

Islamic Financial Literacy and Financial Management Behavior: The Mediating Effect of Fintech Payments by Female Entrepreneurs at Universities in Madura

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Abstract: *The primary objective of this study is to examine the influence of Islamic financial literacy on the financial management behavior of female entrepreneurs in the Madura region, as well as to evaluate the mediating role of Sharia-based financial payment technology (fintech payment) in this relationship. This research is grounded in the strategic contribution of MSMEs to regional economic development and the persistent challenges encountered by female entrepreneurs in sustaining and growing their businesses. Specifically, this pertains to the limited level of Islamic financial literacy and restricted access to digital financial services that adhere to sharia principles. This research employs a quantitative approach, utilizing an online questionnaire as the primary survey method for data collection. Respondents were selected purposively, namely Muslim women from academic circles in Madura who have entrepreneurial experience and use sharia fintech payments. The sample size was calculated using the Lemeshow formula, yielding a total of 97 respondents for this study. This was then multiplied by a certain number to become 120 respondents. The data collection process was carried out through a combination of literature review and structured questionnaire distribution, while data analysis was conducted using the SEM-PLS method with SmartPLS 4.0 software. This research is anticipated to contribute meaningfully to the advancement of a digital sharia financial ecosystem that is inclusive, sustainable, and responsive to the specific needs of female entrepreneurs in the Madura region.*

Keywords: *fintech payment., Financial Literacy., Financial Management Behavior*

INTRODUCTION

Women entrepreneurs now play a strategic role in driving national economic development, Especially through the MSME sector, which functions as a critical pillar of Indonesia's economic structure. Based on preliminary data for 2025, MSMEs in East Java Province showed a positive growth trend of 5.33% compared to the previous year. Meanwhile, the Madura region recorded an increase in MSME activity of 2.98% in the same year, although aggregate data from Bangkalan Regency is not yet officially available and therefore has not been included in the calculations.

Table 1. Growth of MSME

No.	Regency	Number of MSME in 2024	Number of MAME in 2025
1.	Sampang	37.117	37.117

2.	Pamekasan	11.240	11.240
3.	Sumenep	282.071	282.071
4.	Total	330.428	330.428

Source: Compiled by researchers, 2025

Although the MSME sector contributes substantially to the national economy, both through job creation and an increase in Regional Domestic Product, MSMEs still face various challenges in maintaining sustainability and encouraging continuous business growth. One of the main obstacles experienced by MSME actors, especially women entrepreneurs, The issue lies in the inadequate level of financial literacy and the constrained access to digital technologies that facilitate business growth. (Alfarisi & Susetyo, 2025)

Based on data released by the Financial Services Authority (OJK), women account for around 64% of the total 64 million MSME players in Indonesia. However, the financial literacy rate among women is still at 65.58%, lower than that of men, which is 67.32%. This disparity is largely due to structural barriers and limited access to adequate financial information and education.(TEMPO, n.d.) Meanwhile, Indonesian students' understanding of Islamic finance concepts in 2025 is estimated to reach 43.42%, as reflected in the findings of the National Survey on Financial Literacy and Inclusion (SNLIK) issued by the Financial Services Authority (OJK). (Sharia Knowledge Center, 2025)

The lack of Islamic financial literacy and the minimal adoption of sharia-compliant financial technology among female academic entrepreneurs serve as key obstacles to managing businesses effectively in alignment with Islamic principles. The dominance of intuitive financial practices without systematic planning has the potential to cause financial risks. On the other hand, the low level of technology adoption is influenced by minimal digital literacy, Limited comprehension of the functional features embedded within financial applications, and concerns regarding security and compliance with Sharia provisions. (Ani et al., 2023)

