The Role of Financial Technology in Determining the Priorities of Distributing Zakat Using Artificial Intelligence to Achieve Maqasid Al Sharia

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ABSTRACT

Financial technology has entered all aspects of life, so we need to benefit from it in zakat management, especially emerging technologies such as artificial intelligence, which has entered several fields. One of the problems facing zakat management institutions is determining priorities in distributing zakat to legitimate banks, especially with the scarcity of zakat funds relative to the number of those in need of zakat. Therefore, this research aims to present proposals to benefit from artificial intelligence technologies in zakat management and determining priorities according to collecting data related to those in need and analyzing this huge data using machine learning and deep learning techniques. The researcher used the analytical inductive approach, and the results of this research showed the importance of using artificial intelligence in managing zakat funds to achieve the objectives of Islamic law. Therefore, this research is considered a starting point for activating artificial intelligence in zakat management institutions and renewing the means to achieve the objectives of Sharia.

Keywords*: financial technology, zakat, artificial intelligence, Maqasid Al Sharia.*

INTRODUCTION

Zakat is one of the pillars of Islam. Allah the Almighty has linked prayer and zakat in many places in the Holy Quran, such as His saying: {And establish prayer and give zakat} [Al-Baqarah: 43]. The Prophet (peace and blessings of Allah be upon him) explained that zakat is one of the pillars of Islam. It was narrated on the authority of Ibn Umar, may Allah be pleased with them both, that the Messenger of Allah (peace and blessings of Allah be upon him) said: "Islam is built on five: testifying that there is no god but Allah and that Muhammad is the Messenger of Allah, establishing prayer, paying zakat, Hajj, and fasting Ramadan." (Bukhari , 1422 : 1/ 11))

The world is now living in the age of digital transformation, and the Fourth Industrial Revolution and rapid and tremendous progress in technological and technical means have emerged. These means must be used correctly to achieve the objectives of Islamic law. Islamic law has commanded us to benefit from modern and contemporary technologies. Allah the Almighty has informed us of addressing people in their language and in the languages that they understand by calling to Allah. Allah the Almighty said: {And We did not send any messenger except that he In the language of his people, that he may make clear to them} [Ibrahim: 4]. The language of the present age is the language of modern technology and contemporary techniques, including: artificial intelligence, the Internet of Things, and blockchain technologies. Therefore, we need to benefit from these modern means as modern means of collecting and distributing zakat to help zakat institutions solve their problems.

These technical means have helped solve many humanitarian problems and continue to help solve difficulties in the medical, educational and other fields. At the same time, problems arise for zakat institutions in collecting zakat and distributing it to its recipients, in addition to the issue of determining priorities in distributing zakat recipients when there is a crowding of beneficiaries and zakat funds are scarce. Sometimes the income from zakat money is

small and the types of zakat are many, and zakat money may not be enough to distribute it to the large number of beneficiaries. Here, it is necessary to determine priorities in spending zakat money. These priorities change from one institution to another, from one person to another, from one state to another, and from one system to another. Therefore, it is necessary to apply the rules of jurisprudence of priorities objectively and impartially in distributing zakat to beneficiaries to achieve the objectives of Sharia. An unintended error or difference of opinion may occur among workers in zakat institutions in determining the priority for spending and disbursing zakat money.

