Journal of Economics, Finance and Management Studies

ISSN (print): 2644-0490, ISSN (online): 2644-0504

Volume 06 Issue 11 November 2023

Article DOI: 10.47191/jefms/v6-i11-56, Impact Factor: 7.144

Page No: 5739- 5744

Can the Sharia Finance Industry Still Adopt New Innovations?

Nurul Fadila[1], F Mario Andaru[2], Y Anni Aryani[3]

[1,2,3] Sebelas Maret University, Indonesia

ABSTRACT: The rapid growth of the sharia and halal product industry marks a positive development in global market share. Even though it is run according to conventional management principles, the sharia industry faces significant challenges in adopting new technology, especially in the sharia financial sector such as Fintech. This research aims to explore the extent to which sharia principles can adapt to modern technological innovations such as cryptocurrencies, blockchain, crowdfunding and P2P Lending. The Islamic finance industry is responding to technological challenges by developing technology-based solutions according to sharia principles. Collaboration between industry and religious authorities is considered crucial to provide clear guidelines and fatwas regarding the use of technology in a sharia context.

KEYWORDS: sharia finance, Islamic finance, sharia industry, Islamic fintech

I. INTRODUCTION

The Sharia finance industry has developed rapidly over the past few decades, offering alternatives based on Sharia principles for individuals and business entities who wish to carry out financial activities in accordance with Islamic teachings (Laldin & Djafri, 2019). However, in an era of rapidly developing technology, this industry faces new challenges in adopting the latest technological innovations, such as cryptocurrency, blockchain and machine learning. Conventional sharia principles are often considered incompatible or even in conflict with this technology, and the classic problem of halal-haram law becomes more complex in this context (H. Ali et al., 2019).

Throughout history, sharia principles have formed firm and clear guidelines for aspects of life related to business and finance. There are quotes from hadith and verses of the Koran that regulate economic and financial activities so that they are in accordance with Islamic values. However, as technology advances, questions arise about the extent to which these principles can be adapted to new innovations emerging in the modern era.

It is important to remember that many of the guidelines in sharia are actually flexible and can be adapted to changing times. While some technologies may have been avoided in the past due to limited knowledge or historical context, the question that arises is to what extent these guidelines can be applied to technologies that did not exist during the time of the Prophet Muhammad SAW and the early development of Islam. The question of halal-haram laws relating to cryptocurrencies, for example, is a concrete example of this challenge (Alaeddin et al., 2021).

This research will explain how the Sharia financial industry is facing a dilemma in adopting new technology. This involves complex ethical, legal and sharia considerations in achieving compatibility between technological innovation and sharia financial principles. In addition, this research will discuss and provide clarification regarding new technology in the context of sharia. This research will also look for solutions and efforts that can be taken to ensure that sharia principles are still relevant in a world that continues to change and continues to develop technology.

II. METHODOLOGY

This research adopts a methodology inspired by previous research (Rabbani, 2022; Rabbani et al., 2020) in order to identify and analyze the relevance and potential integration of Fintech-based solutions in the Islamic finance industry. The research process is divided into three main stages.The first stage of this research began with the formation of research objectives, which involved collecting literature from various database sources. The aim of this stage is to identify relevant literature with the main focus, namely Islamic Fintech. We cover both theoretical and conceptual literature in the literature review process. Keywords used in database searches include “Fintech”, “Islamic Finance”, “Sharia”, “Cryptocurrency”, “Blockchain”, “Crowdfunding”, and “Lending”. Database sources used include Elsevier, Emerald, Springer, and Google Scholar.

In the second stage, we limited literature published in English and Indonesian, both empirical, conceptual articles and articles in the mass media. The third phase of the research involved implementing a review protocol. We reviewed the citation scores of all documents to increase the reliability of the findings presented through the literature review process.

Through this methodological process, this research aims to identify key themes, challenges and opportunities related to the integration of Fintech solutions in the context of the Islamic finance industry. We hope this research will provide a deeper understanding of how sharia principles and technology can interact to create innovative solutions in an ever-changing and increasingly complex financial industry.

III. RESULT AND DISCUSSION

The market share of the sharia industry or halal products in recent years has experienced very rapid growth. Although sharia industry is often associated with Islam, sharia economics has principles that can provide benefits to the entire global community. The concept of sharia is a reflection of Islamic teachings which touch all aspects of human life, including economic, financial and business concepts (Laldin & Djafri, 2019).

