

CHAPTER 17

Zakat Digital Management Techniques

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Abstract Today, poverty is one of the biggest challenges that exist in the world [Kuzudisli, Fight Against Poverty From the Islamic Point of View: The Wealth Distribution and Share. 5(1), 9–15 (2017). https://doi.org/10.17265/2328-7144/2017.01.002]; it is regarded as the most crucial and the most significant social problem of the modern age [Saifee, Islamic Strategies for the Elimination of Poverty from the Society (June 2012), 2018. https://doi.org/10.13140/RG.2.2.28281.16486], a danger to belief, to morality, to safety, to family, to society, a plague and

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a misfortune [Qaradawi, Fekeh Al Zakat, 1123 (1973)], a destructive force from all aspects [Salleh, Contemporary Vision of Poverty and Islamic Strategy for Poverty Alleviation (2017). https://doi. org/10.1177/2158244017697153], a curse at individual as well as at a community level and a threat to humanity [Mian Akram and Afza. Dynamic Role of Zakat in Alleviating Poverty: A Case Study of Pakistan (56013), 2014]. According to UNDP, more than 3 billion people representing approximately half of the world's population, live on less than \$2.50 a day. Moreover, more than 1.3 billion people live with less than \$1.25 a day. Half of the global poverty is located in the Muslim majority countries. Definitions of poverty are varied. However, the UNDP adopted a few years ago in the Human Development Report the Multidimensional Poverty Index (MPI). The MPI tries to capture some human deprivations at the household level across the same three dimensions as the HDI (health, education, and living standards). MPI covers ten deprivation indicators, including school attainment and attendance, nutrition, child mortality, assets, and access to some essential services. Currently, 26.5% of adults who are employed are part of the working poor representing less than \$3.10 a day in purchasing power parity terms. If poverty is not controlled soon then it will be alarming.

Keywords Digital • Management • Zakat • Technique • Mechanisms

Introduction

Zakat: An Islamic Approach to Poverty Alleviation

Islam is a religion of justice and fairness that has no tolerance for a community that remains idle when there exists among them people who cannot afford necessities such as the daily bread, a cloth to cover their back, or a dwelling to shelter them. In fact, it is an obligation upon every Muslim to dedicate their blood, sweat, and tears to fulfill their basic needs. However, in case a Muslim is confronted by circumstances that restrict him from earning his necessities, it falls within the responsibility of the Muslim community to sponsor him and ensure that he does not fall prey to hunger, nudity, and misery. Abu Musa (May Allah be pleased with him) reported:

Messenger of Allah (\Box) said, "The relationship of the believer with another believer is like (the bricks of) a building, each strengthens the other." He (\Box) illustrated this by interlacing the fingers of both his hands.¹

In a similar vein, "Islam denies a community where there is accumulation of wealth in a few hands, where no hoarding and no profiteering; a society in which there will be none slums nor multi-millionaires, neither the exploited proletariat nor the exploiting bourgeoisie" (Bello, 2010).

In order to bridge the gap between the rich and the poor, to alleviate poverty to the extent of eradicating it, to eliminate inequality and to achieve socioeconomic justice, Islam provides a compelling social security instrument that guarantees a permanent, smooth, and uninterrupted flow of wealth from the haves to the have nots. This effective tool for wealth distribution is called Zakat.

The meaning of the word Zakat linguistically varies from being purified to being guiltless, to being referred to as a mandatory payment of charity, to justify and to praise oneself, depending on the verse it is mentioned in, in the Quran. While technically, it refers to the act of a part of the wealth of a Muslim being given away for distribution in the cause of eight specifically mentioned groups of beneficiaries. In a nutshell, Zakat is defined as the right of the poor.

Allah has made Zakat compulsory upon every Muslim who meets specific criteria, to give a predetermined portion of his wealth. In fact, Hayeeharasah, Sehvises, and Ropha (2013) have said: 'Paying zakah is an obligation for Muslim when possessing assets that cover a specific amount according to Islamic rule (nisab) and reach the time period of a year (haol).'

