

Islamic Financial Integrity with the Digital Economy: A Bibliometric Study of Global Trends Using VOSviewer

Alya Zahfira*, Salsa Apridenis, Desinta Rabbiah, Irma Wati, Sri Rahayu

Faculty of Economics and Business, Accounting Study Program, Universitas Islam Sumatera Utara, Medan, Indonesia
Jl. Sisingamangaraja No. Kelurahan, Teladan Bar., Kec. Medan Kota, Kota Medan, Sumatera Utara 20217, Indonesia
Email: ^{1,*}alyazahfira28@gmail.com, ²salsaapridenis10@gmail.com, ³rabbiahdesinta2@gmail.com, ⁴irmaatik1408@gmail.com, ⁵sri.rahayu@fe.uisu.ac.id@gmail.com

Correspondence Author Email: alyazahfira28@gmail.com

Submitted: 08/01/2026; Accepted: 16/01/2026; Published: 25/01/2026

Abstract—The development of the digital economy has driven significant transformation in the Islamic financial system, particularly through the use of financial technology (fintech), artificial intelligence, and other digital technologies. Although digitization offers great opportunities to improve efficiency, financial inclusion, and service quality, challenges related to integrity and compliance with Islamic principles remain crucial issues. This study aims to map and analyze global research trends on Islamic financial integrity in the context of the digital economy during the period 2020–2025. The method used is bibliometric analysis combined with a systematic literature review (SLR), with scientific publication data that obtained from reputable databases and analyzed using VOSviewer software. The results of the study show a significant increase in the number of publications related to digital Islamic finance, with the main thematic clusters covering Islamic fintech, Sharia compliance and governance, digital finance regulation, and the use of blockchain and artificial intelligence technologies. The visualization of keyword networks indicates a shift in research focus from conceptual approaches to technology-based and digital governance approaches. This study contributes by providing a systematic scientific map of the development of Islamic finance integrity research in the digital economy era and identifies opportunities and research agendas for the future for academics, regulators, and practitioners.

Keywords: Sharia Finance; Digital Economy; Sharia FinTech; Sharia Integrity; Bibliometric Analysis

1. INTRODUCTION

In the era of digital transformation, the global financial industry is undergoing a paradigm shift triggered by technological advances such as fintech, blockchain, and artificial intelligence, which are affecting conventional and sharia financial services practices (Daing Maruak Sadek et al., 2025). This transformation opens up great opportunities for Islamic financial systems to improve efficiency, transparency, and financial inclusion, while also bringing new challenges in maintaining compliance with sharia principles such as the prohibition of *riba*, *gharar*, and *maysir* (Daing Maruak Sadek et al., 2025; Houria Ben Gharbi, 2025).

The acceleration of sharia economic digitalization has created a crossroads between technological innovation and classical Islamic values, which requires a deeper understanding of sharia governance in the context of fintech and the dynamic digital economy (Purba, 2025). Digitalization has expanded access to Islamic financial services such as peer-to-peer lending, halal marketplaces, and blockchain-based e-wallets, which provide operational efficiency and increase the inclusion of micro, small, and medium enterprises (MSMEs) (Yesi Safitri et al., 2024).

A number of studies highlight that the integration of sharia fintech not only expands the reach of services, but also strengthens the ethical values that are at the core of Islamic finance, such as justice, transparency, and social welfare (Mutiarra Alfia & Uun Sundari, 2025). The integration of Environmental, Social, and Governance (ESG) principles into Islamic fintech, for example, demonstrates an important synergy between *maqasid al-syariah* and sustainability practices in the digital economy (Mutiarra Alfia & Uun Sundari, 2025).

On the other hand, research shows that there are significant challenges related to regulations, digital infrastructure readiness, and understanding of sharia by industry players, which remain major obstacles in ensuring consistent sharia compliance in fintech practices (Fadilatul Jannah & Halimatus Sya'diyah, 2024). The lack of integrated regulations that can accommodate both technological aspects and Sharia values results in vulnerability to legal and ethical risks, which can undermine consumer confidence in Sharia digital services (Fadilatul Jannah & Halimatus Sya'diyah, 2024).

In addition, the challenges of sharia governance in the digital ecosystem are also highlighted by studies showing that Sharia Supervisory Boards (SSBs) often face technical capacity limitations in assessing new digital products such as smart contracts and AI-based services, which could potentially lead to uncertainty in fatwa decisions and supervision (Article on digital SSBs, 2025).

