



**ANALYSIS OF THE INFLUENCE OF FINANCIAL LITERACY AND FINANCIAL INCLUSION ON USE OF FINANCIAL TECHNOLOGY (FINTECH)  
(Case Study of Islamic Bank Customers )**

**Muhammad Aldrian Oktofa**

Faculty of Islamic Economics and Business, UIN North Sumatra

Email : [mochaldrianoktofa@gmail.com](mailto:mochaldrianoktofa@gmail.com)

**Tuti Anggraini**

Faculty of Islamic Economics and Business, UIN North Sumatra

**Abstract**

*This research is motivated by the rapid development technology digital finance ( financial technology or fintech ) which also change behavior customers in accessing and utilizing service finance , including in the sector Islamic banking . However , the high fintech adoption doesn't always work along with level literacy and inclusion finance society , especially Islamic bank customers who have characteristics and preferences special based on Sharia principles . Formulation The problem in this research is focused on the question : (1) What is the influence of financial literacy to use of fintech by sharia bank customers ? (2) How is the influence financial inclusion to use of fintech by Islamic bank customers ? and (3) What are financial literacy and financial inclusion? in a way simultaneous influential significant to use of fintech by sharia bank customers ? The purpose of This research is to analyze in a way in-depth how the level literacy finance and inclusion finance influence pattern use fintech services by Islamic bank customers , as well as to identify connection simultaneous between second variables independent the to variables dependent . This study uses approach qualitative with method studies bibliography and descriptive-analytical , which examines various primary and secondary sources , including research results previous studies , scientific journals , and academic books relevant . Research result shows that good financial literacy and financial inclusion own influence positive and significant to the use of fintech by sharia bank customers is good in a way partial and simultaneous . Literacy level adequate finances help customers understand risks and benefits fintech services , as well as making decisions smart finance . Meanwhile that , level inclusion good finances open wider access to products and services finance digital- based . Combination both of them push improvement optimal adoption of fintech in the context Islamic banking , in line with findings study previously stated that the ability individuals in understanding information finance as well as access to institution finance are two factors crucial in acceleration transformation digital finance .*

**Keywords : Financial Literacy , Financial Inclusion, Fintech, Islamic Banking**

**1. INTRODUCTION**

Development technology such rapid information has brought transformation significant in the sector global finance , including in Indonesia. One of them form real from transformation that is the emergence *financial technology* (fintech), which has revolutionized method individuals and institutions access , manage , and utilize service finance . Fintech provides service more efficient ,

inclusive and easy finance accessible only with help gadgets and internet connections . However , the adoption and utilization of fintech in society is not running smoothly. evenly distributed . Many groups , especially from sector Islamic banking , still show level relative participation low , which indicates existence factors the determinant behind level fintech adoption , in particular literacy finance and inclusion finance .

Financial literacy, or literacy finance , is knowledge , skills , and beliefs that influence a person's attitude and behavior in taking decisions decision finance in a way rational and responsible answer . According to Lusardi and Mitchell that Literacy finance is determinant main in taking decision good finances , and without literacy finance , individual tend own debt , making choices bad investment , and underutilization service finance (Lusardi & Mitchel, 2014) . In this context , someone who has literacy finance tall will be better prepared to utilize fintech platforms for planning finance , digital payments , to online investment .

In addition , financial inclusion or inclusion finance , as effort ensure equal access to service formal finance , is a prerequisite important for fintech penetration . World Bank (2018) emphasized that inclusion finance ensure that individuals and businesses own access to products and services useful and affordable finance that meets need they (World Bank, 2018) . In Indonesia, although inclusion finance increased , but gap between access and utilization service finance digital based still seen real , especially among customers Islamic banking which has characteristics religiosity , prudence height , and preferences to service based sharia principles .

