

Association for Information Systems

AIS Electronic Library (AISeL)

UK Academy for Information Systems
Conference Proceedings 2023

UK Academy for Information Systems

Spring 6-29-2023

Digitalisation of Zakat Management: A New Avenue for Enhancement

Adnam Opeyemi Salaudeen
University of Bolton, adnanopeyemi@gmail.com

Farag Edghiem
Manchester Metropolitan University, f.edghiem@mmu.ac.uk

Follow this and additional works at: <https://aisel.aisnet.org/ukais2023>

Recommended Citation

Salaudeen, Adnam Opeyemi and Edghiem, Farag, "Digitalisation of Zakat Management: A New Avenue for Enhancement" (2023). *UK Academy for Information Systems Conference Proceedings 2023*. 11.
<https://aisel.aisnet.org/ukais2023/11>

This material is brought to you by the UK Academy for Information Systems at AIS Electronic Library (AISeL). It has been accepted for inclusion in UK Academy for Information Systems Conference Proceedings 2023 by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

Digitalisation of Zakat Management: A New Avenue for Enhancement

Adnan Opeyemi Salaudeen

PhD Candidate and Researcher
Centre for Islamic Finance, University of Bolton
Deane Rd,
Bolton
BL3 5AB

Dr Farag Edghiem*

Senior Lecturer in Digital Marketing Communications
Manchester Metropolitan University
Cavendish Building
Cavendish Street
Manchester
M15 6BJ

* *Corresponding author*

Abstract

Zakat, one of the Five Pillars of Islam, is a form of almsgiving that requires Muslims to give a small percentage of their saved capital to charitable causes to the poor and needy. Zakat is commonly determined as a proportion of a Muslim's total saved wealth, which includes cash savings, harvested crops, cattle, and other forms of saved capital. The actual proportion is commonly estimated to be 2.5%. Zakat is usually collected and disbursed by the government or a charitable organisation every year. However, traditional methods of collecting and distributing Zakat may be obstructed by inefficiency or possibly corruption. In addition, Amil (Zakat manager) encounters several obstacles when attempting to collect Zakat, including technical obstacles such as great distances to travel to muzakki, lack of time, transportation problems, and expensive and inefficient processing costs. This conceptual paper debates the use of digital technologies to mitigate the aforementioned challenges and enhance Zakat administration. By digitising the collection and distribution of Zakat, it is possible to increase transparency, reduce administrative expenses, and enhance the process's efficacy, as argued in this paper. Furthermore, this study sheds light on a case study of a successful zakat digitalisation project in a Muslim-majority country and discusses the challenges and opportunities of implementing similar projects in other contexts. Additionally, the framework proposes various Fintech tools such as applications, e-wallets, and accessible websites that have motivated the Muzakki (Zakat payer) to pay Zakat persistently because such platforms have ensured information availability, accountability, and transparency about the authentic collection and distribution of Zakat funds to the Asnaf (Beneficiaries). The article concludes by highlighting the potential of digitalisation to enhance the effectiveness of Zakat as a means of addressing poverty and inequality in Muslim communities.

Keywords: *Zakat, Poverty, Digitalisation, Fintech, Management.*

1. Introduction

Zakat is an essential pillar of Islam and is a form of charitable giving specific required amounts by Muslims who meet specific wealth criteria. It is considered a religious obligation, or fard, for those who are financially capable. Zakat means “purification”, and giving Zakat is believed to purify one’s wealth and heart. According to Saharuddin, Anggraini, and Jamila (2019), Zakat is a way to help the poor and needy and promote social justice. It is typically calculated as a percentage of a person’s wealth, including cash, savings, investments, and property. The exact percentage varies, but it is generally considered 2.5%. Zakat is typically paid annually, collected, and distributed by the government or a charitable organisation (Saharuddin et al., 2019). Since it may serve as a method for fair income distribution and an Islamic fiscal instrument for resolving social welfare concerns, Zakat is a fundamental component of Islam (Abidin & Utami, 2020). In addition, Zakat has been proven historically to be an effective method for addressing socioeconomic concerns like poverty. Under the caliphate of Umar bin Abdul Aziz of the ninth dynasty of the Ummayah, Zakat was previously effective in strengthening and expanding the economy of Muslim society (717-720 AH). During that time, a prosperous civilisation with a tiny number of destitute people was developed (Antonio et al., 2020).

Fintech-driven financial innovation has, to a significant degree, continued to exert an influence on both the conventional and Islamic financial sectors (Ali et al., 2019; Hasan et al., 2020; Lee & Shin, 2018). These disruptions brought about by Fintech, “the marriage of technology innovation with finance” (Zavolokina et al., 2017), pervade almost, if not entirely, all parts of the financial system, whether in terms of financial product development or financial services delivery (Gomber et al., 2018). This phenomenon is summarised concisely by Ali et al. (2019), Hasan et al. (2020), and Lee and Shin (2018), who state, “Fintech has encircled the whole finance area.”

