

Waqf Development in Indonesia: R Application

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The paradigm shift in waqf development also occurred in Indonesia. This change was initiated by waqf reform from the legal-constitutional and institutional aspects, with the aim of improving the performance of waqf in the country. Legally-constitutionally, waqf reform is covered by Law (UU) No. 41/2004 on Waqf and Government Regulation (PP) No. 42/2006 as an implementation guideline for Law No. 41/2004. This study aims to determine the development of waqf development in Indonesia research trends published by leading journals on Islamic economics and finance. The data analyzed consisted of 58 indexed research publications. The data is then processed and analyzed using the R application to determine the bibliometric map of waqf development research development in Indonesia. Some analyzes such as word clouds, trend topics, thematic map and also thematic evolution on waqf development in Indonesia are also displayed.

Keywords: Waqf, Indonesia, Bibliometrics, R

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INTRODUCTION

The fame of waqf has been proven and recorded since the beginning of the arrival of Islam in the Arabian Peninsula, namely during the leadership of the Prophet sallallaahu 'alaihi wa sallam and khulafa ur-rashidin, which then continued until the time of the Umayyad, Abbasid and Ottoman caliphs. Historical evidence shows that at that time, various efforts were made to improve the administration of waqf, so that the waqf institution developed into one of the pillars supporting the economic activities of the government (Boudjellal, 2008). However, due to colonial occupation and the collapse of the caliphate system, the development of waqf in many Muslim countries became very slow. This fact is further exacerbated by the fact that many waqf lands are idle and stagnant due to mismanagement and poor administration of waqf management institutions. These facts have prompted a number of Muslim countries to review and revitalize the role and function of waqf institutions.

Waqf revitalization efforts generally aim to make waqf as one of the important instruments to create a better society. Based on this revitalization goal, the development of waqf in many Muslim countries has undergone a paradigm shift, both in terms of orientation (dimension) and in terms of waqf objects. In the past, waqf in Muslim societies was still oriented towards religious activities (e.g. for the construction of mosques/mushalla) and social activities (burial grounds, and education) that had relatively little economic impact, but since the revitalization efforts, waqf has been developed in other dimensions that have economic values.

The object of waqf has also shifted from the dominance of immovable property waqf to movable property waqf. The change in the dimension and object of waqf is expected to improve the welfare of the community. Look at the revitalization efforts that became part of the waqf reform carried out by Turkey in 1987. Waqf institutions in the country were given the opportunity to establish a company and the company was allowed to develop waqf. As a result, the waqf management institution in Turkey succeeded in developing waqf assets in a more productive and income-generating manner, including through the establishment of hotels and caravans, factories, commercial cultural facilities, business houses, student dormitories, houses/apartments, various industries, and other properties (Hasanah, 2008).

Almost the same pattern of waqf development is also practiced in Saudi Arabia and Jordan. In Saudi Arabia, the development of waqf by the Waqf High Council is pursued through various forms, such as hotels, land, buildings (houses) for residents, shops, gardens, and places of worship. Similarly, in Jordan, waqf is developed productively and the proceeds are used, among others, to improve public housing in a number of cities, build farmers' housing and develop agricultural land (Hasanah, 2008). The practice of waqf in Egypt and Kuwait is also directed towards the economic development of the people and its management is carried out professionally (Khalosi, 2002; Busharah, 2012; and Khalil, et al., 2014). In some countries, such as Bangladesh, Malaysia and Singapore, the development of waqf has been done in a modern way, where waqf is not only in the form of property, but has developed in the form of cash waqf. Bangladesh, in addition to having a considerable amount of waqf assets, has also practiced the deposit waqf model through the Social Investment Bank and Islamic Bank Bangladesh Limited (Mannan, 1999).

The practice of waqf has also been well developed in Malaysia. The management of waqf assets by Johor Corporation is directed towards investment activities in various economic sectors. Meanwhile, in Singapore, through the waqf institution WAREES (Waqaf Real Estate Singapore), the management of all waqf assets is oriented for the benefit of community empowerment (Abdul Karim, 2010 a,b). These facts about waqf in a number of countries indicate a paradigm shift in waqf development. The paradigm shift in waqf development has also occurred in Indonesia. This change was initiated by waqf reform from the legal-constitutional and institutional aspects, with the aim of improving the performance of waqf in the country. Legally-constitutionally, waqf reform is guided by Law No. 41/2004 on Waqf and Government Regulation No. 42/2006 as an implementation guideline for Law No. 41/2004. Furthermore, the government has also established the Indonesian Waqf Board (BWI), as a manifestation of efforts to make waqf management more structured and institutionally organized. At a practical level, with this new paradigm, the development of waqf assets is not only focused on immovable assets (in the form of land and buildings), but also various goods (movable assets) that have productive economic content. The paradigm shift further fosters new means of waqf development by utilizing production and economic tools, such as money, stocks, bonds (sukuk) and other instruments.

Departing from the historical facts and paradigm shifts that have occurred, this paper aims to examine various issues related to the development of productive waqf in Indonesia. In the first part of this paper, a literature review on waqf is presented, followed by a model of waqf development, both from the perspective of waqf fiqh and the experience of a number of countries. The next section describes the mechanism of productive waqf development, both immovable and movable waqf, in Indonesia. Using SUSENAS 2014 data and a descriptive quantitative analysis approach, this paper then estimates and analyzes the potential of waqf, as well as various obstacles in its development.

LITERATURE REVIEW

Since the early centuries of Islamic civilization, property in the form of land has been reserved by Muslims for the welfare of future generations, including relatives and relations, as well as the poor and needy. This act of the Muslims was known as sadaqah jariyah and later came to be called waqf (waqf or habs). There are four inspiring events in early Islamic history, which are often used as the foundation for the development of the waqf legal framework (Sabit, 2006). First, the donation of land by the Prophet Muhammad (pbuh) to build the Quba' Mosque, after his migration to Medina; Second, the donation of a house (a well purchased by Caliph Uthman r.a.), which was used by the community, including the Prophet himself, which was used by the community, including himself, for drinking water and household needs; Third, the donation of a garden by Talha to his relatives after receiving advice from the Prophet Muhammad (pbuh); and Fourth, the donation by Umar ibn al-Khattab (r.a) of the most valuable land in Khaybar on the advice of the Prophet Muhammad (pbuh) to hold on to the land and dedicate its fruits for charitable purposes. Based on these events, Islamic jurists (fuqaha) developed the theory of waqf. The events were thoroughly interpreted by establishing waqf for religious purposes, community needs, and family protection.

Definition of Waqf Etymologically, the term 'waqf' comes from the word waqf, which can mean alhabsu (to hold) or to stop something or to stay in place (Sabiq, 2009 and al-Kabisi, 2004), while terminologically what is meant by waqf is Tahbisul Ashl wa Tasbiilul Manfa'ah, which means "holding an item and giving its benefits" (al-Ustaimin, 2009). While legally, scholars differ in defining waqf. This difference in definition occurs due to differences in the madhhabs adopted, both in terms of prevalence and prevalence, the

conditions for approaching the issue of waqf and the position of the owner of the waqf property after it is waqf. Differences also concern the procedures for implementing waqf.

Meanwhile, several studies related to waqf in Indonesia can be seen in research conducted by Fajariah et al., (2020), Riani et al., (2022), Rusydiana et al., (2021), Nugraha et al., (2022), and also Qurrata et al., (2019). One of the most recent is the study of Ascarya et al., (2023). This study aims to develop cash waqf models for Baitul Maal wat Tamwil (BMT), a special Islamic microfinance institution in Indonesia, combining Islamic social finance in Baitul Maal (house of wealth) division and Islamic commercial finance in Baitut Tamwil (house of asset development) division, as integrated Islamic social and commercial microfinance in Indonesia, to achieve triple bottom-line, including outreach, sustainability and welfare impact.

Another study was conducted by Aldeen et al., (2022). The purpose of this study is to explore the awareness and willingness level of millennials in Indonesia towards cash waqf (cash endowment). Cash waqf has gained huge attention in Indonesia because of its flexibility, especially after the Majelis Ulama Indonesia (MUI) officially announced in 2002 that cash waqf practices in the country are Shari'ah-compliant. Millennials comprise 33.75% of the total Indonesian population. Therefore, it is vital to analyze cash waqf from an Indonesian perspective. This study provides vital information for all institutions that are concerned with the enhancement of cash waqf contributions in Indonesia.