The benefits of Zakat are manifold from both social and economic aspects cannot be neglected. At a social level, it helps the community at large by instilling values of collectivism through the teachings of assisting and supporting the less privileged in their community. It spreads social cohesion and mutual solidarity, which minimizes social disparities and social frictions between classes. Ibrahim (2014) believes that 'apart from what Zakat produces in giving out to poor and helping them to sustain their basic necessities of life, it also serves as a means of creating equality and reducing poverty in the society at large.' Hence, it is seen as social leverage for Muslim communities.

¹ Al-Bukhari and Muslim. Arabic/English book reference: Book 1, Hadith 222.

At the economic level, Zakat is ordained to create and maintain an economic balance within the Muslim society to redistribute wealth from the wealthy to the less fortunate. According to Sheikh Yusuf al Qaradawi in his book *Fiqh al zakah* (Volume I), Zakat has been described as 'a way to regain balance and equilibrium in social and economic life.' This redistribution of wealth will accelerate poverty alleviation both with social justice and social security. In a similar vein, Zakat payment has the power to speed up the velocity of money, which will consequently help the economy to grow faster.

Zakat has dual-fold impact on society, wherein the rich are cleansed off the feelings of greed and acquisitiveness while the poor are liberated from the misfortune or bondage of unsatisfied needs. While the rich experience purification of the soul and mind from thoughts of selfishness and stinginess by detaching from materialism, the poor are provided the opportunity to venture into living outside the dimensions of poverty, ensuring dignity within society. This will consequently make the poor feel respected in a decent human society that cares about them and their necessities. This will strengthen the community ties, prevent one from feeling ignored, rejected, outcast, abandoned, deficient, and lost, which may cause one to engage in criminal activities such as robbery, looting, and sometimes murder.

HISTORY OF THE ZAKAT MANAGEMENT TECHNIQUES

In the earlier days, at the time of the advent of Islam, a majority of people in Arabia lived in poverty, including our Prophet and most of his companions. There was widespread inequality in the quality of life, wealth, provisions, and skills, and absence of social services made matters worse. (Bashir, 2018)

Yahya related to me from Malik that he heard that the Messenger of Allah, may Allah bless him and grant him peace, entered the mosque and found Abu Bakr as-Siddiq and Umar Ibn al-Khattab there. He questioned them and they said, "Hunger has driven us out." The Messenger of Allah, may Allah bless him and grant him peace, said, "And hunger has brought me out." They went to Abu'l-Haytham ibn at- Tayyihan al-Ansari. He ordered that some barley that was in the house be prepared and he got up to slaughter a sheep for them. The Messenger of Allah, may Allah bless him and grant him peace, said, "Leave the one with milk." He slaughtered a sheep for

them and brought them sweet water and it was hung on a palm-tree. Then they were brought the food and ate it and drank the water. The Messenger of Allah, may Allah bless him and grant him peace, recited, "Then, on that day, you will be asked concerning pleasure." (Sura 102 ayat 8)²

The concept of Zakat was first implemented and practiced in that early Muslim community in Mecca in 9H³ by the Prophet (peace be upon him) with the core objective of enhancing poor people's life to facilitate for them the worship of Allah by all means. Although Zakat became compulsory after the Hijrah to Medina according to the majority of scholars some of which (Shawkani, 1834) (Al-Nawawi) (Imam Malik), the practice of the same had begun years earlier in Mecca (Damilola & Nassir, 2015). When it was first imposed in Mecca, the amount of money given away as Zakat was left to the discretion of the believers. The terms *hawel, nisab, Zakat* rate and types of properties subject to Zakat, the individuals entitled to receive Zakat, and the Zakat payment procedure were all determined only after the Hijrah to Medina. (Kahf, 1999)

The Zakat system was a centralized structure managed by the state that involved the Zakat managers, who were known as *Amils*. These were individuals personally designated to collect the Zakat by the Prophet (peace be upon him), at a prescribed rate, on fair terms from the fortunate to disburse it amongst the less fortunate in the same area (Wahid & Ahmad, 2017).