Financial technology is one kind of digitalisation in the economic and financial system (Fintech). The fast expansion of Fintech in Malaysia has contributed to the efficiency and effectiveness of procedures within the financial industry. As mentioned by Yahaya and Ahmad (2018), the use of technology like mobile banking has proved to be successful for Zakat collection and distribution in an efficient manner in Malaysia. Lembaga Zakat Selangor (LZS), for instance, offers a number of ways to pay zakat, including credit and debit cards, internet banking, MyClear FPX, a wage reduction programme, SMS, and others. While the asnaf have traditionally received zakat in the form of checks or cash, things are becoming more convenient with internet banking, allowing them to save money and time (Yahaya & Ahmad, 2018). This success can be replicated in other countries as well. Additionally, Fintech has also aided the management of various businesses, like zakat management companies (Hudaefi et al., 2019). In tandem with technical advancements, the realm of Zakat has evolved substantially. Digital technology has been employed for zakat collection and distribution, management, and teaching (Salaudeen and Zakariyah, 2022).

This study analyses those elements that could improve and expand zakat fund collection based on the perspective of muzakki (Zakat payers), particularly in today’s digital era, in response to the substantial disparity between the possible zakat amount and its actual

collection. According to Mediawati and Maryati (2012), the core of zakat difficulties may be ascribed to three primary factors: Muzakki (zakat payers), Amil (an entity that collects and manages Zakat), and supervisors (community). As long as these three actors operate independently and in isolation from one another, it will be challenging to collect the optimal amount of Zakat.

2. Literature Review

2.1 *The concept and philosophy of Zakat*

Zakat is a unique and distinctive Islamic concept. According to Al-Qardhawi (2014), Zakat is a fixed amount of a person's wealth allocated to eligible people. It is made compulsory- given one's fulfilment of its conditions- during the Madinan period of Islam. Although the Quran already mentioned the term Zakat during the Meccan period (like in Quran 23:4), Allah's details on its conditions and amounts were not yet specified. Therefore, the term was still generally giving away a portion of one's wealth, tiny or otherwise, towards fellow Muslims. Abdul Karim (2015) stated that besides having a strong spiritual dimension, Zakat also embodies the Islamic core value of social collectivism that goes against the tradition of individualism that reigned supreme during pre-Islamic Arabia and mainly in today's world. In addition to its social and charitable functions, Zakat is also seen as a way for Muslims to demonstrate their submission to God and to express their gratitude for the blessings they have received. Therefore, it is an essential aspect of the Islamic faith and is considered a means of strengthening community bonds and promoting harmony among believers (Zakariyah et al., 2022).

Shamsuddin (2021) wrote that when Allah combines the commandment of prayer (Salah) and Zakat in the Quran, there is an obvious indication that the duty of both is essentially the same. If prayer is a Muslim's religious pillar in life and connects him with his Creator, then Zakat becomes his door through which he accepts fellow creatures and shares the bounty of his Creator. Hence, Zakat is often regarded as an Islamic redistribution system. However, more than that, it is argued that Zakat, as an intrinsically Islamic concept, is a much broader concept. Some, like Hassan (1984), argued for a Zakat-inspired social security system in which social assistance and insurance schemes can be structured through Zakat. According to Kahf & al-Yafai (2015), in the context of the provision of social security and easing social ills, Zakat can even be regarded as one of the first formal institutions of social security in the history of humanity. If governed efficiently, the authors maintained that Zakat could ease the government budgeting on social assistance and help address poverty and other economic issues faced by developing Muslim countries (Rapi et al., 2022).

At the same time, it is important to mention that Zakat is different from tax, which is collected by governments for paying social services. As argued by AlMatar (2015), taxes are levied on an individual's income, whereas zakat is levied on the annual accumulated

wealth of the zakat payer. Due to this disparity, Zakat is more socially just than taxation because it places a greater burden on the wealthy than the poor. As a religious duty, Zakat is divine and holy and thus cannot be reformed or altered.

2.2 The Quest for Digitalisation in the Islamic financial system and services

Financial technology is currently at a reasonably advanced stage, particularly in recent years, and substantial developments have occurred relatively quickly. The transformation and incorporation of new technologies into the goods and services offered by financial institutions worldwide are essential if these institutions are to survive the current wave of technological disruption, including Islamic Financial Institutions (Zakariyah et al., 2022). Financial technology, often known as “Fintech,” will hasten growth to the point where it can compete effectively with prominent players in the market. One of the few studies conducted on Islamic financial technology is the one carried out by Alaabed and Mirakhor (2017). It is thought that eliminating two essential risks in the sector, namely leverage and unequal maturity, gets Fintech closer to the spirit of Shariah. The research supports the significance of Fintech in expediting the implementation of risk-sharing Islamic banking. In the second piece of research authored by Firmansyah and Anwar (2019), the researchers interviewed representatives from six Shariah-compliant financial institutions in Singapore and Indonesia. The results demonstrate that all the companies have an unwavering conviction that Islamic Financial Technology will have a prosperous and fruitful future in their nations and worldwide. The ever-increasing number of clients and revenues may be regarded as unambiguous proof that in some way assures their place in the market of the future.

The expansion of Fintech has resulted in the development of blockchain technology. This phenomenon is where individuals trust decentralised technologies rather than a centralised institution. Cryptocurrencies, Defi platforms, and a significant number of other technologies on the blockchain are the results of this phenomenon. Blockchain enables data storage and preservation methods that increase trust, lower fraud, and promote honesty in the digital economy, which makes it a perfect technology complement to Islamic financial arrangements. This is crucial because Islam and many other religious traditions revere the virtues of honesty, trust, and openness (Dahdal et al., 2022).

