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#### ISLAMIC FINTECH LENDING DETERMINANTS USING ISLAMIC FINANCIAL LITERACY AS A MODERATION VARIABLE

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ARTICLE INFO	ABSTRACT				
Article history: Received: February 26, 2024 Revised: June 29, 2024 Accepted: June 29, 2024 Available: June 30, 2024  Keywords: Islamic Fintech Lending, Islamic Financial Literacy, MSME.	This study aims to determine the financial literacy of MSME actors in Morotai Island Regency as well as their erceptions in utilizing islamic fintech lending as a alternative business funding. Moderated Regression Analysis (MRA) with SPSS version 25 is the analysis approach used. 108 MSME units in six randomly chose sub-districts received questionnaires with sloving technique, which was applied with a 0.05 margin of				
<b>DOI:</b> 10.15575/fjsfm.v5i1.33870	<ul> <li>error and predetermined criteria. The study's findings demonstrate that the usage of islamic fintech lending is</li> </ul>				
*Corresponding author e-mail: daud@iain-ternate.ac.id	highly influenced by the perceived usefulness and ease of use of fintech. In addition, this study discovered that the impact of perceived usefulness and perceived ease of use on the frequency with which MSMEs use islamic fintech lending is not moderated by islamic financial literacy. The study's practical contribution is the realization that islamic financial literacy apart cannot be as a criteria for evaluating how MSME utilize islamic fintech lending to obtain funding for company expansion. Further research is necessary on digital literacy, which refers to MSME actors' ability in utilizing technology and digital platforms to obtain fintech funding. In addition, it's essential to focus on external factors like the availability of Islamic financial technology funding education and training for MSME.				
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#### 1 Introduction

Micro, Small, and Medium-Sized Enterprises (MSMEs) support 70% of employment in each nation, making them the backbone of many economies worldwide (National Action Plans on Business and Human Rights, 2022). Despite their significant role in Indonesia's economic growth, MSMEs often struggle to obtain capital for business expansion (Firdaus & Rif'ih, 2018). This challenge is compounded by insufficient knowledge about financial institutions' products and services that could facilitate business advancement. Furthermore, procedural requirements remain difficult to meet due to the limited capabilities of MSME operators, including the lack of accurate business financial information (Achadiyah, 2019; Mahmud, 2023; Mahmud & Anis Safitri, 2022).

A primary reason for the low absorption rate of business finance among MSMEs is their lack of financial knowledge (Arninda & Prasetyani, 2022). Indonesia's financial literacy index stands at 38.03%, indicating that the understanding of how to raise and utilize funds productively is still relatively poor. The 2019 National Survey of Financial Literacy and Inclusion highlights that microbusiness finance and fintech crowdfunding are among the least known financial products and services in Indonesia (OJK, 2021).

Financial technology (fintech) refers to information technology-based money lending services that make funding applications more accessible (Arner et al., 2015). Fintech has been particularly beneficial for MSMEs, especially those lacking bankability to secure capital (Rasidi et al., 2021; Shofawati, 2019). Studies have shown a clear correlation between MSMEs' financial struggles and their lack of financial literacy (Arninda & Prasetyani, 2022; Dahmen & Rodríguez, 2014), there is a clear correlation between MSME' financial struggles and their lack of financial literacy. According to (Ghazali & Yasuoka, 2018), financial literacy is crucial for improving MSMEs' perceptions of fintech finance options.

Financial literacy barriers prevent MSMEs from using fintech as an alternative funding source (Arninda & Prasetyani, 2022; Dahmen & Rodríguez, 2014; Ghazali & Yasuoka, 2018). By establishing financial literacy indicators, MSME players can identify measurable inhibitory factors and improve their capacity to obtain fintech funding. This study employs the Technology Acceptance Model (TAM) to measure MSME players' perceptions of the ease of use and benefits of fintech. The original scale for assessing the TAM construct, validated by Davis et al. (1989) and Davis & Venkatesh (1996), is used to predict and explain consumer acceptance of information technology (Davis & Venkatesh, 1996).

The financial literacy index (FLI) varies significantly across provinces, with North Maluku having one of the lowest FLIs (OJK, 2021). The 2019 national survey on financial literacy and inclusion indicates that North Maluku has the lowest Islamic financial literacy among all provinces (OJK, 2021). The survey results show that people in North Maluku Province do not use financial institutions, products, and services wisely to meet their needs and potential, posing a significant barrier to national financial inclusion. Morotai Island Regency, in North Maluku Province, has the highest number of MSME units, with 2,216 MSMEs as of 2021 (BPS - North Maluku Province, 2022). However, MSMEs in Morotai Island Regency continue to face challenges such as funding access, marketing difficulties, and incompetent management. The lack of financial expertise among MSME participants is the root of these issues (Ka'bah & Latief, 2021).

Recent studies have emphasized the importance of financial literacy in enhancing MSMEs' access to financial services. Arner et al. (2015) highlighted how fintech innovations have revolutionized access to capital, particularly for unbanked segments. Arninda & Prasetyani (2022) demonstrated the direct impact of financial literacy on MSMEs' ability to leverage fintech solutions. Dahmen & Rodríguez (2014) and Ghazali & Yasuoka (2018) provided insights into how financial literacy is a pivotal factor in MSME growth and sustainability. Despite these findings, there is a gap in understanding how specific financial literacy components affect MSMEs' use of fintech in regions with low financial literacy, such as North Maluku.

