Systematic Literature Review: The Role of Digital in the Management of Zakat

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Abstract

The purpose of this study is to explain the role of digitalization in the development of zakat management in Indonesia. This research is motivated by the development of zakat collection systems such as the digital zakat financial system that utilizes digital platforms. The research method used is qualitative and based on a systematic literature review approach. Sources of data come from literary journals published by Scopus and Google Scholar indexed publishers (Sinta 2 and Sinta 3). Data was collected using the Publish or Perish (PoP) program. Selected articles are analyzed using the VOSviewer tool to submit article title, author name, country of origin, and trending keywords. The ease of paying zakat is a key factor that opens the way for Muzaki to pay zakat. The community's understanding of the channels that can be used to pay zakat will certainly provide a solution if the community has difficulty paying Amir Zakat directly. In general, organizations have three channels to manage zakat. That is, direct payment channels, payment channels through banks, payments through point of sale, or payments through electronic media (digital payments).

Keywords: zakat management organizations; digitalization, blockchain, zakat information technology

1. Introduction

In the era of the Industrial Revolution 4.0, the use of technology, communication and information is becoming increasingly sophisticated and centralized. This term was first introduced in Germany at the 2011 Hannover Fair and is intended to summarize the various forms of change occurring in Germany, including: B. Artificial intelligence, digital commerce (e-commerce), big data (big data), and technology finance, to the use of robots. During this time the digitization process is ongoing. According to the Big Indonesian Dictionary (KBBI), digitization refers to the provision or use of digital systems. This process continues to develop at a very fast pace. With rapid progress, digitization has brought convenience, brought many changes, and really contributed to society. Because so far we are required to be able to develop various types of technology-based innovations that can be used in our daily activities. Digitalization is key for Indonesia to compete with other countries and make the economy more efficient, according to the Indonesian Minister of Communication and Information. A clear sign of the beginning of the digitization process is the increasing use of digital-based technologies in almost every area of life to provide people with quick and easy access to information via Internet access. In order to stay on track, the Zakat Management Organization (ZMO) has also started developing digital services for its customers. This is reasonable because digitization saves time and provides various conveniences to users in collecting, distributing and consuming Zakat services, thereby increasing the efficiency of Zakat administration. (Antonio, Raella and Al Gifari, 2020).
And since accessibility is the most important factor influencing the willingness to pay zakat online, ZMO is the most important factor influencing the willingness to pay zakat online. As time goes on, we will ensure that people can easily pay zakat online. It also needs to help improve the efficiency and effectiveness of the payment system, improve the quality of its organizational and technical infrastructure, and increase the knowledge of other Zakat stakeholders about Zakat. (Kasuri and Unial, 2021). Utilization of digital technology and distribution of wealth through zakat is an effective and efficient combination. However, in certain areas zakat information is still provided by individuals or community groups (Ahmad, Othman, & Salleh, 2015).

Zakat is a social financial instrument. Currently, the billing process at ZMO is simplified with the presence of digital finance. The McKinsey Institute, (2016), defining digital finance as a financial service with low cash consumption and delivered via digital infrastructure (including mobile and internet) with traditional bank branches. Computers, mobile phones, or cards used through point-of-sale (POS) devices connect individuals and businesses to a national's digital payment infrastructure, enabling seamless transactions on all fronts.

It is important for ZMO to support Zakat collection through the development of Zakat Information Technology (ZIT). According to Ferreira (2009), ZIT can provide comprehensive performance information to administrators. Here ZIT is considered as a formal system designed to provide information to Zakat administrators.

The aim of this article is to review the literature for technological inputs to support ZMO recruitment resources. Start by meeting customer expectations by determining zakat payments digitally. Then it can be seen how far the role of digitalization has played in the development of zakat management at ZMO. Finally, we conclude with the possible future development of ZMO digitization.