Thus, the use of financial technology in line with Islamic principles can serve as a strategic instrument in building a fair, balanced, and sustainable economic system. This initiative is increasingly important in the context of strengthening entrepreneurial capacity in academic circles, particularly in universities in the Madura region, Female entrepreneurs are ideally required to possess a sufficient level of Islamic financial literacy to ensure effective and sharia-compliant business practices. Limitations in Islamic financial literacy and the use of sharia financial technology among female academic entrepreneurs are obstacles to realizing efficient business management in accordance with sharia principles. Financial practices that are still

intuitive and not supported by systematic planning have the potential to cause financial risks, while the low level of technology adoption is due to minimal digital literacy, a lack of understanding of service features, and concerns about security and sharia compliance. (Kassim, 2025)

Targeted educational programs and structured mentoring are essential to enhance the Islamic financial literacy and entrepreneurial competencies of women entrepreneurs. Mastery of financial technology, particularly Sharia-based digital payment systems, is key to promoting professional, efficient, and Islamic-compliant financial management. These efforts also contribute to the creation of a sustainable learning ecosystem and increased competitiveness in the digital age. (Rika Desiyanti, Fivi Anggraini, 2022)

(Kulsum, 2024) found in her research that financial literacy plays a pivotal role in shaping students' financial management behavior. Individuals with a high degree of financial literacy are generally more adept at managing their personal finances efficiently, including budget planning, expenditure control, and rational financial decision making. Meanwhile, (A- Hasan, R., Ashfaq, M., Parveen, T., & Gunardi, 2023) It underscores that enhancing the capacity of female entrepreneurs can be effectively realized through the reinforcement of financial literacy and the strategic adoption of digital technology, particularly in the aspects of financial management and payment systems. However, neither study specifically highlights the financial management behavior of female entrepreneurs in the Madura university environment, nor does it examine the mediating role of fintech payment technology in this relationship.

While previous studies have addressed Islamic financial literacy, financial management behavior, and fintech payment usage, this study is particularly urgent as it uniquely investigates the impact of Islamic financial literacy on financial management behavior, with fintech payments positioned as a mediating variable, particularly among female entrepreneurs in the Madura university environment. This study seeks to examine the correlation between Islamic financial literacy and financial management behavior, as well as evaluate the role of fintech payments in strengthening the relationship between the two. The findings are expected to form the basis for policy formulation, training program development, and innovation of Islamic financial services that are more inclusive, adaptive, and sustainable.

Research conducted by (Rahmi et al., 2022). shows that entrepreneurship training that integrates financial literacy can increase individual motivation, although it has not been proven to directly influence the intention to start a new business. Nevertheless, financial literacy remains a crucial element in shaping sound financial management practices, particularly in making

decisions based on financial information, preparing financial reports systematically and in accordance with standards, and optimizing the efficient use of business resources. Islamic financial literacy not only serves as a tool for understanding, but also as an ethical foundation that shapes preferences, orientations, and sustainable financial decisions. In the context of women's entrepreneurship, Strong religious values can serve as a driving force in promoting the adoption of financial technology that upholds efficiency while adhering to the core principles of fairness, transparency, and sustainability within the Islamic financial system. Hence, a holistic strategy for enhancing Islamic financial literacy must encompass the reinforcement of knowledge, attitudes, and behavioral competencies to promote digital transformation aligned with sharia principles. (Peni Haryanti, 2023)

Research conducted by (Sathvara & Karnavat, 2025). Demonstrates that the utilization of fintech applications contributes significantly to enhancing financial inclusion and improving the efficiency of financial decision-making processes. High accessibility through smartphones also contributes to reducing barriers to participation in the financial system, especially among younger generations who have relatively high digital literacy. (Widiawati et al., 2023) Stresses the critical urgency of integrating digital literacy with Islamic financial literacy to foster inclusive and sharia-compliant financial empowerment. The collaboration between these two forms of literacy enables the public to access and utilize fintech-based digital payment applications optimally and safely, while maintaining compliance with Sharia law principles in every transaction. Islamic value-oriented digital literacy plays a vital role in enhancing users' understanding of technological features and in recognizing potential risks associated with the use of digital financial services.