Other studies show that blockchain and artificial intelligence have a strategic role in improving transparency, accountability, and security of sharia digital transactions, thereby strengthening the integrity of the financial system and meeting *maqasid al-syariah* standards in modern practice (Fajri Hidayat, 2025; Nirma Shalwa & Baidhowi, 2025). The implementation of this technology is expected to reduce the risk of fraud and accelerate the real-time sharia audit and compliance process.

At the policy level, research shows that national regulatory strategies such as those of the Indonesian Financial Services Authority (OJK) and digital economic development institutions need to integrate the *maqasid al-syariah*

The network visualization shows four dominant clusters. The first cluster focuses on Islamic finance and literature review, the second cluster relates to fintech and digital challenges, the third cluster highlights Islamic fintech and regtech, while the fourth cluster covers Islamic social instruments such as cash waqf and methodological aspects of research. This pattern indicates that the literature is evolving towards integration between digital technology, governance, and sharia compliance.

3.1.3 Result Overlay Visualization

The overlay visualization results provide an overview of research topic developments based on time dimensions. In the early period, research was dominated by basic themes such as Islamic finance, literature reviews, and country-specific studies. However, in the more recent period (2020–2025), keywords with brighter colors emerged, such as Islamic fintech, blockchain, financial technology, regtech, and digital waqf.

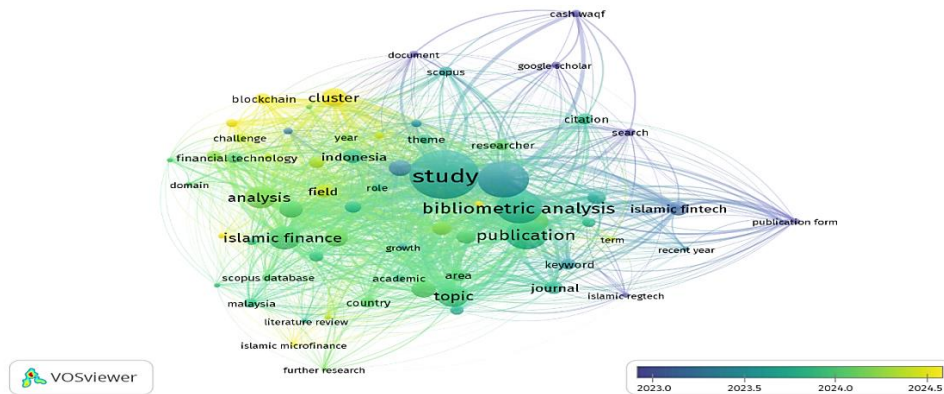


Figure 2. Overlay Visualization

This change indicates a shift in research focus from conceptual and normative approaches to technology-based and digital governance approaches. Digitalization is no longer positioned as a complement, but as a core element in discussions of integrity and sustainability in Islamic finance.

3.1.4 Result Density Visualization

The density visualization results show the level of research density on specific topics. The areas with the highest density are concentrated on the keywords Islamic finance, bibliometric analysis, and publication, indicating that these topics have been extensively explored in the literature.