Therefore, the proposed idea in this research was to benefit from artificial intelligence techniques in helping solve problems related to the subject of zakat, which helps zakat management in institutions to address difficulties. In collecting and distributing Zakat with determining priorities, which helps in giving Zakat to those who deserve it, according to the data collected from those who deserve it and analyzing it and directing the money in the right direction in spending to achieve the objectives of Islamic law by preserving religion by maintaining the achievement of one of the pillars of Islam, and preserving the soul by providing the most needy, especially for those with urgent surgical operations from the poor and deserving, and the purpose of preserving money so that the money is spent in its legitimate expenditures while taking into account the interests of the people, and the purpose of preserving the mind, especially when there are many inputs and it is difficult to determine priorities and the most needy, and this can benefit from these technologies by saving time through artificial intelligence technologies in verifying the validity of data and analyzing it, which affects the mind, and the purpose of preserving the offspring by preserving poor families and sponsoring them from the expenditures of Zakat, and therefore this research was to raise this new issue to help solve the problems of zakat institutions using artificial intelligence technologies, which also helps in achieving the objectives of Islamic law. The importance of this research lies in helping zakat institutions solve their problems and determine who should be given zakat money with complete neutrality and in a way that helps achieve the objectives of Islamic law, especially the objective of preserving money without excess or neglect, in addition to the rest of the other objectives, noting that it is not possible to dispense with the human element and zakat workers; because their role is important in using modern technology and collecting and distributing zakat, as they are only means to achieve the objectives of zakat in a faster, easier and more accurate way, which makes it easier for zakat workers to perform their tasks.

The researcher used the analytical inductive method by collecting what is related to the problems facing zakat institutions in collecting and distributing zakat, and how to determine the priorities of those entitled to zakat while being careful to adhere to the legitimate expenditures from zakat expenditures in order to benefit from artificial intelligence techniques in serving zakat. The research aims to achieve several objectives, including: defining artificial intelligence techniques, collecting and distributing zakat to achieve the objectives of Islamic law through artificial intelligence techniques, and determining priorities in zakat expenditures to achieve the objectives of Islamic law through artificial intelligence techniques, then a conclusion containing the most important results and recommendations.

Definition of Artificial Intelligence:

First: The meaning of intelligence: Intelligence comes from the word "dhikka", meaning that it is endowed with intelligence through extensive training and practice of doing something, and it is used in cleverness, which helps in analysis, synthesis, discrimination, and selection for different situations (Ibn Manzur 1414 AH: 14/ 287).

Second: The meaning of artificial: attributed to the verb "to make", meaning unnatural, such as the artificial heart, artificial satellite, and artificial respiration (Ahmed Mukhtar Abdel Hamid Omar 1429 AH - 2008 AD:,2/ 1323).).

Third: The complex meaning: There are many definitions of artificial intelligence, including: inventions, discoveries, and systems that simulate human capabilities (Ibtisam bint Abdullah Al-Harbi, 1440:20), including: a science that contains computer programs characterized by certain characteristics that make them simulate human mental capabilities (Kazem, Amal (2019: 298), including: machines can perform tasks in an intelligent way that is not just programmed (Nada Badr Jarrah (2019: 44) and among the definitions also: machine learning allows software technologies to become more accurate in predicting results and can do so themselves without constant supervision, followed by deep learning, which is highly accurate (Nada Badr Jarrah (2019: 45).

Therefore, artificial intelligence technologies can be defined as programs that can imitate human mental capabilities to perform some tasks.

These technologies are important and abundant in our lives, and we need to benefit from them in the field of collecting and distributing zakat to achieve the objectives of Islamic law of preserving religion, life, money, mind and offspring, in order to solve many of the contemporary problems facing zakat institutions, and this is what we will present in this research.

Distributing Zakat to achieve Maqasid Al Sharia through artificial intelligence technologies:

Artificial intelligence technologies can be used to help the rich give Zakat to those who deserve it by creating algorithms that work automatically to calculate the money of the rich to help them calculate the incoming and outgoing and alert them once the conditions and reasons for Zakat are met and the obstacles to debts are removed, while taking into account the prevailing sayings of the jurists. Thus, these technologies help remind those who are obligated to pay Zakat to pay it on time with an accurate calculation of the Zakat percentage regardless of whether they are obligated to pay Zakat in the month of Ramadan or other times, once the year has passed and the minimum amount is reached and the conditions and reasons are met and the obstacles are removed; Because many of the rich may not pay zakat on time or in calculating it and do not remember except in the month of Ramadan, which leads to the loss of the rights of the poor and those entitled to zakat in the event that it is not paid throughout the year, and these technologies may also help in paying zakat on the monthly income, and there are some rich people who die without paying zakat and the heirs do not know the amount of zakat due on them except by estimation, so perhaps artificial intelligence technologies will help them pay zakat on behalf of their deceased relatives if the accuracy of the data is verified. Artificial intelligence technologies can also be used to automate zakat in terms of collecting and distributing it; because there are many problems facing zakat institutions in collecting zakat and they can be easily solved through these modern means such as artificial intelligence technologies while adhering to all the rules and legal provisions related to zakat.

