

BLOCKCHAIN IN ISLAMIC FINANCE: A REVIEW USING BIBLIOMETRIC APPROACH

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Abstract

This study reviews research on blockchain in Islamic finance with leading journals. This study uses bibliometric analysis of 161 selected articles related to blockchain in Islamic finance published by national and international journals derived from the dimension database. The entire sample of journal publications has been published in eight years, from 2017 to 2024. There are 12 authors, with research results dominated by the United States and Malaysia, followed by Qatar. Then, data processing is carried out by analyzing it using the VosViewer application, which aims to determine the bibliometric map of blockchain research development in Islamic finance worldwide. Based on bibliometric keyword mapping, 3 clusters can become research paths with topics related to blockchain in Islamic finance. Furthermore, the emergence of blockchain in Islamic finance is expected to improve transparency and accountability in the Islamic financial sector significantly. The implications include the potential to strengthen public trust and efficiency in Islamic financial management while facing challenges in Sharia compliance and technological adaptation.

Keywords: Blockchain, Islamic Finance, Vosviewer, Bibliometrics

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Introduction

Blockchain and Distributed Ledger Technology (DLT) have emerged as technological innovations that potentially transform various industry sectors. Satoshi Nakamoto introduced These technologies as the foundation of the Bitcoin cryptocurrency in 2008. Since then, blockchain and DLT have expanded beyond their initial financial applications, offering solutions to problems in supply chain, healthcare, and government. Blockchain, as one form of DLT, is a decentralized system of record that stores data in interconnected blocks. Each block contains transaction information connected to the previous block through a cryptographic hash function, creating an immutable data chain. The decentralized nature of blockchain allows for greater transparency, security, and efficiency in managing data and transactions.

DLT, on the other hand, it is a broader concept that includes blockchain and other similar technologies. DLT refers to a database system distributed across a network of computers or nodes with no central authority. It enables transparent and secure data recording, sharing, and synchronization across the network. Recent developments in blockchain and DLT have seen the emergence of 'second-generation blockchain' platforms such as Ethereum, which introduced the concept of smart contracts. Smart contracts are self-executing programs that run on the blockchain, enabling automation and execution of agreements without intermediaries. This innovation has paved the way for more complex blockchain applications, including Decentralised Finance (DeFi) and Non-Fungible Tokens (NFTs). While the technology is promising, challenges remain, including scalability, energy consumption, and regulatory issues. However, with continued research and development, blockchain and DLT have the potential to continue to transform the way we conduct transactions, manage data, and interact in the digital economy.

Based on Google Trends on searches for the keyword 'Blockchain' from 27 October 2019 to around October 2024. Figure 1 shows that blockchain experienced a significant peak in popularity in early 2022, but its popularity declined and stabilized at a lower level. This may reflect changes in public perception or interest in blockchain, most likely due to changes in the market or the development of new technologies that attract users' attention. To explain the graph analysis, the X-axis shows the period from 27 October 2019 to around April 2024, while the Y-axis shows the search popularity score on a scale of 0 to 100. This score indicates how often the keyword 'Blockchain' was searched relative to the period with the highest popularity during this period. The peak point occurs from 13-19 February 2022, when the keyword 'Blockchain' reaches its highest popularity score at 80.



Figure 1. Google Trends of searches for the keyword 'Blockchain' from 27 October 2019 to approximately October 2024

This indicates that in this period, the topic of blockchain was trendy, most likely due to developments, big news, or increased public interest in this technology. After reaching a peak in February 2022, search popularity for blockchain experienced a fairly sharp decline and continued until near the end of 2022. At this point, there was a steady decline in popularity to lower levels, indicating a declining interest in the topic after a period of high popularity. After around October 2022, the popularity trend of 'Blockchain' tends to stabilize at a lower range than before. Although there are slight fluctuations, this graph shows that the interest in this topic is still there but not as intense as at the peak of its popularity. There are some small spikes after 2022, although not as high as the peak in February 2022. These spikes could be due to technological developments or blockchain-related news but are not as large as previous events.

Figure 2 shows a world map colored by the intensity of interest in the keyword 'Blockchain' according to Google Trends in the last 12 months, with a relatively diverse distribution of global interest in blockchain, with the highest interest in Nigeria, followed by several other African countries. This can provide insights for researchers or industry players to focus on countries interested in blockchain technology and explore regional opportunities. In addition to the map is a list of the top five countries with the highest interest in this topic. World Map: This world map uses blue colors of varying intensity to show how much interest there is in the keyword 'Blockchain' in each country. The darker the blue color, the higher the interest. Some countries that are not colored (grey) indicate regions with insufficient data related to this keyword. The interest is so low that it is not significantly recorded in Google Trends search results. Alongside the map is a list of

the five countries with the highest interest scores for the keyword 'Blockchain', i.e., Nigeria with the highest score of 100, indicating the highest interest relative to other countries.

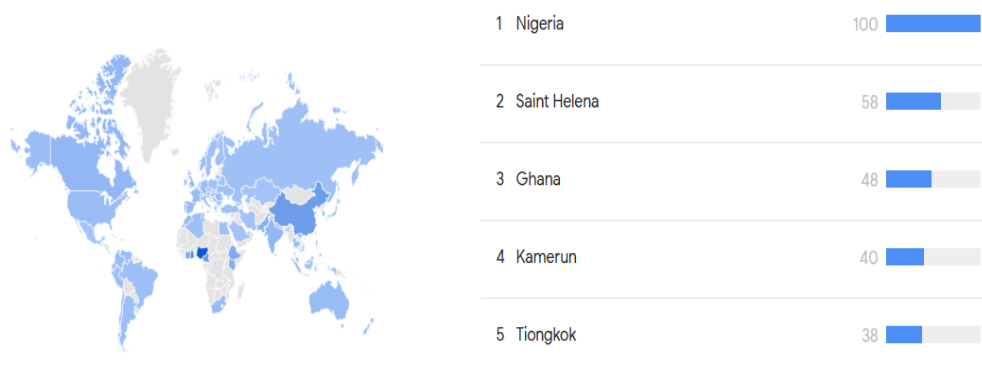


Figure 2. World map colored by the intensity of interest in the keyword 'Blockchain' according to Google Trends

This suggests that blockchain is very popular in Nigeria, which may be attributed to the increasing adoption of digital technology, particularly in the financial and cryptocurrency sectors. Saint Helena scored 58, which is relatively high for a small territory. This interest may be due to specific communities or regional blockchain-related activities. Ghana, with a score of 48, signaling strong popularity for blockchain. Like Nigeria, this interest could be related to the increasing awareness and adoption of digital technology in the financial sector. Cameroon, with a score of 40, indicates significant interest, likely due to the potential use of blockchain in various sectors, including finance, logistics, and data logging. China scored 38, indicating substantial interest despite strict regulations regarding blockchain and cryptocurrencies. China is known to be interested in developing blockchain technology in its industry and government.

In general, West African countries show a very high interest in blockchain. This could be due to limited access to traditional banking services, making blockchain technology and cryptocurrencies an attractive alternative. Other countries in light blue also show interest, but the top five are lower. Regions such as Europe, North America, and parts of Asia have moderate interest in blockchain. Table 1 below is the result of documents searched with the keyword 'blockchain in Islamic finance' using the app dimension.

Table 1. Classifications of year publications lockchain In Islamic Finance 2017-2024 from Dimension

No	Publication Year	Publication
1	2017	1
2	2018	3
3	2019	22
4	2020	14
5	2021	26
6	2022	37
7	2023	39
8	2024	30

Table 1 shows the number of publications related to the topic 'Blockchain in Islamic Finance' from 2017 to 2024 based on data from 'Dimension'. The table contains columns displaying the year of publication and the number of publications published each year, giving an idea of the trend of research interest in the field. Initially, interest in the topic was low, with only one publication in 2017 and a slight increase to three publications in 2018. However, in 2019, there was a significant increase in the number of publications, reaching 22. This may indicate that blockchain is starting to be seen as a relevant and potential technology for adoption in Islamic finance. The year 2020 saw a slight decrease in the number of publications, down to 14 publications, which various factors, including the potential impact of the COVID-19 pandemic on global research, may influence.

However, in 2021, the number of publications increased again to 26, possibly signaling a recovery in research activity and increased interest in this topic. 2022 and 2023 showed a significant spike, with 37 and 39 publications, respectively. This was a high point in this trend, indicating that blockchain in Islamic finance became the main focus of many researchers and practitioners. However, 2024 saw a slight decline with 30 publications, although it remained significantly higher than previous years. This trend shows increased interest and attention to blockchain in Islamic finance since 2017, peaking in 2023. The slight drop in 2024 does not mean that interest in the topic is drastically decreasing, but rather that the research focus may begin to be distributed towards more specific or advanced applications. This data provides a snapshot of the development of studies in this area and can serve as a guide for researchers looking to explore the potential of blockchain in the Islamic finance sector.