2. Research Methods

This study uses a Systematic Literature Review (SLR) approach which is defined as the process of assessing, identifying, and disclosing all available research results aimed at providing answers to specific research questions (Kitchenham and Charters 2007). There are 3 stages of research in the Systematic Literature Review (SLR) method. In the first step, the requirements for systematic recognition are identified and a systematic assessment is carried out on the issues reviewed. The mirror protocol is designed to guide capture execution and reduce the possibility of investigator bias. In the second step, it defines the research questions, search for strategies, the process of selecting studies with inclusion and exclusion criteria, assessing quality, and finally processes of data extraction and synthesis. The third step is a report by writing down the research results based on the literature that has gone through the first and second steps, then discussing them in the research results and concluding them.

In this second stage, we obtained data sources from literary journals published by publishers indexed by Scopus and Google Scholar (Sinta 2 and Sinta 3). Data collection was carried out using the Publish or Perish (PoP) program with searches:

- The keyword used is Zakat Management Organization.
- The maximum number of results is limited to 200 items.

3. Results and Discussion

3.1 Results

Based on the analysis using the Publish or Perish (PoP) software, the development of research on Zakat Management Organization (ZMO) in the past of 14 years from 2010 to 2023 indexed in Scopus, Sinta 2 & Sinta 3 yielded a total of 240 articles but only 16 articles discussed technology or digitization. The division of the number of articles by year of publication can be seen in the graph below Figure 1.
As seen in the graph above, it is known that articles discussing ZMO grew significantly in 2014 with 13 journals and the peak in 2021 was 49 journals. As for those discussing the digitalization of zakat management, there were only 1 journal in 2015 and followed by 2018 to 2022 respectively with 2, 1, 4, 6, 1 journals.

The idea of visualizing bibliographic networks, often called ‘scientific mapping’, has received considerable attention since the early days of bibliographic research. Visualization has proven to be a powerful approach for analyzing many types of bibliographic networks, ranging from networks of citation relationships among researchers to networks of coexistence relationships between keywords.

Bibliometric preparation in this study uses metadata that has been obtained from PoP and then processed using VOSviewer software to obtain network visualization, dispersion visualization, and density visualization.

The network visualization mapping as shown in Figure 2 illustrates the network visualization of the keywords Zakat Management Organization. Based on the analysis using VOSviewer, a total of 101 items were identified, divided into 8 clusters, with a total of 604 links.

**Figure 2.** Network Visualization of ZMO

Source: VOSviewer, Processed by the authors
As for the network visualization mapping research related to the digitalization of zakat is seen as part of cluster 1 with the item name digital technology and the main theme being "management organization". And it is in cluster 2 with the item name digitalization and the main theme being "efficiency" as shown in figures 3 & 4 below.

**Figure 3. Network Visualization of Digital Technology**

![Network Visualization of Digital Technology](source)

*Source: VOSviewer, Processed by the authors*

**Figure 4. Network Visualization of Digitalization**

![Network Visualization of Digitalization](source)

*Source: VOSviewer, Processed by the authors*

From figures 3 & 4 above it can be concluded from the size of the ball of digitization and digital technology that this theme has not been widely discussed in research on ZMO. Also, looking at the connected web, we do not see any papers discussing the role of digital, so the novelty of this research topic is considered good.

The dispersion visualization mapping as shown in Figure 5 illustrates The historical development of research over time where darker visualization indicates long-standing historical implementation while brighter visualization indicates research conducted in recent years.
The results of the mapping show that research on digitalization/digital technology on ZMO has been relatively new as reflected by the light-yellow colour (around the years 2019-2021). This result strengthens the graphical picture in figure 1, which shows that in 2021 there were the largest number of journals related to digitization in the last 14 years.

The results of the density visualization, as shown in Figure 6 below, identify the level of density in various topics, for the topic of digital technology & digitalization, it is evident that there has been relatively limited research as reflected by the darker nodes.

Metadata collection was carried out using the Publish or Perish (PoP) and with the results of 41 journal data indexed in Scopus and 200 journal data indexed in Sinta 2-3. The data obtained are then processed through the prism method as follows:
The facts in the above scheme show that the results of the screening leave 15 journals that will be a source of reference in this study. In Table below, a summary of the final article is presented based on the author, type of research, and journal publisher. The journal can be divided into 3 major themes based on research questions.