Islamic Financial Literacy

Financial literacy refers to a systematic effort to enhance individuals' and groups' knowledge, skills, and confidence in managing personal finances prudently and effectively. Islamic financial literacy denotes the capacity to comprehend and apply Islamic financial principles in the effective and sharia-compliant management of financial resources, while remaining based on Islamic values and provisions in order to achieve the desired goals. (Reza Adiyanto & Setyo Dwi Purnomo, 2021) Individuals with high financial literacy and a responsible attitude tend to have a wise and strategic view of money. They are not easily influenced by consumptive behavior or lifestyle alone, but are able to manage their financial condition rationally. Thus, these individuals can determine the right steps in managing funds and optimize their use in accordance with their needs and objectives. (Rio Ferdinand & Ardyansyah, 2023)

Islamic financial literacy aims to promote efficient financial management that is in line with sharia principles in order to improve the financial welfare of the community. In addition to strengthening Sharia financial inclusion through access to halal and equitable products, this literacy also shapes ethical, responsible, and blessing-oriented economic behavior. Therefore, Islamic financial literacy plays a crucial role in fostering a sustainable financial system and advancing inclusive, value-based economic development within the community. (Roemanasari et al., 2022)

Fintech Payment

Fintech payment represents a technological advancement in the financial industry that facilitates digital payment transactions across multiple platforms, such as electronic wallets (e-wallets), QRIS, and application-based banking services (*mobile banking*). In the context of Islamic finance, the use of these services must comply with *sharia* principles, which include prohibitions on usury or hidden interest, transparency in the cost structure and contracts used, and guarantees of fairness and security in every transaction. (Showkat, 2025)

The swift advancement of digital payment systems in the context of the Industrial Revolution 4.0 has significantly contributed to the expansion of financial inclusion, especially for business actors. This technology encourages MSMEs to adapt to an increasingly complex and competitive digital ecosystem. This, in turn, enhances their operational efficiency and facilitates broader market penetration. Beyond their function as transactional instruments, digital payment systems act as a strategic conduit connecting individual Islamic financial literacy with the execution of structured and sustainable financial management practices. Thus, this technology not only speeds up transactions but also strengthens the foundation of smart, measurable, and data-driven financial management. (Maulidah et al., 2024)

Financial Management Behavior

Financial management behavior encompasses deliberate, structured, and accountable actions undertaken by individuals in managing their financial resources. These activities include budgeting, controlling expenses, saving, investing, and managing debt. Factors such as financial literacy, attitudes towards money, and access to financial instruments also influence this behavior. The effectiveness of financial management is demonstrated by an individual's capacity to make rational decisions that align with long-term financial objectives. (Mukti et al., 2022)

Fintech payments contribute to strengthening systematic financial management behavior through features such as expenditure monitoring, transaction notifications, and integrated reporting. This technology helps students manage their personal finances more disciplinedly.

However, its effectiveness is greatly influenced by the level of financial literacy, because without adequate understanding, ease of access actually risks encouraging consumptive behavior. (Azzahraa & Kartini, 2022)

Islamic financial theoris

Based on the theoretical perspective (human capital), the implementation of effective sharia-based financial management is the result of a continuous investment process in strengthening Islamic financial literacy. (Rohmah & Jumiati, 2021). Within the Technology Acceptance Model (TAM) framework, Islamic financial literacy contributes to enhancing individuals' comprehension of the features and operational mechanisms of Sharia-compliant fintech services. (Pratama et al., 2022). Based on the Theory of Planned Behavior, individual actions such as those related to financial management are shaped by intentions that arise from three core factors: behavioral attitudes, subjective norms, and perceived behavioral control, namely individuals' beliefs about their ability to carry out those actions. (Peran Simanihuruk, 2024) From the standpoint of financial well-being theory, financial management success is not exclusively determined by the accumulation of wealth, but rather by the level of security, control, and financial freedom felt by individuals in living their economic lives. (Kurniawati & Setyo, 2022)