2.3 Utilisation Of Financial Technology In Zakat Collection

The traditional zakat collection carried out by the zakat administrator (Amil) includes visiting the zakat payer (muzakki) through a door-to-door system or the muzakki himself coming to the Amil to collect the Zakat. Usually, Amil faces a series of difficulties collecting Zakat, from technical difficulties such as long distances to travel to muzakki, the Amil not having enough time, transportation difficulties, and expensive and inefficient costs, among difficulties encountered (Salaudeen and Zakariyah, 2022). According to Friantoro and Zaki (2019), the development of the digital age has created new opportunities for the collection of Zakat. The lifestyle of society is becoming increasingly dependent on technology, which necessitates the transformation of the Amil of the zakat institution in

order to provide zakat services that are easily accessible to the muzakki through financial technology.

The increased use of digital devices, financial technology, and innovation have improved how Zakat is collected today. Because many Zakat payers are unsure how to calculate the exact amount of Zakat they must pay, with the aid of digitalisation, some Zakat institutions have made a calculator available on their websites. The platform can calculate the total amount of Zakat easily and quickly that must be paid based on the type of Zakat being paid, such as Zakat on income, Zakat on business, and Zakat on gold and silver (Yahaya & Ahmad, 2018). This results in enhanced collection of Zakat amount eventually (Vientiany et al., 2022).

Finally, the development of financial technology used to pay Zakat raises both advantages and disadvantages. The presence of Fintech can potentially increase the amount of Zakat that can be collected. On the other hand, fraud, cybercrime, and a slew of other issues relating to information technology are also a threat to businesses.

2.4 Adoption Of Technology Among Zakat Institutions

The collection of Zakat through Fintech at the Zakat Institution is at a deficient level of performance. Online payments made with Islamic credit and debit cards and other payment methods are examples of alternative payment methods. For instance, fewer than a quarter of all Zakat institutions in Malaysia and the UK uses technology as the primary method of zakat collection and disbursement, compared to over 60% of institutions that use other methods. These institutions are heavily using technology like the mobile banking that has proved to be user-friendly and cost-effective in zakat collection and distribution ((Yahaya & Ahmad, 2018). Ahmad et al. (2014) estimated that six out of fourteen Zakat institutions use the internet banking system as an accepted medium, accounting for 35% of total zakat acceptance. While 60% of zakat institutions do not accept zakat payments made through Internet banking, the remaining 5% do so occasionally.

Zakat payers could calculate their zakat amount, make payments, and track them easily using an online transaction platform (Ahmad et al., 2014). As a result, financial technology will provide users with a flexible and user-friendly system and effective, efficient, transparent, and quick services (Salma Al Azizah & Choirin, 2019). As a result, it has the potential to bring innovations to the financial services industry in terms of products and services.

2.5 Digitalisation of Zakat distribution

Amid the era of digital transformation, the phenomenal progress of technology is inevitable. Accordingly, Zakat payment transactions can be facilitated through technology, as Zakat is an assortment of vital instruments necessary for the successful creation of public welfare through an escalation in national Zakat reservoirs (Telaumbanua et al., 2020). Moreover, zakat digitalisation is one of the latest and more accessible methods for Zakat funds collection, making zakat payments quicker by saving time and effort and also

decreasing the potential marginal costs (i.e., consumption, administration) (Yunita, 2021). Therefore, the digitalisation of Zakat contains benefits for Muzakki and Amil, as Zakat can pay for by Muzakki directly through a digital payment platform such as numerous barcodes and websites and applications. Additionally, it enables Zakat institutions to effectively play their zakat management role professionally by authorising productive communities through social security to advance the quality of life of the poor (Utami et al., 2020).

Data lies at the heart of Zakat management. Given the essence of Zakat institutions as middlemen between Muzakki and Asnaf, the efficiency of their intermediation role relies heavily on the data they have on their sources and use of funds (Yuniar et al., 2021). Collecting strategies and allocation decisions can be made more accurately and efficiently based on the data availability. Real-time data technology can be utilised in many ways and provide various valuable benefits to Zakat institutions. During the pandemic, households are falling into poverty, and at the same time, Zakat contributions are also affected, and their amount fluctuates (Utami, Basrowi, & Nasir, 2021). The availability of real-time data helps identify this issue and enables Amil to optimise the allocation and channelling of Zakat funds from the shrinking Zakat supply towards its growing demand. Asnaf reporting is essential to ensure that Amil and management do not readily know no beneficiaries, especially those new. A digital platform to report and verify Asnaf status can be useful and is generally more efficient during the pandemic when unnecessary close physical interactions should be avoided (Telaumbanua et al., 2020).

Therefore, Zakat digitalisation offers a superior solution to properly disseminating and managing Zakat surplus, where the total Zakat amount from Muzakki can be easily calculated by the Zakat institutions and the amount to be spent on Asnaf to cater for their basic provisions. Similarly, suppose the surplus amount is significant enough for a particular state. In that case, the excessive amount can be transferred to another needy state facing a shortage of funds to satisfy the needs of Asnaf due to the pandemic, natural disasters or any other emergencies (Ninglasari & Muhammad, 2021). Thus, the adoption of a digital platform by Zakat institutions is essential for the effective, efficient and transparent collection and dissemination of Zakat with a vision to transform individuals from Mustahiq (the needy) to Muzakki (the Zakat payer) (Utami et al., 2020).