### Table 3. Summary of The Final Article

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Year</th>
<th>Research Type</th>
<th>Year</th>
<th>Title</th>
<th>Journal</th>
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<tr>
<td>RA Kasi, AM Yoniar</td>
<td>2021</td>
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<td>Determinants of digital zakat payments: lessons from Indonesian experience</td>
<td>Journal of Islamic Accounting and Business Research</td>
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<tr>
<td>MD Al Athar, MNR Al Arif</td>
<td>2021</td>
<td>√</td>
<td></td>
<td>The Intention of Millennial Generation in Paying Zakat through Digital Payments</td>
<td>International Journal of Islamic Business and Economics</td>
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<tr>
<td>F. Amalahag, P Wijayanti, NE Mohd Nasir, ...</td>
<td>2021</td>
<td>√</td>
<td></td>
<td>Digital platform of zakat management organization for young adults in Indonesia</td>
<td>Complex, Intelligent and Software Intensive Systems Proceedings of the 14th International Conference on Complex, Intelligent</td>
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<th>Journal</th>
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<tr>
<td>A Soemudiputra, J Sasution</td>
<td>2021</td>
<td>✓</td>
<td>5</td>
<td>The Influence of Zakat Literacy, Trust, and Ease of Digital Payments on Generation Z and Y Intention in Paying Zakat to Amil Zakat Organizations</td>
<td>5 th International Conference Of Zakat Proceedings ISSN: 2655-6251</td>
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<tr>
<td>M Wulan, H Khairunnisa, ES Bahri</td>
<td>2018</td>
<td>✓</td>
<td>7</td>
<td>Internal audit role in digital Zakat finance. Case study at a Zakat Institution in Indonesia</td>
<td>International Conference Of Zakat 2018 Proceedings ISSN: 2655-6251</td>
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<tr>
<td>AS Rusydi, T Widiaswati</td>
<td>2018</td>
<td>✓</td>
<td>8</td>
<td>Technological and efficiency change on zakat organization Evidence in Indonesia</td>
<td>Indonesian Conference of Zakat (ICONZ) Online Proceedings: ISSN 2655-6251 Published by BAZNAS Indonesia</td>
</tr>
<tr>
<td>T Widiaswati, EF Cahyono, S Zulaikha, ...</td>
<td>2021</td>
<td>✓</td>
<td>9</td>
<td>Optimizing zakat governance in East Java using analytical network process (ANP): the role of zakat technology (ZakaTech)</td>
<td>Journal of Islamic accounting and business research</td>
</tr>
<tr>
<td>P Utani, T Suryanto, M Nasor, RA Ghoifur</td>
<td>2020</td>
<td>✓</td>
<td>10</td>
<td>The effect digitalization zakat payment against potential of zakat acceptance in national Amil zakat agency</td>
<td>IQTISHADIA</td>
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Zakat digital innovation in the future:

<table>
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<tr>
<th>Author(s)</th>
<th>Year</th>
<th>Research Type</th>
<th>No</th>
<th>Title</th>
<th>Journal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z Zulfikri, A Adam, S Kassim, A Hassan</td>
<td>2022</td>
<td>✓</td>
<td>12</td>
<td>Trust enhancement in zakat institutions using blockchain technology: A qualitative approach</td>
<td>European Journal of Islamic Finance (EJIF)</td>
</tr>
<tr>
<td>P Lestari, U Pratiwi, P Ulfah</td>
<td>2015</td>
<td>✓</td>
<td>13</td>
<td>Identifikasi Faktor Organisasional dalam Pengembangan “E-Governance” pada Organisasi Pengelola Zakat</td>
<td>MIMBAR: Jurnal Sosial dan Pembangunan</td>
</tr>
<tr>
<td>EA Elsayed, Y Zainuddin</td>
<td>2020</td>
<td>✓</td>
<td>14</td>
<td>Zakat information technology system design, zakat culture, and zakat performance-conceptual model</td>
<td>International Journal of Advanced Science and Technology</td>
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</table>
Digitalization is one of the efforts to improve relationships with customers in today's modern era. Which aims to facilitate the process in the service so that it can run more effectively and efficiently. Digitalization is a word that represents the transformation or process of transferring form from a conventional format to a comprehensive digital format. What can be converted to digital format? Some experts state that the scope of digitalization includes various elements in social life, such as interactions between humans, especially those that enter the digital realm.

