



**RESEARCH ARTICLE**

**Analysis of Factors Affecting of Using Sharia Mobile Banking among Indonesian Muslim Students**

Dicky Andriyanto<sup>1\*</sup>, A.A Gde Satia Utama<sup>2</sup>, Izzato Millati<sup>3</sup>

<sup>1,2,3</sup> Department of Accountancy, Faculty of Economics and Business, Universitas Airlangga, Indonesia

ARTICLE INFO	ABSTRACT
Received: Oct 15, 2024	This study aims to analyze the Factors Affecting Using Sharia Mobile Banking among Indonesian Muslim Students. The research utilized a quantitative method to collect empirical data on personal views about the use of Islamic mobile banking. The participants were students attending State Islamic Universities in East Java, a sum of 233 samples was gathered. This study concludes that performance expectations, the most influential factor at 20%, drive the adoption of Islamic mobile banking among Indonesian Muslim students, followed by business expectations (15%), social influence (12%), and confidence in technology use (10%), interest in usage (18%), facilitating conditions (8%), behavioral use (5%), financial and technological literacy (7%), and religiosity (5%). A limitation of this study is that the sample consists of students from State Islamic Universities across East Java. Based on the findings, it is recommended that further research be conducted to explore the relationships between factors influencing the use of information and communication technology Sharia mobile banking among Indonesian Muslim students. Additionally, using SmartPLS for analysis is suggested to obtain more comprehensive results.
Accepted: Dec 22, 2024	
<b>Keywords</b>	
Technological Capabilities	
Information and Communication Technology	
Sharia	
Mobile Banking	
UTAUT	
<b>*Corresponding Author:</b>	
dicky.andriyanto@feb.unair.ac.id	

**INTRODUCTION**

The sharia-based economy in Indonesia is predicted to grow rapidly and become the largest center of sharia economy in the world. The main factor for Indonesia to lead the sharia economy is because 85% are Muslims. Indonesia's strategic planning to lead the sharia economy market share in the future is not easy because globally it has not achieved maximum results. This is reinforced by the World Islamic Economic Forum report which places Indonesia in seventh position in the 2022 sharia financial market and is even quite far behind Malaysia which is in 3rd position (The Global Islamic Economy, 2022). This achievement is not comparable to the demographic potential of Indonesia and indicates that Indonesian people tend not to master Islamic banking literacy and technology. According to OJK (OJK, 2021), the condition of sharia economy in Indonesia tends to be low due to the low level of sharia financial literacy in the community, which is around 8.93%. The literacy factor is very important to note because knowledge of sharia finance is the main indicator in achieving sharia financial management in Indonesia. If the level of literacy can be maximized, individuals will better understand the concept of sharia economics.

Apart from the literacy aspect which is still not optimal, the inhibiting factor for the development of Islamic finance is the inability to provide services like conventional finance, especially information technology-based services such as mobile banking (Zouari & Abdelhedi, 2021). The use of mobile banking has been developed by Islamic banking, but obstacles from the technological aspect and user factors are major obstacles in the process of adopting Islamic financial technology finance (Rusyiana, 2019). Study (Berakon et al., 2023) explains that technology plays an important role in

supporting the Islamic banking industry and has not been explored in depth in previous research. In line with research (Berakon et al., 2023) stated that technology is considered to be able to change the perception and interest of community users to use sharia products. The lack of development of research on the use of technology in the field of sharia finance is an important concern to determine the factors that can encourage individual interest in using technology-based sharia banking products. As in the research (Berakon et al., 2023) limited to research that focuses on perception individual and not yet include aspect important other like technology. This is no as stated by (Jung et al., 2020 ) that the success of adopting banking technology is inseparable from the quality of the technology used. The level of literacy in the process of adopting a digitalization system for Islamic banking is very important because individual knowledge influences interest in using it. Individual knowledge of the concept of Islamic banking, the language used, and the use/utilization of its products are the main factors for Islamic banking to be accepted by the community (Isaac et al., 2019; Md. Sapir @ Md. Shafik & Wan Ahmad, 2020). The concept of literacy needs to be studied further to find out how much knowledge the community has with the sharia concept that has been implemented in Indonesia. As in the research (Raza et al., 2018) who have studied the literacy level of the general public have obtained empirical evidence that they are concerned about the risks of using Islamic M-banking due to the lack of knowledge about Islamic banking. Likewise, research (Kazaure et al., 2021) suggested that the literacy factor requires further research because not all respondents used in the study were aware of the concept of sharia.

