	Y1	0.721	0.1966	Valid
	Y2	0.817	0.1966	Valid
	Y3	0.719	0.1966	Valid
	Y4	0.838	0.1966	Valid
Y5	0.843	0.1966	Valid	
Y6	0.719	0.1966	Valid	
Y7	0.794	0.1966	Valid	
Y8	0.514	0.1966	Valid	
Y9	0.431	0.1966	Valid	
Y10	0.794	0.1966	Valid	

Source: Primary data processed 2026

Based on Table 5, data from 30 respondents was obtained. The results of the data validity test showed a calculated r value greater than the r table. Therefore, all indicators in this study are valid.

Reliability Test

Reliability testing should only be conducted on questions that have met or are already valid. Therefore, if the questions do not meet the validity requirements, they do not need to be further tested. The following are the results of the reliability test on valid questions.

Table 6. Reliability Test

Variables	Cronbach's Alpha	Information
Financial Literacy (X1)	,694	Reliable
Sharia Financial Technology (X2)	,828	Reliable
Sharia Banking Products (Y)	,821	Reliable

Source: Primary data processed 2026

Based on Table 6 above, all variables have a Cronbach Alpha (α) value > 0.60 . This indicates that the data is reliable and can be used for further testing.

Normality Test

In this study, the normality test for residuals was carried out using the Kolmogorov-Smirnov test. The significance level used was $\alpha = 0.05$. The basis for decision making is to look at the probability figures p , with the following provisions. If the probability value $p \geq 0.05$, then the normality assumption is met. If the probability is < 0.05 , then the normality assumption is not met. The results of the Kolmogorov-Smirnov normality test showed that the residual data had a significance value greater than 0.05. Therefore, the residuals were normally distributed, indicating that the normality assumption required for linear regression analysis was fulfilled. This finding suggests that the distribution of the error terms did not significantly deviate from a normal distribution, allowing further statistical analyses to be conducted with confidence. The fulfillment of the normality assumption is important because it ensures the validity and reliability of the regression model used in this study. A normal distribution of residuals indicates that the model is capable of providing unbiased parameter estimates and accurate hypothesis testing results. Consequently, the regression analysis examining the effect of service officer performance on passenger satisfaction can be considered appropriate, and the resulting statistical conclusions can be interpreted with a high degree of confidence.

Table 7. Normality Test**One-Sample Kolmogorov-Smirnov Test**

Unstandardized

N		30
Normal Parameters ^{a,b}	Mean	,0000000
	Standard Deviation	2,51824871
Most Extreme Differences	Absolute	,089
	Positive	,042
	Negative	-,089
Test Statistics		,089
Exact Sig. (2-tailed)		,075
Point Probability		,000

Note that based on Table 7, the probability value of p or Exact. Sig. (2-tailed) is 0.075. Because the probability value of p, which is 0.075, is greater than the significance level, which is 0.05, this means the data is normally distributed.

Table 8. Multicollinearity Test Results

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Financial Literacy	0.274	4,632
	Sharia Financial Technology	0.165	7,741

Source: Primary Data processed 2026

If the VIF value is <10 or the Tolerance value is >0.01, then multicollinearity is not present. If the VIF value is >10 or the Tolerance value is <0.01, then multicollinearity is stated. Based on Table 7 above, this shows that the Tolerance value is more than 0.1 and the VIF is less than 10, it can be concluded that multicollinearity does not occur.

Heteroscedasticity Test

The Glejser statistical test was chosen because it guarantees more accurate results compared to the graph plot test, which can introduce bias. The Glejser test is conducted by regressing the independent variable against its absolute residual value on the dependent variable.

Table 9. Heteroscedasticity Test with Glejser Test Coefficients^a

Model	B	Unstandardized Coefficients		Standardized Coefficients		Sig.
		Std. Error	Beta	t		
1	(Constant)	1,822	,810		2,250	,026
	Financial Literacy (X1)	-,028	,041	-,098	-,683	,495
	Sharia Financial Technology (X2)	,029	,036	,112	,816	,415

a. Dependent Variable: abs_res

Source: Primary Data processed 2026

Based on Table 9, it is known that the Sig. Glejser value of Financial Literacy (X1) is 0.495 > 0.05, the Sig. Glejser value of Islamic Financial Technology (X2) is 0.415 > 0.05. It is known that all Sig. Glejser values of each independent variable are above 0.05, so it is concluded that there is no heteroscedasticity.