Methods

Studies related to literature studies on the topic of blockchain in Islamic finance based on dimension search have been conducted by Mohammad Kabir Hassan, Anwar Hasan, Aishath

Muneeza, Abdullah Othman, Ahmet Faruk Faruk Aysan and Mustafa Raza Rabbani. A similar study using the bibliometric method has never been conducted in the Sinta journal. Based on this explanation, this study is interesting to be researched further. This research was conducted to complement existing research, fill the gaps in previous research, and expand the literature related to blockchain in Islamic finance through research. Specifically, this study aims to see the development of 'blockchain in Islamic finance' research around the world published by journals on the theme and see future research opportunities by formulating a research agenda.

In this study, various scientific journal publications related to the theme of 'blockchain in Islamic finance' *worldwide* were used as data sources.

The data was collected by searching for journal publications indexed in the dimension database using the keywords 'blockchain in Islamic finance.' After that, scientific articles or journals that are relevant to the research theme will be selected based on the publication data that has been collected. The criteria for screening and data processing using software are journals equipped with DOI. There were 172 journal articles published with the keyword 'blockchain in Islamic finance' on 29 October 2024. The development of publication trends related to the research topic was analyzed using VOSviewer software, which can generate bibliometric maps and allow for more detailed analysis. VOSviewer uses the acronym VOS, which refers to *Visualising of Similarity*. In previous studies, the VOS mapping technique has been used to obtain bibliometric visualizations, which were then analyzed. Furthermore, VOSviewer can create and display author journal maps based on co-citation data or keyword maps based on co-occurrence data.

Based on this, a map analysis of journals related to 'blockchain in Islamic finance' was carried out, including author maps and keywords, which were then analyzed for future research paths that could be carried out through clusters on *keyword mapping*. This research uses a descriptive qualitative approach with meta-analysis and descriptive statistical literature study based on 161 journal publications that discuss the theme 'blockchain in Islamic finance'. Meta-analysis is a method that integrates previous research related to a particular topic to evaluate the results of existing studies. Furthermore, the qualitative method used in this research is also called a constructive method, where the data collected in the research process will be constructed into themes that are easier to understand and meaningful. The sampling technique used in this research is the purposive non-probability sampling method, which aims to fulfill certain information by the desired research objectives.

Result And Discussion

Blockchain and Distributed Ledger Technology (DLT) have emerged as technological innovations that potentially transform various industry sectors. (Wang, Yingli, Meita Merilainen, 2021). The concept was first introduced by Satoshi Nakamoto in 2008 as the foundation for the Bitcoin cryptocurrency (Antonopoulos, 2023). The decentralized nature of blockchain allows for greater transparency, security, and efficiency in managing data and transactions (Risius, Marten, 2017). DLT, on the other hand, is a broader concept that includes blockchain and other similar technologies. (Xu, Xiwei, Ingo Weber, 2019). This innovation has paved the way for more complex blockchain applications, including Decentralised Finance (DeFi) and Non-Fungible Tokens (NFTs) (Zheng, Zibin, Shaoan Xie, Hong-Ning Dai, Xiangping Chen, 2018). Blockchain Structure: The blockchain structure consists of Blocks, Block Headers, Merkle Tree, and transactions (Zheng, Zibin, Shaoan Xie, Hong-Ning Dai, Xiangping Chen, 2018).

The consensus mechanism is at the core of blockchain operations, allowing the network to agree on the ledger's status without a central authority (Zheng, Zibin, Shaoan Xie, Hong-Ning Dai, Xiangping Chen, 2018). Blockchain security relies on consensus, ensuring only valid transactions are added to the blockchain (Xu, Xiwei, Ingo Weber, 2019). Cryptocurrencies and blockchain are closely related because cryptocurrencies operate on decentralized blockchain technology without a central authority such as a bank or government (Al, n.d.). Many cryptocurrencies have a limited supply, which can create scarcity and increase in value over time (Casino, Fran, Thomas K. Dasaklis, n.d.). Self-executing contracts that run on the blockchain, enabling the automation of various business and legal processes, are blockchain applications (Bashir, 2023).

Bitcoin operates 24/7 without geographical boundaries, enabling fast and cheap transfers of value globally (Akhtaruzzaman, Md, Ahmet Sensoy, 2020). In its application, Ethereum has become the cornerstone for numerous innovations in the blockchain industry (Akhtaruzzaman, Md, Ahmet Sensoy, 2020). Altcoins emerged in response to perceived limitations in Bitcoin or to fulfill specific needs in the cryptocurrency ecosystem (Bashir, 2023). The concept was first introduced by Nick Szabo in 1994 but only gained significant practical implementation with the advent of blockchain technology, particularly the Ethereum platform (Antonopoulos, 2023).

Sharia Enterprise Theory states that Allah is the center of everything. As Allah's creatures, humans have the consequence to submit to all His laws (Cahyani et al., 2020). Implementation opportunities for blockchain technology in Islamic finance can increase financial transparency. Blockchain technology has limitations in the scale and capacity of transactions it can handle. This is a challenge if used to implement large and complex digital transformations (Arwani & Priyadi, 2024).

The development of the Islamic finance industry has reached a new stage after the development trend outside the banking sector (Soemitra, Rukiah, Heri Ansyah Panjaitan, et al., 2021). The Islamic finance industry's rapid growth has contributed to the Islamic social finance sector (Purnama Sari et al., 2022). Economic growth is the development of economic activity, which results in increased goods and services produced for society and the welfare of the population (Khafifah et al., 2023a). Islamic business is run to worship and get the pleasure of Allah SWT, not only focusing on profit alone. (Sari et al., 2022a) Islam teaches its people that they must always uphold Sharia principles in carrying out all their activities, including economic activities (Budi Gautama Siregar & Aswadi Lubis Aswadi, 2024).

Competent human resources are a significant asset in supporting economic activity (Khafifah et al., 2023b). Fintech is an effort in the financial or banking sector supported by modern software technology (Daulay et al., 2023). Advances in digital technology have penetrated the financial sector, encouraging the emergence and development of financial technology. The low level of financial literacy, coupled with the difficulty of financing through banks, makes people look for alternative financing outside the banking system. One financial service experiencing rapid growth is fintech or financial technology (Soemitra, Rukiah, Panjaitan, et al., 2021). This research helps researchers understand the position of their research, identify themes that have the potential to be studied in the future, and provide recommendations to policymakers in supporting business development (Cahyani et al., 2022).

Previous research used bibliometric analysis to determine blockchain development (Sari et al., 2022b). Researchers have found gaps in the evidence from previous studies that must align with the findings (Pratomo et al., 2023). As a country with the largest Muslim majority population, Indonesia should be a leader in the development of Islamic finance globally (Consulting, 2013). Islamic banks have presented various products and services to raise funds from the public (Gautama Siregar et al., 2017). The development of development and rapid global progress requires every country, including Indonesia, a developing country, to continue to adapt and follow the dynamics that occur (Yanti et al., 2024). one-way causality relationship from energy consumption to economic growth (Pratomo et al., 2023). Financial management is an essential requirement for every business person because this will directly affect the development of their business (Lubis et al., 2023) with a focus on businesses that comply with the Islamic economy, which emphasizes fair, transparent, and sustainable financial principles in its management practices (Nasution & Fauzan, 2023).

Table 2. Classifications of publications Researcher aggregated Blockchain In Islamic Finance from Dimension

No	Name	Organization	Country	Publication	Citation	Citation (means)
1	Mohammad Kabir Hassan	University of New Orleans	United States	10	170	17
2	Aishath Muneeza	International Centre for Education in Islamic Finance Mal	Malaysia	7	31	4,43
3	Ahmet Faruk Faruk Aysan	Qatar Foundation	Qatar	6	45	7,5
4	Mustafa Raza Rabbani Anwar	Univerisity Of Bahrain	Bahrain	5	28	5,6
5	Hasan Abdullah Othman Zakir	International Islamic University Malaysia	Malaysia	4	9	2,25
6	Hossen Shaikh	Kingdom University	Bahrain	4	13	3,25
7	Dhiaeddine Rejeb	-	-	3	12	4
8	Ibrahim Musa Unal	Hamad bin Khalifa University	Qatar	3	28	9,33
9	Zakariya Mustapha Rashmi	University of Malaya	Malaysia	3	22	7,33
10	Ranjan Panigrahi	GITAM University	India	3	4	1,33

Table 2 above classifies the researchers who published scholarly works on 'Blockchain in Islamic Finance.' This data comes from 'Dimension' and includes information regarding the researcher's name, the organization they are affiliated with, country, number of publications, number of citations, and average citations per publication (citation means). The table contains columns that display the following information:

1. **Name:** Lists the names of researchers active in Blockchain in Islamic Finance. For example, Mohammad Kabir Hassan, Aishath Muneeza, and Ahmet Faruk Aysan are the leading researchers in this field.
2. **Organization:** Mention the institution or organization that the researchers are affiliated with. These institutions are spread across different countries, such as the University of New Orleans

(USA), the International Centre for Education in Islamic Finance (Malaysia), and Hamad bin Khalifa University (Qatar).