Religiosity is considered to be able to encourage individuals to change their interests and behavior. For example, religiosity changes perceptions and encourages individuals to use Islamic banking services (Janah et al., 2020; Usman et al., 2022). Religiosity is related to an individual's self-confidence to assess and decide on steps taken with the expectation of goodness when using Islamic banking services (Menne et al., 2022). Individual beliefs based on religious aspects can change individual perceptions to utilize Islamic M-banking (Andespa et al., 2023). Several previous studies have suggested using individual religious values in Islamic research to prove that religious beliefs can influence interests and behavior in using the system (Andespa et al., 2023; Baber, 2020; Hartono et al., 2022; Shaikh et al., 2020). his study included students at the State Islamic University because they were considered to have good religious values because their learning was based on religion, so that they were able to encourage them to use Islamic banking services optimally because they had been equipped with a good understanding of religion. Religiosity is considered to be able to encourage individuals to change their interests and behavior. For example, religiosity changes perceptions and encourages individuals to use Islamic banking services (Janah et al., 2020; Usman et al., 2022). Religiosity is related to an individual's self-confidence to assess and decide on steps taken by expecting goodness when using Islamic banking services (Menne et al., 2022). Individual beliefs based on religious aspects can change individual perceptions to utilize Islamic M-banking (Andespa et al., 2023). Several previous studies have suggested using individual religious values in sharia research to prove that religious beliefs can influence interest and behavior in using the system (Andespa et al., 2023; Baber, 2020; Hartono et al., 2022; Shaikh et al., 2020).

This research aims to find empirical evidence and develop a model/concept of individual interest and use of the sharia banking system. The model developed refers to Berakon et al., (2023) on the impact of the sharia banking system on Muslims in Indonesia, which is limited to measuring individual perceptions consisting of perceived ease and perceived usefulness of individual interest, so it is considered still weak because it only uses individual perceptions to describe interest in using the system. This research refers to the UTAUT model with model development through the addition of religiosity factors, literacy levels, and self-confidence. In addition, to address the inconsistency of previous research, the gender factor from Hofstede et al., (2010) were included as moderation.

## RESEARCH METHODS

The research utilized a quantitative method to collect empirical data on personal views about the use of Islamic mobile banking. Information was gathered via questionnaires given to participants and examined with suitable tools to yield understandable outcomes. The participants were students attending State Islamic Universities in East Java. The sampling method used was purposive sampling, choosing participants according to defined criteria, including having a background in Islamic economics or accounting and possessing experience with mobile banking for their tasks. A sum of 231 samples was gathered. The study's questionnaires are found in the appendix and address

multiple factors: Appendix 1 (Performance Expectations), Appendix 2 (Business Expectations), Appendix 3 (Social Influence), Appendix 4 (Self-Confidence), Appendix 5 (Interest in Use), Appendix 6 (Facilitating Conditions), Appendix 7 (Behavioral Use), Appendix 8 (Literacy), and Appendix 9 (Religiosity).

The survey provided seven answer options to give participants a broader selection of choices. The questionnaire's validity and reliability were evaluated by language and subject matter experts, affirming that it was indeed valid and reliable. The gathered data was subsequently analyzed with SPSS to identify the percentage contribution of each element.