Multiple linear regression analysis

The analytical method used in this study is multiple linear regression analysis. Multiple linear regression analysis is used when the number of independent variables is at least two.

Table 10. Multiple linear regression analysis test

Model		Coefficients ^a				Sig.	Collinearity Statistics	
		Unstandardized Coefficients		Standardized Coefficient	T		Tolerance	VIF
	B	Std. Error	Beta					
1	(Constant)	1,966	1,217		1,616	,108		
	Financial Literacy (X1)	,325	,061	,392	5,309	,000	,244	4,105
	Sharia Financial Technology (X2)	,241	,054	,316	4,445	,000	,264	3,794

Source: Primary Data processed 2026

Based on table 10 above, a regression equation is formulated to determine the influence of knowledge, Financial Literacy (X1) and Sharia Financial Technology (X2) on Sharia Banking Products (Y) as follows:

$$Y = 1.966 + 0.325 X1 + 0.241 X2 + e$$

Information:

Y = Sharia Banking Products (Y)

A = Constant

X1 = Financial Literacy (X1)

X2 = Sharia Financial Technology (X2)

Based on this equation it can be interpreted as follows:

1. It is known that the constant value is 1.966. This value can be interpreted as if Financial Literacy (X1), Sharia Financial Technology (X2), do not affect the dependent variable of Sharia Banking Products (Y), then the value of the dependent variable of Sharia Banking Products (Y) is 1.966.
2. The regression coefficient value of the Financial Literacy variable (X1) is 0.325, which is positive. This means that when Financial Literacy (X1) increases by 1 unit, Islamic Banking Products (Y) tend to increase by 0.325.
3. The regression coefficient value of the Islamic Financial Technology variable (X2) is 0.241, which is positive. This means that when Islamic Financial Technology (X2) increases by 1 unit, Islamic Banking Products (Y) tend to increase by 0.241.

Hypothesis Testing

The t-statistic test is used to show how much influence one independent variable partially explains the variation in the dependent variable. This result suggests that improvements in the quality of service provided by officers, including responsiveness, professionalism, communication skills, and friendliness, contribute directly to higher levels of passenger satisfaction. Passengers tend to evaluate the overall quality of railway services based on their interactions with service officers. Consequently, better officer performance enhances passengers' perceptions of service quality and increases their satisfaction with the services provided. These findings support previous studies that emphasize the important role of employee performance in achieving customer satisfaction within the transportation and public service sectors. The following are the test results

Table 11. t-test

		Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients		Sig.	Collinearity Statistics	
		B	Std. Error	Beta	t		Tolerance	VIF
1	(Constant)	1,966	1,217		1,616	,108		
	Financial Literacy (X1)	,325	,061	,392	5,309	,000	,244	4,105
	Sharia Financial Technology (X2)	,241	,054	,316	4,445	,000	,264	3,794

a. Dependent Variable: Sharia Banking Products (Y)

Based on table 11 above, the results of testing the variables Financial Literacy (X1) and Sharia Financial Technology (X2) through the test are as follows:

- It is known that the regression coefficient value of the Financial Literacy variable (X1) is 0.325, which is positive. This means that Financial Literacy (X1) has a positive effect on Sharia Banking Products (Y). It is known that the t statistic or t count of Financial Literacy (X1) is 5.309 > t table = 1.97 and the Sig. value is 0.000, which is < the significance level of 0.05, so Financial Literacy (X1) has a significant effect on Sharia Banking Products (Y). So it is concluded that Financial Literacy (X1) has a positive and significant effect on Sharia Banking Products (Y).
- It is known that the regression coefficient value of the Islamic Financial Technology variable (X2) is 0.241, which is positive. This means that Islamic Financial Technology (X2) has a positive effect on Sharia Banking Products (Y). It is known that the t statistic or t count of Islamic Financial Technology (X2) is 4.445 > t table = 1.97 and the Sig. value is 0.000, which is < the significance level of 0.05, so Islamic Financial Technology (X2) has a significant effect on Sharia Banking Products (Y). So it is concluded that Islamic Financial Technology (X2) has a positive and significant influence on Sharia Banking Products (Y).