RESEARCH METHOD

The review process was conducted on November 15, 2021. Figure 1, illustrates the three steps in identifying research documents, namely eligibility, screening, and inclusion, involved in the systematic review process. The keywords that will be used in this study try to answer the research questions above. Some general statistics of the data set are presented to get an overview of research related to good governance. All articles that met the search query were evaluated from the aspect of text analysis. Text analytics, also known as text mining or text analysis, is the process of deriving meaningful insights, patterns, or information from unstructured text data. It involves using natural language processing (NLP), machine learning, and statistical techniques to analyze and extract valuable information from text documents or data sources.

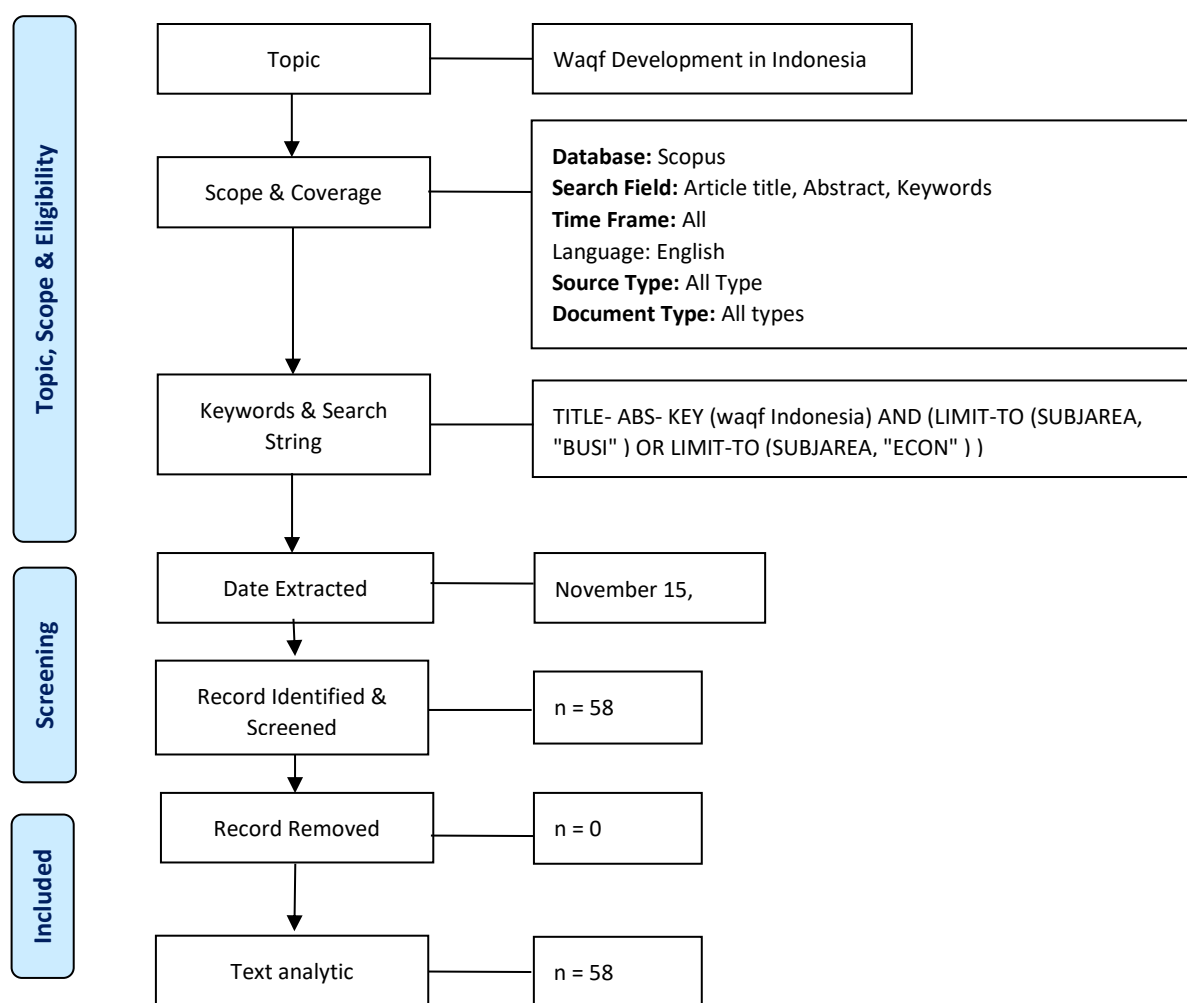


Figure 1: Flow diagram of the search strategy

Then the research documents were analyzed using bibioshiny software, a free software supported by the R environment ((CRAN, The Comprehensive R Archive Network, <https://cran.r-project.org/>) which provides a set of tools for quantitative research in bibliometrics and scientometrics (Aria & Cucurrolo, 2017). In the bibliometric literature, the greatest attention has been on the construction of bibliometric maps. Research related to the effect of differences on similarity measures (Ahlgren et al., 2003), and they were tested with different mapping techniques (Boyack et al., 2005). Next, a text analysis of bibliometrix mapping results related to "word" will be conducted.

RESULT AND DISCUSSION

Source

The following is a table of document types used in research with the keyword waqf development in Indonesia. The number of documents analyzed is 58 documents which are divided into 4 document types, including journal articles (44 documents), anthologies / book chapters (4 documents), conference papers (5 documents), and reviews (5 documents).

Table 1: Document Types

No.	Document Type	Number of Articles	Percentage
1	Journal Article	44	75.86%
2	Book Chapter	4	6.9%
3	Conference Paper	5	8.62%
4	Review	5	8.62%
Total		58	

Based on the results of the document type grouping above, the document type most widely used as a research subject with the keyword "waqf development in Indonesia" is a document in the form of a journal article with a percentage of 75.86% or as many as 44 documents, and the document with the smallest percentage is a book chapter where the percentage is 6.9% or as many as 4 documents. Based on the type of document, it can be concluded that the references used are quite valid because most of them come from scopus indexed scientific journals.

Text Analysis

Text analysis was conducted using R-studio and biblioshiny software developed by Massimo Aria and Corrado Cuccurullo from the University of Naples and Luigi Vanvitelli from the University of Campania (Italy). Text analysis is carried out by analyzing more deeply on

searches related to words that often appear in the theme of waqf development in Indonesia. This is intended to add references that can be done by the government in tackling economic problems based on existing research from all over the world.

To explore the results of the meta-analysis, this section will present a visual mapping chart of 58 documents related to waqf development in Indonesia. The results of the keyword mapping analysis become the basis for mapping together important or unique terms contained in a particular document. Mapping is a process that allows one to recognize knowledge elements and their configurations, dynamics, interdependencies and interactions.