However, challenges in the sharia industry also have their own way of being resolved. The sharia industry is an industry that isrun using conventional management theory, but is modified according to sharia principles so that the process of determining policies and making decisions takes longer than conventional industry (Hui et al., 2019). The very rapid development of technology is a challenge in itself for the sharia sector which requires more time to formulate policies (H. Ali et al., 2019) whether the technology has more benefits or disadvantages *(mudharat).*

One of the sharia businesses that is growing rapidly because it covers almost the entire market share of halal products is the financial industry, including Fintech (H. Ali et al., 2019). The financial industry has become a very important aspect of modern life, and in many countries, it reflects the impact of the latest technology in this world. However, there is a unique financial industry, namely the Islamic financial industry, which operates based on Islamic sharia principles. These principles (Shinkafi et al., 2020) include the prohibition of *riba* (interest), ambiguity *(gharar),* prohibition of gambling *(maysir),* and compliance with ethical aspects in finance.

Basically, the Islamic finance industry tries to ensure that the finance and investments they offer do not conflict with Islamic principles. This includes transparency, fairness, and the prohibition of practices considered haram (not halal) in Islam. However, this industry also has to face challenges from continued technological advances (Rahman et al., 2020).

Technology has played an important role in the transformation of the financial industry, such as FinTech. However, the question arises to what extent sharia principles can adapt to these technologies. One particularly relevant example is cryptocurrency technology, which has created debate about whether these digital currencies comply with sharia principles, especially regarding the prohibition of usury and speculation (El-Islamy, 2021).

Approaches to these issues vary and give rise to different views from ulama and religious authorities in the Islamic world. Some scholars may feel that new technologies such as blockchain and smart contracts are compatible with sharia principles because they allow transactions to be transparent and clearly recorded, reducing the risk of obscurity *(gharar).* However, there are also scholars who are still confused regarding the halal or haram related to new technology, especially in terms of cryptocurrency which can be used for speculation or illegal activities (Haerisma, 2022).

The Islamic finance industry has responded to this challenge in various ways. Some companies have tried to develop technology-based solutions that comply with sharia principles, such as fintech platforms that offer financial products that comply with Islamic law. They have also collaborated with ulama to provide guidance on halal and haram laws related to certain technologies (Tijjani et al., 2021).

At the same time, regulatory agencies and religious authorities have also been involved in providing clearer guidelines and issuing fatwas on the use of technology in the context of sharia. This approach seeks to bridge the gap between technological innovation and sharia principles, by providing comprehensive direction to sharia financial industry players (Rabbani, 2022).

Thus, the Islamic finance industry is on a challenging journey in adopting new technologies while complying with shariaprinciples. The views of scholars and the industry's response will play a critical role in determining the future direction of the industry, and the extent to which it can benefit from technological innovation while remaining true to its underlying Islamic principles.

A. Cryptocurrencies from a Sharia Perspective

Cryptocurrency is a technological development trend that is becoming a hot topic in the financial industry landscape.However, the legality of cryptocurrency is the basis why Islamic scholars do not agree on the *halalness* of cryptocurrency. A study from Khan (2022) evaluates cryptocurrencies from a sharia perspective.

A study from Haerisma (2022) adds from the perspective of *Maqasid Al-Shariah* which concludes that cryptocurrency has a much greater *mafsadah* than *maslahah*. Moreover, if cryptocurrency is used as an investment, the very high level of risk and volatility reflects its meaning.

Aloui et al. (2020) and Hanif (2020) also argue that cryptocurrencies are not designed for sharia market share because they are not in accordance with sharia principles. Even Siswantoro et al. (2020) added that cryptocurrency cannot be used as an alternative payment to fiat money because cryptocurrency has less sharia principles than fiat money, although Kirchner (2021) has the opposite opinion that cryptocurrency can actually be an alternative payment because it does not have usury.

The results of these studies state that cryptocurrency is not in accordance with Islamic principles because it is an intangible currency without the backing of precious metals or commodities so it has no intrinsic value, and its price is also very volatile. However, the fiat money that we are currently using is also an intangible medium of exchange without the support of precious metals or commodities. Fiat money also has no intrinsic value and its price fluctuates greatly. So, why is fiat money permitted to be used, while cryptocurrency is prohibited?