3. Country: This column indicates where each research organization is located. Countries such as the United States, Malaysia, Qatar, and Bahrain have a representation of researchers in this field, indicating that blockchain research in Islamic finance is a topic that is gaining global attention.
4. Publications: This shows the total number of publications each researcher has published. Mohammad Kabir Hassan is the researcher with the most publications, with ten publications, followed by Aishath Muneeza with seven publications, and Ahmet Faruk Aysan with six publications.
5. Citations: This column records the total number of citations each researcher received for their publications in this field. Mohammad Kabir Hassan has the highest number of citations, 170, which shows the significant influence of his work in the blockchain literature in Islamic finance. Ahmet Faruk Aysan and Ibrahim Musa Unal have significant citations, 45 and 28, respectively.

Figure 3 is a visualization of network analysis using VOSviewer, which maps relationships between researchers, collaborations, or citation networks in a research field. This image shows interconnected clusters of researchers based on the frequency of collaboration or research linkages. Each circle or dot in this figure represents a researcher, and the researcher's name is also displayed near the respective node. Red clusters group researchers who collaborate frequently or have strong research topic links, while green, blue, and yellow clusters show internal relationships within the group.



Figure 3. Classifications of publications Network Blockchain in Islamic Finance from Dimension

A line connecting one node to another indicates a relationship or collaboration between two researchers. Thicker lines indicate a higher frequency of collaboration, which means that the researchers connected by these thick lines have more frequent interactions or collaborations. This figure can also be used to understand the structure of research collaboration networks. For example, 'Hassan, Mohammad Kabir' has a central role in this network, as it is in the center and has many connecting lines to other researchers. This suggests that he may be an influential researcher or frequent collaborator. At the bottom right of the image, there is a circle size scale that shows the difference in node size based on the level of connectedness.

Table 3 displays the publication classification data of a researcher on the topic 'Blockchain in Islamic Finance,' organized by ANZSRC 2020 classification. This data was obtained from the *Dimension* platform and included various fields of study, the number of publications, and the number and average citations per publication in each field. In *Commerce, Management, Tourism, and Services*, with code 35, 97 publications received 679 citations, averaging seven per publication. In the Banking, Finance, and Investment field, with code 3502, 59 publications with 506 citations resulted in an average of 8.58 per publication.

**Table 3. Classifications of publications Researcher aggregated (ANZSRC 2020)
Blockchain In Islamic Finance from Dimension**

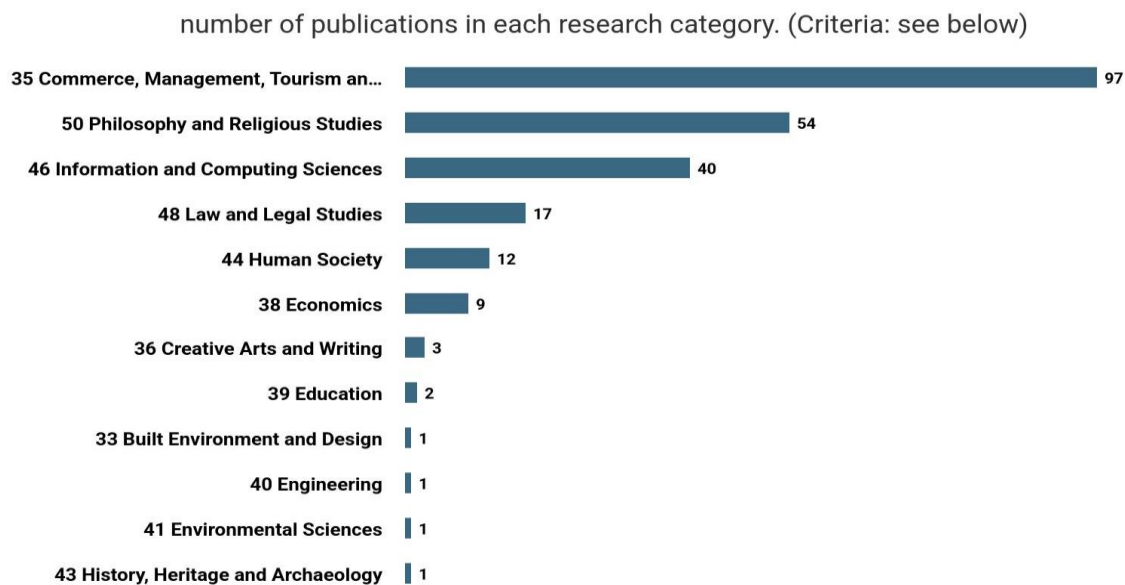
No	Name	Code	Publication	Citation	Citation (means)
1	Commerce, Management, Tourism and Services	35	97	679	7
2	Banking, Finance and Investment	3502	59	506	8,58
3	Philosophy and Religious Studies	50	54	294	5,44
4	Religious Studies	5004	42	153	3,64
5	Information and Computing Sciences	46	40	118	2,95
6	Law and Legal Studies	48	17	39	2,29
7	Commercial Law	4801	14	35	2,5
8	Strategy, Management and Organisational Behaviour	3507	13	74	5,69
9	Human Society	44	12	45	3,75
10	Development Studies	4404	10	27	2,7

Meanwhile, in *Philosophy and Religious Studies*, with code 50, 54 publications get 294 citations, with an average of 5.44 citations per publication. In the field of *Religious Studies* with code 5004, there are 42 publications and 153 citations, with an average of 3.64 citations per publication. The *Information and Computing Sciences* field with code 46 has 40 publications that received 118 citations, with an average of 2.95 citations per publication. In the Law and Legal Studies field, with code 48, there are 17

publications with 39 citations, resulting in the lowest average of 2.29 per publication. In the field of *Commercial Law* with code 4801, there are 14 publications and 35 citations, with an average of 2.5 citations per publication.

In *Strategy, Management, and Organisational Behaviour*, with code 3507, 13 publications received 74 citations, with an average of 5.69 per publication. In the field of *Human Society* with code 44, there are 12 publications with a total of 45 citations, resulting in an average of 3.75 citations per publication. Finally, in the field of *Development Studies* with code 4404, there are ten publications with 27 citations, resulting in an average of 2.7 citations per publication. Overall, the *Banking, Finance, and Investment* field shows the highest average citations per publication (8.58), while the *Law and Legal Studies* field has the lowest average citations (2.29).

Image 4 shows the total number of publications in the various research categories related to 'blockchain in Islamic finance.' This data was retrieved from the *Dimensions* platform on 29 October 2024, with research criteria defined by the keywords 'Blockchain in Islamic Finance' in the title and abstract. The *Commerce, Management, Tourism, and Services* field has the highest number of publications, with 97 publications. The field of *Philosophy and Religious Studies* ranks second with 54 publications. Followed by *Information and Computing Sciences*, which has 40 related publications.



Source: <https://app.dimensions.ai>
 Exported: October 29, 2024
 Criteria: 'Blockchain In Islamic Finance' in title and abstract.

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Figure 4. Classifications of publications bar chart Blockchain in Islamic Finance from Dimension

Law and Legal Studies has 17 publications, while *Human Society* has 12. *Economics* has nine publications, while *Creative Arts and Writing* has three publications. Several other fields only have one publication related to this topic, namely *Built Environment and Design, Education, Engineering, Environmental Sciences, History, Heritage, and Archaeology*. This figure provides an overview of how the topic of ‘Blockchain in Islamic Finance’ has been explored in various research fields, with the largest concentrations in management, religion, and computational science.

Table 4 displays the publication classification of a researcher on the topic of “Blockchain in Islamic Finance” about the Sustainable Development Goals (SDGs). This data was obtained from the Dimension platform and included the various development goals, the number of publications, the number of citations, and the average citations per publication in each goal. In the Industry, Innovation, and Infrastructure goal, there were 23 publications with 107 citations, resulting in an average of 4.65 citations per publication. The Reduced Inequalities goal has ten publications with 47 citations, which averages 4.7 citations per publication. For the Peace, Justice, and Strong Institutions goal, seven publications received 35 citations, averaging five citations per publication. The No Poverty objective has five publications with six citations, which averages only 1.2 citations per publication.