3. Discussion

3.1. Opportunities

The advancement of zakat digitisation can significantly improve the convenience of zakat payment services at zakat institutions. This is one of the benefits of digitising Zakat, owing to the large-scale social restriction policy during the pandemic. Thus, Muzakki is not required to pay Zakat at the zakat institution's office but may do so online. According to Zubaidah & Afifah (2020), the presence of easily accessible websites and applications is one of the reasons muzakki is interested in paying Zakat. Additionally, information about the programme and zakat funds can be distributed digitally via social media or other platforms (Lubis & Latifah, 2019).

Zakat digitisation, in general, possesses the following advantages. First, it enables muzakki to pay Zakat at any time and location. Muzakki is freely accessible via cell phones and personal computers via digital platforms. As a result, it may boost people's motivation to pay Zakat (Antonio et al., 2020). Second, transaction expenses are less than the cost of direct zakat payment, which needs transportation. Thirdly, the use of data blockchain to connect people in rural locations and boost the community's zakat literacy. Fourth, technological media maximises the zakat institution's transparency and accountability to establish strong corporate governance. Fifth, payment must be made for the real-time zakat payment system and the accuracy of zakat calculation (Santoso, 2019).

The Covid-19 pandemic is an ideal time to enhance digital channels for zakat fundraising since digital services usage surged dramatically throughout the pandemic. The following advantages accrue from Zakat's digitalisation. First, there is widespread usage of the internet and digital financial services and rapid technological progress (Ninglasari & Muhammad, 2021). Along with the advancement of technology, paying Zakat virtually will become a norm in the future due to its perceived effectiveness and efficiency, not just during pandemics like today. Second, the Ministry of Religious Affairs' plea to pay Zakat digitally or online to alleviate crowding. Third, reducing the possibility of a smaller distribution also provides an excellent opportunity to investigate additional potential Zakat from the broader community (Saharuddin et al., 2019).

One of the new media innovations from digital technology is the Digitalisation of Information and Communication. Digitalisation aims to achieve efficiency and optimisation in many ways, including optimisation of security and storage (Flew, 2008). "Information digitalisation is a process to change various sources of information, news, or news from an analogue format to digital format so that it is easier to produce, store, manage and distribute. Digitalisation information can be presented in the form of text, numbers, audio, visualisation, which contains ideological, social, economic and business information sources" (Flew, 2008).

3.2. Challenges and Risks

Although using technology and information improves the effectiveness of zakat administration, it also introduces several risks. According to Utami et al. (2020), digital channels for zakat management pose various hazards, including the danger of zakat fund transfer failure, sharia compliance risk, and technological information risk. Additionally, the ease with which information and Zakat may be accessed and paid online might be abused by irresponsible individuals who perpetrate cybercrimes. However, with global cybersecurity and fintech advancements, these digital hindrances may be addressed effectively.

The potential of uncollected Zakat can be maximised by zakat digitisation. Zakat institutions may partner with other financial technology (Fintech) firms to raise zakat funds. The convenience of digital zakat payment and the rapid advancement of financial technology create significant strength and potential. On the other side, the community's lack of information technology knowledge and abilities and the rise of cybercrime are both

weaknesses and hazards associated with zakat digitalisation (Amilahaq et al., 2021). In many cases, people are anxious and not fully confident about using technology, which poses further challenges in this regard (Salloum et al., 2019). Again, due to digital divide or digital inequalities, as well as the inherent complexities, many people might find it difficult to use technology in an extensive manner for zakat payment (Williamson et al., 2020).

3.3. Theoretical implications

The fundamental focus of this study was to reveal various elements that could advance and increase Zakat fund collection in today's digital era. The frequent use of financial technology, digital devices, and innovation has amended the way of collecting Zakat nowadays to reduce the substantial discrepancy between the intended and actual amount of Zakat to be collected (Kraus et al., 2022). According to research by The Institute for Development of Economics and Finance (INDEF), the digital economy's contribution to GDP in 2018 was 5.5% and is projected to increase to 6.4% by 2024 (Fauzia, Mulatsih, & Alexandi, 2021).

Accordingly, the present study unveils various thought-provoking trends related to Zakat digitalisation literature. First, the key topics related to Zakat digitalisation are Fintech, zakat collection, Muzakki, Zakat institutions and optimal allocation of funds. Second, using digital platforms as a means of Zakat collection is deemed more optimal and effective as Zakat payment can be made by the Muzakki anywhere and anytime, so the restriction to pay Zakat physically in the office of Zakat institution is no more valid. Third, the availability of a Zakat calculator has facilitated the Muzakki to calculate the exact amount of Zakat to be paid on the specific type of wealth (i.e., income, gold, business etc.) on which Zakat must be paid, as the Muslim jurists or scholars primarily did this calculation to know about the exact amount of payable Zakat. However, now it has been replaced by Fintech in the form of Zakat calculators that can be used on any digital platform (i.e., smartphone, web), and different institutions and countries have developed their calculation systems for Zakat (Rosele et al., 2022).

Fourth, various Fintech tools such as applications, e-wallets, and accessible websites have motivated the Muzakki to pay Zakat persistently because such platforms have ensured information availability, accountability and transparency about the authentic collection and distribution of Zakat funds to the Asnaf. Fifth, the operational costs of Zakat institutions tend to decrease due to digitalisation as the use of technology (i.e. blockchains, Defi platforms, cryptocurrencies, crowdfunding, etc.) via various internet networks permits institutions to spread the information widely and enables them to develop an integrated system into all states and offices. As a result, it will increase work completion and make Zakat institutions quicker in responding to multiple transactions efficiently. The study of Atiya et al. (2020) supports this notion by signifying that the utilisation of technology resulted in an improved output of Zakat institutions in the form of the increased amount of funds collection and dissemination of Zakat.