Oziev & Yandiev (2017) argue that cryptocurrencies can actually comply with sharia principles if they have real assets that underlie the value of the cryptocurrency. Kirchner (2021) added that if cryptocurrency complies with sharia principles, then cryptocurrency can be an alternative as a substitute for Islamic bonds.

Ajouz et al. (2019) researched Precious Metal Backed Cryptocurrency (PMBC), which is a sharia requirement for halal cryptocurrency products. PMBC is an alternative requirement to protect the *halalness* of cryptocurrency and can be an alternative payment compared to fiat money. PMBC can be a sharia-compliant cryptocurrency solution.

Al-Hussaini et al. (2020) also argue that the presence of cryptocurrency technology cannot be ignored because it can be a better method than fiat money. According to him, cryptocurrency can reduce the costs and be more compliant with sharia as any other fiat money. Virgana et al. (2018) also added that cryptocurrency can be a very effective medium of exchange, providedit does not contain usury and illegal activities.

Based on the findings of these studies, cryptocurrency can actually become an alternative payment with its latest innovations. However, cryptocurrency needs to be given legality in accordance with sharia principles, such as the PMBC policy which must be added to cryptocurrency regulations.

B. Blockchain and Smart Contract From a Sharia Perspective

Blockchain is a very revolutionary technology in all operations of human transactions, including in the financial sector. Chong (2021) believes that blockchain offers a more transparent solution as a transaction tool and is very helpful for sharia financial services. The challenge of blockchain itself lies only in its regulation.

Foglie et al. (2021) argue that blockchain technology can significantly reduce the risk of *gharar* and *maysir* in Sukuk services. Foglie et al. (2021) added, if Sukuk are integrated through blockchain tokenization, it can actually be more transparent than not. This was added by Busari & Aminu (2021) who stated that blockchain has enormous potential to increase trust (reliability) in Sukuk transactions.

Alaeddin et al. (2021) argue that blockchain can actually increase work efficiency in financial services, especially during the Covid-19 crisis. In fact, blockchain has made a huge contribution to the Islamic finance industry. Ali et al. (2021) added that blockchain could be an alternative solution in completing the supply chain of halal products. Even in its implementation, Al- Sakran & Al-shamaileh (2021) argue that blockchain and smart contracts can increase transparency and customer loyalty, especially in *musharakah* contracts.

In this context, blockchain must comply with sharia principles such as usury or interest, gambling, uncertainty, and speculation. In addition, blockchain is required to uphold sharia principles regarding the main virtues in dealing with human problems, including avoiding dishonesty and exploitation.

Blockchain must have clear regulations as a technological development for the sharia industry because the current weaknesses of blockchain are lack of experts, contradictory fatwas, including absence of sharia supervision and standards. This requires a deep understanding of sharia law and how to apply it in the context of financial technology. Therefore, although blockchain offers great potential for the sharia industry, there are regulatory challenges that need to be overcome to ensure sustainable growth.

C. Crowdfunding From a Sharia Perspective

In the sharia context, many say that crowdfunding is a form of innovation that is friendlier to sharia principles. Hendratmi et al. (2019) stated that crowdfunding can be a financial solution, especially for MSMEs, especially those that adhere to sharia principles and crowdfunding is very easy for the sharia industry to adapt. Likewise, Saiti et al. (2018) stated that Salam-based crowdfunding is an innovation in financial solutions, especially in the agricultural business sector. It is becoming easier for agricultural business actors with the Salam-based crowdfunding scheme.

Can the Sharia Finance Industry Still Adopt New Innovations?

In contrast to Saiti et al. (2018), Isaac et al. (2022) updated research by stating that crowdfunding can be a financial solution, especially using the *mudhrabah* method. The *mudharabah*-based crowdfunding scheme is in accordance with sharia principles and can be used by all sectors because using the Salam-based crowdfunding scheme has very expensive costs.

Crowdfunding can also be a solution for waqf land. According to Hapsari et al. (2021), crowdfunding is a very innovative instrument and needs to be developed for waqf land solutions. Even though crowdfunding can be a solution, current implementation, especially in Indonesia, is still relatively minimal. Therefore, there is a need for socialization regarding crowdfunding as a solution for waqf land.

Based on these studies, crowdfunding innovation is very easy to implement in accordance with sharia principles. This is because crowdfunding has some rules that are in accordance with sharia principles, namely *ta'awun* or mutual cooperation. However, there needs to be continuous monitoring and evaluation to protect crowdfunding schemes that are detrimental to society.