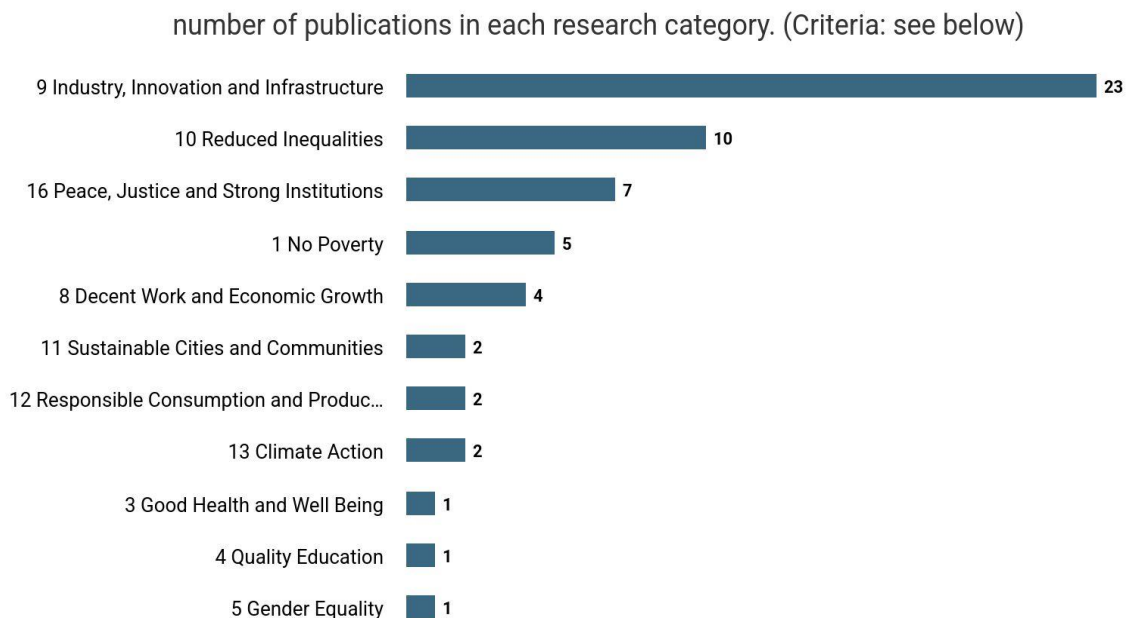
Table 4. Classifications of publications Researcher aggregated (Sustainable Development Goal) Blockchain In Islamic Finance from Dimension

No	Name	Publication	Citation	Citation (means)
1	9 Industry, Innovation and Infrastructure	23	107	4,65
2	10 Reduced Inequalities	10	47	4,7
3	16 Peace, Justice and Strong Institutions	7	35	5
4	1 No Poverty	5	6	1,2
5	8 Decent Work and Economic Growth	4	10	2,5
6	11 Sustainable Cities and Communities	2	4	2
7	12 Responsible Consumption and Production	2	13	6,5
8	13 Climate Action	2	5	2,5
9	3 Good Health and Well Being	1	1	1
10	4 Quality Education	1	0	-

In Decent Work and Economic Growth, there are four publications with ten citations, so the average number of citations per publication is 2.5. Meanwhile, two publications received four citations in the Sustainable Cities and Communities goal, with an average of 2 citations per publication. For the Responsible Consumption and Production goal, two publications received 13 citations, resulting in the highest average of 6.5 per publication. The Climate Action objective has

two publications with five citations, averaging 2.5 citations per publication. The Good Health and Well-Being and Quality Education objectives have only 1 publication, with a total of 1 and 0 citations respectively, so the average citations on Quality Education cannot be calculated.

Figure 5 shows the number of research publications that examine the topic of “Blockchain in Islamic Finance” and how this topic relates to various sustainable development goals (SDGs). The graph shows that most of the research in this area focuses on SDG goals related to industry, innovation, and infrastructure. This suggests that blockchain in Islamic finance is highly relevant in supporting innovative infrastructure development. The topic is also quite widely discussed in the context of reducing inequality, demonstrating blockchain's potential to create a more inclusive and equitable financial system in Islamic finance.



Source: <https://app.dimensions.ai>
Exported: October 29, 2024
Criteria: 'Blockchain In Islamic Finance' in title and abstract.

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Figure 5. Classifications of publications bar chart Blockchain in Islamic Finance from Dimension

In addition, many publications look at the relevance of blockchain in strengthening institutions, justice, and peace, illustrating the interest in using this technology to support more vital institutions and transparent finance. Research has also shown the connection between blockchain in Islamic finance and poverty alleviation, decent job creation, and economic growth. Some publications also address the role of technology in supporting sustainable urban development, responsible

consumption and production, and climate action, although there are fewer publications in these areas. Overall, this graph illustrates the distribution of research on blockchain in Islamic finance as it relates to the various SDGs, with a primary focus on infrastructure innovation, reducing inequality, and strengthening institutions.

Table 5. Classifications of publications Type Blockchain In Islamic Finance from Dimension

No	Type	Publication
1	Article	81
2	Chapter	64
3	Edited Book	10
4	Preprint	9
5	Proceeding	5
6	Monograph	3

Table 5 shows the classification of publication types related to Blockchain technology in Islamic finance taken from the Dimension database. Detailed explanations for each type of publication without using sequential numbers:

1. Articles: This was the most numerous publication type, with 81 publications. Articles are usually published in scientific journals or research magazines and considered the primary research source.
2. Chapters: 64 chapters were published in books relevant to this topic. Book chapters often present topics in more detail within the context of a more significant book.
3. Edited Book: There are ten published edited books. Edited books are books compiled by editors who bring together the work of various authors, focusing on a particular theme, such as Blockchain in Islamic finance.
4. Preprints: There were nine publications in the form of preprints. A preprint is an early version of a research paper that has yet to go through the peer review process.
5. Proceedings: In this context, were 5 proceedings published, which are collections of papers or presentations from an academic conference.
6. Monographs: There were three monographs published. A monograph is a scholarly work focusing on a specific topic, usually more in-depth than an article or book chapter.

Table 6 shows the classification of publication sources on Blockchain in Islamic finance, measured by the number of publications and the mean citation collected from each source, based on data from Dimension.

Table 6. Classifications of publications Source Titles (Mean) Blockchain In Islamic Finance from Dimension

No	Name	Publication	Citation	Citation (means)
1	SSRN Electronic Journal	8	20	2,5
2	Advances in Finance, Accounting, and Economic	6	33	5,5
3	Journal of Islamic Accounting and Business Rese	3	21	7
4	ISRA International Journal of Islamic Finance	3	3	1
5	International Journal of Islamic Economics and	3	2	0,67
6	Global Finance Journal	2	36	1,8
7	Qualitative Research in Financial Markets	2	80	40
8	International Journal of Electronic Banking	2	3	1,5
9	Lecture Notes on Data Engineering and Commu	2	1	0,5
10	International Journal of Islamic Economics and	2	137	68,5

The following is a detailed explanation without using sequential numbers:

1. SSRN Electronic Journal: This journal has eight publications related to Blockchain in Islamic finance, with 20 total citations, and the average citation per article is 2.5. SSRN Electronic Journal is a platform that facilitates preprints or articles that have yet to go through peer review, allowing researchers to distribute their preliminary findings.
2. Advances in Finance, Accounting, and Economics: This journal published six articles on the same topic with 33 citations, resulting in a citation average of 5.5. The journal focuses on aspects of finance, accounting, and economics relevant to Blockchain technology's application in Islamic finance.
3. Journal of Islamic Accounting and Business Research: This journal has three publications with 21 total citations, so the average citation is 7. This journal specializes in Islamic accounting and business, so topics such as Blockchain and its application in Islamic finance are relevant.
4. ISRA International Journal of Islamic Finance: With three publications and three citations, the average citation per publication is 1. ISRA is a leading journal in Islamic finance that examines various Shariah-compliant financial technologies and models, including Blockchain.
5. International Journal of Islamic Economics and Finance Studies: This journal has 3 publications with two citations, so the average citation is 0.67. This journal focuses on Islamic economics and finance studies, and Blockchain is one of the exciting technologies to be explored in that context.

6. Global Finance Journal: With two publications and 36 total citations, this journal has an average citation per article of 1.8. Global Finance Journal tends to explore innovations in finance in general, including applying new technologies such as Blockchain in various financial systems, including Islamic finance.
7. Qualitative Research in Financial Markets: The journal had two publications that received 80 citations, resulting in an average citation of 40. The journal highlights qualitative research in financial markets, allowing exploration of the non-quantitative aspects and social impact of Blockchain in Islamic finance.
8. International Journal of Electronic Banking: This journal has two publications and three citations, averaging 1.5. The focus of this journal is on electronic banking technology, which is undoubtedly relevant in examining the potential of Blockchain in the Islamic financial system.
9. Lecture Notes on Data Engineering and Communications: This journal has two publications with one total citation, so the average citation is 0.5. This journal focuses more on technical aspects, such as data engineering and communications, which are essential in implementing Blockchain technology.
10. International Journal of Islamic Economics and Finance Studies (again appearing in the last row): Has 2 publications with a very high citation count of 137, resulting in an average citation per article of 68.5. This data shows this journal as a highly influential publication source for Blockchain research in Islamic finance, with high citation rates.