This study aims to fill the existing gaps by assessing the financial literacy levels of MSME actors in Morotai Island Regency and identifying the specific financial literacy barriers that hinder MSMEs from utilizing fintech loans. By demonstrating the correlation between financial literacy and the adoption and utilization of fintech lending using the Technology Acceptance Model (TAM), this research contributes theoretically and practically. Theoretically, it enhances our understanding of the relationship between financial literacy and fintech adoption among MSMEs. Practically, it provides insights for policymakers and stakeholders to enhance financial literacy and fintech adoption among MSMEs in North Maluku and similar regions.

Given this context, the study addresses the following research questions:

- a. Does the Actual Islamic Fintech Use (ATU) depend on perceived usefulness (PUS)?
- b. Does the Actual Islamic Fintech Use (ATU) depend on perceived ease of use (PEU)?
- c. Is there a moderating effect of Islamic financial literacy (IFL) on the perceived usefulness of Islamic fintech lending on the Actual Islamic Fintech Use (ATU)?
- d. Is there a moderating effect of Islamic financial literacy (IFL) on the perceived ease of use (PEU) of Islamic fintech lending on the Actual Islamic Fintech Use (ATU)?

The purpose of this study is to assess the financial literacy of MSME actors in Morotai Island Regency and identify their shortcomings in using fintech loans as an alternative funding source. This research aims to contribute theoretically by demonstrating the correlation between financial literacy and MSMEs' adoption and utilization of fintech lending. Practically, it seeks to map MSME participants' access to fintech financing, providing data to support the development of MSME firms in Morotai Island Regency, North Maluku, and Indonesia at large.

#### 2 Literature Review

Prior studies have primarily focused on the relationship between MSMEs' performance and financial literacy, despite the significant impact of funding availability on their financial success. Fintech business funding requires specialized information technology expertise. Therefore, this study aims to evaluate MSME participants' perceptions regarding the ease and benefits of adopting fintech for funding, a process influenced by Islamic financial literacy.

Research by (Amalia, 2018; Hermanto & Patmawati, 2017; Hu et al., 1999; Suyanto & Kurniawan, 2019) indicates that users' attitudes and behavioral intentions towards information technology are significantly influenced by their perceived usefulness (PUS).

Consequently, the first hypothesis posits that the frequency of Islamic fintech lending usage by MSMEs is significantly affected by their perceived usefulness of these services.

In addition to these findings, studies by (Akbar et al., 2021; Kurniawan et al., 2019) conclude that the perceived ease of use (PEU) of information technology significantly influences the tendency to use Islamic financial technology financing. Based on this, the second hypothesis suggests that perceived ease of use significantly impacts the frequency of Islamic fintech lending usage.

Further research by Akbar et al. (2021), Hermanto and Patmawati (2017), Kirana and Havidz (2020), Kurniawan et al. (2019), and Nugroho and Apriliana (2021) demonstrates that financial literacy positively affects individuals' perceptions of the usefulness and simplicity of using information technology. Therefore, the third and fourth hypotheses propose that Islamic financial literacy moderates the impact of MSME actors' perceptions of the usefulness and ease of use of Islamic fintech lending.

In summary, this study seeks to fill existing gaps in the literature by assessing the influence of Islamic financial literacy on MSMEs' adoption of fintech lending, with a focus on perceived usefulness and ease of use. By addressing these relationships, the research aims to contribute to a deeper understanding of the factors that facilitate or hinder the adoption of fintech solutions among MSMEs.

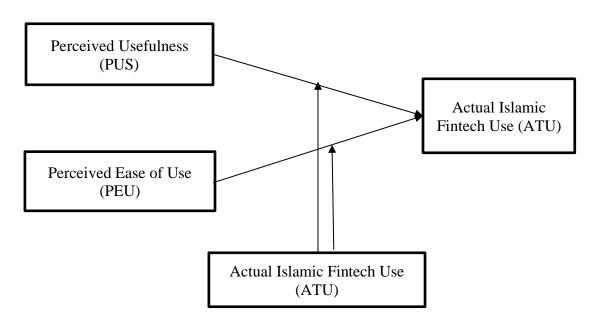


Figure 1. Research Framework

#### **Hypotheses:**

H<sub>1</sub>: Perceived Usefulness (PUS) affects Actual Islamic Fintech Use (ATU)

H<sub>2</sub>: Perceived Ease of Use (PEU) affects Actual Islamic Fintech Use (ATU)

H<sub>3</sub>: Islamic Financial Literacy (IFL) moderates the effect of Perceived Usefulness (PUS) on Actual Islamic Fintech Use (ATU)

H<sub>4</sub>: Islamic Financial Literacy (IFL) moderates the effect of Perceived Ease of Use (PEU) on Actual Islamic Fintech Use (ATU)

#### 3 Methods

The MSMEs registered with the Department of Industry, Trade, Cooperatives, and MSMEs of Morotai Island Regency are the focus of this study. Morotai Island Regency was selected not only because it has the highest concentration of MSMEs in the Province of North Maluku but also because it is designated as an Indonesian Special Economic Zone. The Indonesian government prioritizes these areas to accelerate economic development (Government Regulation Number 50 of 2014: Morotai Special Economic Zone, 2014). There are 331 MSMEs in the Morotai Island Regency (BPS Morotai Island Regency, 2022; Morotai Island Regency Regional Government, 2023). Using the Slovin formula, samples were collected based on two criteria: MSME actors who, over the last five years, have obtained funds from non-bank financial institutions through Islamic peer-to-peer lending and Islamic fintech microfinancing. A total of 108 MSME actors from six randomly selected sub-districts were surveyed. Out of the 108 surveys completed, 82 were deemed suitable for data analysis.