These contemporary technologies help achieve the objectives of Islamic law by paying zakat by achieving the purpose of preserving religion and applying one of the pillars of Islam, which is paying zakat, as well as the purpose of preserving money from haram, as whoever does not pay the obligatory zakat is eating haram and may not know that zakat is obligatory on him, as well as the purpose of preserving the mind when it is difficult to estimate the percentage of zakat, especially if it is for previous years, as well as the purpose of preserving the lineage by preserving families from eating haram, which helps in a good and dignified life in light of paying the obligatory zakat. Zakat is obligatory on growing funds , and therefore artificial intelligence technologies also help zakat institutions and zakat payers to identify growing and growing funds from others, by collecting data and analyzing it through algorithms.

There is also a problem with some zakat institutions in proving poverty so that they can give zakat only to those who deserve it; because the rich are not allowed to take zakat, and there are those who claim poverty or claim that their money was lost and they need zakat and zakat institutions ask them to bring evidence. Scholars differed on the number of evidence, and it was said: Three are necessary (Ibn Qudamah , 1388 AH 1968 AD: 2/663), based on what was mentioned in the hadith of Qubaysah that the Prophet said to him: Stay until the charity comes to us and we will order it for you. Then he said: O Qubaysah, the question is not resolved except for one of three... And he mentioned among them: A man who is afflicted with poverty until three of the wise men of his people stand up for him, poverty has afflicted so-and-so, so the question is resolved for him until he obtains a livelihood or he said: a payment of livelihood (Muslim , 2/ 722).

Therefore, artificial intelligence techniques may help in proving poverty or not through data analysis. Artificial intelligence technologies also help those working on zakat by collecting and analyzing data, which helps them make the right decision regarding zakat expenditures. Therefore, programmers of artificial intelligence technologies enter the share of zakat expenditure workers due to the effort they put into collecting data and programming to analyze it in order to collect and distribute zakat. These technologies can also help determine the amount that the share of workers will take according to the amount of zakat money and the number of zakat categories. The human factor cannot be dispensed with in the case of using artificial intelligence technologies, because they are means to achieve the objectives of zakat. Rather, the skills of zakat workers can be developed to use artificial intelligence technologies to help them save time, effort and money.

Determining priorities in zakat expenditures to achieve the Maqasid Al Sharia through artificial intelligence techniques:

There are several problems that appear in zakat institutions in determining priorities when distributing zakat to its legitimate expenditures. Islamic law has clarified the expenditures of zakat by saying Allah Almighty: {Zakat expenditures are only for the poor and the needy and those employed to collect it and those whose hearts are to be reconciled and to free captives and those in debt and for the cause of Allah and for the wayfarer - an obligation imposed by Allah. And Allah is Knowing and Wise.} [At-Tawbah: 60]

Therefore, artificial intelligence techniques have a major role in developing organizations, which helps in facilitating dealings (Ajam, Ibrahim Muhammad Hassan, 2018: 89), including predicting the number of poor people and solving their problems before they fall into poverty, as prevention is better than cure. Futurology is an important science that institutions and countries need to draw up their economic plans and avoid obstacles and failure. Artificial intelligence technologies can be used to predict and accordingly calculate the amounts (Qabil, Hind Mohammed, 2016: 1).