D. Peer-to-Peer (P2P) Lending From a Sharia Perspective

Peer-to-Peer (P2P) Lending has become the highest trend among other innovations, partly because demand for online loan concepts is increasing along with the increasing ease of online lending transactions. In the sharia context, P2P Lending must be adapted to sharia principles because it is prone to usury.

Basically, P2P Lending is the same as interest-bearing loans from conventional banks. However, Azganin et al. (2021) in their research used a P2P Lending model based on Musharakah Smart Contract (MSC) which is an innovative combination of Smart Contract, P2P Lending, and Islamic financial services. The MSC model allows business people, especially MSMEs, to obtain more equitable financial access solutions.

However, in the research of Muhammad et al. (2021) stated that sharia P2P Lending has a problem of payment failure which continues to increase over time. The success of sharia P2P Lending is actually increasing along with increasing sharia-compliance in the FinTech industry. This can be caused by many factors, including higher debt percentage and lack of government support. The culture and way people behave in each country also influences it.

Even so, P2P Lending can be accepted and adapted easily in accordance with sharia principles, although P2P Lending still requires very serious attention from sharia scholars to continue to further evaluate its compliance with sharia. P2P Lending which is based on sharia principles can also improve people's welfare, as long as it is free from prohibited transactions.

E. Opportunities and Challenges

Today's technological innovations can further help accelerate sharia market share. This is also reinforced by the estimated growth of the sharia industry which could reach US$9.71 trillion in 2025 (Ethis, 2022). Technology has a very big role in the progress and development of the sharia industry. Several studies have also discussed the importance of technological innovation in the sharia industry. Therefore, support fromseveral parties is needed to support the growth of the sharia market share. Opportunities for collaboration between the sharia industry and FinTech companies can increase the market share of sharia banks and can develop economic inclusion (Ethis, 2022). The sharia industry has now developed into several industrial sectors. The increasingly expanding potential of the sharia industry can improve the economy. This is due to the growth of the sharia market share.

However, technology adoption in the sharia industry also faces several challenges, especially P2P Lending technology innovation which requires more serious attention from sharia scholars. This innovation, which is considered very new, is also vulnerable to legal uncertainty and the direction of sharia aspects. There is a need to accelerate policy making regarding the halal and haram of technology (Erisna et al., 2020). This is because increasingly rapid technological turnover needs to be accompanied by increasingly rapid policy making.

Apart from that, the risk of financial crime is increasingly high and varied considering that the misuse of technology has many loopholes. Cases that often occur are concerns about indications of misuse of financial technology to finance terrorism and fraud in the name of religion. This also increases illegal FinTech businesses which also use the name of religion as an attraction (Erisna et al., 2020; Ethis, 2022).

In this context, it is important to remember that judgments regarding the halal or haram practices of technology adoption depend on the interpretation of individuals and religious institutions. If technology adoption is used for purposes that bring more benefits than harm, then technology adoption becomes halal (Erisna et al., 2020; Ethis, 2022). That is why, the adoption of technology still requires continuous supervision to ensure that the technology is not misused and remains in accordance with sharia principles that improve the welfare of the entire global community.

CONCLUSIONS

The sharia and halal product industry is experiencing rapid growth, reaching a significant market share. Even though it is run with conventional management, the sharia industry faces the challenge of adapting to new technology. Especially, the Islamic finance industry, including Fintech, is growing rapidly and trying to comply with sharia principles. However, the question of the compatibility of technologies such as cryptocurrencies with sharia principles remains a matter of debate.

Cryptocurrencies, although controversial, can be considered compliant with sharia principles if they are backed by real assets. Innovations such as crowdfunding and P2P Lending can also be sharia-friendly alternatives with appropriate models. While blockchain technology promises transparency and efficiency, clear regulations are needed to ensure compliance with sharia principles.

In facing this challenge, the Islamic finance industry has responded by developing technology-based solutions and collaborating with religious authorities. The Islamic finance industry responds to technological challenges by developing technology-based solutions in accordance with sharia principles.

The growth of the sharia industry creates opportunities for the adoption of technological innovations that strengthen sharia market share and support inclusive economic growth. The Islamic finance industry, despite facing technological dynamics, remains committed to the underlying Islamic principles to achieve sustainable progress.