Table 1. Research variable operationalization

Constructs	Defenitions	Indicators Codes		Validity Test	Reliability Test	Sources
T-1	TI	Islamia Einanaial Daharian		Test	.892	(Diagt
Islamic	The awareness,	Islamic Financial Behav				(Dinc et
Financial	knowledge, abilities,		IFL1	.636		al., 2021).
Literacy	attitudes, and	be unacceptable.	T-17 -	0.1.1		
	behaviors required	I steer clear of interest-	IFL2	.814		
	to make wise	based deals.				
	financial decisions	Understanding Islamic l	Finance			
	and eventually	It is undesirable to invest	IFL3	.520		
	attain personal	in a company if the	11 135	.520		
	financial well-being	contract's conditions are				
	are collectively	unclear.				
	referred by the term	It is unacceptable to	IFL4	.758	1	
	financial literacy	invest in companies that	11.174	.736		
	(OECD, 2022).	negatively impact the				
	The primary	environment and people.				
	distinction between	There are other interest-	IFL5	.706	-	
	Islamic financial		IFLS	.700		
	literacy and the	free financial institutions				
	traditional financial	and options available for				
	literacy theory is	investments.	IDI	460		
	how people or	I have financial	IFL6	.462		
	society see interest-	management skills and				
	based transactions	can avoid paying interest.				
	(Dinc et al., 2021).	Interest has an	IFL7	.675	-	
		unfavorable and	IFL/	.073		
		detrimental effect on the				
		economy.	,			
		Islamic Financial Attitud		74.4		
		Communities need to	IFL8	.714		
		support one another in				
		getting over challenges.				
		0 0 8				

	T	C :: 1	TELO	770		1
		Communities need to	IFL9	.779		
		provide financial support				
		for one another.	TET 40	7.40		
		The creditor needs to be	IFL10	.740		
		aware of the loan's				
		intended use.				
		Islamic Financial Aware				
		It doesn't bother me to	IFL11	.687		
		ask others to become				
		business partners.	TET 40	400		
		I'm going to put	IFL12	.688		
		investment into the				
		company and become a				
Perceived	Tl. 1 4.	partner.	PUS1	027	007	(17 1 + 1
Usefulness	The degree to	For quicker business	PUSI	.927	.886	(Venkatesh
	which an individual	funding, I use fintech				et al., 2003)
(PUS)	thinks that utilizing a specific	(P2P and microfinance).  I believe that funding my	PUS2	.899		
	technology will	business is more	F U 3 2	.099		
	enhance their ability	convenient when I use				
	to accomplish their	fintech (P2P and				
	work is known as	microfinance).				
	perceived	My funding application	PUS3	.928		
	usefulness (Davis,	procedure will be	1 033	.720		
	1989).	simplified by using				
	1,00).	fintech (P2P and				
	The degree to	microfinance).				
	which MSME	I'll search for an easier-	PUS4	.682		
	participants think	to-use platform for	1001	.002		
	that utilizing fintech	applying for company				
	for business	financing.				
	financing will	8				
	enhance the					
	functioning of their					
	enterprises.					
Perceived	The degree to	I can quickly learn about	PEU1	.746	.865	(Venkatesh
Ease of Use	which a person	microfinance and peer-				et al., 2003)
(PEU)	thinks utilizing a	to-peer lending (P2P)				
	specific system	through these website/				
	would make their	application.				
	task easier (free of	On fintech (P2P and	PEU2	.754		
	effort) is known as	microfinancing) websites				
	Perceived Ease of	and applications, I can				
	Use (Davis, 1989)	easily sign up and				
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	complete the forms.				
	How much MSME	P2P and microfinancing	PEU3	.875		
	owners think using	fintech websites and				
	fintech can simplify	software are easily				
	(and require less	comprehensible and have				
	work) the process of obtaining	a clear design.	DELLA	Z04		
		I don't need to read the	PEU4	.694		
	business capital.	usage instructions for				
		fintech websites or				
		programs (P2P and microfinancing). I can				
		microfinancing). I can utilize them with ease.				
		P2P and microfinancing	PEU5	.825		
		fintech websites and apps	11203	.043		
		initecti websites and apps	l			