SOURCES ANALYSIS

Source Impact

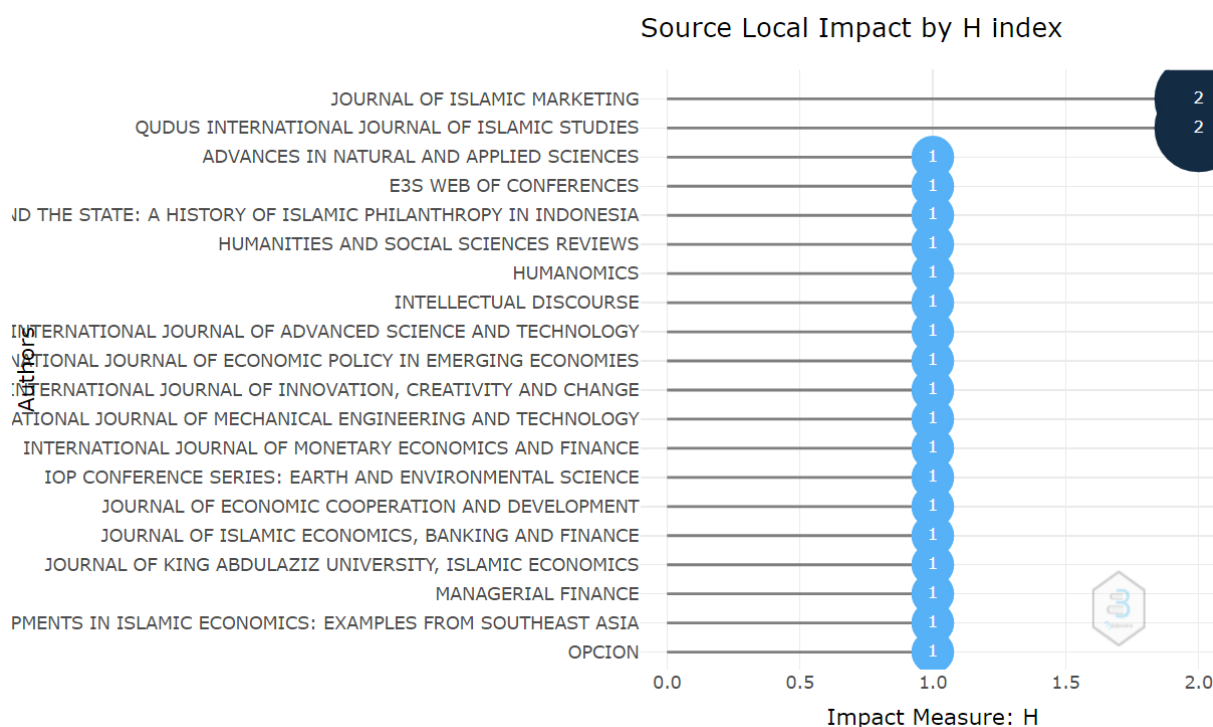


Figure 2: Source Impact

The calculation of journals is not only done based on the quantity produced or their relevance. However, this research is also conducted based on the impact of each journal that publishes papers on the theme of waqf development in Indonesia by calculating the journal's h-Index which is depicted in a blue bar graph. In addition to showing the h-Index value obtained, the diagram above also illustrates the impact produced by the journal through the blue color displayed. The darker the blue color on the diagram, the greater the impact of the

journal. Then the interval of the journal h-index in this study ranges from 0.0 to 2.0.

From the data above, it can be seen that the Journal of Islamic Marketing and Qudus International Journal of Islamic Studies are in the top position with hIndex 2.0 which is marked in dark blue. While the rest for journals with hIndex 1.0 there are 18 journals marked in bright blue on the diagram, which indicates the low impact of the journal.

The highest impact journal Journal of Islamic Marketing. JIMA covers the entire field of marketing

and its related sub-disciplines. Also, due to the nature of the subject, its reach extends further to cross-disciplinary work. JIMA publishes articles that are: based on quantitative or qualitative empirical work, conceptual, theory driven, literature reviews, case studies, book reviews, executive interviews, and thought pieces - without preference. While we welcome new, innovative, and groundbreaking contributions from various traditions; the focus of the author's work should be aimed at meeting the needs of the marketing audience -

and the connection to Islam and Muslims should be clearly articulated. The following are some suggested areas of interest: - Development of Theory, Practice, and Research Methods - Marketing of Islamic Financial Products and Services

AUTHORS ANALYSIS

Most Relevant Authors

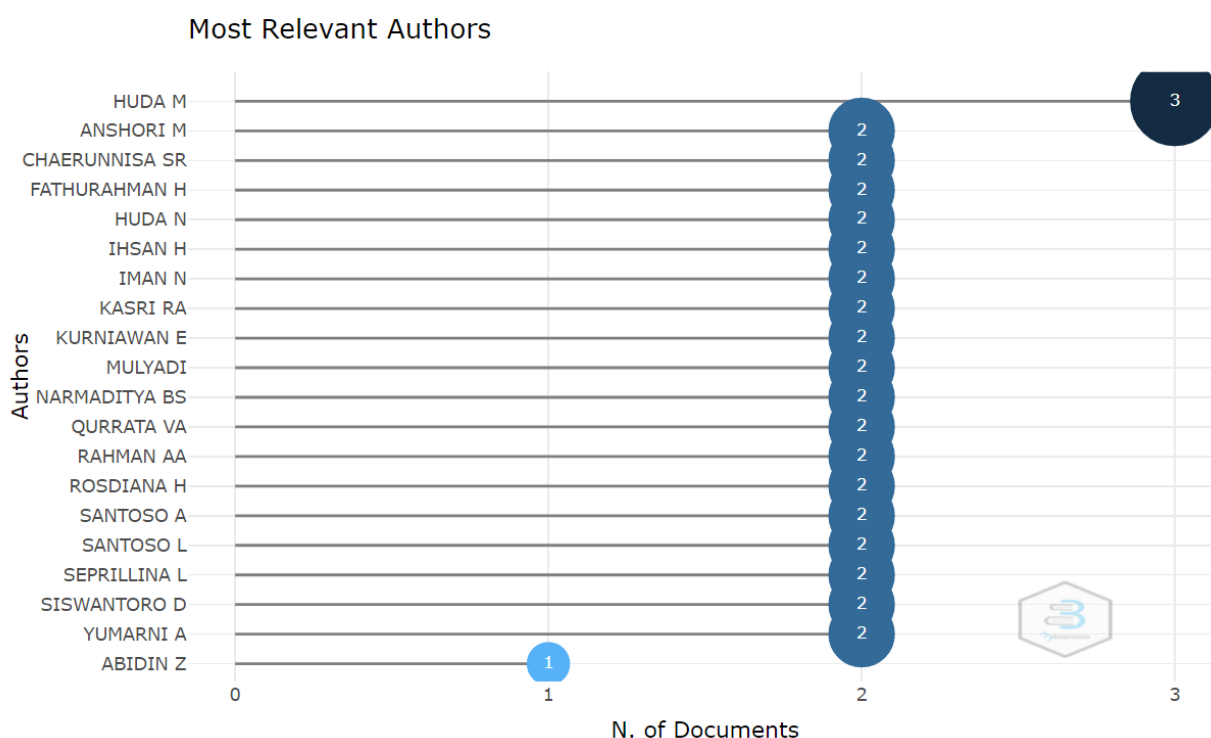


Figure 3: Most Relevant Authors

The figure above shows the number of research documents published by each author based on their level of relevance to the theme of waqf development in Indonesia in economic and financial research. The data displays a list of the top published author names and the interval of the number of published documents with a blue-colored bar chart. The darker the blue color indicates the more quantity and relevance of the research theme, the number of documents published by all journals ranges from 0 to 3.0 documents.

Author Huda M is the author who is in the top position with the number of published documents totaling 3.0 documents displayed in the dark blue bar graph compared to other journal bars. This is because the journal is relevant to the theme discussed. As for the author who occupies the lowest position with the number of publications of 1.0 there is 1 author who is

marked in bright blue. A total of 20 authors are listed in the most relevant data source.

Among Huda M's writings is a paper entitled "Problems, solutions and strategies priority for waqf in Indonesia". This article aims to find out the problems, solutions, and strategy priorities for productive waqf in Indonesia in accordance with the perspectives of Regulators, Nazirs and Waqifs. The method used in this article is Analytic Networking Process (ANP). The results show that the priority problem of waqf in Indonesia lies in the aspect of nazir which is not the main profession. The second problem is that the regulations passed are not adequately socialized which causes a lack of knowledge of the waqif and is considered as the third problem. The main solution to the nazir problem is to change it from an individual to an institution, and the solution to the regulator problem is to create a harmonious relationship between da'wah institutions.

Expansion and innovation in waqf management is the solution to the strategy problem.