Table 7 shows the classification of the list of journals that publish publications related to Blockchain in Islamic finance based on the number of publications recorded in various indexes or journal lists from Dimension. The following is a detailed explanation without using sequential numbers:

Table 7. Classifications of Journal List Blockchain In Islamic Finance from Dimension

No	Type	Publication
1	UGC Journal List Group II	28
2	Era 2023	23
3	Norwegian Register Level 1	20
4	Era 2018	19
5	DOAJ	15
6	Era 2015	15
7	Non-APC Journals	11
8	Norwegian Register Level 0	8
9	VABB-SHW	6
10	ERIH PLUS	4

1. UGC Journal List Group II: This list recorded the highest number of publications 28. UGC (University Grants Commission) Journal List Group II is a list of journals recognized by Indian academic bodies for academic publishing. Publications on this list are considered credible and meet recognized quality standards.
2. Era 2023: 23 publications were recorded in Era 2023, part of Excellence in Research for Australia (ERA), which evaluates journals with high research relevance and quality. The publications on this list show that Blockchain research in Islamic finance is recognized as an essential study area in Australia.
3. Norwegian Register Level 1: This list has 20 publications, which indicates the quality standards recognized by the academic system in Norway. Level 1 is the level of recognition for journals that meet basic research standards, and it shows that research related to Blockchain and Islamic finance is spread across journals with international recognition.
4. Era 2018: 19 publications were recorded in the Era 2018 list, which is also part of the ERA in Australia. This shows that Blockchain research in Islamic finance has been recognized as an essential topic in finance and economics in the past few years.
5. DOAJ: There are 15 publications listed in DOAJ (Directory of Open Access Journals), a directory of open-access journals containing high-quality journals. Publications on DOAJ show that research on Blockchain and Islamic finance is also openly available, making it easy for researchers worldwide to access.
6. Era 2015: Era 2015 also recorded 15 publications, showing that some of the journals in this ERA list have been publishing platforms for Blockchain research in Islamic finance for years.
7. Non-APC Journals: 11 publications are in journals without article processing charges (APC). These Non-APC journals allow access at no extra cost to authors, which can encourage more researchers to publish in this field without worrying about publishing costs.
8. Norwegian Register Level 0: This list records eight publications. Level 0 is a category of journals listed but may still need to be recognized as an established research standard in Norway. However, researchers still access researchers to disseminate preliminary findings or new explorations.
9. VABB-SHW: With six publications, this listing is part of a system in Belgium to assess academic publications in the social sciences and humanities (Flemish Academic Bibliographic Database for the Social Sciences and Humanities). This shows that research on Blockchain in Islamic finance is also relevant in social sciences and humanities.

10. ERIH PLUS: There are four publications in this list, which is a recognized index of journals in the social sciences and humanities in Europe. This shows that Blockchain in Islamic finance is also relevant from a social science perspective and is recognized by journals focusing on a European perspective.

Table 8. Classifications of Open Access Blockchain In Islamic Finance from Dimension

No	Type	Publication
1	Closed	106
2	All OA	66
3	Gold	32
4	Hybrid	16
5	Green	13
6	Bronze	5

Table 8 above shows the classification of Open Access (OA) publications on Blockchain in Islamic Finance based on data from Dimension. This table divides publications into several types of access as follows:

1. Closed: Most of the publications, 106 articles, are in the closed access category, which means they can only be accessed by subscription or purchase.
2. All OA (All Open Access): 66 publications are in the Open Access category, allowing free access for readers.
3. Gold: 32 publications are in the whole open access category (gold OA), where the article is freely available with an open license.
4. Hybrid: 16 publications are hybrid access; some content is open and some is closed.
5. Green: 13 publications are available in institutional or public repositories with specific licenses that still allow access.
6. Bronze: 5 publications are publicly available but without a specific license for open access.

To explore the results of the above meta-analysis, the following section will present a graphical visual mapping of the 161 journal publications mentioned above on the theme of blockchain in Islamic finance. The results of the keyword mapping analysis form the basis for the co-occurrence of the mapping of essential or unique terms contained in specific articles. Mapping is a process that allows one to recognize elements of knowledge and their configurations, dynamics, interdependencies, and interactions. Related to bibliometrics, science mapping is a method to visualize a field of science. This visualization is done by creating a landscape map that can display the topics of a field of science. The co-words network visualization map results for 161 journals with the theme of blockchain in Islamic finance display several keywords that appear in publications

and their relationship with other keywords in the cluster. The keywords are divided into 3 clusters arranged in a collection of clustered colored circles:

Cluster 1 in red consists of 37 keywords: addition, artificial intelligence, banking, chapter, compliance, disruptive technology, emergence, evolution, field, financial inclusion, financial institution, financial sector, financial service, fintech, focus, future, integration, interest, internet, investment, investor, Islamic finance industry, Islamic financial institute, Islamic fintech, machine learning, microfinance, new technology, order, person, question, scope, shariah compliance, shariah principle, thing, trend, year.

Cluster 2, with green color, consists of 30 keywords, namely: adoption, case, collaboration, context, covid, crowdfunding, design methodology ap, efficiency, gap, implementation, Indonesia, insight, interview, Islamic social finance, lack, literature review, Malaysia, originality value, pandemic, policymaker, practitioner, SDGs, source, Sukuk, sustainability, tool, transparency, trust, waqf, zakat.

Cluster 3, with blue color, consists of 30 keywords, namely: academic, Asset, bank, bitcoin, book, characteristic, contract, country, cryptocurrency, digital currency, form, information, Islam, Islamic, Islamic law, journal, knowledge, Money, nature, number, peer, researcher, sharia, shariah, smart contract, user, value, View, Way, world.

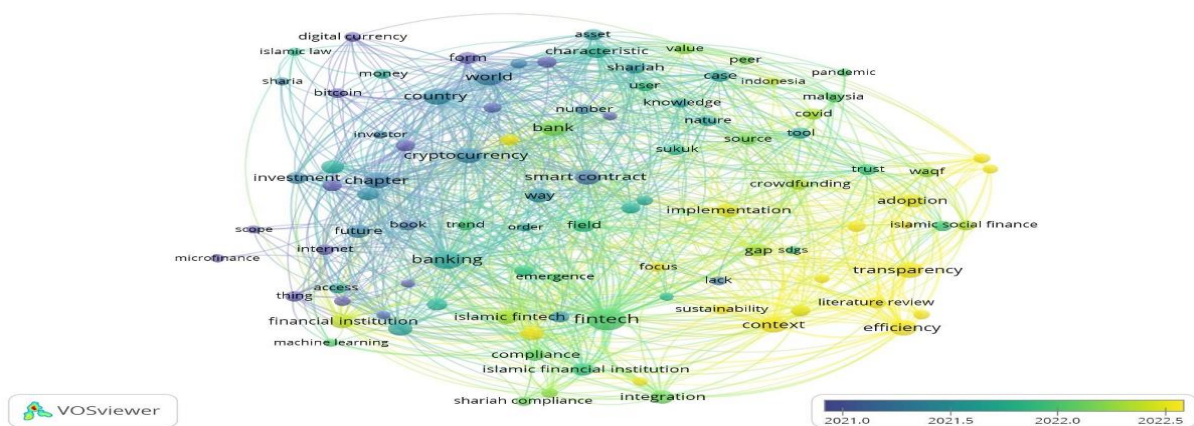


Figure 6. Overlay visualization from key Cluster

Figure 6 is an overlay visualization showing the time progression and research trends related to fintech and Islamic banking:

1. Node Color: Nodes with darker colors (such as blue and purple) usually indicate earlier or older terms in the research. Meanwhile, nodes with lighter colors (yellow or bright green) indicate newer terms in the research.
2. Node Size: As in the previous figure, the node's size indicates the frequency or importance of the term in the literature. Larger nodes indicate more discussed terms.

Analysis Based on Time Progression

1. Older Terms (2021 - Blue/Purple Color)

- a) Key Terms: “cryptocurrency,” “digital currency,” “sharia,” “country,” “investment chapter,” and “microfinance.”
- b) Description: Terms on the blue to-purple color spectrum indicate research that began to be developed at the beginning of the study period (around 2021). Terms such as cryptocurrency and digital currency indicate that these technologies are early research areas in Islamic fintech as digital currencies begin to be recognized and studied within a Shariah framework.
- c) Interpretation: These terms indicate early foundations in fintech and Islamic finance research. Researchers were initially interested in understanding how technologies such as cryptocurrencies could be applied by sharia law and how Islamic microfinance could be enhanced through technology.