As narrated by Mu'adh (May Allah be pleased with him) when reported:

The Messenger of Allah (\square) sent me as a governor to Yemen and (at the time of departure) he instructed me thus: "You will go to people of the Scripture (i.e., the Jews and the Christians). First of all invite them to testify that La ilaha ill Allah (There is no true god except Allah) and that Muhammad (\square) is His slave and Messenger; and if they accept this, then tell them that Allah has enjoined upon them five Salat (prayers) during the day and night; and if they accept it, then tell them that Allah has made the payment of Zakat obligatory upon them. It should be collected from their rich and distributed among their poor; and if they agree to it, don't take (as a share of Zakat) the

² English reference: Book 49, Hadith 28/Arabic reference: Book 49, Hadith 1701.

³9H refers to the 9th year of the Hijra of Prophet Muhammed from Mecca to Medina in year 622G (Gregorian).

best of their properties. Beware of the supplications of the oppressed, for there is no barrier between it and Allah."4

"The whole Zakat Management System managed to live up to the standards of modern principles while maintaining simplicity" (Arif, 2017). The appointed Zakat administration officers were in every country (Masyita, 2018). Qaradawi stated that more than twenty-five companions were appointed by our Prophet (peace be upon him) as Zakat officers throughout the Arabian Gulf. The primary function of these officers was to collect Zakat from the rich, register, and audit the Zakat funds collected, look after the Zakat property and distribute it to the eligible recipient.

The Prophet (peace be upon him) had succeeded in laying down a strong foundation to administer Zakat through his wisdom and leadership by introducing principles of division of labor, distribution of authority, and maintaining records or logs of the Zakat funds being managed. The successful implementation of an effective Zakat management and distribution system by the Prophet (peace be upon him) resulted in the elevation of the standard of living of Muslims, which in turn increased the passion for upholding Islam (Saad, Sawandi, & Mohammad, 2016).

After the death of Prophet Muhammed (peace be upon him), during the time of the first Caliph Abu Bakar Siddique (R.A.), the rules, regulations, and management system devised by Prophet Muhammed (peace be upon him) remained the same without any modification. However, the major incident that occurred during his reign was the refusal of the peninsula to continue paying Zakat after the Prophet's death. Abu Bakar Siddique (R.A) sent armies that subdued these rebels in large-scale battles as he considered Zakat as the right of the needy (Micheal Bonner).

The Era of the 2nd caliph Umar Ibn al-Khattab (R.A.) is considered very significant as a Zakat management system, and laws had encountered several substantial changes and modifications through Ijtihad to coup with the social reality. The administration of Zakat was strengthened through the establishment of *Bayt Al-Mal* for the management of Zakat. (Akbar) *Bayt Al-Mal* constitutes a place where the wealth was administered and recorded through its storage, accumulation, and distribution. This wealth includes *Zakat*, *kharaj*, *jizya*, *usyr*, *booty*, *fay*, and many others.

⁴ Narrated by Al-Bukhari and Muslim/Grade: Mtafakunalayh.Arabic/English book reference: Book 9, Hadith 1077.

Besides, Umar Ibn al-Khattab (R.A.) formalized the system for the management of Zakat through proper distribution of power and responsibilities. Medina was made the center of administration while other branches were open across Muslim cities to help establish the formal system for the effective collection and distribution of Zakat. Managers (*Amil*) and other staff of Zakat were instated as permanent government employees, qualifying them to receive a continuous flow of wages, thus, motivating them to become more committed to performing their assigned responsibilities. Furthermore, efficient checks and balance were placed in the form of officers who audited/monitored the tasks related to Zakat, and its property.