Behavioral economics theory combines psychological and economic perspectives to explain how cognitive biases and emotional factors shape financial decision-making. In the context of this study, it provides a framework for understanding the non-rational elements influencing individual financial behavior, Islamic financial literacy plays a role in minimizing behavioral biases, such as impulsive spending tendencies, by encouraging more structured, rational, and ethically-based financial management patterns. (Prasetyo et al., 2024) The Diffusion of Innovations theory explains how new ideas or technologies are disseminated and adopted within a social system. In this context, the adoption of fintech payments can be viewed as a form of innovation whose spread is influenced by technological characteristics, individual financial literacy levels, and the effectiveness of communication channels in conveying information related to the technology. (Mailin, Gepeng Rambe, Abdi Ar-Ridho, 2022)

METHOD

This study employs a quantitative methodology to investigate the impact of financial literacy and financial management behavior on female entrepreneurs within the Madura university setting, with fintech payment serving as a mediating variable in the relationship. This study uses primary data obtained directly through a survey using a structured questionnaire to systematically identify respondents' perceptions, attitudes, and experiences. (Muchlis, 2023) The

sampling technique used was purposive sampling with the following respondent criteria:

1. Female entrepreneurs
2. Muslim
3. Students and academic staff
4. Have run a business
5. Reside in the Madura region

The sampling technique used refers to the Lemeshow formula:

$$n = \frac{Z^2 P (1-P)}{d^2}$$

Explanation

N = number of sample data

Z = 95% confidence interval = $Z_{table} = 1.96$

P = maximum estimate = 0.5

D = Alpha (0.10 or sampling error value = 10%)

Referring to the Lemeshow formula, the sample size in this study is determined through the following calculation:

$$n = \frac{Z 1.96^2 \times 0,5 \times (1-0,5)}{(0,1)^2}$$

$$n = \frac{3,8416 \times 0,5 \times (1-0,5)}{(0,01)}$$

$$n = \frac{3,8416 \times 0,25}{0,01}$$

$$n = 96,04$$

Based on the Lemeshow formula with a 10% margin of error, the minimum required sample size is 96.04, which is rounded up to 97 for practical implementation. Nevertheless, William and Hair advocate the use of multigroup Structural Equation Modeling (SEM) to assess the consistency of inter-variable relationships across distinct respondent groups. This technique allows researchers to identify whether the model structure remains uniformly valid across various population segments, thereby strengthening external validity and expanding the generalization of research findings. When using multivariate analysis techniques such as Structural Equation Modeling (SEM), the sample size was determined by multiplying the number of indicators by a factor ranging from 5 to 10, resulting in a total of 120 respondents for this study.

(Joseph F. Hair Jr. & Barry J. Babin, 2019)

The hypotheses constructed in this study include:

- a. H1: Financial literacy has a positive effect on *Financial Management Behavior*
- b. H2: Financial literacy has a positive effect on *Fintech Payment*.
- c. H3: Fintech Payment positively influences *Financial Management Behavior*
- d. H4: Financial literacy has a positive effect on *financial management behavior* through *fintech payments*

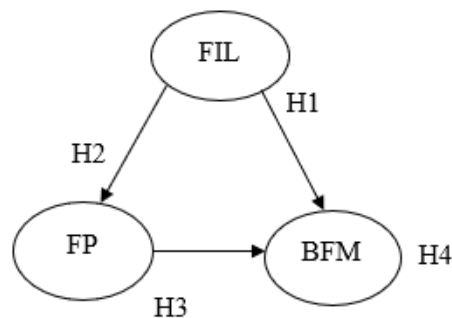


Figure 1 Research Model

Explanation:

FIL = *Financial Islamic Literacy*

FP = *Fintech Payment*

BFM = *Behavioral Financial Management*

RESULT

Women entrepreneurs serve as key agents of economic growth, especially within developing nations like Indonesia. Their contributions are not limited to job creation, but also include improving family welfare and strengthening social empowerment. Based on studies (Widiya Dewi Anjaningrum, Nur Azizah, 2025), Enhancing the performance of women-led small and medium-sized enterprises (SMEs), particularly in the creative industries, can be achieved through the adoption of digital marketing strategies, organizational capacity development, and product innovation. In addition, factors such as market orientation, creativity, and community support have been proven to have a significant impact on achieving competitive advantage. At the

local level, digital-based entrepreneurship training conducted in schools and communities has had a positive impact on increasing women's interest and competence in running businesses.

Descriptive demographic analysis of respondents

Tabel 2. Descriptive Statistic

No.	Variable	Sub-Variable	Frequency	Percentage
1.	Entrepreneurial Status	Freelance / part-time	251	79.20
		Full-time	66	20.80%
2.	Status	Student	252	79.50
		General public	66	20.50
	Generation	Generation Z	279	88.30
		Millennial Generation	35	11
3.	Location	Bangkalan	270	85.17
		Sampang	17	5.36
		Pamekasan	15	4.73
		Sumenep	15	4.73%
4.	Education	High School	65	20.50
		University student (currently enrolled)	194	61.20
		Bachelor's Degree (Strata 1)	49	15.50
5.	Monthly Income	< 1,000,000	241	76
		1,000,000	60	18.90%
		< 3,000,000	16	16.50

Source: Processed by the researcher, 2025

Based on the table above, it can be concluded that the majority of respondents' entrepreneurial status is part-time with 251 responses (79.20%), and 66 are full-time (20.80%). Furthermore, it explains the status of respondents with 252 as students (79.50%) and 66 as the general public (20.50%). Furthermore, 279 respondents (88.30%) belong to Generation Z, while 35 respondents (11%) belong to Generation Millennial. Furthermore, 270 respondents were from

the Bangkalan region (85.17%), 17 from the Sampang region (5.36%), and 15 respondents each from the Pamekasan and Sumenep regions (94.73%). Based on their educational background, the majority were college students (194 people, 61.20%) and bachelor's degree holders (49 people, 15.50%). The majority of respondents had a monthly income of <1,000,000, totaling 241 people (76%), 1,000,000 for 60 people (18.90%), and >3,000,000 for 16 people (16.50%).

DISCUSSION

Evaluation Results (Outer Model)

a. Convergent Validity

Table 3. Convergent Validity

Variable	Item Code	Factors Loadings	Description
<i>Financial Islamic Literacy</i>	FIL 1	0.773	Valid
	FIL 2	0.731	Valid
	FIL 3	0.762	Valid
	FIL 4	0.762	Valid
	FIL 5	0.724	Valid
	FIL 6	0.780	Valid
	FIL 7	0.856	Valid
	FIL 8	0.752	Valid
	FIL 9	0.831	Valid
	FIL 10	0.804	Valid
<i>Fintech Payment</i>	FP 1	0.878	Valid
	FP 2	0.939	Valid
	FP 3	0.914	Valid
	FP 4	0.886	Valid
<i>Behavior Financial Management</i>	BFM 1	0.878	Valid
	BFM 2	0.939	Valid
	BFM 3	0.914	Valid
	BFM 4	0.886	Valid
	BFM 5	0.878	Valid
	BFM 6	0.939	Valid
	BFM 7	0.914	Valid

All items within each construct have achieved convergent validity with factor loadings exceeding 0.70, as presented in the table. Accordingly, the factor loading values for all variables

are considered valid.

b. Discriminant Validity

1. Heterotrait-Monotrait Ratio (HTMT)

Discriminant validity, assessed using the Heterotrait-Monotrait Ratio (HTMT), is considered acceptable when the value is below 0.90, as indicated in the table:

Table 4. Heterotrait-Monotrait Ratio (HTMT)

	BFM	FIL	FP
BFM (Y)			
FP (Z)	0.825	0.868	
FIL (X)	0.856		

As shown in the table, all HTMT values fall below the 0.90 threshold, confirming the discriminant validity of all constructs.