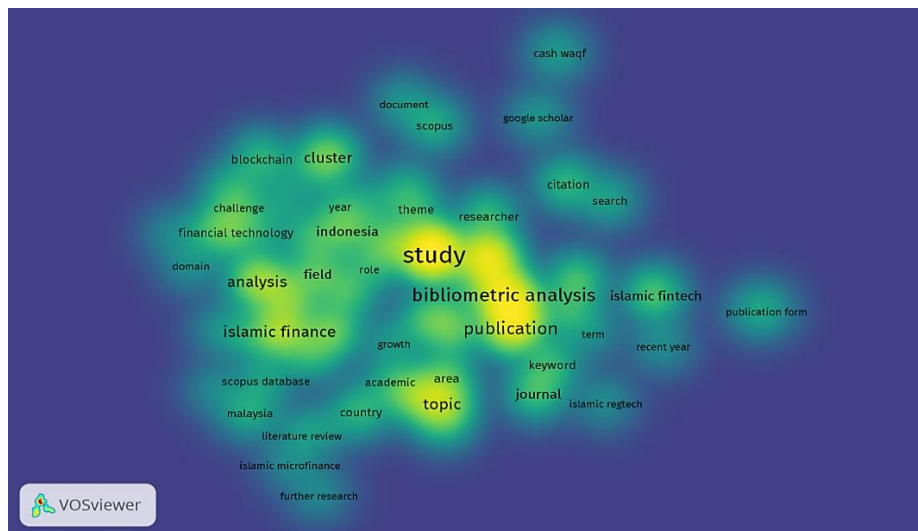


Figure 3. Density Visualization

Conversely, several topics show relatively low density but are beginning to develop, such as Islamic regtech, sharia blockchain, digital waqf, automated sharia audit, and suptech. These areas with low density indicate that there are still wide open research opportunities and have the potential to become strategic research agendas in the future.

3.2 Discussion

The results of bibliometric analysis show that the integration of Islamic finance with the digital economy is a rapidly growing theme in global literature during the period 2020–2025. The dominance of the keywords Islamic finance,

fintech, and bibliometric analysis indicates that studies of digital Islamic finance focus not only on technological innovation but also on scientific mapping and systematic evaluation of research developments. These findings are in line with previous studies that confirm that digitalization has become a major driver of the transformation of Islamic financial systems globally (Thakor, 2020; Alshater et al., 2022; Qudah et al., 2023).

The emergence of Islamic fintech and regtech clusters in network visualization shows that integrity and sharia compliance are central issues in the discourse on digital finance. The literature confirms that the adoption of sharia financial technology cannot be separated from the need to maintain transparency, accountability, and public trust in the sharia financial system (Hassan & Aliyu, 2021; Yusoff, 2022; Widiyanto & Zuhri, 2024). This reinforces the argument that digital technology in Islamic finance serves not only as a tool for efficiency, but also as a mechanism for strengthening the integrity of the financial system.

The overlay visualization results show a shift in research focus from conceptual and normative approaches to technology-based and digital governance approaches. In the early period, research emphasized literature reviews and institutional analysis of Islamic finance. However, since 2020, topics such as Islamic fintech, blockchain, and digital waqf have become increasingly dominant. This shift reflects the growing practical need to understand the implications of digital technology for the sustainability and integrity of Islamic finance (Nasution, 2021; Gunawan & Rusydiana, 2023; Kumara & Nugraha, 2024).

Blockchain technology has emerged as one of the key themes in recent research. The characteristics of blockchain, which are transparent, decentralized, and not easily manipulated, are considered to be in line with sharia principles, particularly in maintaining trust and reducing moral hazard risks. A number of studies show that blockchain has the potential to strengthen Sharia compliance in digital financial transactions, including in the management of zakat, waqf, and Sharia crowdfunding (Rabbani et al., 2020; Zulfikri et al., 2023; Khan et al., 2023).

In addition to blockchain, the use of artificial intelligence (AI) is also increasingly prominent in the digital sharia finance literature. AI is used in financing risk analysis, fraud detection, service personalization, and automated compliance monitoring. International studies show that AI can improve the efficiency and accuracy of financial decision-making, but it also poses significant ethical and regulatory challenges (Aysan et al., 2023; Afzal et al., 2025; Meero, 2025). In the context of sharia, these challenges relate to algorithm transparency, potential bias, and compliance with the principle of fairness.

The density visualization results show that topics such as Islamic regtech, automated sharia audit, and supotech still have relatively low research density. This indicates a significant research gap. The literature confirms that the development of Sharia regtech and supotech is essential to support the effectiveness of supervision and compliance in the digital era (Karim, 2022; Ichsan et al., 2024; Pardi, 2024). The limitations of research in this area open up great opportunities for further interdisciplinary research.

From a regulatory perspective, the integration of Islamic finance with the digital economy requires an adaptive and harmonious policy framework. Several national and international studies show that the lack of synchronization between technological innovation and Islamic regulations has the potential to weaken the integrity of the Islamic financial system (Ahmad Abdul Gani, 2022; Asyiqin, 2025; Nuriyah & Muchtar, 2024). Therefore, collaboration between regulators, scholars, academics, and industry players is key to ensuring that digital innovation remains within the corridor of *maqashid al-syariah*.