Umar Ibn al-Khattab introduced the concept of metamorphosing the lives of Zakat recipients to become eligible Zakat payers too. This was carried forward by transforming the lives of the poor who were eligible to receive Zakat through sustainable and overall development of the same using the Zakat funds. Umar Ibn al-Khattab (R.A.) ensured that all the money in the *Bayt Al-Mal* was spent in the cause of Zakat at the end of the year to avoid embezzlement or exploitative activities of the Zakat funds. To prevent exploitation activities and misappropriation of Zakat funds, Umar Ibn al-Khattab spent all the money in *Bayt Al-Mal* at the end of the year (Saad et al. 2016).

The management of the Zakat system was very efficient during the time of Umar Ibn al-Khattab to the extent that certain provinces of the Islamic State were able to overcome poverty. It was reported that Mua'dh Ibn Jabal had sent the proceedings from Yemen, for three consecutive years, after satisfying the needs of the province, in quantities of one-third, one-half and full, respectively, to Medina for further disbursement (Kahf, 1999).

During the time of the 3rd caliph Othman (R.A), Zakat management system as regarded as similar to the previous during Umar Ibn al-Khattab's reign with a little difference in practice whereby he divided property in two types: apparent property and non-apparent property. He made Zakat on the apparent property, which are agriculture crops, livestock, etc., to be paid through *Bayt Al-Mal*, while the non-apparent property was left to the individual desire (Wahab, Rahim, & Rahman, 2014). However, if he learned that some people were not paying Zakat, he would take it from them by force.

This practice remained the same later on during the Umayyah's Empire, and people were paying the Zakat of their non-apparent assets by themselves as they did not trust the rulers. However, during the time of Caliph

Umar Ibn Abd Al Aziz, who was known for his trustiness, righteousness, straightness, rectitude, and probity, things evolved. In fact, people rushed to pay their Zakat to the state and Zakat management became fully centralized as it was before the reign of Caliph Othman, whereby Zakat collection and distribution was assessed, controlled, and managed by Bayt Al-Mal. During his leadership, there was a surplus of Zakat fund in Bayt Al-Mal as Zakat eligible receivers could not be found (Faisal, 2011). On the attribution of Suhail bin Abi Salih, Abu Ubaid narrated that a man from the Ansar said: Umar ibn Abdul-Aziz wrote to 'Abd al-Hamid bin' Abd al-Rahman in Iraq: Give people their Zakat. Abd al-Hamid wrote back to him: I gave people their Zakat and remained in Bayt Al-Mal. Umar wrote to him: Check everyone indebted not in luxury, and not in profusion and give him to pay back his loan. He said 'I have spent them and remained in Bayt Al-Mal." He wrote to him: "Help every young man wants to marry." He wrote to him: He remained in the Bayt Al-Mal, and wrote to him after the exit of this: to see who was a tribute to the weak of his land, lend him what strengthens the work of his land, we do not want them for a year or two. Also, Caliph Umar Ibn Abd Al Aziz directed Zakat fund to be distributed to the unfortunate in Africa. However, Yahya could not find the needy there; so then, he used the Zakat funds to free slaves (Saad et al. 2016). Zakat surplus was also used to build houses that were given to the homeless, to buy horses and animals that are suitable to transport people who did not have a vehicle at the time and to fund young people who wanted to get married.

These channels of Zakat distribution were employed by Caliph Umar Abdul Aziz to evade the accumulation of undistributed funds of Zakat. The diversification of Zakat distribution channels had benefitted the Muslim community back then. Thus, it can be concluded that under a centralized and fully controlled non-corrupt government, the management of Zakat becomes increasingly efficient.

This system prevailed until the downfall of the Islamic rule during the eighteenth and nineteenth centuries when the Islamic lands were colonized. During that period, Zakat as an institution collapsed and was abandoned in favor of secular strategies enforced by the colonizers. As a result, the Muslim world, postcolonization, witnessed poverty; an increase in income inequality; social insecurity, and so on. These postcolonial new strategies showed their inefficiencies, increasing poverty and wealth inequalities.

Various Islamic countries, later, replaced the Zakat system with elements or institutions of almsgiving that funded and delivered humanitarian support. However, they have been ineffective and unsustainable when compared to the potential that the Zakat system has to offer, which is the tools employed to empower the poor and destitute with only the essential means of livelihood.