Finally, digitalisation and Fintech may also benefit the Zakat institutions to develop and maintain trustworthy internal structures by benefiting from various blockchain-based solutions for the administration of regulatory frames, internal audit structures, and

supervisory boards of Sharia, and these auditing systems are almost entirely automated, thus decreasing the labour costs required to manage such systems (Unal & Aysan, 2022). In general, this study explains the significance of Zakat digitalisation to reduce the disparity between expected and actual Zakat amount to reap the maximum benefits from this Holy deed and advance Zakat institutions' performance at reduced costs. Accordingly, zakat digitalisation is being emerged as an imperative strategy and the best solution to solve the issues related to Zakat collection and disbursement in today's digital economy.

In this context, the technology acceptance model (TAM) can be used to understand why people might want to use digitalisation and Fintech while giving Zakat. This TAM first appeared more than 25 years, and is still a popular model in technology acceptance field. This TAM is based on the psychological theory of planned behaviour and the theory of reasoned action, and has turned out as the main model for understanding human behaviour predictors towards technology acceptance or rejection (Marangunić & Granić, 2015). TAM reportedly became one of the most widely used models for gauging technology adoption to date due to its simplicity, adaptability, and soundness (Al-Emran et al., 2018).

According to the TAM, as found by Salloum et al. (2019), self-efficacy, perceived enjoyment, subjective/social norm, information quality, system quality, content quality, perceived playfulness, and accessibility are the most common external factors that can work behind the motivation of people to use information systems and technology. Similarly, according to Abdullah and Ward (2016), people's decision to use a new system is affected by different factors, including computer self-efficacy, social influence, experience, perceived enjoyment, and computer anxiety. In fact, as explained in this model, the behavioural intention to use a specific technology is influenced by the motivation and attitude, which in turn foretells the actual system use. In the end, these factors can also motivate people to use technology for zakat payment and administration.

3.4. The Conceptual Model

The synthesised conceptual framework of the study is presented in Figure 1.