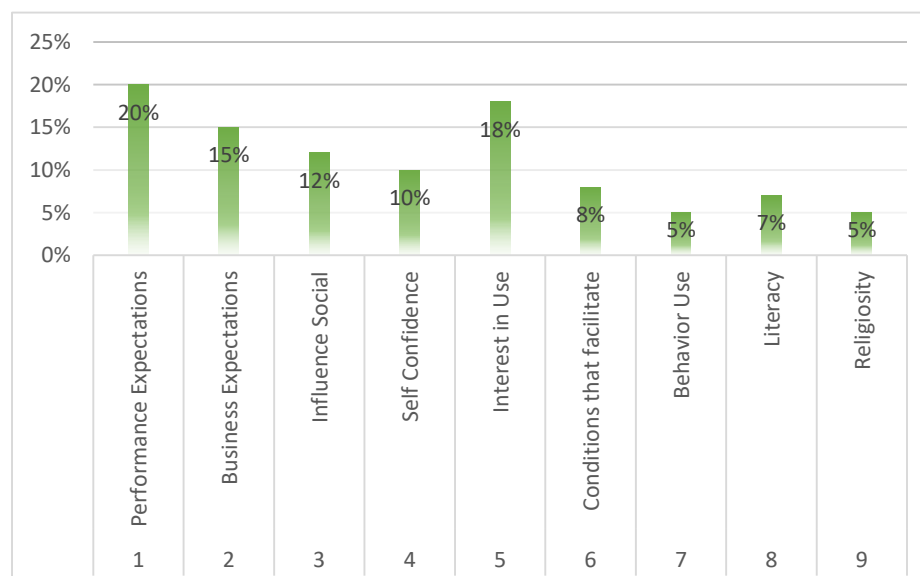
## RESULTS AND DISCUSSION

Based on the analysis that was carried out late, it will be presented in the form of tables and diagrams as follows:

**Table 1: Percentage of factors affecting of using sharia mobile banking among Indonesian Muslim students**

Number	Variable	Percentage
1	Performance Expectations	20%
2	Business Expectations	15%
3	Influence Social	12%
4	Self Confidence	10%
5	Interest in Use	18%
6	Conditions that facilitate	8%
7	Behavior Use	5%
8	Literacy	7%
9	Religiosity	5%
<b>Total</b>		<b>100%</b>

Table 1 shows the percentage of each aspect of Factors Affecting of Using Sharia Mobile Banking among Indonesian Muslim Students. The percentage will be presented in the form of a diagram to clarify the percentage results.



**Figure 1: Percentage result**

The examination of elements affecting the adoption of Islamic mobile banking by Indonesian Muslim students indicates that performance expectations make up 20%, showcasing students' wishes for the app to fulfill their functional requirements. Business expectations account for 15%, emphasizing the perceived benefits and transaction simplicity offered by the app. Social influence, at 12%, emphasizes how the social environment, such as family and friends, impacts students' choices to utilize Islamic

mobile banking. Confidence in utilizing the technology represents 10%. The level of interest in usage is at 18%, showing that students consistently want to use the application. Facilitating factors, like accessibility and technical assistance, account for 8%. Usage of the behavior is tracked at 5%, measuring the frequency of application use. Literacy, at 7%, indicates students' comprehension of the Islamic banking system. Ultimately, religiosity represents 5%, demonstrating the role of religious principles in encouraging students to utilize Islamic mobile banking.

Performance expectations were identified as the leading factor, accounting for 20%, indicating that students anticipate Islamic mobile banking applications to fulfill their functional requirements, including ease of transactions and security. Business expectations represented 15%, highlighting that students also take into account the economic advantages and ease of financial transactions offered by the application. Social influence accounted for 12%, highlighting how the social environment, such as family and friends, affects students' choices to embrace Islamic mobile banking. This discovery is consistent with earlier studies showing that suggestions or instances from close acquaintances greatly affect technology adoption, especially among students (Sudarsono, Kholid, Trisanty, Shidique, et al., 2022).