	T				1	1
		are accessible to me				
		quickly.				
		It is more efficient to	PEU6	.782		
		apply for money through				
		fintech (P2P and				
		microfinance) than				
		through traditional				
		financial institutions.				
Attitude	Attitude Toward	Fintech (P2P and	AFU1	678	.916	(Venkatesh
Toward	Using technology is	microfinance) utilization				et al., 2003)
Using	characterized as a	is an useful option.				, ,
(ATU)	person's overall	P				
()	emotive response	The concept of	AFU2	.717		
	to using a system.	employing fintech (P2P				
	(Venkatesh et al.,	and microfinancing)				
	2003).	bothers me.				
	2003).	It's a lot of fun to use	AFU3	.717	1	
	H J- MCME	fintech (P2P and	711 03	./1/		
	How do MSME	microfinance).				
	owners respond to	inicionnance).				
	the financing of					
	businesses through					
	fintech?					
Behavioral	Behavioral	Fintech (P2P and	AFU4	.754		(Venkatesh
Intention	Intention to Use is	microfinancing) is				et al., 2003)
to Use	the propensity to	something I want to use				
(BIU)	keep utilizing	in the upcoming months.				
	information	I anticipate utilizing peer-	AFU5	.817		
	technology (Davis	to-peer and microfinance				
	et al., 1989)	fintech within the next				
	, ,	few months.				
	How often do	In the upcoming months,	AFU6	.800	1	
	MSME owners use	I want to use fintech	711 00	.000		
	fintech to finance	(P2P and				
	their businesses?	microfinancing).				
Actual		When I need to fund a	A 171 17	920	1	(17 1 + 1
	Actual System Use		AFU7	.829		(Venkatesh
System Use	is What is measured	business, I always use				et al., 2003)
(ASU)	throughout the six	fintech (P2P and				
	months following	microfinance).				
	use is the real usage	I frequently visit websites	AFU8	.830		
	behavior, or actual	and apps related to				
	system utilization.	fintech (P2P and				
	The period of time	microfinance).			]	
	spent using the	I frequently visit the	AFU9	.832		
	system is used to	websites of several P2P				
	measure actual	and microfinance fintech				
	usage behavior	companies whenever I'm				
	(Venkatesh et al.,	looking to raise money.				
	2003)	simily to raise money.				
1	After utilizing					
	fintech, what are					
	the real					
	circumstances (user					
L	reactions)?					

Source: Primary data processed, 2023

The three primary aspects of financial literacy are knowledge, experience, and financial behavior (Moore, 2004). The four primary indicators of Islamic financial literacy are behavior, knowledge, attitudes, and awareness of Islamic finance. 12 questions are used to measure these four indicators (Dinc et al., 2021). 10 questions were used to measure perceived usefulness and perceived ease of use (Venkatesh et al., 2003). Three questions were used to measure attitude toward usage, three questions for behavioral intention to use, and three questions for actual system use (Venkatesh et al., 2003).