Top Author's Production over the time

Top-Authors' Production over the Time

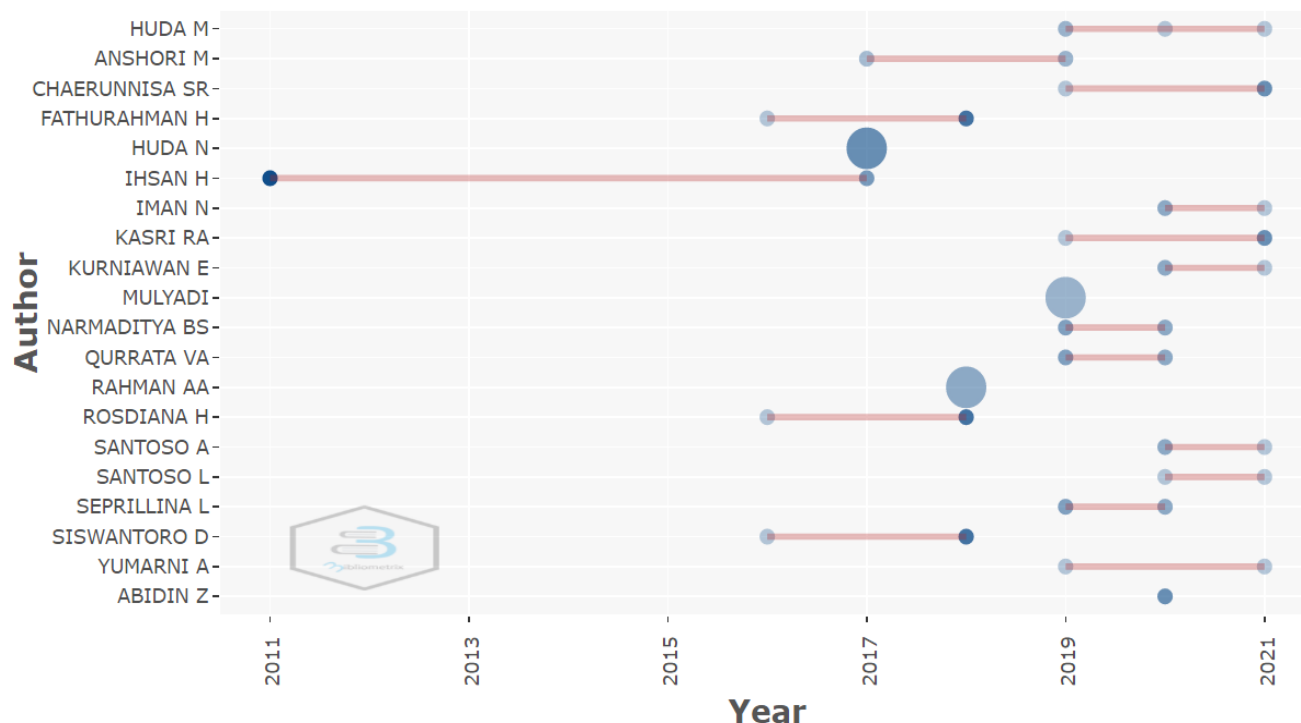


Figure 4: Top Author's Production over the time

Productivity can not only be measured in journals but specifically for authors. The figure above shows the productivity of several top authors during the study period, namely from 2011 to 2021. This productivity is shown by the red line from the time the author published their research until the last year the author published their research. In addition, the circle on the red line shows the number of papers published according to the applicable year.

The figure above presents an overview of authors who have written research related to the theme of waqf development in Indonesia in economic and financial research since the past few years. The author who has long published and has a long track record in research related to waqf development in Indonesia in economic and financial research is Ihsan H from 2011 to 2017. With a paper entitled "A study of accountability practice in Dompot Dhuafa Waqf of Indonesia" published by the Journal of King Abdulaziz University, Islamic Economics in 2017. This research aims to address the issue of accountability practices in waqf institutions. Specifically, the focus of this research is to provide

insight into how accountability is perceived and practiced by mutawal (waqf trustees) in managing waqf. For this reason, a case study of one of Indonesia's waqf institutions, Dompot Dhuafa, was conducted. To achieve the predetermined research objectives, the researcher used various data collection techniques which mainly consisted of: interviews, observation and document review. The findings reveal that the belief in dual accountability - to God and man - has strengthened the mutawalli's perception of the importance of accountability. Moreover, in demonstrating their accountability in managing waqf to stakeholders, the mutawalli use various mechanisms. In addition, mutawalli are also responsible for seeing accountability in themselves. Therefore, this study concludes that Dompot Dhuafa's holistic accountability is an integrative process. It not only includes fulfilling upward and downward accountability and transparency, but also involves a commitment to preserve organizational values.

Most Relevant Affiliations

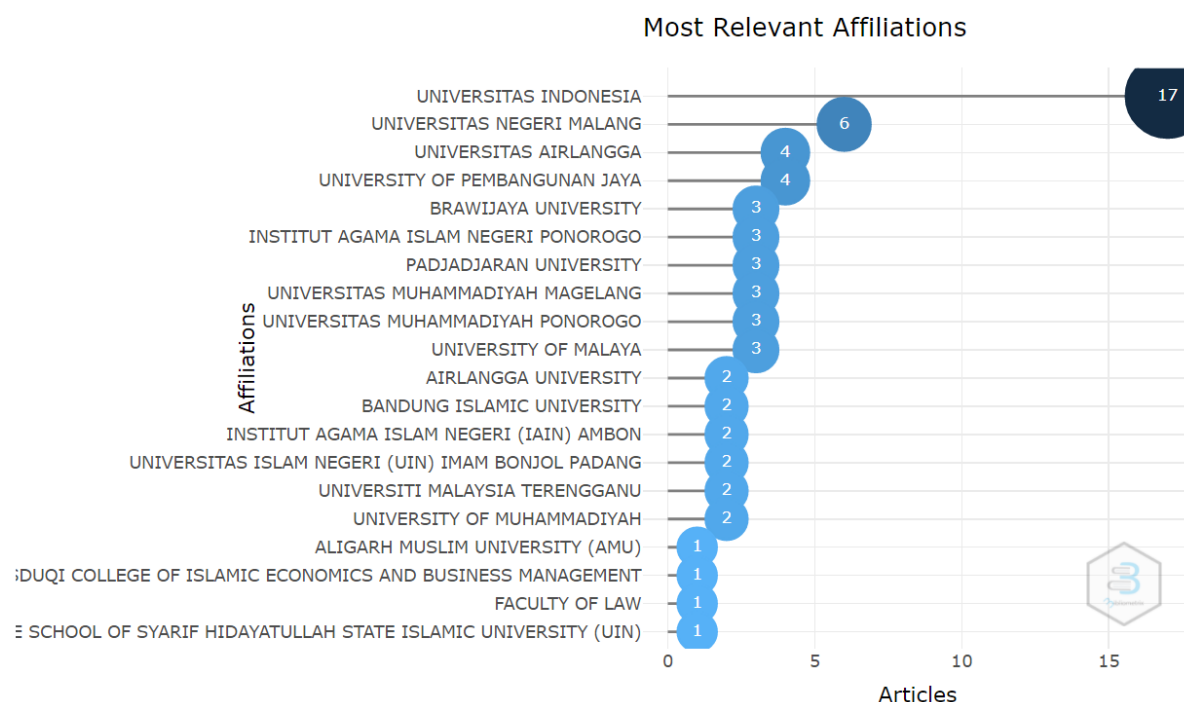


Figure 5: Most Relevant Affiliations

Most relevant affiliation shows the number of research documents with the theme of waqf development in Indonesia in economic and financial research based on the author's affiliation. The figure displays the top 20 affiliations and the interval of the number of published documents with a blue bar chart. The darker the blue color indicates more researcher affiliations. The number of published documents ranges from 0 to more than 17 documents.

University of Indonesia is the author's affiliation in the top position with more than 17 publications. In the second position is Malang State University with a total of 6 publications. One of the journals published by the University of Indonesia is entitled "The role of knowledge, trust, and religiosity in explaining the online

cash waqf amongst Muslim millennials". This study aims to determine the role of knowledge, trust and religiosity in influencing the intention to donate money online among Muslim millennials in Indonesia. The main findings show that knowledge, trust, and religiosity play a positive role in explaining the intention to donate online cash waqf among Indonesian millennials. Religiosity is found to be the strongest factor in influencing attitude, while knowledge is the least significant factor in influencing attitude, which in turn influences the intention to engage in online cash waqf. Social norms and perceived behavioral control also positively influence the intention.