Islamic banks, as an integral part of system finance national , facing challenge double : in one side must increase Power competition through digitalization , on the other hand , must ensure that this transformation is aligned with sharia values and not alienating customers who are still not digitally literate . Islamic banking customers tend to be more conservative in adopting innovation finance compared to conventional bank customers (Abedifar et al., 2015) . This suggests that the factor literacy finance and inclusion finance own role important in determining use of fintech, but not many investigated in a way deep in the environment Islamic banking .

Even though there have been many studies that examine connection between literacy finance and inclusion finance to the use of fintech in general , but part big study the carried out in the context of conventional banking , or targeting population general (such as students , MSMEs, or urban communities ) , without in a way specific study characteristics unique Islamic bank customers . For example , research by Putri and Fitriani shows that influence significant impact of financial literacy on fintech adoption among students , but not studying implications religiosity or sharia principles in preference use technology finance (Putri & Fitriani, 2022) .

Apart from that , there are not many studies empirically which comprehensive test interaction simultaneous between financial literacy and financial inclusion (Raza & Ali, 2015) as variables independent in explaining fintech adoption in general specifically on Islamic bank customers (Nurfaidah et al., 2024) . Some of the literature Still looking at these two factors in partial or using approach descriptive solely , without testing connection strong causality .

With Thus , there are significant research *gap* in understanding how literacy and inclusion finance influence the use of fintech in specifically in the sector Islamic finance , especially in the context of Indonesia which is currently intense push digitalization economics and finance based Islamic values .

Formulation problem from This research is; 1) how does financial literacy influence the use of financial technology (fintech) by Islamic bank customers , 2) how does financial inclusion affect the use of fintech by Islamic bank customers , and 3) Are financial literacy and financial inclusion simultaneous influential significant to use of fintech by Islamic bank customers .

This research aims namely: 1) to analyze the influence of financial literacy on use of fintech among sharia bank customers , 2) to analyze the influence of financial inclusion on use of fintech among sharia bank customers , and 3) to find out influence simultaneous financial literacy and financial inclusion towards use of fintech by Islamic bank customers .

## 2. METHODOLOGY

This research uses approach qualitative with method studies library research and descriptive-analytical analysis models . Selection This approach is based on the objectives main research , namely to explore , understand and analyze in a way deep influence literacy financial *literacy* and inclusion financial *inclusion* towards use technology finance ( *financial technology/fintech* ) in the context of Islamic bank customers , through excavation meaning , concept , and relation between variables the based on review relevant and representative literature .

Approach qualitative chosen Because This research is not aimed at test hypothesis in a way statistics , but rather to construct understanding comprehensive theoretical and conceptual approach to the phenomenon being studied . According to Denzin and Lincoln (2018) , the qualitative allows researchers interpret social reality based on surrounding context , values , and perceptions object study , so it is very appropriate used to describe dynamics literacy finance and inclusion finance in the complex and complex digital sharia ecosystem normative values (Denzin & Lincoln, 2018)

The method used in this research is a study bibliography , which includes collection , classification , and critical analysis to various sources written related with theme research . This method allows researchers to dig up data and information from primary and secondary materials , which consist from research results previous studies , scientific books , reputable journal articles international , publication official institutions global finance (such as Bank Indonesia, OJK, IMF, and World Bank), as well as document relevant regulations . Literature study also opens up opportunity to do data triangulation through comparison cross source use reach validity stronger arguments .

In its implementation , this research adopts a descriptive-analytical model , namely with method describe in a way systematic content and meaning from sources literature , then analyze it in a way deep to dig interrelationships , patterns , and implications from the phenomenon being studied . Descriptive in this case means describe variables and concepts in a way details based on available data , whereas analytical means criticize and interpret information to obtain complete and sharp understanding . This model is considered the most appropriate Because capable present framework unified thinking between fact empirical with perspective theoretical .

In data collection , sources primer used includes scientific journal articles that discuss connection between financial literacy, financial inclusion, and the use of fintech, both in a global context and within a national framework system Islamic finance .