Table 12. f-test ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3562,686	3	1187,562	184,485	,000 ^b
	Residual	1280,998	199	6,437		
	Total	4843,685	202			

a. Dependent Variable: Sharia Banking Products (Y)

b. Predictors: (Constant), Financial Literacy (X1) and Sharia Financial Technology (X2)

Based on table 12 above, it is known that the calculated F value is 184.485 and the Sig. value is 0.000. It is known that the calculated F value is 184.485 > F table 2.649 and the Sig. value is 0.000 < 0.05, then Financial Literacy (X1) and Sharia Financial Technology (X2) together or simultaneously have a significant effect on Sharia Banking Products (Y). The coefficient of determination (R²) measures the extent to which the model is able to explain the variance of the independent variable. The following are the test results:

Table 13. Test of Determination Coefficient

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,858a	,736	,732	2,53716

Based on table 13 above, the coefficient of determination (R-Square) is 0.736. This value can be interpreted as the variables of Financial Literacy (X1) and Sharia Financial Technology (X2) are able to influence Sharia Banking Products (Y) by 73.6%, the remaining 100% - 73.6% = 26.4% is explained by other variables or factors.

DISCUSSION

The Influence of Financial Literacy on Sharia Banking Products In Small and Medium Enterprises in the Sibolga Tapteng Area.

Financial Literacy (X1) is 0.325, which is a positive value. This means that Financial Literacy (X1) has a positive effect on Sharia Banking Products (Y). Sharia banking products used by Micro, Small, and Medium Enterprises (MSMEs) in the Sibolga and Central Tapanuli areas generally include savings, financing, and financial services based on Sharia principles. Savings products such as iB Mudharabah Savings and iB Wadiah Savings are the primary choice because they provide convenience in daily transactions while maintaining the principle of being free from usury. In addition, financing products such as Murabahah (buying and selling), Mudharabah (profit sharing), and Musyarakah (capital cooperation) are widely used by small business owners to increase working capital without being trapped by burdensome interest. On the other hand, the public is also starting to utilize Sharia digital banking services, such as Sharia-based mobile banking, for non-cash transactions, bill payments, and transfers between accounts, which further facilitates their business activities.

The influence of financial literacy and Islamic financial technology on the use of Islamic banking products is significant. Communities with high levels of Islamic financial literacy tend to better understand the concept of halal and haram in transactions and are more aware of the advantages of Islamic banking products over conventional ones. This encourages them to more actively utilize Islamic financing services and investment products such as mudharabah deposits. Meanwhile, the development of Islamic financial technology (fintech) has also expanded public access to Islamic banking products through easy-to-use and transparent digital platforms. The integration of Islamic fintech and Islamic banking enables MSMEs in Sibolga-Tapteng to obtain financing, make payments, and manage their finances efficiently, while simultaneously strengthening the Islamic economic ecosystem in the region.

The Influence of Islamic Financial Technology on Sharia Banking Products In Small and Medium Enterprises in the Sibolga Tapteng Area.

Islamic Financial Technology (X2) is 0.241, which is positive. This means that Islamic Financial Technology (X2) has a positive effect on Sharia Banking Products (Y). For MSME transactions in the Sibolga and Central Tapanuli areas, the most widely used payment systems are still dominated by bank transfers and digital payments through Sharia-compliant mobile banking, such as BSI Mobile. Many small business owners have adapted to advances in financial technology and have begun using Sharia-compliant QRIS (Quick Response Code Indonesian Standard) for their daily transactions, both for product sales and payments to suppliers. Furthermore, some MSME owners still use conventional payment methods such as cash, especially in areas with limited internet access. However, trends show a significant increase in the use of cashless services due to their convenience, security, and efficiency, especially when conducting long-distance transactions or with customers from outside the region. This reflects a shift in financial behavior toward Sharia-compliant digitalization. Meanwhile, for financing products, MSME customers in Sibolga and Central Tapanuli most frequently use financing products from Bank Syariah Indonesia (BSI), such as BSI KUR Syariah and other BSI financing. BSI KUR (People's Business Credit) is one of the financing products from Bank Syariah Indonesia (BSI) aimed at micro, small, and medium enterprises (MSMEs). Unlike conventional loans, BSI KUR uses sharia principles, meaning it does not charge interest (riba), but instead uses sharia contracts such as Murabahah (sale and purchase), Ijarah (rent), or Musyarakah (profit-sharing cooperation).