Corresponding Author's Country

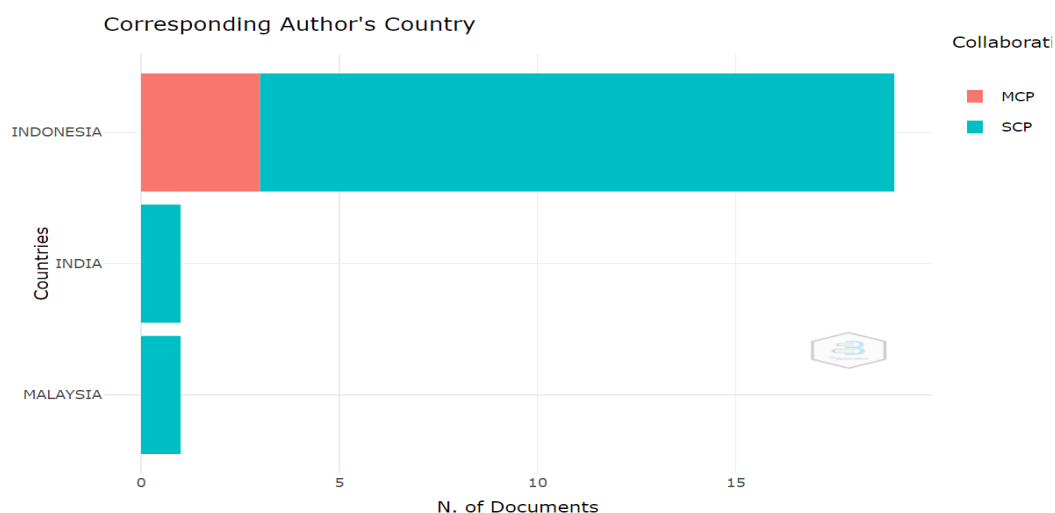


Figure 6: Corresponding Author's Country

The figure above shows the countries of author correspondence contained in each article with a calculation of the total form of collaboration between SCP (singlecountry collaboration) or single country collaboration and MCP (multiple country collaboration) or collaboration between several countries. There are 3 top countries included in this data and the document quantity interval is between 0 to more than 19.0 paper documents published on the theme of waqf development in Indonesia.

The results obtained were that Indonesia ranked first as the country with the highest number of correspondence authors with more than 19.0 papers published. The rest of the countries published papers below 5.0. The figure above shows the results that almost all countries have a form of SCP while MCP collaboration is only owned by 1 country, namely Indonesia.

One of the papers with authors from Indonesia is a paper entitled "The Role of Productive Waqf in Community Economic Empowerment: A Case Study of Muhammadiyah Regional Board of Lumajang, East Java, Indonesia" written by [Hakim I., Sarif M. \(2021\)](#). This article aims to examine the role of productive waqf (1) in community economic empowerment. The object of

study is waqf managed by the Muhammadiyah Regional Board (PDM) of Lumajang, East Java, Indonesia; a gas station business unit called SPBU Shirkah Amanah. PDM Lumajang was taken as the research subject because it has successfully managed waqf profitably and productively in a business entity, as well as playing a role in community economic empowerment. In this study, data were collected through interviews, document review, and observation. The findings of this study show that creative innovation in developing productive waqf both in the form of business entities and business cooperation models carried out by PDM Lumajang can make a significant contribution in opening up new jobs and investment. In addition, it can also increase the financial income of the community, improve social service facilities, and provide financial contributions for the sustainability of religious and social activities. Thus, it can be said that productive waqf is likely to be able to play an important role in the economic empowerment of the community and can also be adapted into a pilot model of productive waqf management.

DOCUMENT ANALYSIS

Most Cited Documents

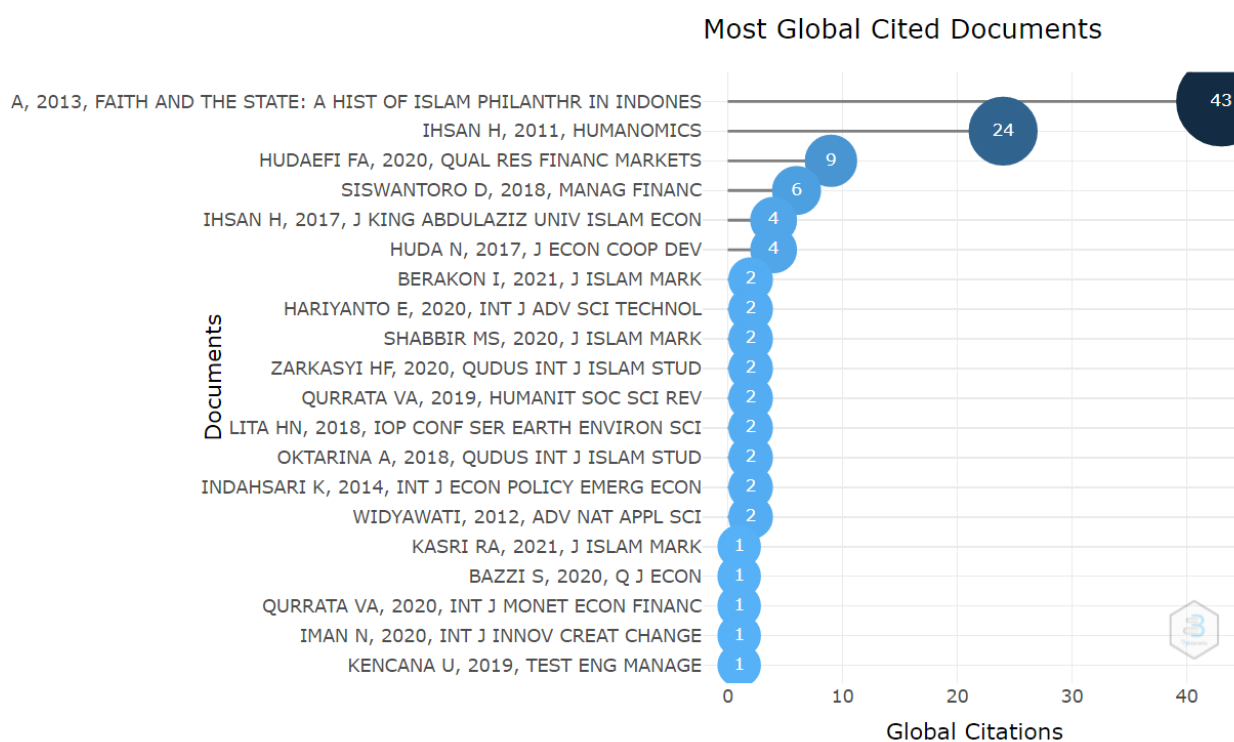


Figure 7: Most Cited Documents

Most cited documents show the order of article citation data on the theme of waqf development in Indonesia which contains the author's name, year of

publication and the journal that published it in the form of a blue bar chart. The darker the blue color, the more

the number of citations. The number shown in the total citations is between 0 and more than 43.

It was found that Fauzia A. (2013) became the top-cited article with more than 43 citations. The paper entitled "Faith and the state: A history of Islamic philanthropy in Indonesia". Faith and the State offers a

historical development of Islamic philanthropy from the time of Islamic kings, through the period of Dutch colonialism and into contemporary Indonesia.

Most Relevant Words

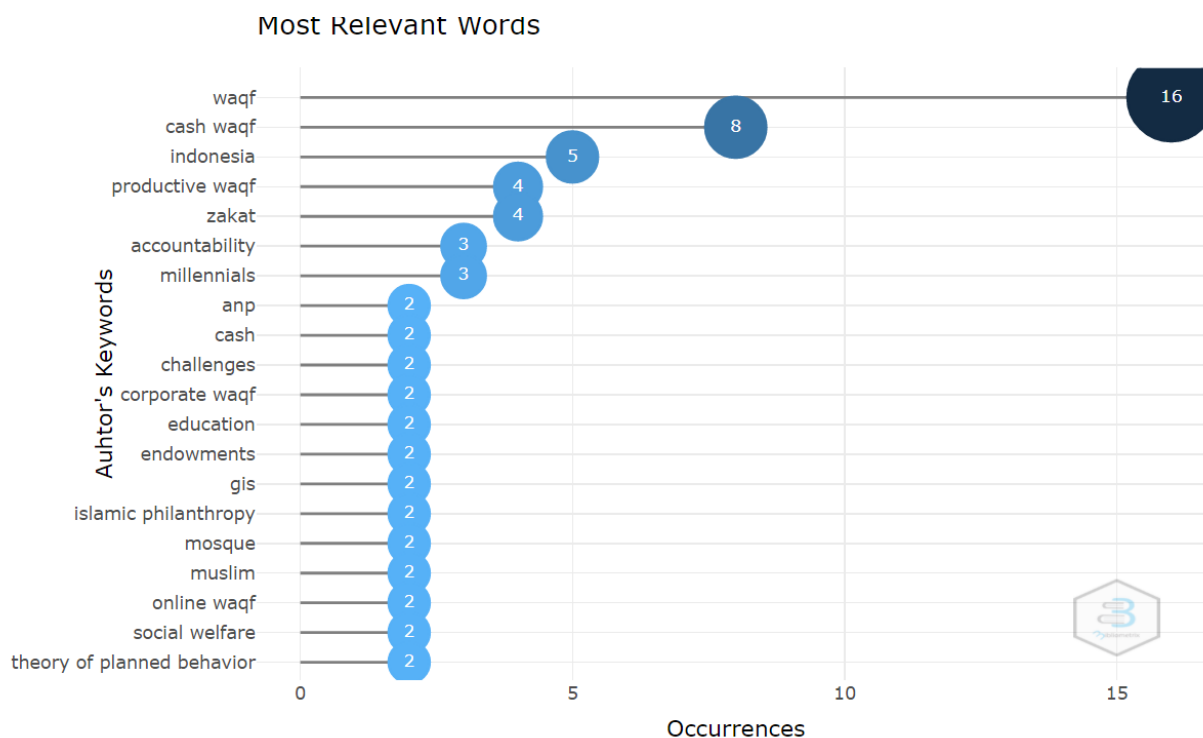


Figure 8: Most Relevant Words

The most relevant word analysis was conducted on the keywords of each document, where there were several words with a quantity of occurrences between 0 and 16 occurrences. The figure above shows the 20 most relevant words used in the research collection related to the keyword "waqf development in Indonesia".