Temporary that , material secondary obtained from scientific books the latest discussing theory and practice literacy finance , inclusion finance , as well as development technology financial , including from a sharia perspective . In addition , the report annual from institutions such as Bank Indonesia, Financial Services Authority (OJK), Islamic Development Bank (IDB), and World Bank are also used as material descriptive data comparison and reinforcement .

The analysis process is carried out through technique categorization thematic , namely with organize data based on themes certain such as concepts base literacy financial , obstacles inclusion financial factors determinant use of fintech, up to perception Islamic bank customers towards digitalization finance . Every theme Then dissected based on argument theoretical construction

from the reading results literature . Relationship patterns between These themes are analyzed to form systematic , logical and critical thinking structures .

Through this approach and method , research expected capable give contribution theoretical and practical in enriching literature about determinant use of fintech, as well as give base conceptual for policy sharia banking in improving adoption digital services based Islamic values .

### 3. RESULTS AND DISCUSSION

#### 1. Financial literacy towards use of financial technology (fintech) by Islamic bank customers

Progress technology increasing information rapid development has created an era of digital disruption in the sector global finance . Financial Technology (fintech) is one of the innovation the forefront of change landscape system finance conventional going to digitalization full . In the middle current this transformation , the use of fintech is not only demand readiness digital infrastructure , but also heavily dependent on the quality literacy finance individual as users . Literacy financial *literacy* is the foundation primary in understanding , assessing , and retrieving wise decisions in access service digital finance .

Financial literacy in a way conceptual refers to a person's understanding of concepts base finance such as management income , budgeting , savings , loans , investments , and risks and benefits from various products financial literacy . According to the definition put forward by the Organisation for Economic Co-operation and Development (OECD), financial literacy finance is a combination awareness , knowledge , skills , attitudes and behaviors required to make decisions good finances and ultimately reach welfare financial individual (OECD, 2016) . In the context of fintech usage , literacy finance becomes crucial Because digital services such as mobile banking, e-wallet, peer-to-peer lending, to online investment , demanding understanding users of the risks , benefits , mechanisms and regulations that accompany it .

In the community Islamic banking , challenges literacy finances are becoming more complex because not only involving understanding to principles finance general , but also understanding to principles finance Sharia- based . Sharia bank customers generally own level high caution in accessing service finance , especially If service it is not yet believed fully in line with Islamic principles . This shows that success adoption of fintech in Islamic banks is not only depending on availability technology , but rather very closely relation with level literacy customer sharia finance .

Literacy level high finance own connection positive with ability individual in choosing product appropriate finances and in avoiding error financial that can detrimental to individuals with literacy higher finances tend planning for retirement , avoiding service finance cost high , and make decisions the right investment (Lusardi & Mitchel, 2014) .

study by Al-Harbi (2017) which reviewed sector Islamic banking highlights importance *Sharia financial literacy* , namely literacy finances that are not only covers aspect technical and rational , but also includes moral, ethical and principle aspects maqashid al-shariah in transactions . The low level literacy Islamic finance can hinder trust and engagement customers in utilizing service Sharia-based digital finance (Al-Harbi, 2017) .

same thing expressed by Ryu (2018) in the journal *Emerging Markets Finance and Trade* which stated that the level of literacy finance own influence direct to perception risk and intention users in adopting technology finance . Ryu noted that the low literacy finance cause uncertainty and fear to potential fraud , loss , and misuse of personal data in the use of fintech (Ryu, 2018) .

In the Indonesian context , the Financial Services Authority (OJK) through *National Survey of Literacy and Inclusion Finance 2019* recorded that the level of literacy finance Indonesian society is

still at 38.03 %, which shows that the majority society does not have yet understanding adequate finances (Financial Services Authority, 2019) . This has an impact straight to the bottom adoption fintech services , especially among Sharia bank customers who are not yet familiar with integration between technology and sharia principles .