Modern Management Techniques of Zakat and Its Challenges

The recent decades have witnessed serious efforts from organizations, institutions, and states toward the institutionalization of Zakat and the implementation of an efficient system. Even though due to some factors, namely, technology and privatization of Zakat institutions, Zakat collection has witnessed a significant rise. However, results are a mirage and Zakat institutions worldwide still suffer from several obstacles and imperfections, which have been generally managed informally. Zakat administration in most jurisdictions has been based on traditional methods with inherent challenges in the calculation, inadequate collection mechanisms and inefficient distribution channels, and so on. This often results in skepticism on the part of both Zakat payers and recipients.

One of the most supported suggestions to overcome this widely widespread skepticism that surrounds the collection and distribution of Zakat is the institutionalization of this system to derive the optimum benefit from its vast potential for society. According to Mutmainah (2015), institutionalizing the Zakat system while creating a suitable governance procedure is one of the earliest propositions recommended to reinforce Zakat and overcome its cited deficiencies. In fact, the role of government institutions to take over the systematization of this pillar is considered imperative. Only six countries in the world have made the governmental collection of Zakat compulsory according to the 2017 report produced by BAZNAS and the UNDP. The report further noted that in most Muslim-majority countries, there did not exist any form of a governmental system that governed the collection and distribution of the Zakat (Beik, Buana, & Pickup, 2018).

A glimpse back into our history throws light on the unmistakably crucial role the State played in governing, supervising and controlling Zakat implementation especially at the time of the Prophet (peace be upon him),

wherein the *Amils* overlooked the smooth functioning of the collection and distribution of Zakat. The State is even entitled to modify the rules of Zakat in the matters of its detailed implementation, provided the alteration remains within the spirit of Quranic precepts (Kasiam, 2009)

To revive the Zakat system in its traditional form is neither feasible nor efficient for our current times. Thus, this has to be managed by embracing the use of the ever-advancing technology of our times. Indeed, the emergence of the latter that seeks to improve and enhance the design and delivery of financial services, the traditional Zakat system seems to have found its misfortune. However, governmental bodies, today, are at a better position to harness the power of technology to realize and attain better the goals and the objectives of Zakat.

Disruptive innovation must be sought after and adopted while executing the collection as well as the distribution of Zakat.

Calculation Challenge

The various issues that the existing Zakat system are explained further; one of the core reasons that explain Muslims' abstinence toward paying Zakat is the accounting problem. Gambling, Kareem (1986) contended that one of the primary objectives of accounting in an Islamic society is to provide information to enable the individual to determine his Zakat liabilities as specified in the Shari'ah. At the time of the Prophet (peace be upon him) and the Caliphas, *Amils* were appointed to fulfill the duty of Zakat accounting, collection, and distribution. This discharged the Zakat payers from the responsibilities of carrying out most of the tedious work. However, due to the gap in information that is widely prevalent today, Muslims are encountering the problem of Zakat accounting, which prevents them from paying their dues. Thus, the government should undertake suitable financial technology strategies that are dedicated to increasing the awareness of Muslims to enable them to determine their Zakat obligations.

There have been numerous attempts by non-governmental institutions to assist Muslims in the calculation of their Zakat through various applications and software. These are mainly website or phone application calculators that help to calculate the total amount needed to be paid according to the type of Zakat such as Zakat on income, Zakat on business, Zakat on gold and silvers and others. (Ahmad, 2018) Some examples of such devices

are ZakatPay, Zakat calculator by the National Zakat Foundation, Zakat calculator by Islamic Relief Worldwide and so on.