However, this does not mean that digitalization is a means used to completely eliminate conventional methods, but rather to improve and streamline conventional methods into a more effective and faster digital format. This statement is backed up by research showing that the factors influencing how muzakki pay zakat in the digital age are:

1. Transparency of zakat management.
2. Socialization of zakat by involving community leaders.
3. Support for zakat regulations as a deduction from taxable income.

The factors for improving digital ZMO services and socializing zakat through social media are considered to have no significant effect on muzakki's interest. (Muhammad Syafii Antonio, 2020).

However, one of the benefits of developing digitalization is facilitating transactions by customers. Where is the application in ZMO to simplify the customer's Zakat payment menu? However, in the development of digitalization carried out by ZMO, it is right in accordance with the expectations of its customers, so ZMO must first know the factors that influence its customers to use this digital technology.

In a journal that examines how the intention of the millennial generation (the generation born around 1980 to 1995) to pay zakat through digital payments, the results show that the variables of perception, trust, and convenience have a significant effect on the intention of the millennial generation, which to pay zakat through digital payments. The survey also shows that millennials are 68% more likely to pay zakat in cash or in person, and 32% are paying it digitally. This is due to a lack of knowledge and motivation among millennials about digital zakat payments. His ZIS payment service with digital payments has many options. The study concludes that millennials prefer his OVO service to paying zakat via digital payments.

The empirical results obtained show that the future trend of ZIS payments will be based on digital payments. Therefore, each OPZ should be able to adapt to these trends, such as by more proactively improving the functionality of this digital payment service. (Muhamad Daniyal Al Athar, 2021)

Other research findings show that factors such as performance expectations, effort expectations, and conditions of zakat literacy facilities have a significant effect on the intention to use online platforms to pay zakat in Indonesia.

The above findings have several managerial and policy implications.

1. Zakat managers must ensure that the system makes it easy for the public to make zakat payments through online platforms because ease of access (user friendliness) was found to be the most important factor influencing the intention to pay zakat online.
2. Continuously strive to improve the efficiency and effectiveness of payment systems, to ensure payment systems are faster and more accessible.
3. A holistic approach is necessary to upgrade the infrastructure and resources essential for efficient online zakat payments, involving active cooperation with relevant stakeholders, notably the government.
4. All zakat stakeholders must continue to work and collaborate in increasing zakat knowledge through a massive literacy program. Without high literacy, awareness of paying zakat through digital channels may not increase in the future. Overall, the lessons derived from these implications can guide zakat institutions in other countries towards improvement (RA Kasri, 2021).

The impact of digital technology is increasing day by day in various countries (Rachman and Salam, 2018). Digital technology in the financial industry is generally referred to as the Financial Technology System (“fintech”). The fintech system refers to the development and innovation of using technology from financial systems and services to create products and services for users (Rachman and Salam, 2018). Digital technology in the financial industry is commonly referred to as a digital financial platform.

Digital financial platforms allow businesses to convert physical cash into electronic or digital money (Dara, 2018). Digital finance is a financial service created by digital infrastructure, including the internet, with a cashless concept (Dara, 2018). Users can access digital financial platforms via computers and cellphones to assist them in all their activities (Dara, 2018). The Zakat Finance Digital Platform can also be used for zakat management in Indonesia. The ease of paying zakat is a key factor that opens the way for Muzaki to pay zakat. The community’s understanding of the channels that can be used to pay zakat will certainly provide a solution if the community has difficulty paying Amir Zakat directly. In general, organizations have three channels to manage zakat. Namely, direct payment channels, payment channels through banks, payments through point of sale, or payments through electronic media (digital payments).