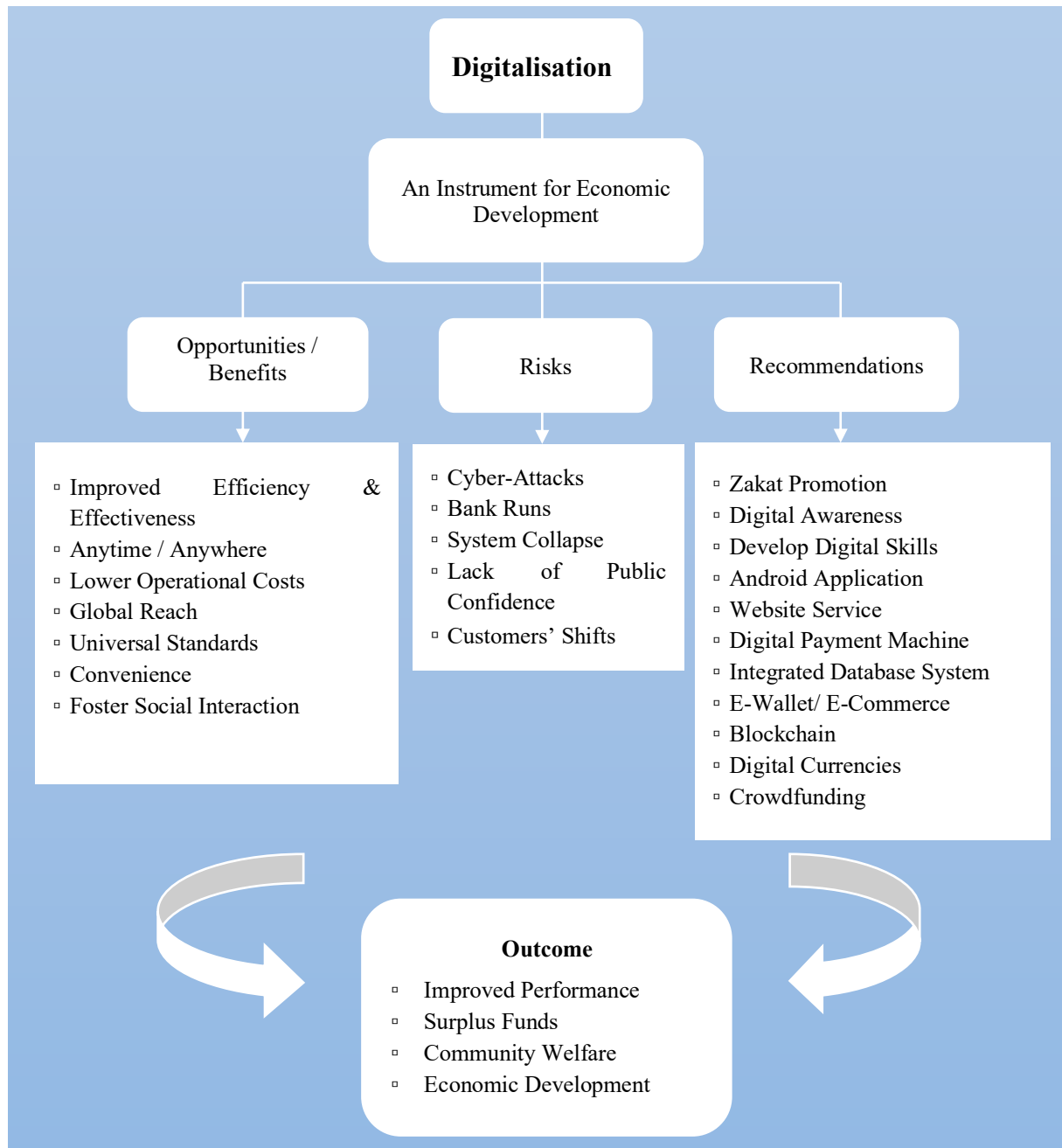


Figure 1: Conceptual Framework

3.5. Recommendations for practice

This study also sheds light on valuable information for managers and practitioners to understand the need and benefits of the digitalisation of Zakat and highlights potential opportunities and challenges originating from the adoption and use of digital platforms.

First, digital Zakat systems provide the opportunity to collect and maintain a substantial amount of funds with minimal effort and then allocate those funds in optimal ways, helps the managers to make novel value propositions and improve revenue for Zakat institutions and the community. Second, the use of digital technology also enables zakat institutions to improve their accountability, honesty, and efficiency, as these factors are crucial to build the trust of Muzakki in Zakat institutions. Thus, the zakat managers can easily report all matters related to Zakat distribution and funds management, which ultimately facilitates Muzakki to keep an eye on every activity and information of the Amil. In this vein, using any digital platform (i.e. web, application etc.) would assist individuals in paying Zakat quickly from their smartphones or laptops. Third, the managers must make comprehensive digital plans and improve their institutions' IT divisions and digital marketing, along with designing and creating e-commerce and crowdfunding. Fourth, the Zakat institutions need to collaborate with government agencies (to strengthen the resources, including access to internet networks all around the country to make digital payments possible for everyone) and also establish cooperation with religious scholars (Ulama) frequently to ensure maximum Zakat collection and distribution without any interruption (Ejbari & Bouali, 2022). So, this understanding will help the managers to establish improved relationships with various stakeholders (i.e. business partners, suppliers, Muazakki, customers etc.) to enhance the propensity of benefiting from digitalisation, and they must also focus on periodic socialisation with Muzakki about the evolving policies and adoption of the digital platform through different socialising channels and media.

Fifth, the policymakers need to understand that the adoption of any form of digital technology means structural changes in their existing business operations, so they need to organise the needed training programs for their workforce and focus on creating dynamic capabilities among them to ensure the anticipated success and benefits from the use of digitalisation. Sixth, the digitalisation of Zakat would be the most feasible way out during any disaster or pandemic, such as Covid-19, when the community cannot go around quickly. They have to maintain social distancing. In such situations, zakat collection and distribution by the use of digital platforms would be the most appropriate option (Ninglasari & Muhammad, 2021), as it would facilitate the Muzakki to pay the funds quickly and also the utilisation of those funds can be done accurately on those who are most affected by the pandemic and unable to meet their fundamental necessities.

Finally, the policymakers should also be aware of the risks associated with the digitalisation such as cyber-attacks, bank runs, system collapse, and customers' shifts are the most crucial risks as due to digitalisation the entire system and information of the institution would be visible at all structural levels (Maulida et al., 2022). Therefore, putting the security and privacy of respective institutions at risk. So, managers must take appropriate actions to address these issues in advance and keep their institutions from any potential digital hindrance. Moreover, the present study is also setting a stage for future research on Zakat digitalisation and recognising the primary objective of the Sharia to

circulate the wealth from the more affluent to the poor to overcome poverty and ensure the well-being of people. So, future research may broaden this perspective with the help of empirical evidences by focusing on various internal and external factors that could facilitate or hinder the potential benefits of digitalisation.

4. Conclusion

Zakat is a fundamental pillar and an essential obligation for Muslims. The precise calculation and honest collection of Zakat have made using digital technology for Zakat management one of the crucial drivers of community welfare and economic development by distributing the funds to the Asnaf. Using the digital platform for Zakat management has become an emerging and exciting research area that needs to be explained more thoroughly. Thus, the current study tries to fill this gap and review the extant literature on Zakat digitalisation. The primary aim of this research was to advance the understanding of the positive implications of digitalisation for Zakat management as most people and countries still follow the traditional method of Zakat payment and collection. The management of Zakat through digitalisation is also fruitful in the pandemic, so institutions can adopt database systems, Fintech, and application-based services to provide convenience for funds' raising. Moreover, the lack of sufficient skills and knowledge in the community regarding the use of digital platforms can give rise to various risks, such as cybercrimes, and this weakness can be controlled by taking appropriate measures. Support from government agencies in adopting and advancing digital technology is the prerequisite to reaping the maximum benefits of Zakat digitalisation. Future research is warranted to elaborate further on the opportunities and ways to go digital.