Therefore, it is important for zakat institutions to use these technologies to develop their performance, governance and smart management. Therefore, the problem of determining priorities in distributing zakat to those entitled to it is one of the problems that some zakat institutions suffer from. Several zakat recipients may crowd together, such as a poor sick person, a poor student who wants to complete his studies, a third who is in debt for an urgent matter, and a fourth who requests zakat to perform an urgent surgery. So, how is the first one to be given zakat determined? Human effort may be used to study their case, and a percentage of errors or bias may occur towards one group over another, or studying their cases may take a long time that affects the circumstances of those who deserve it, or some of the poor may become angry because they are not given the amount they request from the zakat disbursements, and here comes the role of artificial intelligence in helping zakat institutions determine who is first to receive zakat and determine its amount according to their case with complete objectivity and neutrality from the correct algorithms. Artificial intelligence techniques

also help clarify the degree of the poor and needy according to priority. Jurists differed on the definition of the poor and needy. According to the Hanafis and Malikis: the needy is the one who does not own anything. According to the Shafi'is: he is the one who has money or earnings that fall within his sufficiency but are not sufficient for him. According to the Hanbalis: he is the one who finds most of his sufficiency or half of it from earnings or other things (Ibn Abidin, 1412 AH 1992 AD: 2 / 59).

In addition, jurists differed on which of them is more in need. The Shafi'is and Hanbalis believe that the poor are in greater need than the needy, and they argued that God Almighty mentioned them in the categories of zakat. As for the needy, he has money, as God Almighty said: {As for the ship, it belonged to poor people working at sea} [Al-Kahf: 79], unlike the Hanafis and Malikis, who believe that the needy is in greater need than the poor, as God Almighty said: {Or a needy person with {Dust} [Al-Balad: 16]. ((Ibn Qudamah , 1388 AH 1968 AD: 6 / 420)

This is a problem facing zakat institutions in identifying the most needy of the poor and needy who are entitled to zakat. Artificial intelligence techniques help these institutions determine priorities in addition to the amount of zakat that the poor and needy are given. Jurists differed on this issue. The Malikis, the Shafi'is, and the Hanbalis believe that it is permissible to give the poor what is sufficient for a whole year, because zakat is repeated annually, unlike the Shafi'is, in a statement and narration from the Hanbalis, that the poor and needy are given what will enable them to move from poverty to wealth, i.e. permanent sufficiency. The Hanafis believe that whoever does not have the full zakat threshold may be given less than two hundred dirhams or its full amount. (Al-Buhuti: 3 / 238)

Therefore, we need to program artificial intelligence techniques to apply the rules of priorities for distributing zakat expenditures. We begin by combining those who are entitled to it according to the rule: "Combining two interests is better than nullifying one of them." (Siwasi: 6 \223), and this rule helps in the event that there is more than one person entitled to it with the same degree of interest, so it is preferable to combine them as much as possible. Artificial intelligence techniques help us determine the amount for each person entitled to it to achieve benefit for all. If it is not possible to combine the stakeholders and the beneficiaries, then we resort to weighing according to the degree of interest. This is done by determining the interests of each case of those who are entitled to zakat. Priorities are determined and weighing between them is done according to interests, starting with the obligatory, then the recommended, then the permissible, according to studying their case and the degree of urgency in giving them by collecting and analyzing data through artificial intelligence techniques. These techniques also help determine who is forbidden to give or disliked by studying their previous data and how they deal with money, and determining whether they deal with money wisely or foolishly. Therefore, Islamic law prohibits the foolish, and God Almighty said: {And do not give the foolish your property which God has made a means of support for you} [An-Nisa': 5]. So giving money to those who are entitled according to the five rulings helps achieve the goal of preserving money and not being extravagant, which God has forbidden, as He said: God Almighty said: {And do not be extravagant. Indeed, He does not like the extravagant.} [Al-A'raf: 31]

Among the rules of priorities in distributing zakat expenditures to those who deserve it is the rule: "Prioritizing the predominant benefit over the rare harm." This rule helps us, through artificial intelligence techniques, to determine the degrees of current and expected benefits and harms. The techniques are trained to prioritize the predominant benefits over the rare harms by studying the cases of those who deserve zakat.