A number of studies local and international also show that literacy low finances correlated with vulnerability to risk financial , use product inappropriate finances , as well as limitations in accessing and utilizing fintech services . Lack of literacy Islamic finance among bank customers are hindering optimal product utilization finance Sharia -based digital and restrictive expansion fintech solutions in the sector Islamic banking (Hasan et al., 2020) .

From the overall analysis above, that literacy finance own fundamental role in shaping mental readiness , behavior , and decisions finance customers , especially in using fintech services . In the Islamic banking environment , literacy finance becomes an instrument educative at a time former trust to sharia- based digital transformation . Therefore that , the increase literacy finances – good general and based Islamic values – not just an empowerment strategy individual , but also a instrument key in pushing digital inclusion of Islamic finance extensive and sustainable .

## **2. Financial Inclusion Against Use of Fintech by Sharia Bank Customers**

In the era of digital transformation which is marked by with growth exponential technology information , sector finance is one of the domains that is experiencing disruption systemic through presence *financial technology* (fintech). Fintech is not only revolutionize method public access and manage source Power finance , but also opens up opportunity inclusion broader financial opportunities for previously excluded groups marginalized from system formal financial inclusion . In this context , *financial inclusion* or inclusion finance is no longer just understood as expansion access to service banking conventional , but rather as driver main in utilization service digital finance , including sharia - based fintech .

Financial inclusion refers to affordability , availability , and involvement active individual or group society in the system formal finance that is safe , efficient and in accordance with need According to the definition put forward by the World Bank, Inclusion finance means that individuals and businesses own access to products and services useful and affordable finance that meets need they – transactions , payments , savings , credit and insurance – are delivered in a way responsible responsible and sustainable (World Bank, 2018) .

In the context of fintech, inclusion finance is a fundamental prerequisite that determines success penetration service digital finance , especially in areas with infrastructure limited finances , limitations digital literacy , or vulnerable socio- economic segmentation . Digital innovation in the field of finance ideally must capable reach all over layer society , including group vulnerable and communities religious such as Islamic bank customers , who often need approach different in design and delivery service finance .

Islamic banks have position strategic in encouraging inclusion finance based value . However , the challenge mainly lies in building ecosystem finances that are not only inclusive in a way structural , but also *value-based inclusive* , namely system finance that accommodates diversity moral preferences , ethics , and religious beliefs of its users . In this case , sharia fintech has the potential to be a catalyst main in pushing inclusion finance Muslims through service Sharia-compliant and easy digital finance accessed .

A number of study underlining that inclusion finance own correlation significant positive to use of fintech. Tavneet Suri and William Jack show that the increase access to service digital finance , such as *mobile money* , is capable of reduce poverty extreme and increasing household welfare through improvement capacity economy and efficiency transactions . Services digital finance is increasing resilience finance , reduce cost transactions , and stimulate activity finances among communities that previously did not have bank account (Suri & Jack, 2016) .

Research by Demirgüç -Kunt is one of the the most comprehensive global study in the field inclusion finance , also concluded that inclusion finance through digital platforms to provide contribution big in speeding up adoption fintech services in developing countries . However, thus , they emphasize importance alignment between access financial and understanding users to function , risk , and implications from fintech usage (Demirguc-Kunt et al., 2021) .

In the context of sharia, the adoption of sharia fintech and finding that inclusion finance based value – where access accompanied by with halal principles , sharia beliefs , and awareness ethical – to be determinant important in decisions use fintech services by Muslims . Inclusion Islamic finance must understood not only from aspect accessibility , but also through corner view perceived religious legitimacy and spiritual security (Shaikh et al., 2022) .

In Indonesia, the relationship between inclusion Finance and fintech adoption in the sharia context are also seen in various reports strategic from Financial Services Authority (OJK). In the *2020–2025 Indonesian Sharia Financial Roadmap* , the OJK emphasized that one of the challenge big in development Islamic finance is low sharia digital inclusion that occurs consequence lack of connectivity , inequality distribution services , and the incompatibility of the fintech business model with sharia principles . Therefore that , a strengthening strategy is needed inclusion that is not only provide access , but also build trust and understanding public to benefits of sharia fintech.