2. Cross Loadings

Discriminant validity assessed through cross-loading is considered satisfactory when each item correlates more strongly with its associated construct than with others, with a minimum expected loading of > 0.70.

Table 5. cross Loading

Variable	BFM	FIL	FP
BFM 1	0.766	0.696	0.705
BFM 2	0.766	0.682	0.606
BFM 3	0.780	0.592	0.546
BFM 4	0.831	0.726	0.680
BFM 5	0.896	0.629	0.626
BFM 6	0.846	0.618	0.649
BFM 7	0.789	0.552	0.499
FIL 1	0.653	0.773	0.641
FIL 2	0.607	0.731	0.609
FIL 3	0.555	0.762	0.572
FIL 4	0.538	0.762	0.548
FIL 5	0.576	0.724	0.584
FIL 6	0.634	0.780	0.643

FIL 7	0.588	0.856	0.668
FIL 8	0.743	0.752	0.665
FIL 9	0.641	0.831	0.706
FIL 10	0.640	0.804	0.636
FP 1	0.701	0.773	0.878
FP 2	0.730	0.773	0.939
FP 3	0.647	0.698	0.914
FP 4	0.693	0.679	0.886

Based on the data presented, all correlation values between indicators and constructs show figures above > 0.70 . Therefore, it can be concluded that the relationship between the indicators and variables used has met the discriminant validity criteria.

c. Construct Reliability and Validity

Table 6. Construct Reliability and Validity

Variable	Cronbach's Alpha	rho_A	Composite Reliability	AVE
Literasi Keuangan Islam (X)	0.927	0.929	0.939	0.606
<i>Fintech Payment</i> (Z)	0.926	0.928	0.947	0.818
Perilaku Manajemen Keuangan (Y)	0.913	0.916	0.931	0.659

The reliability coefficients and Average Variance Extracted (AVE) values for each variable demonstrate that the criteria for construct validity and reliability have been met. A variable is deemed highly reliable when its Composite Reliability, Cronbach's Alpha, and AVE values each exceed 0.50. As shown in the table, all tested variables meet these thresholds, confirming their validity and reliability for subsequent structural model analysis.

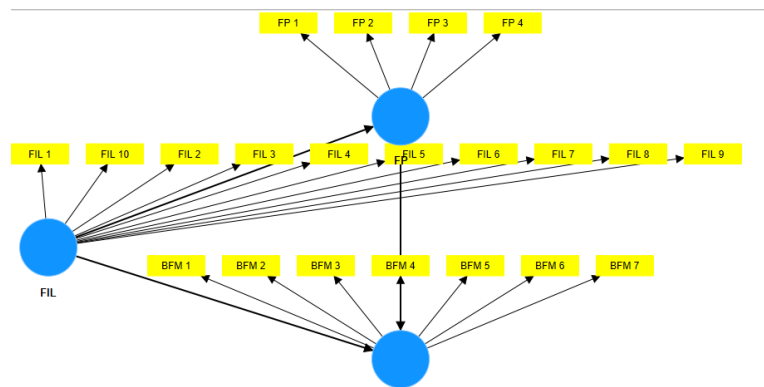


Figure 2. Evaluation of the Inner Model structural model

Evaluasi Model Struktural (Inner Model)

a. Multicollinearity

To avoid collinearity between constructs, the Variance Inflation Factor (VIF) value must be < 5 . In the SEM-PLS approach, the VIF value in the Inner Model is used to detect multicollinearity, which is a high correlation between independent variables.