We need to benefit from artificial intelligence technologies in distributing zakat to its correct recipients according to priorities, in order to achieve the objectives of Islamic

law by giving those with necessities, then needs, then improvements. In this way, we gradually eliminate the problem of poverty and transform the poor from individuals who receive zakat to rich people who give zakat. These technologies will also help institutions determine the amount that will be paid to those who are entitled to it from the poor and needy, according to the data that is entered and analyzed to know the most needy, as well as the amount that is disbursed to them.

Therefore, artificial intelligence technologies help zakat institutions distribute zakat expenditures accurately according to priorities, by accurately identifying those entitled and the percentage of distribution to them through technologies and studying their case. Because identifying the poor and needy to help them and identifying those most in need of spending is important to achieve the intent of the Sharia, as well as the number of debtors and their urgent need, as well as the case of the wayfarer and those whose hearts are to be reconciled, which helps zakat institutions on how to accurately distribute zakat money, in addition to another issue, which is determining the extent of the need to transfer zakat to another country or not by activating the global zakat system and artificial intelligence technologies and available data, and the extent of the need to impose taxes and their amount in the event of difficulty in sufficiency with zakat, as well as zakat al-fitr and how to benefit from it throughout the year.

The researcher suggests setting controls when using artificial intelligence techniques in zakat matters, including: not deviating from the legitimate expenditures of zakat specified in the Holy Quran so as not to lead to the loss of zakat funds, as well as cooperation between zakat specialists and programmers to create algorithms in a healthy way that achieves the objectives of Sharia for zakat so as not to lead to financial corruption, and not tampering with algorithms or using them in a bad way that harms the zakat institution or those entitled to them, as well as using the data of the rich and those entitled to them in a correct way without violating their privacy or publishing their data except with their permission, while adhering to the principles and ethics of artificial intelligence techniques. These are suggestions for zakat institutions to help them solve their problem related to collecting zakat and distributing it to those entitled to it.

Artificial intelligence helps in determining the priorities of distributing zakat to the needy, and this undoubtedly helps in achieving the objectives of Islamic law, such as the objective of preserving religion by ensuring that zakat is distributed to those who deserve it, as in Islamic law, and the objective of preserving life by distributing zakat to those most in need to preserve their lives, and the objective of preserving money by preserving zakat funds so that they are distributed correctly to preserve money, and the objective of preserving the mind by correctly knowing those most in need of zakat and educating those in need of zakat to guide them in managing money, and achieving the objective of preserving offspring by preserving poor families and children by supporting them with zakat funds correctly.

Proposed methods for using artificial intelligence to determine the priorities of zakat distribution for zakat management institutions:

- Collecting and analyzing data on needy families from various sources such as government records, non-governmental organizations, and social media to help verify their authenticity and identify those most in need of zakat.
- Using artificial intelligence and machine learning systems to estimate the degree of need for zakat according to family factors, health status, previous history of individuals, and their skills.
- Developing algorithms to classify beneficiaries based on their priorities and needs, such as extreme poverty or the most vulnerable groups.
- Using machine learning techniques to predict the places most in need of zakat due to economic conditions and others.

- Using artificial intelligence to determine the appropriate specific amount of zakat that should be distributed to each individual or family.
- Quickly analyzing data to identify areas most affected by natural disasters or epidemics and directing zakat to them quickly.
- Artificial intelligence can be used to guide groups that need advice on how to benefit from zakat funds.
- Using artificial intelligence to identify societal problems and how to prevent them before they occur and reduce their harms, if any.
- Artificial intelligence helps the Zakat Foundation manage its operations to distribute Zakat effectively and appropriately, achieving the objectives of Islamic Sharia.

CONCLUSION:

This article discusses the definition of artificial intelligence, modern methods of distributing zakat through artificial intelligence technologies, and determining priorities in zakat expenditures to achieve the objectives of Islamic Sharia.

RECOMMENDATIONS:

This article has several recommendations, including:

The importance of benefiting from financial technology in collecting and distributing Zakat.

Cooperation between specialists in Zakat management and specialists in artificial intelligence to design applications that help Zakat workers in distributing it.

Working on collecting complete data on those in need of Zakat and analyzing this huge data while taking advantage of machine learning and deep learning.

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