The data were analyzed using a moderated regression analysis approach, and the analytical tool used was SPSS Statistics version 25. The regression equations used in this study were as follows:

```
Y=\alpha+\beta1X1+\beta\ 2X2
Y=\alpha+\beta1X1+\beta2X2+\beta3M+\beta4X1*M+\beta5X2*M
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#### Validity and Reliability Test

When an instrument is modified or combined for a study, its original validity and reliability may not apply to the new instrument. Therefore, it is crucial to establish validity and reliability as part of the data analysis plan (Creswell & Creswell, 2023). To ensure the validity of the instrument used in this research, we tested 50 questionnaires using Pearson's correlation – two-tailed with a significance criterion of 0.05. For reliability, we used Cronbach's alpha (α) value scale, which ranges between 0 and 1, with optimal values between 0.7 and 0.9 (Creswell & Creswell, 2023). Out of all the instrument items used to measure research variables (Table 1), only one item, coded AFU 2, was found to be invalid. Consequently, this item was eliminated and not used in the analysis of this research's findings. The results of the tests for validity and reliability can be seen in the table 1.

#### 4 Results and Discussion

A questionnaire with a 0.05 margin of error was distributed to 108 MSME actors in six randomly selected sub-districts. The sample criterion consisted of MSME actors who had obtained funding from non-bank financial institutions over the last five years via Islamic fintech micro financing and Islamic peer-to-peer lending. Out of the 108 completed surveys, 82 were valid for data analysis.

The respondent demographics provide a comprehensive breakdown of the characteristics of the 82 MSME actors who participated in the study. The majority of respondents are from North Morotai (35%) and Rao Island (22%), with smaller representations from South Morotai (16%), East Morotai (11%), Morotai Jaya (12%), and West South Morotai (4%). Female respondents constitute a larger proportion (59%) compared to males (41%). In terms of age distribution, 33% of the respondents are between 15-29 years old, while 40% are between 30-60 years old.

Regarding education levels, 44% of the respondents have an education ranging from elementary to high school, 24% hold a bachelor's degree, and 20% have a postgraduate degree. The income distribution reveals that a majority (65%) of the respondents have a

monthly income of less than IDR 4,000,001, while 33% earn between IDR 4,000,001 and 10,000,000, and only 2% have an income above IDR 10,000,001.

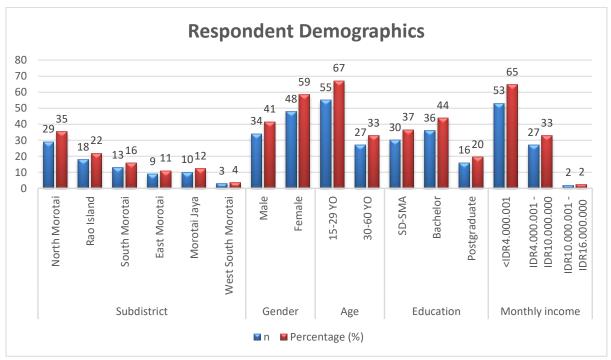


Figure 1. Respondent Demographics

Source: Primary data processed, 2023

This diverse demographic data enhances the robustness of the study, ensuring that the findings are reflective of various perspectives within the MSME community utilizing Islamic fintech lending.

Based on the results of the classical assumption tests, the regression model used in this analysis meets all the necessary assumptions.

Table 2. Classical Assumption Test

Classical Assumption Test	Variables	Test Result			
Normality Test		Asymp. Sig. (2- tailed)	0.079		
Multicollinearity Test		Tolerance	VIF		
	Perceived Usefulness	0.470	2.128		
	Perceived Ease of Use	0.464	2.154		
	Islamic Financial Literacy	0.718	1.394		
Heteroscedasticity Test		Sig.			
•	Perceived Usefulness	0.535			
	Perceived Ease of Use	0.421			
	Islamic Financial Literacy	0.065			

Source: Primary data processed with SPSS 25, 2023

The normality test results show an Asymp. Sig. (2-tailed) value of 0.079, which is greater than the significance level of 0.05. This indicates that the residual data are normally distributed, thus fulfilling the normality assumption. Furthermore, the multicollinearity test results show Tolerance values for Perceived Usefulness, Perceived Ease of Use, and Islamic Financial Literacy of 0.470, 0.464, and 0.718, respectively, with corresponding VIF values of 2.128, 2.154, and 1.394. Since the Tolerance values are greater than 0.1 and the VIF values are less than 10, it can be concluded that there are no multicollinearity issues among the independent variables in this model. Lastly, the heteroscedasticity test results indicate significance values for Perceived Usefulness, Perceived Ease of Use, and Islamic Financial Literacy of 0.535, 0.421, and 0.065, respectively. These values are all greater than 0.05, suggesting that the residual variance is constant and there are no heteroscedasticity issues. Therefore, this regression model meets all the classical assumptions and is suitable for further analysis.

The following interpretation provides an analysis of the impact of perceived usefulness and perceived ease of use on the actual use of Islamic fintech lending, as well as the moderating effect of Islamic financial literacy on these relationships.

Table 3. Mutliple Regression Analysis

Variables	Coefiecient	t	Sig	R	R-Square	Adjusted R Square
Models 1				.734	.539	.527
(Constant)	10.770	3.697	.000			
Perceived Usefulness	1.231	6.886	.000			
(Constant)	5.436	1.989	.050			
Perceived Ease of Use	1.110	9.311	.000			
Islamic Financial	.102	.438	.663			
Literacy						
Perceived	.015	.660	.511			
Usefulness*Islamic						
Financial Literacy						
Perceived Ease of	020	-1.076	.285			
Use*Islamic Financial						
Literacy						

Dependent Variable: Actual Islamic Fintech Use

Source: Primary data processed with SPSS 25, 2023

The regression analysis results show that perceived usefulness significantly affects the actual use of Islamic fintech lending. The coefficient of 1.231 indicates that for every unit increase in perceived usefulness, the actual use of Islamic fintech lending increases by 1.231 units. This relationship is statistically significant, as indicated by the t-value of 6.886 and a significance value of .000. Therefore, **Hypothesis 1 (H<sub>1</sub>) is accepted**.