Result Multicollinearity

	FIL	FP
BFM (Y)	2.906	2.906

The table indicates that all Variance Inflation Factor (VIF) values are below 5, confirming the absence of multicollinearity within the research model.

b. R-Square

Result R- Square

Variabel	R-Square	R-Square adjusted
BFM	0.680	0.674
FP	0.656	0.653

The Adjusted R-Square value of 0.674 indicates that Islamic Financial Literacy and Fintech Payment variables account for 67.4% of the variance in Financial Management Behavior, while the remaining 32.6% is attributed to external factors beyond the scope of this research model.

c. Hypothesis Testing (*Bootstrapping*)

Result (*Bootstrapping*)

Item	P-Value	Decision
FIL -> BFM	0.000	Accept
FIL -> FP	0.000	Received
FP -> BFM	0.019	Accepted
FIL -> FP -> BFM	0.019	Accepted

The explanation is as follows:

1. Islamic Financial Literacy -> Financial Management Behavior The p-value of 0.00, which is below the 0.05 significance threshold, indicates that H1 is supported Islamic Financial Literacy significantly influences Financial Management Behavior. Satya Graha's research affirms that Islamic financial literacy and financial attitudes significantly influence the financial management behavior of students in the Islamic Economics program. (Pangestuti, 2024)) in his research also emphasizes that optimal financial management practices (BFM) are not only required to achieve operational efficiency but must also comply with accounting standards and Islamic ethical principles. "Such compliance logically stems from a high degree of Islamic financial literacy, which encourages the integration of religious values in professional and sustainable financial management. (Endriyati, 2024) Based on the theory perspective (human capital), the implementation of effective sharia-based financial management is the result of a continuous investment process in strengthening Islamic financial literacy. This literacy represents intellectual assets that not only contribute to increased operational efficiency but also ensure compliance with accounting standards and ethical principles based on sharia. Based on the theoretical perspective (human capital), the implementation of effective sharia-based financial management is the result of a continuous investment process in strengthening Islamic financial literacy. This literacy represents intellectual assets that not only contribute to improving operational efficiency but also ensure compliance with accounting standards and ethical principles based on sharia.
2. Islamic Financial Literacy -> *Fintech Payment* The p-value of 0.00, which is below the 0.05 significance level, confirms the acceptance of H2—indicating that Islamic Financial Literacy significantly influences Fintech Payment. This is in line with Nata Ari Praja's research that the level of Islamic financial literacy and the dimension of religiosity have a significant influence on the tendency to use sharia-based fintech

services. (Nata Ari Praja, 2024) Annisa Yusmelia's research demonstrates that Islamic financial literacy, reinforced by factors such as knowledge and trust, plays a significant role in enhancing individuals' interest in adopting Sharia-compliant financial technology services. These findings affirm that adequate comprehension of Islamic financial principles is a key driver in promoting the adoption of fintech services aligned with religious values and ethical financial practices.. (Yusmelia et al., 2024) Within the Technology Acceptance Model (TAM) framework, Islamic financial literacy contributes to enhancing individuals' comprehension of the features and operational mechanisms of Sharia compliant fintech services. A high level of literacy encourages confidence and comfort in accessing and utilizing these financial technologies. In addition, the aspects of trust and knowledge serve as external variables that reinforce positive perceptions of the acceptance of financial technologies that are in line with Islamic principles.

3. *Fintech Payment* -> Financial Management Behavior The p-value of 0.019, which falls below the 0.05 significance level, supports H3—indicating that Fintech Payment significantly influences Financial Management Behavior. This is based on the study (Imroatus Sholekha, Nurhidayah Nurhidayah, 2024) This suggests that the use of fintech payment services positively influences students' financial management behavior, particularly when shaped by their level of financial literacy. Avyana Trista's study confirms that digital payment systems exert a positive and significant influence on students' financial management practices. This effect is further amplified by sufficient financial literacy, which enhances individuals' capacity to manage their finances in a more structured and accountable manner. (Mulya, Avyana Trista, 2024) From the perspective of *the Technology Acceptance Model (TAM)*, adequate financial literacy among students acts as an external variable that influences perceptions of digital financial technology. Students with high levels of financial literacy tend to be better able to understand the perceived usefulness and ease of use of digital payment systems. This understanding fosters favorable attitudes and strengthens behavioral intentions to integrate the technology into everyday financial management practices. Thus, financial literacy serves as a catalyst in increasing the acceptance and effective and responsible use of fintech services.
4. Islamic Financial Literacy -> *Fintech Payment* -> Financial Management Behavior The p-value of 0.019, which is below the 0.05 significance level, supports H4—indicating that Islamic Financial Literacy influences Financial Management Behavior indirectly through the mediating role of Fintech Payment. These findings are consistent with