The top word with the highest quantity of occurrences and most relevant to the keyword waqf development in Indonesia is the word waqf itself, with the highest quantity of occurrences 16 times. The second most relevant word related to the theme of waqf development in Indonesia is cash waqf with 8 occurrences. Furthermore, the third most relevant word related to the theme of waqf development in Indonesia with the appearance of the word 5 times is the word Indonesia.

Research entitled Development of waqf forest in Indonesia: The SWOT-ANP analysis of bogor waqf forest program by bogor waqf forest foundation (Ali K.M., Kassim S., 2021) explains that some communities and governments in Indonesia have taken the initiative to develop waqf forests to address forest conservation issues. However, research on waqf forest development

is still rare. This study aims to improve the development strategy of waqf forests in Indonesia. The SWOT method was used to identify the strengths, weaknesses, opportunities, and threats as well as possible development strategies of the Bogor Waqf Forest as the Waqf Forest manager. ANP method prioritizes the four aspects and the best strategy in developing waqf forest. An aggressive strategy needs to be carried out by optimizing existing legal organizations and educated human resources to inform the public about the concept of waqf in Islam and its application in waqf forests. Thus, the great potential of cash waqf and waqf can be obtained. This paper is one of the pilot articles that discusses the development strategy of waqf forests, especially in Indonesia. From this research, we recommend the Bogor Waqf Forest to finalize the legal aspects as an official waqf manager, and the government and the Indonesian Ulema Council to issue regulations and fatwas on waqf forests.

Word Cloud

Furthermore, relevant words in research related to the theme of waqf development in Indonesia will be

displayed on the document title in the form of a word cloud. Word cloud is a description of the words that often appear in the collection of paper data studied with the keywords of the title with the theme "waqf development in Indonesia". World cloud displays a picture of words displayed with various sizes according

to the quantity of the word that appears. In terms of placement, word clouds tend to be random but the dominating words are placed in the center so that they are more visible with a relatively larger size. In this research, the results of the word cloud are obtained based on the analysis of document titles.



Figure 9: Word Cloud

Based on the picture of the results of the analysis of document titles, it is found that the most dominant words are related to waqf development in Indonesia, namely Waqf, Indonesia, Islamic, Cash. Most of the current research on "waqf development in Indonesia" discusses "Waqf". This is because waqf has played a very significant role in improving the welfare of Muslims, both in the fields of education, health services, social services and public interest, religion, development of science and Islamic civilization in general. Research conducted on waqf development in Indonesia includes The implementation of Waqf as 'Urf in Indonesia (Yumarni, A., Dewi, G., Mubarak, J., Wirdyaningsih, W., & Sardiana, A., 2021), Cash waqf from the perspective of the Indonesian Ulama Council (MUI) and the scholars of Aceh: An analysis (Mauluddin M.I., Rahman A.A., 2018) and Online based waqf management system in Indonesia: A new model in management of waqf administration (Iman N., Santoso A., Kurniawan E., 2020).

WordTree Map

Furthermore, relevant words in the research related to the theme of waqf development in Indonesia will be displayed in the document abstract in the form of a word tree map. Word Tree Map displays words that appear frequently in boxes similar to regions or areas in a map, where the more the word appears, the larger the square area.

Based on the picture of the results of the analysis of document abstracts, it is found that the most dominant words for research on the theme of waqf development in Indonesia are Waqf, Indonesia, Islamic, Research, Cash. Most of the research related to the theme of waqf development in Indonesia currently discusses "Waqf". This is because waqf has played a very significant role in improving the welfare of Muslims, both in the fields of education, health services, social services and public interest, religion, development of science and Islamic civilization in general.

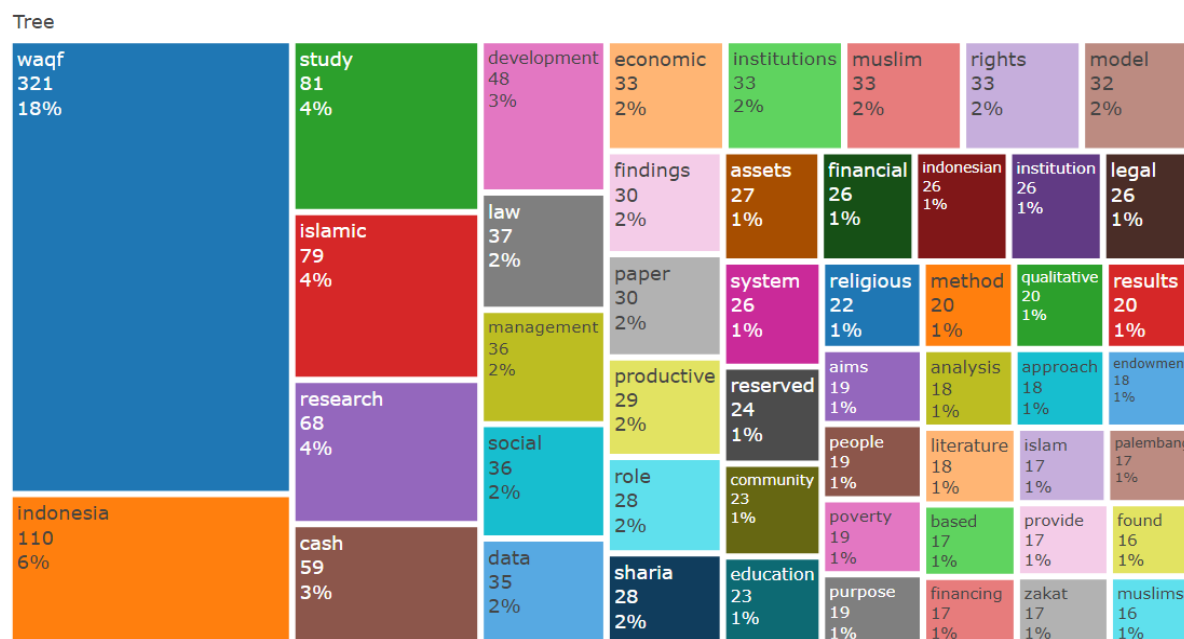


Figure 10: Word Tree Map

Research conducted on waqf development in Indonesia includes "The legal position of Waqf for non-muslims in efforts to increase Waqf assets in Indonesia" (Sulistiani, S. L., 2021). This research examines the legal position of waqf for non-Muslims who contribute to increasing waqf assets in Indonesia. It turns out that the collection of waqf funds can be accessed from non-Muslim funds that sympathize with the economic value of Islamic philanthropy. Waqf is an act that is part of Islamic goodness and has a socio-economic dimension. The essence of waqf is to hold the core of waqf and develop the results, so that the waqf assets are not lost. The form of waqf is attractive and has great benefits so

that not only Muslims are interested in waqf, many non-Muslims also contribute through donations. However, scholars differ on the law of non-Muslim waqf; moreover, the waqf law also does not mention the specificity of waqf only for Muslims. This research is a qualitative research through a normative juridical approach through literature study in analyzing the data obtained. Thus, the different opinions of the madzhab scholars essentially allow non-Muslim waqf if it is not intended for worship facilities such as mosques.