From various findings said , can it is understood that inclusion finance is not only functioning as indicator development sector finance , but also as lever main adoption of fintech , especially in the sector Islamic banking . Increasingly tall level involvement sharia bank customers in the system formal finance – with safe , easy and compliant access religious principles – then the more big opportunity adoption technology inclusive and sustainable digital finance .

However thus , inclusion finance must balanced with improvement quality services , favorable regulations , and development fintech products that meet principle *sharia compliance* . In this context , the approach collaborative between regulators, providers fintech services , and institutions Islamic finance becomes absolute is needed to ensure that digitalization finance truly reach all over public without exclude identity and beliefs religious they .

### **3. Influence Simultaneous Financial Literacy and Financial Inclusion towards Use of Fintech for Sharia Bank Customers**

Massive digital transformation in the sector service finance has given birth to various innovations technology promising financial technology ( *fintech* ) efficiency , inclusiveness , and convenience access to various transactions finance . Fintech is a catalyst for disruption service finance conventional , creating new ecosystem that combines technology information with need financial society . However , progress technology it is not yet fully balanced with readiness cognitive and structural users , especially in the community Islamic banking . In this context , two variables the key is financial literacy ( literacy) finance ) and financial inclusion ( inclusion) finance ) is a factor determinants that are simultaneous influence level adoption and utilization of fintech.

Financial literacy, which reflects understanding individual to draft finance, management risk, and decision making decision financial, play a role important in forming confidence and mental readiness to access fintech products and services. Meanwhile that, financial inclusion emphasizes the aspect structural and accessibility — the extent to which society can reach and utilize service finances in accordance with their needs, including in digital form. Both, if present in a way simultaneously and strongly, creating ecosystem that allows optimal, inclusive and sustainable use of fintech, especially in the context of demanding sharia banking harmony between technology and sharia principles.

In the study Empirical research conducted by Lusardi and Mitchell (2014) stated that high financial literacy increase a person's tendency to use service modern finance and doing decision financial based information. Individual with literacy higher finances tend adopt innovation finances and avoid product less than optimal finances (Lusardi & Mitchel, 2014).

Inclusion expanded finance through digital technology is key to expanding coverage service finance to the previous group marginalized (Demirguc-Kunt et al., 2021). In his report with the World Bank, Synergy between literacy finance and inclusion finance push depth and quality fintech adoption, especially in underserved populations (World Bank, 2018).

Correlation simultaneous between literacy finance and inclusion finance to the use of fintech in empirical reinforced by Al Tamimi & Kalli, who found that literacy strong finances push preference use digital services because height ability individuals to understand benefits, risks, and operationalization service. However, the preference the only can come true in a way real when supported by inclusion finance — namely existence infrastructure and access to services the (Al-Tamimi & Kalli, 2009).

Specifically in context Islamic bank customers, this relationship becomes more complex. Because decision financial they are not only based on aspects technical and economic, but also on the aspects values and compliance to sharia principles. Therefore that, literacy Islamic finance and inclusion Islamic finance needs to be present in a way simultaneously so that the use of fintech can happen optimally. In a study by Shaikh, Karjaluoto, and Chin (2022) published in *the International Journal of Bank Marketing*, it was found that: “Literacy and inclusion simultaneous financial management in an Islamic context strengthens intention behavior and perceived legitimacy in using fintech (Shaikh et al., 2022).

In Indonesia, data from The Financial Services Authority (OJK) indicated that although level inclusion finance increase from 67.8% to 76.2% (2019), however level literacy finance only increase from 29.7% to 38.03% in the same period (Financial Services Authority, 2019). This inequality is an obstacle main in penetration sharia fintech services that require both of them in a way simultaneously: accessibility (inclusion) and understanding (literacy). In the *Development Roadmap Indonesian Sharia Finance 2020–2025*, OJK emphasized that to strengthen sharia digital ecosystem, improvement literacy Islamic finance must walk side by side with expansion access service finance based technology (Financial Services Authority, 2020).