However, clarifying the intention behind the acquisition of an asset precedes calculation of the amount to be paid in Zakat. This is because the intention that resulted in the acquiring of the asset is a decisive factor that determines whether Zakat should be paid on that property or not. For instance, if a woman bought jewelry with the intention of adornment, according to Imam Malik, she is not required to pay Zakat; however, if she intended to trade with it or save it or rent it, then, it becomes required to have Zakat paid upon it. The drawback with the applications mentioned above is that, the intention for the acquiring of an asset that makes the same required to be paid Zakat upon is neither investigated nor clarified. As a result, the amounts calculated through these apps do not necessarily be authentic. Also, there are differences of opinion amongst the juristic schools with regards to Zakat calculation. For example, in a similar vein with the previous example, when Imam Malik, Imam Shafii and Imam Ibn Hanbal agreed that jewelry intended for adornment is not Zakatable, Imam Hanafi said it is. Such differences usually add on to the confusion of the Zakat payer whom we witness regularly depending on scholars for clarification. These deficiencies are yet to be addressed, and the government must pay attention to finding an effective solution.

Collection Challenge

Another challenge that exists in setting up an effective Zakat system is the failure to realize the full potential of Zakat amount in its collection. Indeed, some researchers claim that, of the existing Zakat systems, not one has been able to achieve more than 25% of the Zakat potential in its form of collection (Haq, Binti, & Wahab, 2017) This could be explained by the unwillingness amongst Zakat payers to pay their Zakat due to the lack of trust that exists amongst people in paying their Zakat to third parties, and from the government side collection is costly and the methods adopted are not effective the reason why Zakat collection is yet to be effective.

Fortunately, the emergence of digital technology (Internet and mobile application) created vast opportunities to develop smooth and thrifty tools for the direct collection of Zakat. Rachman and Salam (2018), divided these tools into two main categories: crowdfunding and information technology media.

The rise of charity-based crowdfunding platforms in the recent years have shown platforms being set by the creator, who is either an individual or an institution, calling for collection of funds to support campaigns through the acceptance of donations. These campaigns often contain detailed information that explains the flow of disbursement of these funds and the various usages of the same. A Zakat distribution can adopt a similar program, wherein the proposed campaign is based on principles that prioritize the interests, justice, and welfare of the Mustahiq.

Processing transactions payments through information technology media, on the other hand, takes the form of a Zakat payer proceeding to make a payment through e-commerce channels or marketplaces. For instance, Zakat payer shops online and then proceeds to pay his Zakat through one of those websites, which are in collaboration with governmental bodies or NGOs. There are different Zakat payment channels like Zakat mobile applications, Islamic banking tools such as mobile banking that facilitates transactions and other online systems that are unlike crowdfunding; as these are only the tools that enable Zakat payment transactions. For instance, in Malaysia, according to (Lubis, Yaacob, Omar, & Dahlan, 2011) most Zakat institutions are in the process of making Zakat information electronically available to the public through the development of E-Zakat platforms

The use of the above-cited digital devices and financial technology by some countries such as Malaysia and Indonesia have helped to slightly increase the amount collected in Zakat relative to its potential. However, the impact of the same falls very short from justifying its actual potential. For instance, the potential of Zakat in Indonesia is considered quite immense. However, according to (Canggih, Fikriyah, & Surabaya, 2017) the realization of Zakat collection compared to its potential is as low as 0.09% (Friantoro & Zaki, 2018). In Malaysia, the Zakat amount realized is only 19.4% in the collection (Payers & Selangor, 2018) This could be explained by the increasing concerns over online fraud, cybercrime, data security and some other issues related to the internet of things (IoT).

To achieve the optimum level of Zakat collection, it is immensely crucial that the concerns as mentioned earlier are addressed and tackled with the use of blockchain technology to facilitate a safer and more secure passageway for transactions and payments.

Without a doubt, Zakat collection methods have been evolving from year to year, but unfortunately, the mediums for Zakat distribution have failed to meet the improvement that Zakat collection has undergone over the years. Thus, much work and innovation are still needed to improve and benefit the *Asnaf*. (Lubis et al., 2011). The gap between Zakat distribution and collection is a result of non-transparent and unreliable distributors, which has resulted in the lack of trust amongst the Zakat givers. Zakat payers are interested to know where and to whom has their Zakat contributions been channeled to (Ahmad, 2018). Moreover, high costs of distribution further fuel this, besides the non-confirmation of the authenticity of the recipients of Zakat, the arduous processing of Zakat and disturbing level of involvement of bureaucracy that hinders the speed of disbursement (Lubis & Azizah, 2018) has resulted in the failure to distribute Zakat most efficiently and effectively (Haq et al., 2017).