Collaboration between industry and religious authorities is considered crucial to provide clear guidelines and fatwas regarding the use of technology in the context of sharia. Although technology brings benefits, continuous monitoring and the views of ulama remain crucial to ensure compliance with sharia principles. With the rapid growth of the sharia industry, technological innovation can strengthen sharia market share and support inclusive economic growth.

REFERENCES

1) Ajouz, M., Abdullah, A., & Kassim, S. (2019). Developing a Sharīʿah-compliant precious metal backed cryptocurrency. Journal of King Abdulaziz University: Islamic Economics, 33(1), 3–20.
2) Alaeddin, O., Al Dakash, M., & Azrak, T. (2021). Implementing the blockchain technology in islamic financial industry: Opportunities and challenges. Journal of Information Technology Management, 13(3), 99–115.
3) Al-Hussaini, N., Ibrahim, A., Noordin, M., & Mohadis, H. M. (2020, March 30). Islamic approach toward purification of transaction with cryptocurrency. https://www.semanticscholar.org/paper/Islamic-approach-toward-purification-of-transaction-Al-Hussaini-Ibrahim/08e1a04105a891f61a1fe8d4a23ecb36b92bbf0f
4) Ali, H., Abdullah, R., & Zaini, M. Z. (2019). Fintech and its potential impact on Islamic banking and finance industry: A case study of Brunei Darussalam and Malaysia. International Journal of Islamic Economics and Finance (IJIEF), 2(1), 73–108.
5) Ali, M. H., Chung, L., Kumar, A., Zailani, S., & Tan, K. H. (2021). A sustainable Blockchain framework for the halal food supply chain: Lessons from Malaysia. Technological Forecasting and Social Change, 170, 120870. https://doi.org/10.1016/j.techfore.2021.120870
6) Aloui, C., Ben Hamida, H., & Yarovaya, L. (2020). Are Islamic Gold-backed cryptocurrencies different? Finance Research Letters, 39, 101615. https://doi.org/10.1016/j.frl.2020.101615
7) Al-Sakran, H., & Al-shamaileh, O. (2021). P2P islamic investments using blockchain, smart contract and E-negotiation. Journal of Theoretical and Applied Information Technology, 99, 59–74.
8) Azganin, H., Kassim, S., & Sa'ad, A. A. (2021). Proposed waqf crowdfunding models for small farmers and the requiredparameters for their application. Islamic Economic Studies, 29(1), 2–17. https://doi.org/10.1108/IES-01-2021-0006
9) Busari, S. A., & Aminu, S. O. (2021). Application of blockchain information technology in Ṣukūk trade. Journal of IslamicAccounting and Business Research, 13(1), 1–15.
10) Chong, F. H. L. (2021). Enhancing trust through digital Islamic finance and blockchain technology. Qualitative Research in Financial Markets, 13(3), 328–341. https://doi.org/10.1108/QRFM-05-2020-0076
11) Delle Foglie, A., Panetta, I. C., Boukrami, E., & Vento, G. (2021). The impact of the Blockchain technology on the global Sukuk industry: Smart contracts and asset tokenisation. Technology Analysis & Strategic Management, 0(0), 1–15. https://doi.org/10.1080/09537325.2021.1939000
12) El Islamy, H. (2021). The Challenges of Cryptocurrencies and the Shariah Paradigm. Islamic FinTech: Insights and Solutions, 407–428.
13) Erisna, N., Tarmizi, R., & Redaputri, A. P. (2020). The Role Of Fintech And Sharia Banking Industries In Increasing Economics Inclusion In Indonesia. 9(02).
14) Ethis. (2022). The rise of the Halal industry and tech innovations in 2022 [Company Website]. Ethis Malaysia. https://ethis.co/blog/rise-halal-industry-tech-innovations-2022/
15) Haerisma, A. S. (2022). Cryptocurrency in The Perspective of Maqasid Al-Shariah: A Critical Analysis of the Mafsadah (Harm) and the Maslahah (Benefit) of Cryptocurrency Cryptocurrency. Afkaruna, 18(1), 110–139.
16) Hanif, M. (2020). Developing a fair currency system. ISRA International Journal of Islamic Finance, 12(3), 325–345.