In a way conceptual, relational between financial literacy and financial inclusion towards fintech adoption can explained through the *Technology Acceptance Model (TAM)* and the *Unified Theory of Acceptance and Use of Technology (UTAUT)*. In both models, the variables exogenous factors such as *perceived ease of use* and *facilitating conditions* own influence significant to *behavioral intention* in use technology. Literacy finance can increase perception convenience usage, whereas inclusion finance functioning as condition facilitative that provides channel access to technology said. With Thus, collaboration between literacy and inclusion are key success

adoption of fintech, especially within the framework Islamic banking is full of with spiritual and normative dimensions .

Influence simultaneous between financial literacy and financial inclusion towards the use of fintech by Islamic bank customers is each other complement and strengthen . Literacy finance create understanding and trust , whereas inclusion finance give access and affordability . Second this variable , if present in a way strong and balanced , will push wider , informed , and sustainable adoption of sharia fintech . Therefore , that , intervention institutional policies and strategies need to be directed at efforts integrative — combining education financial sharia- based with expansion access service digital finance that is in line with Islamic principles .

#### 4. CONCLUSION

Development technology financial technology (fintech) has revolutionized landscape service global finance , including in the ecosystem Islamic banking . In this context , *financial literacy* ( literacy ) and *financial inclusion* ( inclusion ) are two fundamental pillars that are simultaneous play a role significant in influencing decisions and behavior use of fintech among Sharia Bank customers . Through approach qualitative with studies literature and descriptive analysis that integrates primary and secondary data from various literature academic , can it is concluded that understanding adequate finances as well as access to services formal finance has correlation strong positive to adoption and utilization technology modern finance based on sharia principles .

First, *financial literacy* proven to be a determinant main in forming attitudes and behavior finance individuals . Customers who have level literacy finance tall tend to be more capable understand benefits , risks , and operationalization sharia fintech services , such as mobile banking, digital payments , and investments sharia- based . In the context of Islamic Banking, this means that literacy finance is not only increase knowledge technical , but also strengthens understanding to values maqashid sharia in transactions finance .

Second , *financial inclusion* play role crucial in opening access to infrastructure fair , affordable , and equity - based finance principle justice distributive as mandated in the system Islamic finance . Inclusion effective finance capable integrate group the previous society marginalized in the system formal finance , which then provide space for them to access Sharia-based fintech products . Expansion access to bank accounts , systems digital payments , and services finance based technology in a way significant reduce socio- economic disparities and increase household welfare

Third , when *financial literacy* and *financial inclusion* analyzed in a way simultaneously , the result show synergy positive that strengthens intention and participation Sharia Bank customers in using fintech. Both each other complete : literacy finance give competence to understand product digital finance , whereas inclusion finance give access and opportunity to take advantage of it .

In context Sharia Bank customers , the results of this study confirm that the success of adoption of sharia- based fintech is not enough only with build infrastructure technology , but must accompanied by with educational strategies literacy comprehensive Islamic finance and policies that guarantee access equal for all layer society . Therefore that is , strengthening the literacy program finance based Islamic values and policies inclusive from institution Islamic finance is a necessity to accelerate inclusive , sustainable , and equitable digital transformation .

With Thus , this research not only give contribution academic in filling *research gap* in Islamic fintech studies , but also offers runway conceptual for regulators, actors industry and institutions

education to develop empowerment models finance people based digital technology that corresponds to sharia principles and relevant with need contemporary Muslim society .