Confidence in utilizing technology accounted for 10%, indicating that students who feel more confident in their tech skills are more inclined to embrace Islamic mobile banking. This element is essential in making sure that students are not only engaged but also have the required skills and confidence to utilize the application efficiently. The application's usage interest accounted for 18%, indicating that a high level of interest is a major factor in the adoption of Islamic mobile banking, showcasing students' ongoing involvement with mobile banking in their everyday activities. Facilitating factors, including accessibility and technical help, made up 8%, highlighting the significance of straightforward access and sufficient support in resolving technical issues. In the absence of these supports, the adoption of technology may encounter obstacles. Behavioral usage, at 5%, indicated how often students truly utilized the application. Even though its contribution is minor, it continues to be a significant element in evaluating the efficiency and longevity of usage. Financial and technological literacy accounted for 7%, indicating that students' knowledge of the Islamic banking system and associated technologies supports the acceptance of Islamic mobile banking. Students who possess higher literacy skills are more capable of comprehending and maximizing the use of the application effectively (Sudarsono, Kholid, Trisanty, & Maisaroh, 2022). Ultimately, religiosity accounted for 5%, highlighting the importance of religious values in influencing students' choices to embrace Islamic mobile banking, where religious beliefs play a crucial role in selecting Islamic banking services (Shaikh et al., 2020).

## CONCLUSION

This study's conclusion shows that performance expectations play the most crucial role, accounting for 20% of the adoption of Islamic mobile banking among Muslim students in Indonesia. Business expectations account for 15%, underscoring the significance of economic advantages and transaction simplicity. Social influence, comprising 12%, indicates that the social context, such as family and friends, affects students' choices to utilize Islamic mobile banking. Confidence in utilizing technology accounts for 10%, highlighting the significance of self-confidence in embracing technology. A usage interest of 18% highlights that student involvement is a crucial element in the adoption of mobile banking. Facilitating conditions, including accessibility and technical support, account for 8%, highlighting the importance of straightforward access and technical help in utilizing technology. Behavioral use, while accounting for just 5%, is still important for evaluating the frequency of application usage. Financial and technological literacy, accounting for 7%, shows that students' comprehension of the Islamic banking system fosters the acceptance of this technology. Finally, religiosity accounts for 5%, emphasizing the influence of religious principles in encouraging students to embrace Islamic mobile banking.

## REFERENCE

- Andespa, R., Yeni, YH, Fernando, Y., & Sari, DK (2023). A systematic review of customer Sharia compliance behavior in Islamic banks: determinants and behavioral intention. *Journal of Islamic Marketing*. <https://doi.org/10.1108/JIMA-06-2023-0181>
- Baber, H. (2020). FinTech, Crowdfunding and Customer Retention in Islamic Banks. *Vision: The Journal of Business Perspectives*, 24 (3), 260–268.