Similarly, perceived ease of use also significantly affects the actual use of Islamic fintech lending. The coefficient of 1.110 indicates that for every unit increase in perceived ease of use, the actual use of Islamic fintech lending increases by 1.110 units. This

relationship is statistically significant, with a t-value of 9.311 and a significance value of .000. Thus, **Hypothesis 2 (H<sub>2</sub>) is accepted**.

However, the analysis reveals that Islamic financial literacy does not significantly moderate the effect of perceived usefulness on the actual use of Islamic fintech lending. The interaction term coefficient of .015 indicates a very small moderating effect, and with a t-value of .660 and a significance value of .511, this effect is not statistically significant. Therefore, **Hypothesis 3 (H<sub>3</sub>) is rejected**.

Similarly, Islamic financial literacy does not significantly moderate the effect of perceived ease of use on the actual use of Islamic fintech lending. The interaction term coefficient of -.020 indicates a very small and negative moderating effect, but with a t-value of -1.076 and a significance value of .285, this effect is also not statistically significant. Thus, **Hypothesis 4 (H4) is rejected**.

In summary, perceived usefulness and perceived ease of use both significantly influence the actual use of Islamic fintech lending. However, Islamic financial literacy does not significantly moderate these relationships.

The model summary provides key statistics to evaluate the overall fit of the regression model. The correlation coefficient (R) is .734, indicating a strong positive correlation between the predictors (perceived ease of use and perceived usefulness) and the dependent variable (actual use of Islamic fintech lending). The R Square value is .539, which means that 53.9% of the variance in the actual use of Islamic fintech lending is explained by perceived ease of use and perceived usefulness combined. This suggests that the model has good explanatory power.

The Adjusted R Square value, which adjusts for the number of predictors in the model and the sample size, is .527. This indicates that, after adjusting for the number of predictors, 52.7% of the variance in the actual use of Islamic fintech lending is explained by the model. This adjustment is important as it accounts for the potential inflation of R Square when more predictors are added to the model.

## 4.1. Actual Islamic Fintech Use (ATU) Depend On Perceived Usefulness (PUS)

Table 3 illustrates the decision-making process in this study. As a result, the first hypothesis, which posits that the perceived usefulness of using fintech significantly affects the actual use of Islamic fintech lending, is accepted.

The findings from the first hypothesis test suggest that Islamic fintech lending can help MSME (Micro, Small, and Medium Enterprise) actors grow their businesses by enhancing the usefulness of fintech, particularly in terms of the ease of accessing business funding. This study's findings confirm and support the results of previous studies conducted by (Amalia, 2018; Hermanto & Patmawati, 2017; Hu et al., 1999; Suyanto & Kurniawan, 2019).

These studies collectively highlight the importance of fintech in providing accessible financial solutions, which is crucial for the development and sustainability of MSMEs. The positive impact of perceived usefulness on the actual use of Islamic fintech lending

underscores the practical benefits that fintech services offer to business owners, facilitating smoother and more efficient access to necessary financial resources.

## 4.2. Actual Islamic Fintech Use (ATU) Depend On Perceived Ease Of Use (PEU)

The acceptance of the second hypothesis indicates that the perceived ease of use of fintech has significant effects on the actual use of Islamic fintech lending. The findings from the second hypothesis test demonstrate that Islamic fintech lending applications are particularly user-friendly, emphasizing the simplicity of use. The application's pleasant and user-friendly layout allows users to browse information on business funding more easily, facilitating their understanding of their rights and obligations in funding agreements.

These findings confirm and support the results of previous studies conducted by (Akbar et al., 2021; Kurniawan et al., 2019). These studies collectively underscore the importance of user-friendly interfaces in fintech applications, which significantly enhance user experience and accessibility. The ease of use not only improves the adoption rates of fintech services but also ensures that users can efficiently navigate and utilize the services for their business funding needs.

# 4.3. Moderating Effect Of Islamic Financial Literacy (IFL) On The Perceived Usefulness and Perceived Ease Of Use (PEU) Of Islamic Fintech Lending On The Actual Islamic Fintech Use (ATU)

A moderating effect occurs when a third variable or construct changes the relationship between two related variables. Interaction effects are used to assess whether the differences between groups remain consistent across the values of another variable (Hair et al., 2019). In this study, Islamic financial literacy was tested as a potential moderator between perceived usefulness and perceived ease of use on the actual use of Islamic fintech lending. The homogeneity and lack of correlation with other independent variables, as indicated by the multicollinearity and heteroscedasticity test findings (Table 2), suggest that Islamic financial literacy is suitable for this role.

The interaction between perceived usefulness and perceived ease of use variables with the Islamic financial literacy variable shows significance values of 0.511 and 0.285, respectively, as shown in Table 8. These results exceed the recommended significance level of 0.05 for social research (Sallis et al., 2021). Consequently, it can be concluded that the influence of perceived usefulness and perceived ease of use on the actual use of Islamic fintech lending is not moderated by the Islamic financial literacy variable. Therefore, both Hypothesis 3 (H3) and Hypothesis 4 (H4) are rejected.