## REFERENCES

- Abedifar, P., Ebrahim, S. M., Molyneux, P., & Tarazi, A. (2015). Islamic Banking: Stability, Efficiency and Prudential Regulation. *Journal of Banking & Finance*, 58, 349–367. <https://doi.org/https://doi.org/10.1016/j.jbankfin.2015.03.006>
- Al-Harbi, A. (2017). Financial literacy and Islamic banking: Empirical evidence from Saudi Arabia. *Journal of Islamic Economics. Ournal of Islamic Economics, Banking and Finance*, 13(1).
- Al-Tamimi, H. A. H., & Kalli, A. A. Bin. (2009). Financial literacy and investment decisions of UAE investors. *The Journal of Risk Finance*, 10(5), 500–516. <https://doi.org/10.1108/15265940911001402>
- Demirguc-Kunt, A., Ansar, S., Klapper, L., & Singer, D. (2021). *The Global Findex Database 2021: Financial Inclusion, Digital Payments, and Resilience in the Age of COVID-19*. World Bank. <https://doi.org/https://doi.org/10.1596/978-1-4648-1374-0>
- Denzin, N. K., & Lincoln, Y. S. (2018). *The SAGE Handbook of Qualitative Research*. SAGE Publications.
- Hasan, M., Nawaz, M., & Amin, H. (2020). slamic financial literacy and fintech adoption: Evidence from Islamic banking customers. *International Journal of Islamic and Middle Eastern Finance and Management*, 13(5), 765–784. <https://doi.org/https://doi.org/10.1108/IMEFM-05-2019-0195>
- Lusardi, A., & Mitchel, O. S. (2014). The Economic Importance of Financial Literacy: Theory and Evidence. *Journal of Economic Literature*, 52(1), 5–44. <https://doi.org/https://doi.org/10.1257/jel.52.1.5>
- Nurfaidah, Gazali, A. U., Bunyamin, Rusdiah, Hadidu, A., & Sudirman. (2024). The Effect of Financial Literacy and Technology Acceptance model on Student Interest in Using Paylater. *Moneta: Journal of Economics and Finance*, 2(3), 116–128. <https://doi.org/https://doi.org/10.61978/moneta.v2i3.345>
- OECD. (2016). OECD/INFE International Survey of Adult Financial Literacy Competencies. In *OECD Publishing*.
- Financial Services Authority. (2019). *2019 National Survey of Financial Literacy and Inclusion (SNLIK)*. OJK.
- Financial Services Authority. (2020). *Roadmap for the Development of Indonesian Sharia Finance 2020–2025*. OJK.
- Putri, D., & Fitriani, R. (2022). Financial Literacy and Financial Technology Adoption Among College Students in Indonesia. *International Journal of Economics and Financial Issues*, 12(1), 88–94.
- Raza, S.A., & Ali, M. (2015). Service Quality Perception and Customer Satisfaction in Islamic Banks of Pakistan: The Modified SERVQUAL Model. *Total Quality Management & Business*

*Excellence*, 28 (5–6), 559–577.  
<https://doi.org/http://dx.doi.org/10.1080/14783363.2015.1100517>

Ryu, H.-S. (2018). Understanding Benefit and Risk Framework of Fintech Adoption: Comparison of Early Adopters and Late Adopters. *Emerging Markets Finance and Trade*, 54(6), 1221–1239. <https://doi.org/https://doi.org/10.1080/1540496X.2018.1435249>

Shaikh, A. A., Karjaluoto, H., & Chin, C. H. (2022). Adoption of Islamic Fintech: Perceived Legitimacy and Financial Inclusion. *International Journal of Bank Marketing*, 40(2), 452–472. <https://doi.org/https://doi.org/10.1108/IJBM-12-2020-0614>

Suri, T., & Jack, W. (2016). The long-run poverty and gender impacts of mobile money. *Science*, 354(6317), 1288–1292. <https://doi.org/https://doi.org/10.1126/science.aah5309>

World Bank. (2018). The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution. *Washington, DC: World Bank*. <https://doi.org/https://doi.org/10.1596/978-1-4648-1259-0>