References

- Abdul Karim. (2015). Dimensi Sosial dan Spiritual Ibadah Zakat. *Jurnal Zakat Dan Waqaf*, 2(1). <https://journal.iainkudus.ac.id/index.php/Ziswaf/article/view/1550/1421>
- Abdullah, D. B., Abdullah, M. Y., & Salleh, M. A. M. (2017). A review of the concept of the fourth industrial revolution and the government' s initiatives to promote it among youths in Malaysia. *Journal of Social Sciences and Humanities*, 006(Special), 1–8.
- Abdullah, F., & Ward, R. (2016). Developing a General Extended Technology Acceptance Model for E-Learning (GETAMEL) by analysing commonly used external factors. *Computers in human behavior*, 56, 238-256.
- Abidin, A., & Utami, P. (2020). The Regulation of Zakat Digital Technology in Creating Community Welfare Impact on Economic Development. *Journal of Legal, Ethical and Regulatory Issues*, 23(5), 1–9.
- Alaabed, F.A. and A. Mirakhor, 2017. Accelerating risk sharing finance via FinTech: NextGen Islamic Finance. In *The 1st International Colloquium on Islamic banking and finance*. pp: 1-10.
- Al-Emran, M., Mezhuyev, V., & Kamaludin, A. (2018). Technology Acceptance Model in M-learning context: A systematic review. *Computers & Education*, 125, 389-412.
- AlMatar, F. (2015). Zakat vs taxation: the issue of social justice and redistribution of wealth. *European Journal of Business, Economics and Accountancy*, 3(3), 119-129.

- Al-Qardhawi, Y., 2014. Halal & Haram Dalam Islam (Zulkifli Mohamad al-Bakri, Terj.). Nilai: Pustaka Cahaya Kasturi Sdn Bhd.
- Antonio, M. S., Laela, S. F., & Al Ghifari, D. M. (2020). Optimising Zakat Collection in the Digital Era: Muzakki's perception. *Jurnal Dinamika Akuntansi Dan Bisnis*, 7(2), 235–254. <https://doi.org/10.24815/jdab.v7i2.16597>
- Atiya, N., Widiastuti, T., Cahyono, E. F., Zulaikha, S., & Mawardi, I. (2020). A Techno-Efficiency Analysis of Zakat Institutions in Indonesia. *International Journal of Zakat*, 5(3), 30-43. <https://doi.org/https://doi.org/10.37706/ijaz.v5i3.249>
- Che Mohd Salleh, M., & Chowdhury, M. A. M. (2020). Technological Transformation in Malaysian Zakat Institutions. *International Journal of Zakat*, 5(3), 44–56. <https://doi.org/10.37706/ijaz.v5i3.263>
- Confluent.io. (n.d.). Real-Time Data & Analytics - The Complete Guide. Confluent. Retrieved January 27, 2022, from <https://www.confluent.io/learn/real-time-data-and-analytics/>
- Dahdal, A., Truby, J., & Ismailov, O. (2022). The role and potential of blockchain technology in Islamic finance. *European Business Law Review*, 33(2), 175-192.
- Ejbari, R., & Bouali, J. (2022). Digital transformation of companies: Proposal of a global theoretical framework for understanding. *International Journal of Accounting, Finance, Auditing, Management and Economics*, 3(1-1), 348-366. <https://doi.org/10.5281/zenodo.5914528>
- Fauzia, A. S., Mulatsih, S., & Alexandi, F. (2021). Mapping the Potential of Zakat Collection Digitally in Indonesia. *International Journal of Zakat*, 6(3), 1-22. <https://doi.org/https://doi.org/10.37706/ijaz.v6i3.355>
- Firmansyah, E.A. and M. Anwar, 2019. Islamic financial technology (Fintech): Its challenges and prospect. In *Achieving and Sustaining SDGs 2018 Conference: Harnessing the Power of Frontier Technology to Achieve the Sustainable Development Goals (ASSDG 2018)*. Atlantis Press
- Friantoro, D., & Zaki, K. (2019). Do We Need Financial Technology for Collecting Zakat? *International Conference of Zakat*. <https://doi.org/10.37706/iconz.2018.133>
- Goh, T. T., Suki, N. M., & Fam, K. (2014). Exploring a consumption value model for Islamic mobile banking adoption. *Journal of Islamic Marketing*, 5(3), 344–365. <https://doi.org/10.1108/JIMA-08-2013-0056>
- Hasif, M., & Ahmad, K. (2019). Factors Affecting the Acceptance of Financial Technology among Asnaf for the Distribution of Zakat in Selangor - A Study Using UTAUT. *Journal of Islamic Finance*, 8, 035–046.
- Hassan, N. (1984). SOCIAL SECURITY SYSTEM OF ISLAM WITH SPECIAL REFERENCE TO ZAKAH. *International Centre for Research in Islamic Economics King Abdulaziz*
- Kraus, S., Durst, S., Ferreira, J. J., Veiga, P., Kailer, N., & Weinmann, A. (2022). Digital transformation in business and management research: An overview of the current status quo. *International Journal of Information Management*, 63, 102466. <https://doi.org/10.1016/j.ijinfomgt.2021.102466>
- Maulida, S., Al Amruzi, F., Hakim, B. R., & Beik, I. S. (2022). Problems and solutions in zakat digitalisation: Evidence from South Kalimantan, Indonesia. *Jurnal Ekonomi dan Keuangan Islam*, 8(1), 94-109. <https://doi.org/10.20885/jeki.vol8.iss1.art7>
- Marangunić, N., & Granić, A. (2015). Technology acceptance model: a literature review from 1986 to 2013. *Universal access in the information society*, 14, 81-95.
- Ninglasari, S. Y., & Muhammad, M. (2021). Zakat digitalisation: effectiveness of zakat management in the COVID-19 pandemic era. *Journal of Islamic Economic Laws*, 4(1), 26-44. <https://doi.org/10.23917/jisel.v4i1.12442>
- Rapi, M. Z. H. et al. (2022) 'Micro Takaful Programs for the Poor: The Malaysian Experience', *International Journal of Accounting*, 7(45), pp. 65–81.
- Rosele, M. I., Muneem, A., Rahman, N. N. B. A., & Ali, A. K. (2022). The Digitalized Zakat Management System in Malaysia and the Way Forward. *AL-IHKAM: Jurnal Hukum & Pranata Sosial*, 17(1), 242-272. <https://doi.org/10.19105/al-lhkam.v17i1.5365>