https://doi.org/10.1108/IJIF-02-2019-0024
17) Hapsari, M. I., Bin Mohd Thas Thaker, M. A., Mohammed, M. O., & Duasa, J. (2021). A qualitative investigation into crowdfunding framework as a source of financing for waqf land development. Journal of Islamic Accounting and Business Research, 13(3), 425–443. https://doi.org/10.1108/JIABR-10-2020-0311
18) Hendratmi, A., Ryandono, M. N. H., & Sukmaningrum, P. S. (2019). Developing Islamic crowdfunding website platform for startup companies in Indonesia. Journal of Islamic Marketing, 11(5), 1041–1053. https://doi.org/10.1108/JIMA-02-2019- 0022
19) Hui, H. W., Manaf, A. W. A., & Shakri, A. K. (2019). Fintech and the transformation of the Islamic finance regulatory framework in Malaysia. In Emerging issues in Islamic finance law and practice in Malaysia (pp. 211–222). Emerald Publishing Limited. https://www.emerald.com/insight/content/doi/10.1108/978-1-78973-545-120191018/
20) Ishak, M. S. I., Kamaruddin, M. H., & Aderemi, A. M. R. (2022). Mudharabah based crowdfunding as an alternative source of funding book publications in Malaysia. Journal of Islamic Marketing, 13(9), 1973–1987.
21) Khan, S. N. (2022). The legality of cryptocurrency from an Islamic perspective: A research note. Journal of Islamic Accountingand Business Research, 14(2), 289–294. https://doi.org/10.1108/JIABR-02-2022-0041
22) Kirchner, I. K. F. (2021). Are Cryptocurrencies Halal? On the Sharia-Compliancy of Blockchain-Based Fintech. Islamic Law and Society, 28, 76.
23) Laldin, M. A., & Djafri, F. (2019). Islamic finance in the digital world: Opportunities and challenges (Kewangan Islam dalam Dunia Digital: Peluang dan Cabaran). Journal of Islam in Asia (E-ISSN 2289-8077), 16(3), 283–299.
24) Muhammad, R., Fakhrunnas, F., & Hanun, A. K. (2021). The Determinants of Potential Failure of Islamic Peer-to-Peer Lending: Perceptions of Stakeholders in Indonesia. Journal of Asian Finance, Economics and Business, 8, 981–992. https://doi.org/10.13106/jafeb.2021.vol8.no2.0981
25) Oziev, G., & Yandiev, M. (2017). Cryptocurrency from Shari'ah Perspective (SSRN Scholarly Paper 3101981).https://doi.org/10.2139/ssrn.3101981
26) Rabbani, M. R. (2022). Fintech innovations, scope, challenges, and implications in Islamic Finance: A systematic analysis. International Journal of Computing and Digital Systems, 11(1), 1–28.
27) Rabbani, M. R., Khan, S., & Thalassinos, E. I. (2020). FinTech, blockchain and Islamic finance: An extensive literature review.
28) Rahman, M. P., Mohd Thas Thaker, M. A., & Duasa, J. (2020). Developing a Sharīʿah-compliant equity-based crowdfunding framework for entrepreneurship development in Malaysia. ISRA International Journal of Islamic Finance, 12(2), 239–252. https://doi.org/10.1108/IJIF-07-2018-0085
29) Saiti, B., Afghan, M., & Noordin, N. H. (2018). Financing agricultural activities in Afghanistan: A proposed salam-based crowdfunding structure. ISRA International Journal of Islamic Finance, 10(1), 52–61. https://doi.org/10.1108/IJIF-09-2017- 0029
30) Shinkafi, A. A., Yahaya, S., & Sani, T. A. (2020). Realising financial inclusion in Islamic finance. Journal of Islamic Marketing, 11(1), 143–160.
31) Siswantoro, D., Handika, R., & Mita, A. F. (2020). The requirements of cryptocurrency for money, an Islamic view. Heliyon, 6(1), e03235. https://doi.org/10.1016/j.heliyon.2020.e03235
32) Tijjani, B., Ashiq, M., Siddique, N., Khan, M. A., & Rasul, A. (2021). A bibliometric analysis of quality research papers inIslamic finance: Evidence from Web of Science. ISRA International Journal of Islamic Finance, 13(1), 84–101.
33) Virgana, R. a. E., Harahap, P., & Anwar, T. A. (2018). CONCEPTUAL RESEARCH: SHARIA-BASED CRYPTOCURRENCY. 3rd International Conference on Management Economics and Business of Universitas Mercu Buana (ICMEB), 21-22. http://repository.widyatama.ac.id/xmlui/handle/123456789/9912