Trending Topics

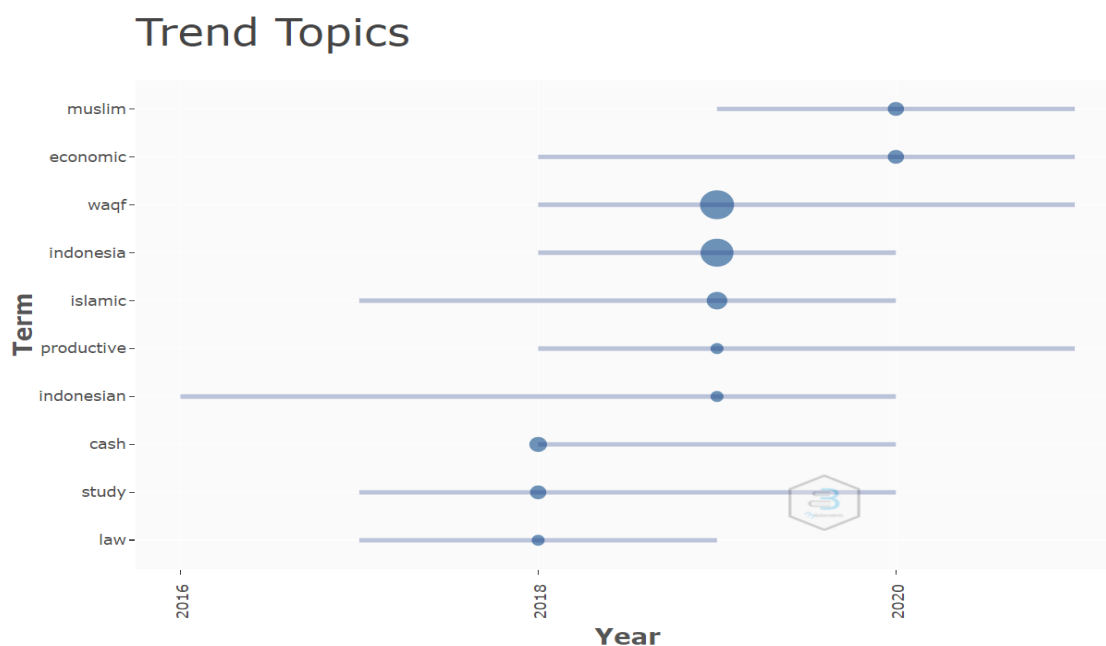


Figure 11: Trends in Topics

Based on the picture of the results of the analysis of document titles in research with the theme of waqf development in Indonesia, topic trends are also an important part of this research. Where the figure above displays an overview of the development of topics related to waqf development in Indonesia from time to time with a division per year, so that it is known what topics have been used for a long time and what topics have recently been used. This topic trend also considers the frequency value of each word shown by the log axis.

Thus, in addition to looking at the annual trend, the topic occurrence is also adjusted to the frequency of the quantity of words appearing in the research theme related to waqf development in Indonesia. The higher indicates the more the word is used, and the more to the right, the more recent the word is used. The development of the theme of waqf development in Indonesia began to experience a significant increase since 2016.

Based on the data description above, the most recent and most used topics related to the theme of waqf development in Indonesia are Muslim, Economics, Waqf. The word Muslim was used the most in 2019-2021 because it is closely related to the number of religions that dominate in Indonesia. The journal entitled "Impact of digital Sharia banking systems on cash-waqf among Indonesian Muslim youth" written by

Berakon, I., Aji, H. M., & Hafizi, M. R. (2021). discusses cash waqf as one of the transformative models for handing over waqf assets to optimize cash waqf revenue in Indonesia. Currently, cash waqf can be paid through platforms integrated with the digital sharia banking system (DSBS) such as Jadiberkah.Id (Bank Syariah Mandiri), Digital Wakaf Hasanah (Bank Negara Indonesia Syariah) and other online waqf services provided by Bank Syariah Bukopin, Bank Commerce International Merchant Bankers Niaga and Bank Rakyat Indonesia Syariah. This study aims to determine the role of DSBS in encouraging the decision of Muslim youth to endow money in Indonesia. The structural model results show that the research model is structurally sound because it meets all model criteria. Perceived ease of use (PEU) was found to be the most significant predictor of perceived usefulness (PU). Both resulted in a significant influence on Muslim youth attitudes towards DSBS. Overall, subjective norm (SN), perceived behavioral control (PBC), PU and attitude are important determinants that steer individuals' decisions to use online cash waqf payments through DSBS. Finally, the research findings conclude that DSBS plays an important role in driving the interest of Muslim youth to participate in cash waqf transactions.

Co-occurrence Network

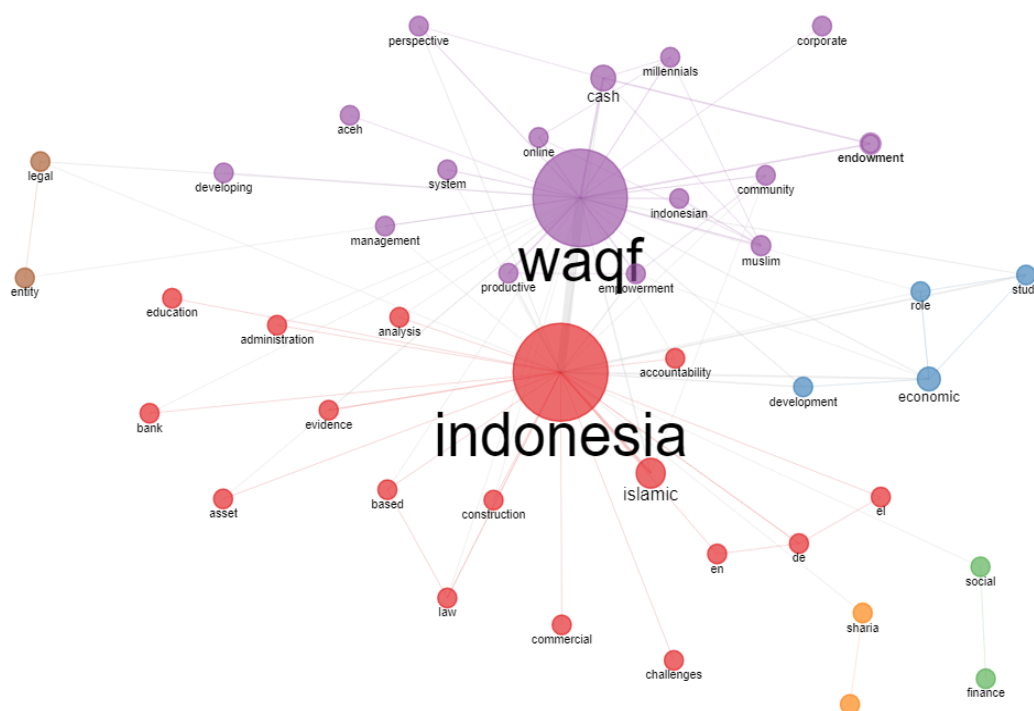


Figure 12: Co-occurrence Network

Co-occurrence network displays words related to the title of documents related to the theme of waqf development in Indonesia, in the form of colored clusters by considering the relationship between one title and another. Some titles that often appear in research on the theme of waqf development in Indonesia are divided into 4 clusters, namely:

- Cluster 1 in red consists of keywords:
- Cluster 2 in green consists of the keywords: Finance, Social.
- Cluster 3 in purple consists of keywords: Waqf, Productive, Empowerment, Indonesian,

Muslim, Community, Endowment, Corporate, Millennials, Cash, Online, System, Perspective, Developing, Management.

- Cluster 4 in blue consists of the keywords: Development, Economic, Role, Study.
- Cluster 5 in orange consists of the keywords: Banking, Sharia
- Cluster 6 in brown consists of the keywords: Legal, Entity.