These products are highly sought after because they implement the principles of murabahah (sale and purchase) or mudharabah (profit-sharing) contracts, which are fairer and less burdensome for businesses. Through BSI KUR Syariah, for example, businesses can obtain additional capital with a clear profit margin in accordance with Islamic law, rather than a fixed interest rate like conventional banks. Furthermore, BSI Mitra UMI also provides microfinance with a fast process, without heavy collateral, and accompanied by business mentoring. This financing program has proven to help many MSMEs expand their businesses,

increase production, and strengthen local economic competitiveness based on Islamic financial principles.

The Influence of Islamic Financial Literacy and Financial Technology on Sharia Banking Products in Small and Medium Enterprises in the Sibolga Tapteng Area.

Based on the research results, the coefficient of determination (R-Square) is 0.736. This value can be interpreted as the variables of Financial Literacy (X1) and Sharia Financial Technology (X2) are able to influence Sharia Banking Products (Y) by 73.6%, the remaining $100\% - 73.6\% = 26.4\%$ is explained by other variables or factors. The level of sharia financial literacy has a major influence on the level of understanding and use of sharia banking products by Micro, Small, and Medium Enterprises (MSMEs) in the Sibolga and Central Tapanuli areas. People who have a deep understanding of sharia financial concepts such as mudharabah, musyarakah, murabahah contracts, and the prohibition of usury tend to be more trusting and interested in using sharia banking products, such as iB savings and profit-sharing-based business capital financing. Research by Alimi (2023) in the Scientific Journal of Islamic Economics shows that increasing sharia financial literacy significantly improves people's decisions to use sharia banking products, as they better understand the values of fairness, transparency, and the blessings of transactions. Similar findings were also supported by Putri (2021) from IAIN Parepare, who revealed that MSMEs with high levels of sharia literacy are able to manage their finances more effectively and are oriented towards halal principles. In the context of Sibolga-Tapteng, this means that good financial literacy helps small business owners understand the benefits of sharia financing from institutions like Bank Syariah Indonesia (BSI), while simultaneously increasing their loyalty to the sharia-based banking system.

Meanwhile, the development of Islamic financial technology (fintech) is a major driving factor in increasing inclusion and use of Islamic banking products among regional MSMEs. Digital platforms such as BSI Mobile and the QRIS Syariah payment system enable businesses in remote areas to conduct transactions, payments, and financing more easily and quickly without having to visit a bank branch. Research by Rinaldi (2024) from Brawijaya University confirms that Islamic fintech has significant potential to expand financial access in rural areas due to its low transaction costs and system transparency in accordance with Islamic principles. This also aligns with reports from the Financial Services Authority (OJK, 2024) and Bank Indonesia (2025), which show a significant increase in QRIS use by MSMEs throughout Indonesia, including in the Islamic sector. In the context of Sibolga-Tapteng, the adoption of sharia fintech strengthens the synergy between financial literacy and the digitalization of sharia services, so that MSMEs not only gain easy access to financing such as BSI KUR Mikro or BSI Mitra UMI, but are also encouraged to manage their businesses with more modern, efficient, and Islamic-compliant financial principles.

CONCLUSION

Based on the results of research that has been conducted regarding the Influence of Financial Literacy and Sharia Financial Technology on Sharia Banking Products in Small and Medium Enterprises in the Sibolga Tapteng Area, the following conclusions can be drawn. The Financial Literacy variable (X1) is 0.325, which is positive. This means that Financial Literacy (X1) has a positive effect on Sharia Banking Products (Y). It is known that the t statistic or t count of Financial Literacy (X1) is $5.309 > t_{table} = 1.97$ and the Sig. value is 0.000, which is $<$ the significance level of 0.05, so Financial Literacy (X1) has a significant effect on Sharia Banking Products (Y). So it is concluded that Financial Literacy (X1) has a positive and significant effect on Sharia Banking Products (Y). The Islamic Financial Technology variable (X2) is 0.241, which is positive. This means that Islamic Financial Technology (X2) has a positive effect on Sharia Banking Products (Y). It is known that the t statistic or t count of Islamic Financial Technology (X2) is $4.445 > t_{table} = 1.97$ and the Sig. value is 0.000, which is $<$ the significance level of 0.05, so Islamic Financial Technology (X2) has a significant effect

on Sharia Banking Products(Y). So it is concluded that Islamic Financial Technology (X2) has a positive and significant influence on Sharia Banking Products(Y).

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