2. Intermediate-Term (2021-2022 - Green Color)

- a) Key Terms: “bank,” “smart contract,” “Sharia compliance,” “context,” “Islamic fintech,” and “integration.”
- b) Description: Nodes with green color indicate that these terms appear frequently around the middle of the period (2021-2022). Smart contracts and Islamic fintech indicate that research is moving towards applying intelligent contracts in Islamic fintech and integrating this technology in a Shariah-compliant banking system.
- c) Interpretation: This phase reflects the period where attention shifts from simply understanding new technologies to integrating and customizing these technologies within the Islamic finance framework.

3. New Term (2022 and above - Yellow Color)

- a) Key Terms: “transparency,” “adoption,” “Islamic social finance,” “waqf,” “trust,” “sustainability,” and “efficiency.”
- b) Description: Nodes in yellow indicate terms that have emerged in more recent research (2022 and above). Transparency and trust indicate that attention is now turning to trust and transparency in applying fintech in Islamic finance.
- c) Interpretation: Recent research shows a shift in interest from the technical aspects of fintech towards social impact, trust, and sustainability.

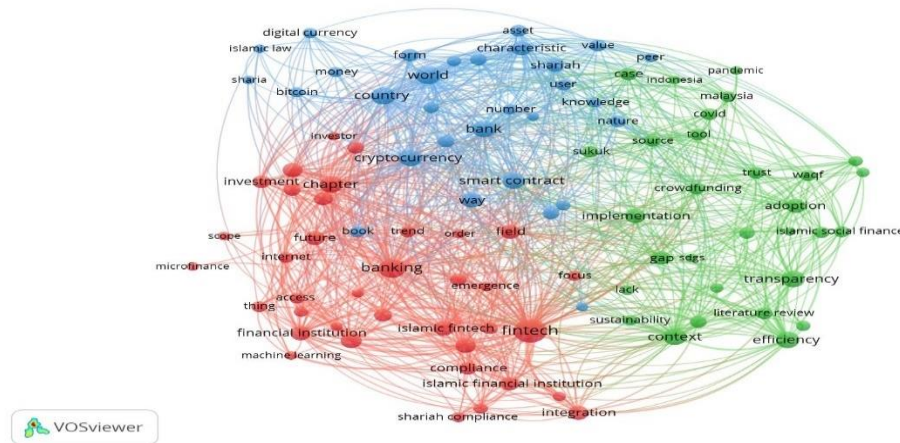


Figure 7. Network visualization from key Cluster

Figure 7 above is a network visualization that shows the relationship between terms in research related to fintech and Islamic banking. This figure shows how the terms are interrelated and form groups or clusters based on topic relevance:

1. Nodes (spheres): Each node represents a term frequently in the literature.
2. Node Size: Larger nodes indicate more frequently discussed terms or have stronger connections to other terms.
3. Edge: The connecting line between nodes indicates the relationship or linkage between two terms.
4. Color: The color of nodes and connecting lines indicates clusters or groups of closely related topics. Three main clusters are marked with red, green, and blue colors.

Cluster-based Analysis

1. Red Cluster: Focus on Banking and Investment
 - a) Key Terms: “banking,” ‘investment,’ ‘financial institution,’ ‘Islamic fintech,’ ‘Islamic financial institution,’ ‘Shariah compliance,’ and ”integration.”
 - b) Description: This cluster focuses on terms related to banking and investment in the Islamic context, especially how Islamic banking can integrate technological innovations such as fintech while complying with shariah principles.
 - c) Interpretation: This red cluster indicates research on how Islamic banking and financial institutions can adapt and implement new technologies, such as fintech and digital investment, while maintaining shariah compliance.
2. Green Cluster: Focus on Social, Trust, and Transparency
 - a) Key Terms: “transparency,” ‘adoption,’ ‘Islamic social finance,’ ‘trust,’ ‘waqf,’ ‘crowdfunding,’ and ”efficiency.”

- b) Description: The green cluster focuses on the social and transparency aspects of fintech adoption in Islamic finance. Transparency and trust indicate the importance of transparency and trust in Islamic finance, especially when implementing new technologies such as crowdfunding and waqf.
 - c) Interpretation: This cluster highlights research on how technology can improve transparency, trust, and efficiency in Islamic social finance.
3. Blue Cluster: Focus on Technology, Regulation, and Globalization
- a) Key Terms: “cryptocurrency,” “smart contract,” “shariah,” “country,” “digital currency,” “bank,” and “characteristic.”
 - b) Description: The blue cluster focuses on aspects of technology, such as cryptocurrencies and smart contracts, and how these technologies can be regulated in Shariah and applied globally.
 - c) Interpretation: This cluster shows interest in new technologies such as cryptocurrencies and smart contracts in a global context, as well as the regulatory challenges that may be faced, especially regarding compliance with Shariah principles.

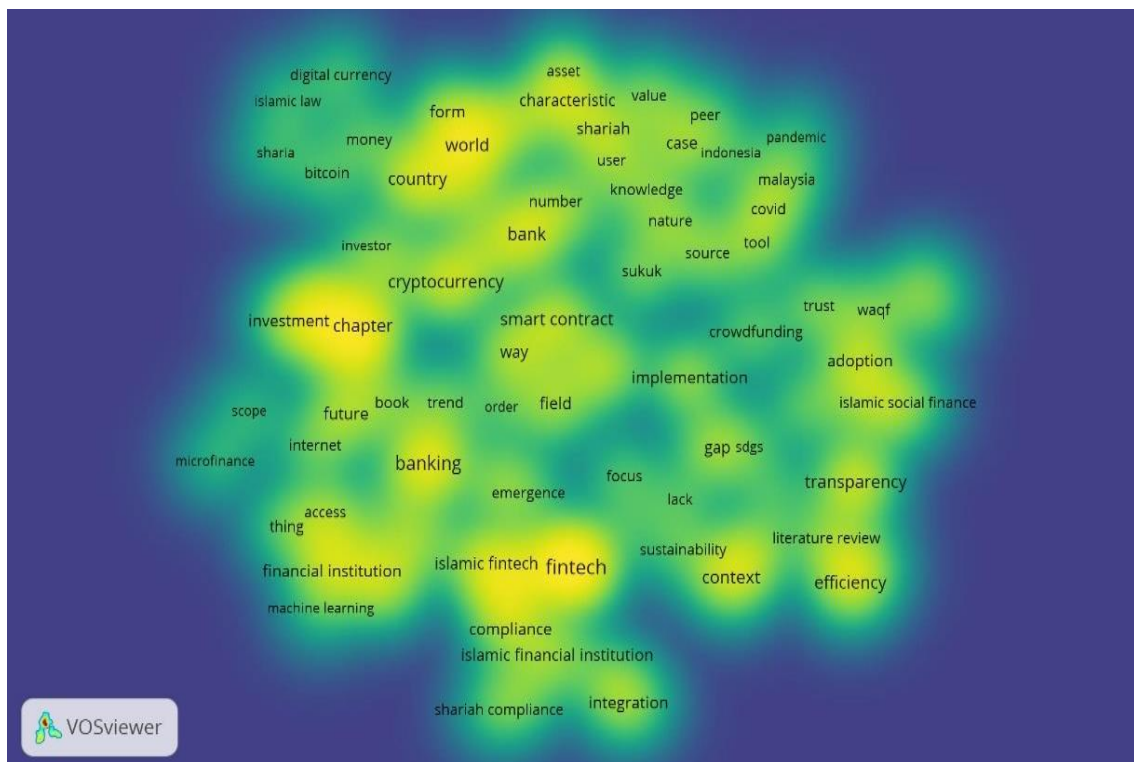


Figure 8. Density visualization from key Cluster

Figure 8 is a heatmap of the most frequently occurring terms in fintech and Islamic banking research. This heatmap was created using the VOSviewer tool, which identifies and visualizes critical terms based on their frequency of occurrence and interrelationships:

1. Yellow indicates high-density areas, where much research goes into the terms.
2. Green to Blue colors indicate lower density, meaning fewer studies have covered the terms.

Analysis by Term

1. Central Area – High-Density Terms

- a) The terms “world,” “country,” “bank,” “cryptocurrency,” and “banking” Are the terms that are at the center of the heatmap and colored in bright yellow, indicating that these terms have high density and appear frequently in the literature.
- b) Bank and banking are the main focus, reflecting the intense research on aspects of banking, especially about the Islamic financial system.
- c) Cryptocurrency and country shows the focus on the impact and regulation of cryptocurrencies in different countries, especially in the context of Islamic banking.

2. Area Around the Center - Supporting Terms

- a) Around the center area are terms such as smart contract, investment, shariah, fintech, financial institution, and Islamic financial institution.
- b) Smart contracts indicate interest in blockchain technology that can help automate transactions in Islamic banking, which also aligns with the principles of transparency and efficiency.
- c) Shariah and Shariah compliance signifies that this research focuses on how new technologies, such as fintech and cryptocurrencies, can be applied by Shariah principles.