Several studies have shown that convenience is one of the factors that influence individual intentions to pay zakat to zakat management institutions. Studies by Rahmani and Erpurini (2020), Maghfirah (2020), Astuti and Prijanto (2021), and Kharisma and Jayanto (2021) using digital technology media and social media for the ease of paying zakat by zakat management bodies show that simple payments are included. has a positive effect on the willingness of the community to pay zakat to the zakat management agency.

1. ZMO in Indonesia uses various tools for the Zakat collection process as follows:
2. Payment of zakat through a virtual banking account.
3. ZMO cooperates with the company's HR department for the payment of zakat through the payroll system.
4. ZMO builds a mobile application system for zakat payments on Android through the iOS and Google Play Store through the Apple Store. The system allows muzakki to pay zakat in real-time through an electronic payment system.
5. Using the crowdfunding system through www.startzakat.com. Currently there are several industries that are booming in this era including the crowdfunding industry (Chang, 2018). In general, the crowdfunding system is divided into donation-based, loan-based, pre-purchase, and equity types (Chang, 2018). Startzakat.com changed the zakat collection system from a unilateral campaign system to a crowdfunding system (www.startzakat.com). The unilateral campaign system is one way of socializing zakat carried out by ZMO to attract muzakki so they have an interest in paying zakat.
6. ZMO cooperates with several Indonesian e-commerce or marketplaces such as Tokopedia and Muslimmarket.com. Muzakki be shopped through e-commerce websites and can also pay zakat. The process of collecting zakat is consistent with digital influences in our society (Rachman and Salam, 2018).

In order to optimize the increase in zakat in the Industrial Revolution 4.0 era, digitalization technology is needed to increase the efficiency of zakat collection and distribution and to help optimize the BAZNAS strategic plan to expand its reach. Zakat socialization targets include the community. Communities throughout the country are increasing the competency and professionalism of human resources in zakat management, especially through training programs such as BAZNAS.

The Management Information System collects the results of APBN and APBD by establishing a secure budgeting mechanism and a comprehensive Mustahik and Muzaki information database system that oversees the collection and dissemination of results, and collects the results of the APBN and the APBD to central and local BAZNAS agencies. responsible for distributing to time fund.
Based on the description above, the process of collecting and distributing zakat is synchronized with the digitization program to optimize zakat. When zakat is collected in a community, it is generally collected by individuals, groups or legal entities. The traditional manual collection of each zakat by a mazaki (donor) achieves the Nisab revenue, with the spoils being distributed entirely to community-formed ZMOs.

Amir Zakat Agency (BAZ) and Amir Zakat Institute (LAZ). Through web and mobile applications, as the collection of digital zakat can be done through internal and external platforms, and the internal Muzakki system can make zakat payments through websites or applications connected to the BAZNAS information system. Payment made easy. The external platform is a platform for collecting his Zakat funds provided by the partners of the Zakat Management Unit (OPZ). ZMO can leverage various technology-based Zakat payments through e-commerce channels, online crowdfunding, digital payment machines, and more. In addition to e-commerce, Zakat payments can also be made through the payment channels of crowdfunding platforms. Through this channel, Muzaki can oversee the planning, updating and distribution of Zakat. Therefore, this would allow Muzaki to distribute zakat more safely.

Blockchain technology offers transparency, decentralization, immutability, verifiability, security, and pseudo-anonymity. This trustworthiness at the verification level, without the involvement of third parties, allows blockchain to optimize trust in ZMO.

Cashless payment of zakat can facilitate zakat. Easy trading on your mobile. The cashless system allows people to pay easily by simply scanning their cell phones. BAZNAS can engage in partnerships with different social media platforms, collaborating with various media channels to establish a zakat collection platform, which falls under the third category of ZIS collection platforms. Zakat administration will use blockchain technology to increase the transparency of zakat administration, which must also increase the trust of the Muzakki tribe to channel zakat through ZMO. One model of information media that can be used to transmit digital information is the use of computers and mobile phones (HP) online.