In addition to regulatory aspects, behavioral factors and digital literacy among the public also influence the success of digital Islamic finance implementation. Research shows that levels of trust, understanding of Islamic principles, and perceptions of technological security play an important role in the adoption of Islamic fintech services (Azman & Zabri, 2022; Fitriyaningsih & Fianto, 2022; Budiyanto et al., 2025). Thus, strengthening digital Islamic finance literacy is an integral part of efforts to maintain the integrity of the financial system.

Overall, this discussion confirms that the integration of Islamic finance with the digital economy is a multidimensional process involving technology, regulation, ethics, and behavior. Bibliometric results show that global research is moving towards a more comprehensive and governance-based approach. However, there is still an urgent need to expand research in the areas of Sharia regtech, digital auditing, and AI ethics so that the digital transformation of Sharia finance can take place in a sustainable and integrity-based manner (Donthu et al., 2021; Salem & Shahimi, 2025).

4. CONCLUSION

This study shows that the integration of Islamic finance with the digital economy has grown significantly in global literature during the period 2020–2025. The results of bibliometric analysis using VOSviewer reveal an increase in the number of publications, indicating a high level of academic attention to the issues of digitization, integrity, and sharia compliance. Research network visualization shows that the themes of Islamic finance, Islamic fintech, regtech, and bibliometric analysis are at the center of scientific discourse, reflecting a shift in research from a normative approach to a technology-based and digital governance approach. The findings of this study also identify several major thematic clusters, namely Sharia fintech technology and services, Sharia regulation and compliance, economic impact and financial inclusion, as well as ethical and data security issues. The emergence of blockchain technology and artificial intelligence as dominant themes shows that digital innovation is seen as a strategic instrument in strengthening the transparency, accountability, and integrity of the Islamic financial system. However, the density visualization results

indicate that topics such as Islamic regtech, automated sharia audit, and digital supervision are still relatively unexplored, thus opening up opportunities for further research. Conceptually, this study contributes by providing a systematic scientific map of the development of research on Islamic finance integration and the digital economy. This mapping not only enriches the academic literature but also provides practical implications for regulators and industry players in formulating policies and digital transformation strategies that are in line with the principles of maqashid al-syariah. However, this study has limitations because it is descriptive and relies on publications indexed in international databases. Therefore, further research is recommended to combine bibliometric analysis with empirical studies or qualitative approaches to assess the implementation and real impact of digital technology on Islamic finance integrity in various jurisdictions.

ACKNOWLEDGMENT

The author would like to thank all those who have provided support in completing this article entitled “Sharia Financial Integrity with the Digital Economy: A Bibliometric Study of Global Trends Using VOSviewer.”

The author would like to express his deepest gratitude to his supervisor, who provided guidance, mentoring, and constructive input during the research and writing process for this article. The author also thanks the institutions and libraries that provided access to literature sources and academic data, which were very helpful in compiling this bibliometric study. Thanks also go to family, friends, and colleagues who have always provided moral support and motivation. Hopefully, this research can contribute to the development of science, especially in the integration of Islamic finance and the digital economy.