Thematic Map

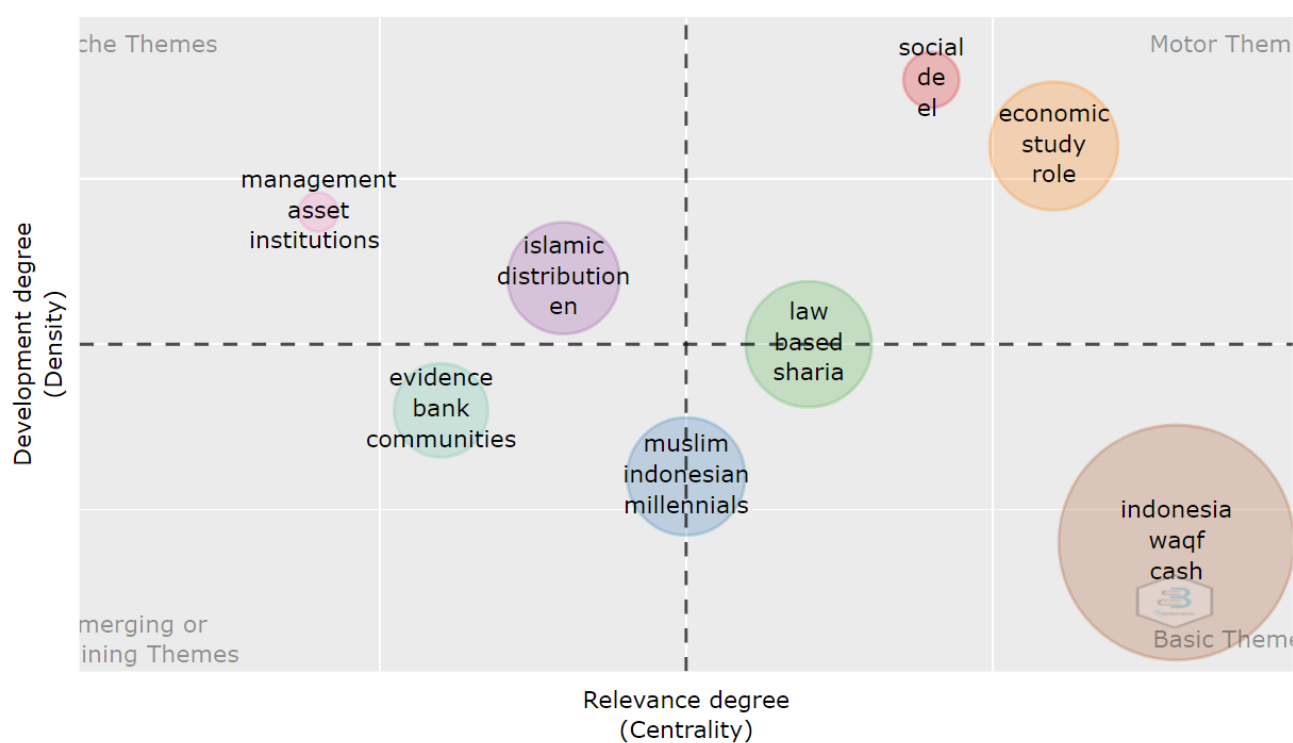


Figure 13: Thematic Map

This research will also analyze thematic maps that appear based on density and centrality which are analyzed based on document titles with the research theme waqf development in Indonesia which is divided into 4 quadrants. These results are obtained from a semi-automatic algorithm by reviewing the titles of all references on the object of research.

The upper left quadrant represents *highly developed and isolated themes*. The quadrant shows themes that are specific and rarely researched, but highly developed, which is indicated by high density but low centrality. The themes in this quadrant are Management, Assets, Institutions, Islamic, Distribution. While the lower left quadrant is *emerging or declining themes*, this quadrant shows themes that have long been used but are experiencing an

increasing or decreasing trend with low density and centrality. The themes in this quadrant are Evidence, Banks, Communities. Looking at the developments with the sub-theme waqf development in Indonesia in recent years, the trend of words contained in this quadrant has increased.

While the upper right quadrant is a *motor theme* or driving theme characterized by high density and centrality, so it needs to be developed and is important to be studied in further research. The themes that appear in this quadrant are Social, Economic, Study, Role, Law, Based, Sharia. Finally, the bottom right quadrant is the *basic and transversal themes* characterized by high centrality but low density. These themes are important to include in the research because they are common topics that are

commonly used. The themes that appear in this quadrant are Muslim, Indonesian, Millennials, Indonesia, Waqf, Cash.

Thematic Evolution

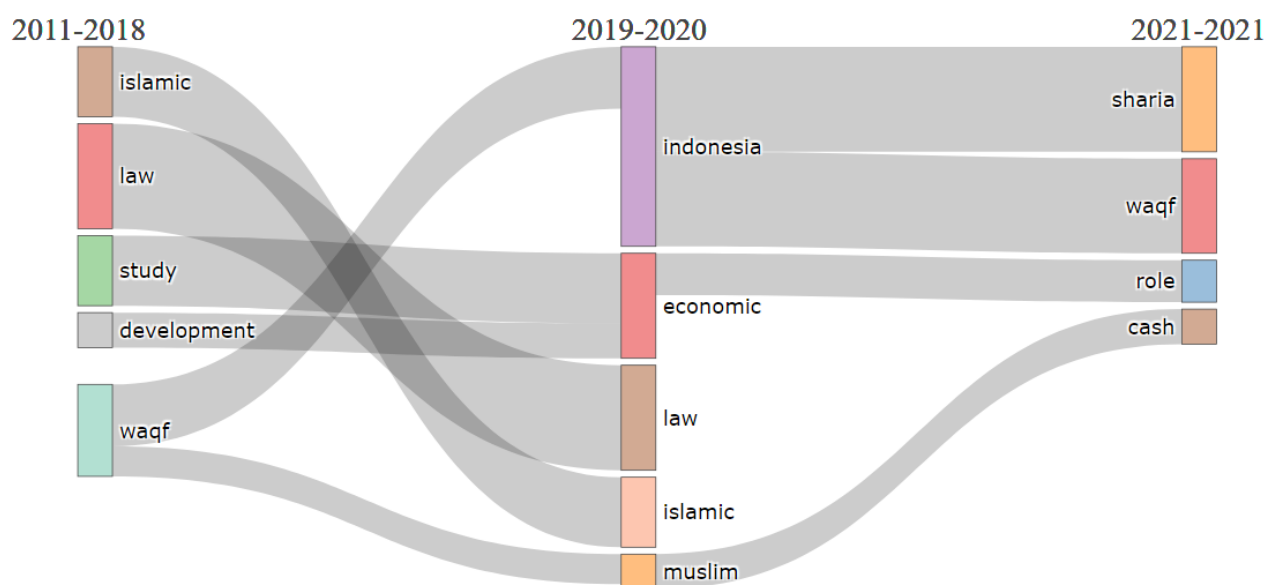


Figure 14: Thematic Evolution

The themes used in the papers that are the object of research continue to change, especially from recently published papers when compared to papers that have been published for a long time. The figure above shows the evolution analyzed by theme with research related to waqf development in Indonesia consisting of themes depicted by rectangles with the larger the size, the more k is used. Although the theme of this research is about waqf development in Indonesia, the data obtained shows that there are several sub-themes that are widely used.

Thematic Evolution is divided into 3 sections. Where the left side shows some of the most widely used themes from 2011 to 2018, there are 5 themes listed with different sizes depending on the quantity of use of the theme. The "Law" theme ranks first, followed by the "Waqf" theme.

The second or middle section shows the most frequently used themes in the period between 2019-2020. 5 themes are listed, of which 2 are evolutions of themes that appeared in the previous period, namely the themes "Law" and "Islamic", which are extensions of some of the themes shown by the colorful grooves.

The last or right section shows the most used themes from 2021-2021. There are 4 themes, of which there is 1 evolutionary theme from the previous period, namely "Waqf" which is an extension of several themes shown by the colorful flow.

CONCLUSION

This research attempts to evaluate the topic of waqf development in Indonesia using text analysis from 2011-2021. The conceptual structure of R 'biblioshiny' provides key research networks and themes. We have identified two research networks in waqf development in Indonesia literature using co-occurrence network. These research networks are "Waqf" and "Indonesia". Combining these two research networks will address many social and economic issues in Indonesia.

Furthermore, in the conceptual structure, this study has deployed a thematic map to place themes and subthemes on the graph and divide them into four clusters (dropping or emerging themes, basic themes, highly developed and isolated themes, motor themes). The highly developed and isolated themes quadrant is represented by the themes Management, Assets, Institutions, Islamic, Distribution. Furthermore, themes that are in the emerging or declining themes quadrant are Evidence, Banks, Communities. In the motor themes or driving themes quadrant, the emerging themes are Social, Economic, Study, Role, Law, Based, Sharia. Finally, the basic and transversal themes quadrant is represented by the themes Muslim, Indonesian, Millennials, Indonesia, Waqf, Cash.

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