- <https://doi.org/10.1177/0972262919869765>
- Berakon, I., Wibowo, MG, Nurdany, A., & Aji, HM (2023). An expansion of the technology acceptance model applied to the halal tourism sector. *Journal of Islamic Marketing* , 14 (1), 289–316. <https://doi.org/10.1108/JIMA-03-2021-0064>
- Hartono, R., Abdi, F., & Subhan, M. (2022). Factors Affecting the Interest of Sharia Banking Students in Sulthan Thaha Saifuddin Jambi State Islamic University To Use the Mobile Bank Services Sharia Bank Mandiri. *Jurnal Margin* , 2 (2), 105–118. <https://doi.org/10.30631/margin.v2i2.1388>
- Isaac, O., Abdullah, Z., Aldholay, A.H., & Abdulbaqi Ameen, A. (2019). Antecedents and outcomes of internet usage within organizations in Yemen: An extension of the Unified Theory of Acceptance and Use of Technology (UTAUT) model. *Asia Pacific Management Review* , 24 (4), 335–354. <https://doi.org/10.1016/j.apmr.2018.12.003>
- Janah, N., Medias, F., & Pratiwi, E.K. (2020). The intention of religious leaders to use Islamic banking services: the case of Indonesia. *Journal of Islamic Marketing* , 12 (9), 1786–1800. <https://doi.org/10.1108/JIMA-01-2020-0012>
- Jung, J.-H., Kwon, E., & Kim, D.H. (2020). Mobile payment service usage: US consumers' motivations and intentions. *Computers in Human Behavior Reports* , 1 (January), 100008. <https://doi.org/10.1016/j.chbr.2020.100008>
- Kazaure, MA, Abdullah, AR, Zawawi, DB, & Hamzah, A. (2021). Determinants of SMEs intention to adopt Islamic crowdfunding model in Northwestern Nigeria. *Journal of Islamic Accounting and Business Research* , 12 (2), 204–217. <https://doi.org/10.1108/JIABR-12-2019-0234>
- Md. Sapir @ Md. Shafik, AS, & Wan Ahmad, WM (2020). Financial literacy among Malaysian Muslim undergraduates. *Journal of Islamic Accounting and Business Research* , 11 (8), 1515–1529. <https://doi.org/10.1108/JIABR-10-2017-0149>
- Menne, F., Surya, B., Yusuf, M., Suriani, S., Ruslan, M., & Iskandar, I. (2022). Optimizing the Financial Performance of SMEs Based on Sharia Economy: Perspective of Economic Business Sustainability and Open Innovation. *Journal of Open Innovation: Technology, Markets, and Complexity* , 8 (1), 18. <https://doi.org/10.3390/joitmc8010018>
- OJK. (2021). *Indonesian Sharia Finance Development Report* . <http://www.ojk.go.id/>
- Raza, S. A., Shah, N., & Ali, M. (2018). Acceptance of mobile banking in Islamic banks: evidence from modified UTAUT model. *Journal of Islamic Marketing* , 10 (1), 357–376. <https://doi.org/10.1108/JIMA-04-2017-0038>
- Rusydiana, A. (2019). How to Develop the Sharia Fintech Industry in Indonesia? Interpretive Structural Model (ISM) Approach. *Al-Muzara'ah* , 6 (2), 117–128. <https://doi.org/10.29244/jam.6.2.117-128>
- Shaikh, I.M., Qureshi, M.A., Noordin, K., Shaikh, J.M., Khan, A., & Shahbaz, M.S. (2020). Acceptance of Islamic financial technology (FinTech) banking services by Malaysian users: an extension of technology acceptance model. *Foresight* , 22 (3), 367–383. <https://doi.org/10.1108/FS-12-2019-0105>
- Sudarsono, H., Kholid, M. N., Trisanty, A., & Maisaroh, M. (2022). The intention of Muslim customers to adopt mobile banking: The case of Islamic banks in Indonesia. *Cogent Business and Management*, 9(1). <https://doi.org/10.1080/23311975.2022.2154102>
- Sudarsono, H., Kholid, M. N., Trisanty, A., Shidiqie, J. S. A., & Suseno, P. (2022). Examining the adoption of mobile banking: Empirical evidence from Indonesian Muslim students. *Banks and Bank Systems*, 17(2), 138–149. [https://doi.org/10.21511/bbs.17\(2\).2022.12](https://doi.org/10.21511/bbs.17(2).2022.12)
- The Global Islamic Economy. (2022). *State of the Global Islamic Economy Report* . <https://salaamgateway.com/specialcoverage/SGIE22>
- Usman, H., Mulia, D., Chairy, C., & Widowati, N. (2022). Integrating trust, religiosity and image into technology acceptance model: the case of the Islamic philanthropy in Indonesia. *Journal of Islamic Marketing* , 13 (2), 381–409. <https://doi.org/10.1108/JIMA-01-2020-0020>
- Zouari, G., & Abdelhedi, M. (2021). Customer satisfaction in the digital era: evidence from Islamic banking. *Journal of Innovation and Entrepreneurship* , 10 (1), 9. <https://doi.org/10.1186/s13731-021-00151-x>

## APPENDIX

### Appendix 1: Performance expectations

No	Statement	1 STS	2 ATS	3 TS	4 N	5 US	6 S	7 SS
1	Using the <i>Mobile Banking system Sharia</i> can help me to finish my work quickly							
2	If I use the <i>Mobile Banking system Sharia</i> , I can improve my performance							
3	I feel that using the <i>Mobile Banking system Sharia</i> will be useful for my work							
4	Using the <i>Mobile Banking system Sharia</i> can increase my productivity							