Transparency and Trust Challenges

Zakat in Muslim countries is lacking transparency and reliability in the distribution process, which incidentally was the same reason that prevented Muslims from paying their Zakat during the reign of *Banu Umayyah*. The information on the collection and distribution of Zakat is, in most cases, inaccessible to the public, suggesting a low level of transparency in the Zakat institutions (Taha et al., 2017).

Several factors lead to the trust problem that occurs when payer want to pay Zakat to *Amil*. These factors are the reputation of the institution that plays a significant role, the contact person who has a strong positive influence on the corporate image of service firms in the hospitality industry.

The fulfilment of the principle of transparency may be achieved through the embracement of Blockchain technology that is designed to be an open tamper-proof ledger that provides all information about the amount of Zakat collected, the disbursement flow, the official financial reports and the operational accountability which will consequently increase the effectiveness and responsibility of service in Zakat management.

The Islamic Social Financing App is the first of its kind to have leveraged the blockchain technology mentioned above, initiated by the International Centre for Education in Islamic Finance (INCEIF) in partnership with AidTech, a Dublin-based FinTech company; and the International Federation of Red Cross and Red Crescent Societies. This application was both well received and awarded accolades by the Islamic Development Bank Group as well as the IE Business School in Madrid in 2018.

This app provides its users to choose from an array of projects such as water irrigation, sanitation, poverty, etc. to direct their contributions. Upon the selection of the project, users fulfill their payment through a secured gateway. The payers are notified with notes of thanks through the sophisticated features of blockchain once all the money donated by the user is completely utilized. Governmental Zakat Institutions must establish a similar rigorous governance structure that corresponds with the functionality of the Islamic Social Financing App to enhance transparency and operating efficiency.

According to some empirical studies (Hakim, 2014); (Mutmainah, 2015), variables of accountability, financial transparency, and independence contribute to the Zakat payer's awareness and willingness to pay Zakat. Thus, the eventual generalization of such governance principles among Zakat institutions would undoubtedly increase their efficiency and contribution to poverty alleviation and social development. As a result, the community's trust and confidence are restored through the establishment of good governance and the transparency of Zakat management (Rachman & Salam, 2018).***

Distribution Challenge

Another major hindrance in the process of establishing an efficient Zakat system is the discrepancy that exists between the amount of Zakat that is collected and the amount distributed. According to Azman, Mohammad and Syed Mohd Najib (2012), what is collected is unfortunately not appropriately and effectively distributed. In other words, it is not put to the right use. This misuse factor is explained by Ali et al. (2017) as to how Zakat institutions handle and play their role as a medium of distributing the fund collected from Zakat payers to those entitled to receive Zakat.

The Zakat funds collected are supposed to be dedicated to the use of empowering Asnaf to increase the quality of their life at the micro as well as the macro levels. The Asnaf are supposed to be transformed from being the receivers of Zakat to becoming the payers of Zakat in the long run. This can only be achieved when the Zakat funds are specifically directed toward developing opportunities for the education, skills, and training of the Asnaf, which would eventually allow him/her to have access to employability or to start a business in the future. Unfortunately, the current practices entail the Asnaf being directly handed over the sum of money required to fulfill their short-term needs. As a result, the Zakat

money goes through the vicious circle of invoking no sustainable value in the long run for its receivers.

A recent example is the Zakat funds' use in Kenya that benefits more than 1.2 million people through the purchase of seeds and farming packets. This successful project, which is managed by the International Federation of the Red Crescent (IFRC), has actually witnessed the transformation of the communities involved from the subsistence and needbased category (*daruriyyat*) to the level of *hajiyyat* (complementary-based category). Thus, the net effect of the project was the movement of groups of people from poverty to become Zakat payers for those of lesser fortune, until poverty is eventually eradicated (Umar, Abdul, & Alchaar, 2018).