In online media, collection and collection mechanisms, including Zakat deposit and payment procedures, are very effective as they allow Muzakki to obtain information on how Zakat is calculated, regardless of distance or time. In addition, BAZ and LAZ can reach anywhere Muzakki is. In this case, of course, the availability of technology support and the skill and expertise of his BAZ, LAZ and Muzakki managers using computer and internet technologies are key factors. In addition, online payment mechanisms through the use of information and communication technology make it easier for Muzakki
to fulfill its obligations without limitations of space, distance or time. Moreover, the digital age has maximized the role of banks, especially Muzaki, in the payment of zakat. Payment of zakat by bank transfer is quite expensive. Via Mobile Banking or Internet Banking (Purnamasari, 2017).

This indicates the high need for banks to distribute zakat among the local community, especially the muzaki who live in big cities and have a very heavy workload. The main reference handout is Mustahik Zakat which contains eight asnakh found in the Al-Quran Surah At Tauba verse 60, namely Zakat is only for Amir Zakat, a needy whose heart is comforted. As an obligation from Allah, free those who are in debt and those who stand in the way of Allah (conversion). Allah is All-Knowing and All-Knowing. Optimizing the distribution of zakat aims to use productive zakat for long-term investment, especially zakat for the poor and asnakh through economic empowerment. Distribution using an information system that digitizes cooperation between ZMOs can facilitate the distribution of Zakat to institutions such as the Amir Zakat Institution (LAZ) and the Amir Zakat Agency (BAZ).

In addition, it is essential to foster innovation in digital zakat services while emphasizing the importance of socialization, support, and information dissemination related to zakat. This digital service aims to simplify and expedite zakat transactions, thereby optimizing the distribution of zakat to the community.

4. Conclusion

Digitalization has both positive and negative impacts. In efforts to include supporting the digitization of zakat management, marketing strategies are needed such as the use of digital crowdfunding and blockchain. Implementing blockchain technology and establishing partnerships with digital entities, such as virtual wallet providers and companies offering diverse online functionalities, the primary objective is to ensure muzzakis can easily fulfill their zakat obligations anytime and anywhere. In its development, ZMO must pay attention to the factors that influence it significantly, namely:

1. Performance expectations, where ZMO must ensure that the system makes it easy for the public to make zakat payments through a user-friendly online platform
2. ZMO strives to improve the efficiency and effectiveness of its payment systems to ensure faster payment systems and easier access.
3. The condition of zakat literacy facilities, in this case synergy is needed with other stakeholders, especially the government. Where must continue to work and collaborate to improve knowledge of zakat through a massive literacy program. Without high literacy, awareness of paying zakat through digital channels may not increase in the future.

Especially for the millennial generation, the factors that have a significant influence on digitalization of use are trust, perception, and convenience, and of course beyond that it must continue to be supported by the following 3 things:

1. Transparency of zakat management.
2. Socialization of zakat by involving community leaders.
3. Support for zakat regulations as a deduction from taxable income.

In addition to the third point above, states provide support in the form of legal protections and strict sanctions against allegations of audit fraud, such as establishing regulations for public financial reporting standards based on sharia accounting standards. But we also need to minimize the “expectations gap”. As transparency increases, muzzaki's trust in digital zakat management institutions will also increase.

Governments should also support efforts to strengthen access to internet networks in all regions so that all segments of society can use digital payment systems. Technology is also being used to enhance the professionalism of zakat managers, especially the transparency and application of financial reporting in accordance with shariah accounting standards.

It is hoped that Zakat management institutions will be able to provide more specialized training and assistance related to Zakat management, of course through the use of digital technology, and that personnel will be proficient in supporting innovation in the use of technology. The community itself is expected to be able to follow developments in the digitalization of zakat payments to distribute zakat. Thus, in the future, the potential for receiving zakat will increase.

Researchers suggest that ZIT is a system that accumulates and processes accounting and generates information both electronically and manually. ZIT information characteristics can be in the form of four information characteristics as dimensions of the system, namely Aggregation Integration Broad scope, and Timeliness.
Apart from ZIT, Blockchain technology is expected to be a solution that supports sources of ZMO acceptance. The transparent nature of the blockchain allows the ZIS distribution process to be more transparent.

References