3. Edge Area – Low-Density Term

- a) In the peripheral or outer area of the heatmap, there are terms with green to blue colors with lower density, such as digital currency, bitcoin, Islamic law, microfinance, machine learning, and waqf.
- b) Digital currency and bitcoin indicate that research on digital currency still exists but is lower than critical topics such as banks and cryptocurrencies.
- c) Microfinance and waqf indicate interest in Islamic social finance concepts, but this area may be less widely discussed or as big as mainstream topics such as banks or fintech.
- d) Machine learning shows that artificial intelligence technology is starting to be looked at in the context of Islamic fintech, but it has yet to be a significant topic.

Figure 9 is a network visualization based on keywords or topics that often appear together in related articles:

1. Red Cluster (Central Topic):

- a) Description: Red clusters may contain keywords or the main topic that is the focus of the research. This topic serves as the core of various related sub-topics.
- b) Topic Analysis: Keywords such as ‘Islamic finance’, ‘sharia compliance’, and ‘financial stability’ may dominate these clusters, indicating that the main topic of great concern is Islamic finance and financial stability.
- c) Relevance in the Network: This cluster is at the center of the network and has high connectivity with other clusters, suggesting that this topic has a broad connection and attracts much attention from other studies.

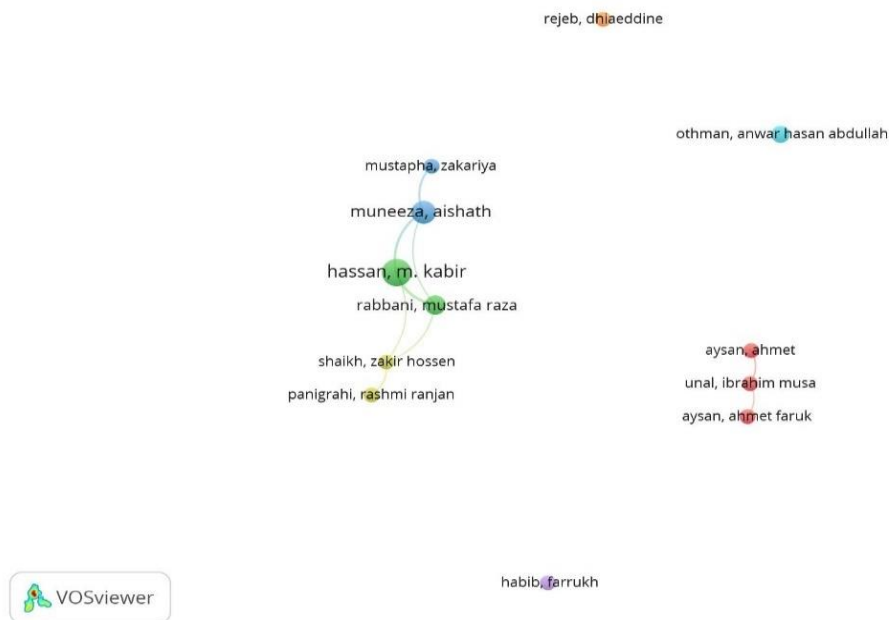


Figure 9. Network visualization from key Author

2. Green Cluster (Social Linkages Sub-Topic)

- a) Description: Green clusters may consist of keywords related to social aspects of the main topic, such as ‘social impact’, ‘ethical finance’, or ‘community development’.
- b) Topic Analysis: This indicates an interest in social impact and ethical values in finance, which is an important part of the context of Islamic finance or ethical finance in general.
- c) Relevance in Networking: This cluster has sufficient connectivity with the red cluster, indicating that the topic of social impact is often discussed in the context of financial stability and Shariah compliance.

3. Blue Cluster (Technology and Innovation Sub-Topic)

- a) Description: This cluster may consist of keywords related to technology, such as 'fintech', 'blockchain', or 'digital finance'.
- b) Topic Analysis: This focus reflects interest in the integration of technology in finance, particularly in order to improve efficiency or reach populations that do not have access to traditional financial services.
- c) Relevance in the Network: The blue clusters have connections to the red clusters, suggesting that technological innovations are part of a larger financial discussion, especially regarding their application in Islamic finance.

4. Yellow Cluster (Regulation and Policy Sub-Topic)

- a) Description: This cluster may focus on keywords such as 'regulation', 'governance', and 'policy'.
- b) Topic Analysis: The keywords in this cluster indicate the importance of regulation and governance in supporting the development of Islamic finance or ethical financial systems.

Relevance in the Network: The yellow cluster is connected to the central cluster (red) because regulation is an important aspect that affects the application of sharia or ethical principles in finance.

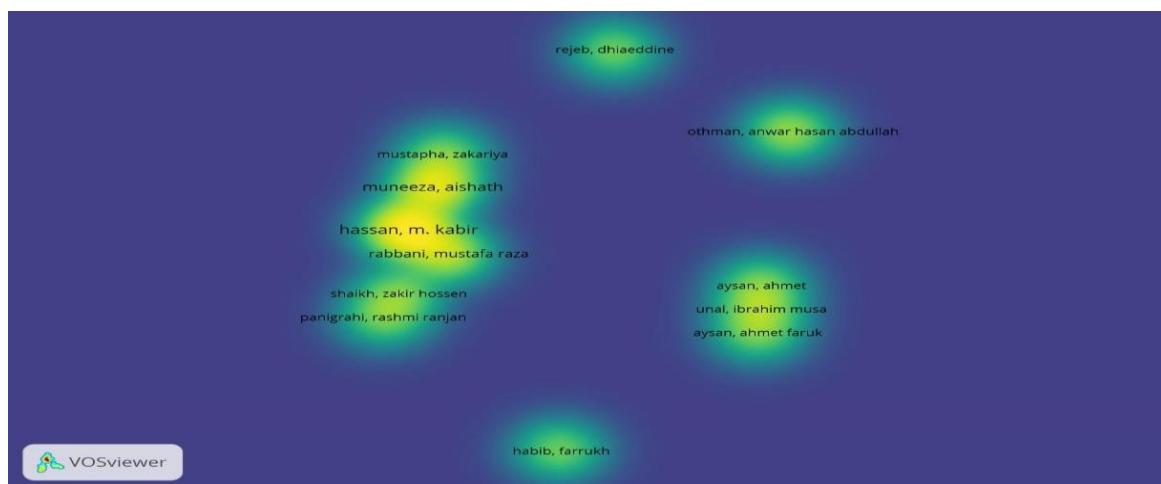


Figure 10. Destiny visualization from key Author

Figure 10 above shows the relationship between researchers who are members of a co-authorship network. In this context, each node or point represents a researcher, and the lines connecting them show the collaboration done in publications. Each cluster in the second figure shows a group of researchers who often work together or have close research links:

1. Center cluster (Hassan, M. Kabir, Muneeza, Aishath, Rabbani, Mustafa Raza)

- a) **Description:** This cluster is the centre of the network and has a high level of collaboration. Names like ‘Hassan, M. Kabir’ and ‘Muneeza, Aishath’ appear to be central to this network.
 - b) **Author Influence:** Hassan and Muneeza are this network's most prolific or influential figures, often engaged in joint research with many other researchers.
 - c) **Collaboration Topics:** Their research may cover major themes frequently discussed in Islamic finance or financial ethics, thus attracting many collaborations from various other researchers.
 - d) **Connectivity:** These clusters have links with almost all other clusters in the network, suggesting that they act as key hubs in research.
2. **Right Cluster (Othman, Anwar Hasan Abdullah)**
- a) **Description:** This cluster is dominated by Othman, Anwar Hasan Abdullah, who seems to have a smaller but specific scope of collaboration.
 - b) **Author Influence:** Although not at the center of the network, Othman may be very influential in specific sub-fields or have a unique approach.
 - c) **Collaboration Topic:** His research focus may be more specific, such as applying certain technologies in Islamic finance or analyzing social impact.
3. **Upper Left Cluster (Rejeb, Dhaeiddine)**
- a) **Description:** This cluster consists of one researcher who appears to be very disconnected from the rest of the network, Rejeb and Dhaeiddine.
 - b) **Author influence:** Rejeb may be working on a very specialized or new topic that has yet to attract much collaboration from other researchers.
 - c) **Collaboration Topics:** This could include experimental research or topics still in the exploratory stage.
4. **Bottom Right Cluster (Aysan, Ahmet; Unal, Ibrahim Musa; Aysan, Ahmet Faruk)**
- a) **Description:** This cluster is a closely connected group of researchers, indicating intensive collaboration.
 - b) **Author Influence:** They may be working on a project requiring intensive collaborative research in a smaller scope.
 - c) **Collaboration Topic:** This could be a technical or in-depth aspect of a particular financial theme that requires intense collaboration.
5. **Lower Cluster (Habib, Farrukh)**
- a) **Description:** Habib and Farrukh are seen as authors who work independently or with little collaboration.