However, with the increase in the trend to defraud authorities amongst the public to enjoy the benefits of being Zakat beneficiary, there exists a confusion problem arises to determine who deserves Zakat payments as the growing trend to defraud authorities can no longer be debated. In the time of the Prophet (peace be upon him), he did not want to give Zakat to people who ask for Zakat but created a fact-finding group that finds and determines who is entitled to receive Zakat. As a good Muslim, many of them feel that they are not allowed to be paid Zakat money (Masyita, 2018). This is in stark contrast to the present circumstances where identifying and locating the rightful *Asnaf*s of all eight categories have become tedious.

Despite most Zakat institutions and NGOs possessing a comprehensive database and access to information technology, these institutions still struggle to obtain useful information on *Asnafs* and identify potential *Asnafs* in a region.

In a similar vein, proving to Zakat payers that the recipients selected are rightful *Asnaf*s and determining that their Zakat is directly utilized for the needs of those who are eligible is another issue that most institutions and NGOs face. Some of these institutions have successfully overcome the tracking issue with the utilization of the blockchain tracking system.

Bureaucracy is yet another significant barrier that exists to the establishment of a systematic and effective Zakat distribution system, which reduces the efficiency of operations and is time-consuming.

The speed of disbursement of Zakat funds is different from one country to another, depending on the method adopted for the distribution and the spread of the IoT in it.

For instance, in Malaysia, there are mainly three methods of disbursement (monetary), namely, cash, check, and internet banking. According

to the Zakat officers, the most popular way to distribute funds amongst the recipients is through internet banking, as more than 80% of the *Asnaf* today hold bank accounts. However, in certain instances such as the application of an *Asnaf* to purchase a bicycle, the Zakat funds are distributed in the form of a check to ensure the proper exercise of the funds provided. Thus, the type or method of distribution differs according to the circumstances (Ahmad, 2018). These methods help to increase the velocity and acceleration of distribution.

In some countries, in stark contrast to Malaysia, the mode of distribution that is adopted is still very traditional in nature. It is important to note that the speed of disbursement becomes a significant concern in cases where the *Asnaf* requires financial help on an immediate basis, such as in the case of emergencies. In such circumstances, the process and procedures adopted by the Zakat institutions can prove to be cumbersome and even fatal. With the advancement of technology nowadays, Zakat institutions can generate a spot system that fulfills the need for such cases.

Blockchain can potentially improve efficiency, streamline the process, decrease audit burden, and ensure quick delivery by significantly reducing bureaucracy and paperwork as well as reducing cost. This is usually done with the help of smart contracts built on the blockchain. A smart contract is a computer program envisioned to digitally facilitate, verify, or enforce the negotiation or performance of a contract. Smart contracts allow the execution of transactions without third parties. These transactions are trackable and irreversible.⁵

All the aforementioned issues need to be tackled to ensure that the Zakat is moving on the right track. Today, with the emergence of financial technology that seeks to improve and enhance the design and delivery of financial services, we can say that Zakat traditional system has found its misfortune. The financial technology can help to address all the deficiencies of Zakat and replace the classical approach by a new, more sophisticated, efficient, effective, and transparent one. There have been several tentative to tackle different problems of Zakat process, but none of them attempted to create a whole new technological design that solves the deficiencies all along the Zakat process.

 $^{^5\,}https://medium.com/@abhibvp003/smart-contracts-on-the-blockchain-a-deep-dive-in-to-smart-contracts-9616ad26428c$

Conclusion

This chapter dealt with the digital management techniques of Zakat, highlighting at the beginning how the Zakat could be the Islamic approach to alleviate poverty challenges. The chapter further outlined the Zakat management techniques throughout history and later tackled the current and modern Zakat management techniques. In fact, the innovate Zakat management has few challenges that the blockchain and new technologies fixed like the Calculation, collection, Distribution, Transparency and Trust Challenges.

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