REFERENCES

- Afzal, A. M., Abu Khalaf, B., Al-Naimi, M. S., & Samara, E. (2025). The impact of fintech on the stability of MENA banks. *Risks*, 13(6), 106. <https://doi.org/10.3390/risks13060106>
- Ahmad Abdul Gani. (2022). Perkembangan fintech syariah dan regulasi hukum: Kajian literatur. *Jurnal Ilmu Akuntansi dan Bisnis Syariah (AKSY)*, 4(2), 145–160.
- Alshater, M. M., Saba, I., Supriani, I., & Rabbani, M. R. (2022). Fintech in Islamic finance literature: A review. *Heliyon*, 8(9), e10385. <https://doi.org/10.1016/j.heliyon.2022.e10385>
- Astuty, W., Habibie, A., Pasaribu, F., Pratama, I., & Rahayu, S. (2022). Pemanfaatan informasi akuntansi dan partisipasi anggaran sebagai anteseden kinerja manajerial: mengeksplorasi peran moderasi komitmen organisasi, gaya kepemimpinan, ketidakpastian lingkungan, dan strategi bisnis di Indonesia.
- Astuty, W., Rahayu, S., & Lubis, N. (2015). Langkah Muda Menyusun Laporan Keuangan dengan MYOB Accounting Versi 19 untuk Perusahaan Jasa dan Dagang. *Kumpulan Jurnal Dosen Universitas Muhammadiyah Sumatera Utara*, 1 (01).
- Aysan, A. F., Disli, M., Ng, A., & Ozturk, H. (2023). Artificial intelligence and Islamic finance. *Finance Research Letters*, 52, 103448. <https://doi.org/10.1016/j.frl.2022.103448>
- Azman, N. H. N., & Zabri, M. Z. M. (2022). Shariah-compliant fintech adoption among micro-entrepreneurs. *Journal of Islamic Monetary Economics and Finance*, 8(2), 305–324.
- Budiyanto, A., Lubis, I., Pamungkas, I. B., & Maulana, A. E. (2025). Technology acceptance, trust, and financial behavior. *Innovative Marketing*, 21(2), 197–210. [https://doi.org/10.21511/im.21\(2\).2025.16](https://doi.org/10.21511/im.21(2).2025.16)
- Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis. *Journal of Business Research*, 133, 285–296. <https://doi.org/10.1016/j.jbusres.2021.04.070>
- Fitrianiingsih, F., & Fianto, B. A. (2022). Behavioral intention toward Islamic fintech adoption. *Journal of Islamic Marketing*, 13(7), 1511–1530. <https://doi.org/10.1108/JIMA-01-2021-0020>
- Gunawan, M. R., & Rusydiana, A. S. (2023). Islamic banking research trends during COVID-19: A bibliometric analysis. *Al-Tijarah*, 9(1), 1–17.
- Hasibuan, DS, Sembiring, IY, Sidabalok, SPT, Pane, SG, & Rahayu, S. Pengaruh Lingkungan Kerja, Kecerdasan Emosional, dan Karakteristik Pekerjaan terhadap Kinerja Karyawan Kantor Kelurahan Simpang Empat, Kabupaten Asahan.
- Hassan, M. K., & Aliyu, S. (2021). Digital transformation and Islamic banking performance. *Journal of Islamic Accounting and Business Research*, 12(2), 324–341. <https://doi.org/10.1108/JIABR-07-2020-0213>
- Ichsan, M., Fitriyanti, F., Setiorini, K. R., & Al-Qudah, A. M. (2024). Digitalization of Islamic banking and sharia compliance. *Jurnal Media Hukum*, 31(2), 244–261. <https://doi.org/10.18196/jmh.v31i2.22485>
- Karim, A. (2022). Sharia governance challenges in Islamic fintech. *Journal of Islamic Finance*, 11(1), 45–60.
- Khan, A., Rabbani, M. R., & Thalassinis, E. (2023). Blockchain and Islamic finance: Opportunities and challenges. *International Journal of Financial Studies*, 11(3), 112. <https://doi.org/10.3390/ijfs11030112>
- Kumara, A., & Nugraha, R. (2024). Digital transformation in Islamic finance: Regulatory challenges. *Jurnal Ilmiah Ekonomi Islam*, 10(1), 55–70.
- Kurniawan, H., Gunawan, R., & Rahayu, S. (2025, Juli). Ekonomi Hijau dalam Perspektif Ekonomi Syariah: Solusi untuk Pembangunan Berkelanjutan. Dalam *Prosiding Seminar Nasional Teknologi Komputer dan Sains* (Vol. 3, No. 1, pp. 361-368).
- Lubis, H., Ismail, S., Rahayu, S., & Kurnianingsih, HT (2025). Model Kewirausahaan Perempuan di Koperasi Medan Tuntungan, Ladang Bambu, Sumatera Utara: Pengabdian. *Jurnal Pengabdian Masyarakat dan Riset Pendidikan*, 3 (4), 2520-2527.
- Meero, A. (2025). Islamic and conventional banking in the age of fintech and AI. *International Journal of Financial Studies*, 13(3), 148. <https://doi.org/10.3390/ijfs13030148>
- Nasution, M. E. (2021). Islamic finance research trends: A bibliometric approach. *Heliyon*, 7(10), e08219. <https://doi.org/10.1016/j.heliyon.2021.e08219>