- b) Author Influence: May work on topics that are not mainstream or in high demand.
- c) Collaboration Topics: This independent research could be an innovation or exploration of a new topic that has not attracted much attention.

Connectivity: Since they are separate from the main cluster, there is an opportunity to attract more collaborations if their topic starts to gain attention.

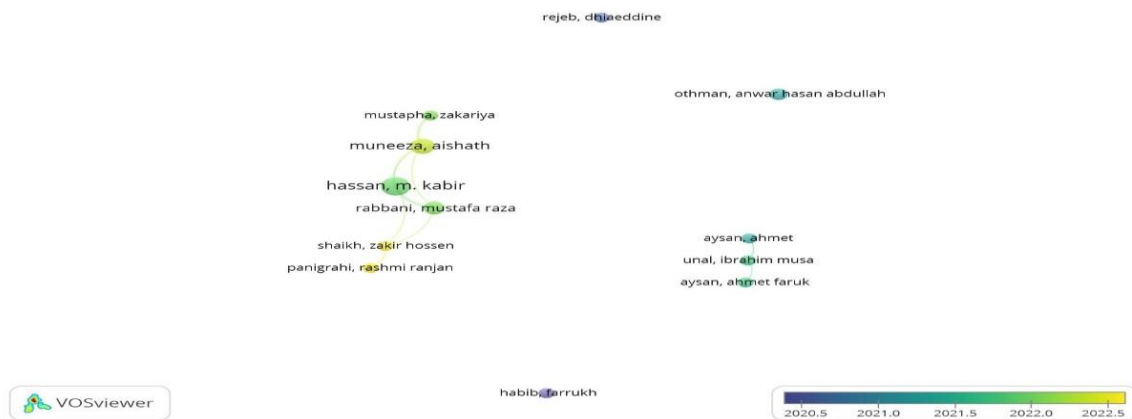


Figure 10. overlay visualization from key Author

Overlay visualization that shows how the keywords in the study evolved, represented by color gradations:

1. Dark Blue Cluster: Foundation or Initial Research Topic
 - a) Description: The dark blue clusters show the dominant topics or authors at the beginning of the research period. Topics in this cluster are often theoretical foundations or key concepts that inform subsequent research.
 - b) Keywords/Author Examples: Keywords such as ‘Islamic finance,’ ‘Sharia compliance,’ or early authors in the field of Islamic finance may be included in this cluster.
 - c) Interpretation: These topics are important because they form the foundation of the entire development of the field.
2. Dark Green to Light Green Cluster: Development or Application
 - a) Description: This cluster represents the period when research begins progressing to practical applications or answering specific questions from the established foundations.
 - b) Keywords/Author Examples: For example, topics such as ‘microfinance’ or ‘social impact of Islamic finance’ may fall under this cluster, signaling a focus on applying Islamic finance for social purposes.

- c) Interpretation: At this stage, researchers explore how the basic concepts of Islamic finance can be tangibly applied to solve social or economic problems.

3. Yellow Cluster: Recent Trends in Research

- a) Description: Yellow clusters indicate keywords and authors that have recently emerged and are trending. These clusters usually indicate new directions or rising trends in the field.
- b) Keyword/Author Examples: Topics such as 'fintech,' 'blockchain,' or 'digital finance in Islamic context' may dominate this cluster. These trends indicate a great interest in integrating technology into the Islamic financial system.
- c) Interpretation: The development of digital finance and technology is a primary concern nowadays, and researchers are interested in exploring how these new technologies can be adapted to the principles of Islamic finance.

Methodology

Transactions recorded in the blockchain are immutable, as they cannot be deleted or modified. Before adding a "block" of transactions to the blockchain, network participants must collectively authorize the transaction's validity through a consensus mechanism. In addition, blockchain technology facilitates fraud detection by enabling real-time information sharing, giving all blockchain participants visibility into transactions. A shared digital ledger's transparency across supply chains and business networks helps reduce fraudulent activity, making fraudulent transactions more visible (Jannah et al., 2024).

More research on Islamic finance and blockchain still needs to be done. In the last ten years, other researchers have found only twenty-four papers on Islamic Finance and Blockchain in Scopus. There are more papers on Google Scholar, but they are still not as specific as the papers on Scopus. Scopus is the most prominent indexed journal, but there have been very few papers on this topic in the last ten years. This shows that the opportunity to research these topics is vast. Bibliometric analysis is the answer to create a reference base for future research. Bibliometric information can be viewed as a component of a more extensive set of data sources that can be accessed to support decision-making in research management. Peer review and other quantitative sources, such as research funding statistics, research staff data, and altimetry data, can provide relevant information. Bibliometrics can also evaluate all the factors involved in producing and consuming books and papers. Another definition of bibliometrics is the statistical analysis of publications by people or organizations in a particular field and location and the relationships between those articles. Using

bibliometric analysis, we can now summarize all the references in Islamic finance and blockchain (Putri et al., 2022).

Other studies have used data from the Scopus database on July 15, 2019. The analysis stage of the research publication results begins with a search using the keyword 'financial technology.' This keyword is used to extract documents from the Scopus collection regarding topics that include four parts (namely title, abstract, author keywords, and additional keywords) in publication years limited to 2014 to 2020. Based on these keywords, a total of 41,669 publications were found. However, this publication also contains some documents that need to be more closely related. Therefore, these results were further filtered using the keyword 'blockchain'. Furthermore, the results were filtered again by selecting the document type 'articles and conference papers'. In this last stage, the research determined 429 published research documents related to blockchain technology as a revolutionary system that connects computer networks in a decentralized and distributed manner. (Rosyidiana et al., 2019)

Studies related to literature studies on the topic of blockchain in Islamic finance based on dimension search have been conducted by Mohammad Kabir Hassan, Anwar Hasan, Aishath Muneeza, Abdullah Othman, Ahmet Faruk Faruk Aysan, Mustafa Raza Rabbani. In the Sinta journal itself, a similar study using the bibliometric method, as far as the author's understanding, has not been carried out; based on this explanation, this study is interesting to be examined further. This research was conducted to complement existing research, fill the gaps in previous research, and expand the literature related to blockchain in Islamic finance through research. Specifically, this study aims to see the development of 'blockchain in Islamic finance' research around the world published by journals on the theme and see future research opportunities by formulating a research agenda. In this study, various scientific journal publications related to the theme of 'blockchain in Islamic finance' *worldwide* were used as data sources.

The data was collected by searching for journal publications indexed in the dimension database using the keywords 'blockchain in Islamic finance'. After that, scientific articles or journals that are relevant to the research theme will be selected based on the publication data that has been collected. The criteria for screening and data processing using software are journals equipped with DOI. There were 172 journal articles published with the keyword 'blockchain in Islamic finance' on 29 October 2024. The development of publication trends related to the research topic was analyzed using VOSviewer software, which can generate bibliometric maps and allow for more detailed analysis. VOSviewer uses the acronym VOS, which refers to *Visualising of Similarity*. In previous studies, the VOS mapping technique has been used to obtain bibliometric visualizations, which were then analyzed.

Furthermore, VOSviewer can create and display author journal maps based on co-citation data or keyword maps based on co-occurrence data. Based on this, a map analysis of journals related to 'blockchain in Islamic finance' was carried out, including author maps and keywords, which were then analyzed for future research paths that could be carried out through clusters on *keyword mapping*. This research uses a descriptive qualitative approach with meta-analysis and descriptive statistical literature study based on 161 journal publications that discuss the theme 'blockchain in Islamic finance'. Meta-analysis is a method that integrates previous research related to a particular topic to evaluate the results of existing studies. Furthermore, the qualitative method used in this research is also called a constructive method, where the data collected in the research process will be constructed into themes that are easier to understand and meaningful. The sampling technique used in this research is the purposive non-probability sampling method, which aims to fulfill certain information under the desired research objectives.

Conclusion

This research discusses 'blockchain in Islamic finance' by utilizing 161 publications of journal articles indexed in dimension. Bibliometrics is a method used to measure and evaluate scientific performance by considering factors such as citations, patents, publications, and other more complex indicators. Bibliometric analysis is conducted to evaluate research activities, laboratories, and scientists and the performance of countries and scientific specializations. Some steps in bibliometric analysis include identifying the background of the research, collecting the databases to be used, and determining the leading indicators to be used in the research. This section will deepen the meta-analysis results by showing a visual mapping chart depicting 161 journals related to 'blockchain in Islamic finance'. In this study, mapping was done by analyzing keywords and important or unique terms in the journal articles. Mapping is identifying knowledge elements, configurations, dynamics, dependencies, and interactions among these elements. The results of the network visualization of 161 journals with the theme 'blockchain in Islamic finance' will be explained in more detail in the next section.

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