The findings of this study align with those of previous studies by Akbar et al. (2021), Hermanto & Patmawati (2017), Kirana & Havidz (2020), Kurniawan et al. (2019), and Nugroho & Apriliana (2021). These studies consistently found that financial literacy does not significantly influence perceptions of usefulness and ease of use in the context of information technology. This suggests that users' perceptions of the ease and usefulness of fintech applications are not significantly altered by their level of financial literacy.

When comparing these findings to the national survey on financial inclusion and literacy conducted by the Financial Services Authority of the Republic of Indonesia in 2019 (OJK, 2021), there are notable differences. The report emphasizes that financial literacy is crucial for anyone using fintech, especially for those seeking capital for business expansion.

Despite the survey indicating a very low level of Islamic financial literacy in Indonesia, particularly in North Maluku Province, this does not imply that the general public, including MSMEs, lack the necessary references to utilize Islamic fintech lending for business funding.

The analysis reveals that while Islamic financial literacy is important, it does not significantly moderate the effect of perceived usefulness and perceived ease of use on the actual use of Islamic fintech lending. This suggests that efforts to improve the adoption and utilization of Islamic fintech lending should focus more on enhancing the perceived usefulness and ease of use of the technology rather than solely improving financial literacy. However, this does not diminish the importance of financial literacy for broader financial inclusion and effective use of fintech services.

The study concludes that the perceived usefulness and perceived ease of use significantly affect the actual use of Islamic fintech lending, but these relationships are not moderated by Islamic financial literacy. These findings highlight the direct impact of usability factors on fintech adoption and suggest that user-friendly design and perceived benefits are key drivers of fintech utilization, irrespective of users' financial literacy levels.

#### 5 Conclusion

Based on the discussion of the research findings, it can be concluded that MSME actors' perceptions of the utility and ease of use of Islamic fintech loans significantly impact their frequency of use. The findings indicate that the actual use of Islamic fintech loans primarily depends on individuals' assessments of their utility and ease of use. Furthermore, Islamic financial literacy does not significantly influence individuals' assessments of the simplicity and utility of using Islamic fintech loans for securing business funding. The study suggests that Islamic financial literacy alone cannot serve as the sole criterion for evaluating MSMEs' use of Islamic fintech lending for business growth. Instead, efforts to enhance adoption should focus on improving the perceived usefulness and ease of use of these technologies. This implies the need for targeted education and training programs to improve digital literacy among MSMEs.

However, this study has limitations, including its focus on specific variables, geographic constraints, and reliance on self-reported data, which may affect the generalizability and accuracy of the findings. Future research should explore additional factors influencing fintech adoption, such as trust in technology and cultural aspects, and conduct studies across different regions to enhance generalizability. Investigating the impact of specific educational and training programs on fintech adoption among MSMEs could provide practical recommendations for stakeholders.

#### References

Achadiyah, B. N. (2019). Otomatisasi Pencatatan Akuntansi Pada UMKM. *Jurnal Akuntansi Multiparadigma*, 10(1), 188–206. https://doi.org/10.18202/jamal.2019.04.10011

Akbar, Y. R., Zainal, H., Basriani, A., & Zainal, R. (2021). Moderate Effect of Financial Literacy during the Covid-19 Pandemic in Technology Acceptance Model on the Adoption of Online Banking Services. *Budapest International Research and Critics Institute*-

- Journal (BIRCI-Journal), 4(4), 11904–11915. https://doi.org/10.33258/BIRCI.V4I4.3253
- Amalia, S. N. A. (2018). Faktor-Faktor Yang Mempengaruhi Minat Individu Terhadap Financial Technology (Fintech) Syariah (Paytren) Sebagai Salah Satu Alat Transaksi Pembayaran (Pendekatan Technology Acceptance Model (TAM) dan Theory Of Planned Behavior (TPB). *Iqtishaduna*, 41(1), 64–79. https://doi.org/10.20414/IQTISHADUNA.V9II.687
- Arner, D. W., Barberis, J., & Buckley, R. P. (2015). The Evolution of FinTech: A New Post-Crisis Paradigm. *Georgetown Journal of International Law*, 47.
- Arninda, D., & Prasetyani, D. (2022). Impact of Covid-19 Pandemic: SMEs Financing Solutions through Fintech Lending Education. *Proceedings of the International Conference on Economics and Business Studies (ICOEBS 2022)*, 655, 25–31. https://doi.org/10.2991/AEBMR.K.220602.004
- Backhaus, K., Erichson, B., Gensler, S., Weiber, R., & Weiber, T. (2023). Multivariate Analysis. In *Springer Fachmedien Wiesbaden* (Second). Springer Fachmedien Wiesbaden. https://doi.org/10.1007/978-3-658-40411-6
- BPS North Maluku Province. (2022). North Maluku in Figures 2022.
- BPS Morotai Island Regency. (2022). *Morotai Island Regency in Figures 2022*. BPS Statistics Indonesia.
- Cleff, T. (2019). Applied Statistics and Multivariate Data Analysis for Business and Economics. In *Springer International Publishing*. Springer International Publishing. https://doi.org/10.1007/978-3-030-17767-6