- Nuriyah, N. S., & Muchtar, A. R. F. (2024). Transformasi ekonomi Islam melalui fintech digital. *Anggaran: Jurnal Ekonomi dan Akuntansi*, 6(2), 101–115.
- Pertiwi, ID, Yani, M., & Rahayu, S. (2025, Juli). Green Sukuk dan Pembiayaan Berkelanjutan: Analisis Empiris terhadap Efektivitas Instrumen Keuangan Islam dalam Mendukung Transisi Energi Bersih. Dalam *Prosiding Seminar Nasional Teknologi Komputer dan Sains* (Vol. 3, No. 1, pp. 81-88).
- Putri, AAK, Zufrihal, Z., Habibie, A., & Hakim, I. (2024). Dampak Boikot Terhadap Stabilitas Keuangan Perusahaan Cepat Saji Yang Terdaftar Di Indeks Saham Syariah Indonesia (Issi): Analisis Prediksi Kebangkrutan Menggunakan Model Springate. *Krigan: Jurnal Manajemen dan Bisnis Syariah*, 2 (2), 129-139.
- Qudah, H., Malahim, S., Airout, R., Alomari, M., Hamour, A. A., & Alqudah, M. (2023). Islamic finance in the era of financial technology: A bibliometric review. *International Journal of Financial Studies*, 11(2), 76. <https://doi.org/10.3390/ijfs11020076>
- Rabbani, M. R., Khan, S., & Thalassinou, E. (2020). FinTech, blockchain and Islamic finance. *International Journal of Economics and Business Administration*, 8(2), 171–190.
- Rahayu, S., Jaafar, MA, & Azni, AI (2025). Peningkatan Pendapatan Ibu Rumah Tangga Melalui Pelatihan Kuliner Khas Masakan Ayam Geprek Indonesia di Kampung Warna-Warni Kuala Perlis. *Buletin Pengabdian Masyarakat ADA*, 1 (1), 33-38.
- Rahayu, S., Siregar, S., Suginam, AH, & Habibie, A. (2019). Pengaruh Penerapan Prinsip Tata Kelola Pemerintahan yang Baik Terhadap Penerimaan Dana Zakat di Lembaga Amil Zakat di Kota Medan. Dalam *Prosiding Seminar Internasional Studi Islam* (Vol. 1, No. 1, hlm. 746-754).
- Rahayu, S., Tullah, DS, Suginam, S., & Nur, S. (2025). Digitalisasi, AI, dan Kualitas Layanan di Bank Umum Syariah: Kepuasan dan Pengetahuan Nasabah sebagai Mediator Paralel terhadap Kinerja Keuangan yang Dirasakan Nasabah. *Jurnal Ilmiah Akuntansi Kesatuan*, 13 (3), 611-616.
- Salem, M. R. M., & Shahimi, S. (2025). Fintech research trends: A bibliometric analysis. *Future Business Journal*, 11(1). <https://doi.org/10.1186/s43093-025-00652-1>
- Siregar, D., Rahayu, S., Saputra, I., Sari, DP, & Sari, VW (2025). Peningkatan Daya Saing UMKM Kerajinan Lokal Melalui Penerapan Konsep Bluepreneur Berbasis Sumber Daya Ramah Lingkungan. *Buletin Pengabdian Masyarakat ADA*, 1 (1), 18-24.
- Suginam, S., Pamungkas, B., Rahayu, S., & Hashim, N. (2025). Mengintegrasikan Nilai-Nilai Islami dan Strategi Keuangan Peran Pengelolaan Keuangan Berbasis Syariah Dalam Meningkatkan Kinerja UMKM Muslim. *Jurnal Ilmiah Akuntansi Kesatuan*, 13 (3), 451-466.
- Thakor, A. V. (2020). Fintech and banking: What do we know? *Journal of Financial Intermediation*, 41, 100833. <https://doi.org/10.1016/j.jfi.2019.100833>
- Widiyanto, A., & Zuhri, S. (2024). Technological innovation and regulation in Islamic finance. *SANTRI: Jurnal Ekonomi dan Keuangan Islam*, 2(6), 258–267.
- Yusoff, M. (2022). Shariah governance challenges in digital Islamic finance. *ISRA International Journal of Islamic Finance*, 14(2), 223–239. <https://doi.org/10.1108/IJIF-10-2021-0192>
- Zulfikri, Z., Kassim, S., Hassan, A., & Othman, A. (2023). Blockchain adoption for zakat institutions. *European Journal of Islamic Finance*, 1–15. <https://doi.org/10.13135/2421-2172/7221>