### Appendix 2: Business expectations

No	Statement	1 STS	2 ATS	3 TS	4 N	5 US	6 SS	7 SS
1	I found it easy to learn the <i>Mobile Banking system. Sharia</i>							
2	Procedures for using the <i>Mobile Banking system Sharia</i> clear and understandable							
3	I find it easy to use the <i>Mobile Banking system Sharia</i>							
4	I found it easy to become proficient and skilled in using the <i>Mobile Banking system. Sharia</i>							

### Appendix 3: Influence social

No	Statement	1 STS	2 ATS	3 TS	4 N	5 US	6 S	7 SS
1	The head of the agency has influenced me to use the <i>Mobile Banking system Sharia</i>							
2	Most of my co-workers influenced me to use the <i>Mobile Banking system. Sharia</i> in completing work							
3	In general, the agency has supported me to use the <i>Mobile Banking system. Sharia</i>							
4	People who are important to me (the community and local government), think that I should use the <i>Mobile Banking system. Sharia</i> for village fund management							

### Appendix 4: Self confidence

No	Statement	1 STS	2 ATS	3 TS	4 N	5 US	6 S	7 SS
1	I am confident in my own ability to use the <i>Mobile Banking system Sharia</i>							

2	I have the necessary skills to use the <i>Mobile Banking system Sharia</i>							
3	I have the necessary qualifications/requirements to use the <i>Mobile Banking system. Sharia</i>							
4	I am confident that I can use the <i>Mobile Banking system Sharia</i> to the max							

#### Appendix 5: Interest in use

No	Statement	1 STS	2 ATS	3 TS	4 N	5 US	6 S	7 SS
1	I predict that I will continue to use the <i>Mobile Banking system.</i>							
2	In carrying out work (village fund management), I chose to use the <i>Mobile Banking system Sharia</i> rather than using a manual system							
3	What percentage of you use the <i>Mobile Banking system? Sharia</i> in managing village funds?	1. 0% 5. 51 – 70% 2. 1 – 10% 6. 71 – 90% 3. 11 – 30% 7. > 90% 4. 31 – 50%						

#### Appendix 6: Conditions that facilitate

No	Statement	1 STS	2 ATS	3 TS	4 N	5 US	6 S	7 SS
1	The agency where I work has the facilities needed to use the <i>Mobile Banking system.</i>							
2	I have the knowledge needed to use the <i>Sharia Mobile Banking system</i>							
3	<i>Mobile Banking System Sharia</i> has been in accordance with its function for managing village funds							
4	There is a specific person or group to help me when I have problems or difficulties in using the <i>Sharia Mobile Banking system.</i>							

#### Appendix 7: Behavior use

No	Statement	Statement
1	How much time do you spend using the <i>Sharia Mobile Banking system?</i>	1. Very rare 2. Less than 1/2 hour 3. 1 – 2 hours 4. 2 – 3 hours 5. 2 – 3 hours 6. 4 – 5 hours 7. > 5 hours
2	How often do you use the <i>Sharia Mobile Banking system?</i>	1. Never 2. Less than once a month 3. Once a month 4. Three times a month 5. Several times a week 6. Once a week 7. Often once a day

**Appendix 8: Literacy**

No	Statement	1 STS	2 ATS	3 TS	4 N	5 US	6 S	7 SS
1	The Islamic method of finance is interest-free							
2	An Islamic bank lends money according to profit/loss sharing method							
3	Preservation of wealth is one of the objectives of Islamic finance							
4	I always make sure that there is no element of interest in all financial transactions that I make							

**Appendix 9: Religiosity**

No	Statement	1 STS	2 ATS	3 TS	4 N	5 US	6 S	7 SS
1	Islamic business encourages honesty, truthfulness, investigation and verification before action; right and ethical conduct, true witness							
2	My religion encourages truthfulness, sincerity and honesty in any business dealings							
3	Islamic beliefs encourage multiculturalism in international trade and business, group and team working							
4	Islamic business encourages entrepreneurs to rely on accurate information before making business decisions and taking corporate actions							

**Information: 1. Strongly Disagree 3. Disagree 5. Somewhat Agree 7. Strongly Agree**

**2. Somewhat Disagree 4. Neutral 6. Agree**