- Saharuddin, D., Anggraini, R. T., & JAmila, S. (2019). Efficiency and Effectiveness of Zakat Payroll System and Digital Zakat on the Acceptance of Zakat Funds Baznas 2016-2017. *Maqdis: Jurnal Kajian Ekonomi Islam*, 4(1), 35–44.
- Salaudeen, A. O. and Zakariyah, H. (2022) 'Challenges Hindering Islamic Microfinance Banks' Sustainable Financial Inclusion: A Case of Al-Hayat Microfinance Bank in Ogun State, Nigeria', *El-Barka: Journal of Islamic Economics and Business*, 5(1), pp. 24–50. doi: 10.21154/elbarka.v5i1.3930.
- Salloum, S. A., Alhamad, A. Q. M., Al-Emran, M., Monem, A. A., & Shaalan, K. (2019). Exploring students' acceptance of e-learning through the development of a comprehensive technology acceptance model. *IEEE access*, 7, 128445-128462.
- Santoso, I. R. (2019). Strategy for Optimising Zakat Digitalization in Alleviation Poverty in the Era of Industrial Revolution 4.0. *Ikonomika*, 4(1), 35–52. <https://doi.org/10.24042/febi.v4i1.3942>
- Shamsuddin, M. M. J. (2021, April). Aplikasi Maqāṣid Ke Atas Hukum Membayar Zakat Fitrah Mengikut Harga Beras Yang Dimakan. 591–603. <http://conference.kuis.edu.my/iconsyal/images/eprosiding/1070.pdf>
- Telaumbanua, W. R. A., Marliyah, M., & ... (2020). The Role Of Digitalization In Zakat To Increasing Zakat Acceptance (Case Study in BAZNAS in Medan City). ... of management and ..., 2(1), 1–11. Retrieved from <http://jurnal.uinsu.ac.id/index.php/jombi/article/view/9417%0Ahttp://jurnal.uinsu.ac.id/index.php/jombi/article/download/9417/4403>
- Unal, I. M., & Aysan, A. F. (2022). Fintech, Digitalization, and Blockchain in Islamic Finance: Retrospective Investigation. *FinTech*, 1(4), 388-398. <https://doi.org/10.3390/fintech1040029>
- Utami, P., Basrowi, B., & Nasor, M. (2021). The Role of Digital Zakat Towards Economic Development at Slums in Indonesia. *Asian Journal of Business Environment*, 11(3), 45-51. <https://doi.org/10.13106/ajbe.2021.vol11.no3.45>
- Utami, P., Suryanto, T., Nasor, M., & Ghofur, R. A. (2020). The Effect Digitalization Zakat Payment Against Potential of Zakat Acceptance in National Amil Zakat Agency. *Iqtishadia*, 13(2), 216. <https://doi.org/10.21043/iqtishadia.v13i2.7809>
- Vientiany, D., Arfa, F. A., & Ruslan, D. (2022). E-Zakat: Breakthroughs and Innovations in Information Technology in Increasing Zakat Receipts in Indonesia. *International Journal of Artificial Intelligence Research*, 6(1.2).
- Williamson, B., Eynon, R., & Potter, J. (2020). Pandemic politics, pedagogies and practices: digital technologies and distance education during the coronavirus emergency. *Learning, Media and Technology*, 45(2), 107-114.
- Wintermeyer, L. and A.H. Basit, 2017. The future of Islamic FinTech is bright. *Forbes*. Available from <https://www.forbes.com/sites/lawrencewintermeyer/2017/12/08/the-future-of-islamicfintech-is-bright/#47e1b19a65fa>.
- Yahaya, M. H., & Ahmad, K. (2018). Financial Inclusion through Efficient Zakat Distribution for Poverty Alleviation in Malaysia: Using FinTech & Mobile Banking. *The 5th International Conference on Management and Muamalah*, 2018(September 2000), 15–31. www.un.org.my
- Yuniar, A. M., Natasya, A., Kasri, R. A., & Siswanto, D. (2021). Zakat and Digitalization. In *International Conference of Zakat* (pp. 523-534). <https://doi.org/10.37706/iconz.2021.298>
- Yunita, P. (2021). Developing a modern zakat management model digital technology 4.0 version. *AZKA International Journal of Zakat & Social Finance*, 139-156. <https://doi.org/10.51377/azjaf.vol2no1.47>
- Zakariyah, H. et al. (2022) 'Enhancing waqf management through fintech in Malaysia: A Conceptual Framework on the Technology Acceptance Model (TAM)', *Journal of Emerging Economies and Islamic Research*, 10(2), pp. 62–73.
- Zubaidah, S., & Afifah, A. (2020). Development of Zakat Management Digitalization in Indonesia. In *International Conference of Zakat* (pp. 459–468). <https://doi.org/10.37706/iconz.2020.227>