- Creswell, J. W., & Creswell, J. D. (2023). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (6th ed.). Sage publications.
- Dahmen, P., & Rodríguez, E. (2014). Financial Literacy and the Success of Small Businesses: An Observation from a Small Business Development Center. *Numeracy*, 7(1). https://doi.org/10.5038/1936-4660.7.1.3
- Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13(3), 319–340. https://doi.org/10.2307/249008
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User Acceptance of Computer Technology: a Comparison of Two Theoretical Models. *Management Science*, 35(8), 982–1003.
- Davis, F. D., & Venkatesh, V. (1996). A critical assessment of potential measurement biases in the technology acceptance model: three experiments. *International Journal of Human-Computer Studies*, 45(1), 19–45. https://doi.org/10.1006/ijhc.1996.0040
- Dinc, Y., Çetin, M., Bulut, M., & Jahangir, R. (2021). Islamic Financial Literacy Scale: an Amendment in The Sphere of Contemporary Financial Literacy. *ISRA International Journal of Islamic Finance*, 13(2), 251–263. https://doi.org/10.1108/IJIF-07-2020-0156
- Firdaus, F., & Rif'ih, M. W. (2018). Internet Financial Reporting: Ditektor Eskalasi kebijakan pemasaran Umkm Berbasis Stakeholder Value Sebagai Implementasi Financial Technology. ... *Ekonomi Kreatif Di Era* ..., 104–125.
- Ghazali, N. H., & Yasuoka, T. (2018). Awareness and Perception Analysis of Small Medium Enterprise and Start-up Towards FinTech Instruments: Crowdfunding and Peer-to-Peer Lending in Malaysia. *International Journal of Finance and Banking Research*, 4(1), 13. https://doi.org/10.11648/j.ijfbr.20180401.12

- Government Regulation Number 50th of 2014: Morotai Special Economic Zone (2014). Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). Multivariate data analysis. In *Cengage Learning*, *EMEA* (8th ed.). Annabel Ainscow.
- Hermanto, S. B., & Patmawati, P. (2017). Determinan Penggunaan Aktual Perangkat Lunak Akuntansi Pendekatan Technology Acceptance Model. *Jurnal Akuntansi Dan Keuangan*, 19(2), 67–81. https://doi.org/10.9744/jak.19.2.67-81
- Hu, P. J., Chau, P. Y. K., Sheng, O. R. L., & Tam, K. Y. (1999). Examining the Technology Acceptance Model Using Physician Acceptance of Telemedicine Technology. *Journal of Management Information Systems*, 16(2), 91–112.
- Ka'bah, S., & Latief, F. H. (2021). Pemberdayaan Usaha Kecil Menengah Masyarakat dalam Mendorong Pendapatan Daerah. *Jurnal Ilmiah Wahana Pendidikan*, 7(4), 665–674. https://doi.org/10.5281/zenodo.5302076
- Kirana, M. Y., & Havidz, S. A. H. (2020). Financial Literacy and Mobile Payment Usage as Fainancial Inclusion Determinants. *Proceedings of 2020 International Conference on Information Management and Technology, ICIMTech 2020*, 905–910. https://doi.org/10.1109/ICIMTech50083.2020.9211157
- Kurniawan, T. A., Wardani, D. K., & Widhayati, L. (2019). Pengaruh Keberterimaan Layanan Peer to Peer Lending Kepada UMKM Sebagai Pengguna dengan Menggunakan Metode Technology Acceptance Model (TAM). *Jurnal Sosial Ekonomi Dan Humaniora*, 5(2), 151–160. https://doi.org/10.29303/jseh.v5i2.59
- Mahmud, M. D. bin. (2023). Pendampingan Proses Produk Halal (Self Declare) Dalam Pengajuan Sertifikasi Halal Produk Usaha Mikro Kecil. *Al-Mulk: Jurnal Pengabdian Masyarakat*, 1(1), 1–11.
- Mahmud, M. D. bin, & Anis Safitri, M. (2022). Pendampingan UMKM Dalam Penataan Catatan Keuangan Bisnis Menggunakan Lamikro Di Kota Ternate. *Prosiding Sembadha*, *3*, 21–26.
- Moore, D. (2004). Survey of Financial Literacy in Washington State: Knowledge, Behavior, Attitudes, and Experiences (Issue December 2003). https://doi.org/10.13140/2.1.4729.4722
- Morotai Island Regency Regional Government. (2023). *Morotai Island Regency Government Data Center*. MATA (Morotai Satu Data). https://mata.pulaumorotaikab.go.id/dataset/document/detail/77
- National Action Plans on Business and Human Rights. (2022). Small & medium-sized enterprises | National Action Plans on Business and Human Rights. National Action Plans on Business and Human Rights. https://globalnaps.org/issue/small-medium-enterprises-smes/
- Nugroho, A. P., & Apriliana, R. M. (2021). Islamic Financial Literacy and Intention to Use Gopay in Yogyakarta: Extended Theory of Acceptance Models. *International Conference on Islamic Studies and Social Sciences (ICONISSS) 2021*, 2022(January), 329–338. https://doi.org/10.18502/KSS.V7I10.11370
- OECD. (2022). OECD/INFE Toolkit for Measuring Financial Literacy and Financial Inclusion 2022. In *The International Journal of Applied Economics and FinanceOrganisation for Economic Co-operation and Development*. The Organisation for Economic Co-operation and Development.
- OJK. (2021). Survei Nasional Literasi dan Inklusi Keuangan Indonesia 2019.

- Rasidi, Y. S., Budi, C. S., & Hatmoko, P. A. (2021). Fintech Syariah Alternatif Pendanaan UMKM Pada Masa Pandemi Covid-19 Di Indonesia. *Finansha: Journal of Sharia Financial Management*, 2(1), 1–10. https://doi.org/10.15575/fjsfm.v2i1.12462
- Sallis, J. E., Gripsrud, G., Olsson, U. H., & Silkoset, R. (2021). Research Methods and Data Analysis for Business Decisions. In *Springer International Publishing* (1st ed.). Springer International Publishing. https://doi.org/10.1007/978-3-030-84421-9
- Shofawati, A. (2019). The Role of Digital Finance to Strengthen Financial Inclusion and the Growth of SME in Indonesia. *KnE Social Sciences*, 3(13), 389. https://doi.org/10.18502/kss.v3i13.4218
- Suyanto, S., & Kurniawan, T. A. (2019). Faktor yang Mempengaruhi Tingkat Kepercayaan Penggunaan FinTech pada UMKM Dengan Menggunakan Technology Acceptance Model (TAM). *Akmenika: Jurnal Akuntansi Dan Manajemen*, 16(1). https://doi.org/10.31316/akmenika.v16i1.166
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User Acceptance of Information Technology: Toward a Unified View. *MIS Quarterly: Management Information Systems*, 27(3), 425–478. https://doi.org/10.2307/30036540