Siti Munawwaroh's research, which demonstrates that Islamic financial literacy and the utilization of fintech payment services jointly exert a significant influence on students' financial management behavior. (Munawwaroh, 2023) The study employed an inverse mediation model, positioning financial literacy as a mediator between fintech usage and individual financial behavior. Nonetheless, this conceptual framework remains relevant for developing an alternative model in which fintech payment serves as a mediating variable between Islamic financial literacy and financial management behavior. (Parulian et al., 2025) Within the Theory of Planned Behavior (TPB) framework, the utilization of fintech payment services represents the actualization of behavioral intentions shaped by Islamic financial literacy. In other words, *fintech payments* function as a functional mediator connecting intentions derived from positive attitudes and perceived control over behavior with actual actions in financial management. Therefore, the use of sharia-compliant fintech does not merely reflect acceptance of technology but also represents the internalization of Islamic financial values and knowledge within individuals.

The challenge of digital literacy for women entrepreneurs

In the era of digital transformation, digital literacy extends beyond basic technological proficiency to encompass critical thinking in evaluating digital content and a sound understanding of cybersecurity principles, and the ability to manage and utilize digital applications to support business activities. For women entrepreneurs, especially those from non-technological communities or regions with limited digital infrastructure such as Madura, these challenges become even more significant and complex. (Shodiq, 2024) The digital divide is not solely related to access to technological devices, but also reflects deeper socioeconomic inequalities. In the context of women entrepreneurs, those who come from low educational backgrounds or live in remote areas tend to face limitations in obtaining digital training, understanding the functions of financial applications, and managing security risks in the use of technology. (Vassilakopoulou, P., Hustad, 2023)

(Bullough, A., Guelich, U., Manolova, 2022) emphasizes that cultural norms and gender role constructs also influence women's participation in the digital ecosystem. Structural barriers such as double role burdens, time constraints, and lack of social support are major obstacles to the maximum development of digital competencies among women. In the realm of Islamic finance and fintech payment services, limited digital literacy is a major obstacle to adopting financial technologies that are secure and comply with Islamic principles. A lack of understanding of digital

aspects risks encouraging women entrepreneurs to use applications that do not meet sharia requirements or engage in harmful financial practices. Accordingly, enhancing digital literacy in accordance with Islamic values is crucial to fostering an inclusive, secure, and equitable digital transformation process. (Ditya Wardana, 2024)

CONCLUSION

This study demonstrates that Islamic financial literacy significantly enhances the financial management behavior of female entrepreneurs within Madura's higher education context, both directly and indirectly through the mediating role of Sharia-compliant fintech payment services. These findings confirm that understanding Islamic financial principles and utilizing Sharia-compliant digital payment technology are key elements in shaping rational, structured, and sustainable financial behavior. However, low digital literacy and limited access to technology among non-technological women remain challenges that need to be addressed comprehensively. Therefore, policy interventions are essential to promote the integration of Islamic financial literacy and digital literacy within women's MSME empowerment initiatives—through community-based training, the development of Sharia-compliant fintech platforms, and strategic collaboration among universities, local governments, and Islamic financial institutions. This step is expected to strengthen an inclusive female entrepreneurship ecosystem that is responsive to technology and contributes significantly to local economic development in Madura.

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