THE EFFECT OF USING QR CODES TO INCREASE ALMS IN THE MOSQUE

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Abstract

Technological developments have brought many changes to various sectors of human life, one of which is in terms of financial transactions. In the past, Indonesian people used to use their money as a means of payment. Now there is an innovation that makes it easier for people to make more efficient transactions, namely non-cash payments via e-money. One example is taking advantage of financial technology developments by using the QR Code to give alms and spend in mosques. Indonesia has been named the most generous country in the world. This is an opportunity to use fintech to give charity. By utilizing QR Code technology in the charity box, you can increase the income of alms and infaq at the mosque. The data used are primary data through questionnaires distributed in the Jabodetabek area with a total of 100 respondents. While secondary data were obtained from various literature studies such as journals, books, articles, and internet sites that are relevant to this research. The purpose of this study is to find out how much influence the QR Code is used in the mosque for giving alms. It is hoped that the QR Code technology used in this mosque can increase the development and use of sharia fintech in Indonesia.

*Keywords: **Financial Technology, QR Code, Mosque, Alms.***

Introduction

The emergence of the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) virus in China at the end of 2019 was the start of an outbreak on an international scale that threatened public health. To reduce the spread of the virus in Indonesia, the government is implementing various efforts, one of which is Large-Scale Social Restrictions (PSBB). Even though many public facilities are closed, several vital sectors such as health facilities, markets, and minimarkets remain open during the PSBB. The community also supports this option because it is considered capable of preventing disease transmission while still maintaining people's purchasing power. According to Nasruddin & Haq (2020), PSBB measures are an effective strategy to break the chain of the spread of the coronavirus. Of course, this must be based on public awareness not to gather together and comply with existing protocols when outside the home.

The mosque is a center for Muslims to carry out their worship activities. However, during the coronavirus pandemic, the mosque cannot operate optimally but still requires maintenance and the need for operations so it will still incur costs. In general, mosques depend on infaq income funds obtained from congregations to be able to cover the mosque's operational costs. According to Wisandiko & Tias Andarini Indarwati (2020), the government's implementation of the Large-Scale Social Restrictions (PSBB) policy has resulted in mosques no longer being visited by many people. This has had a huge impact on the mosque's finances. With the outbreak of the coronavirus, the mosque was not visited by many people so the mosque almost did not get any income from the congregation's infaq. Even though the income is increasingly minimal, the operation and maintenance of the mosque must still be carried out to ensure the mosque is in good condition. With this limited income, it can encourage mosque administrators to think creatively and innovatively to find other sources of mosque income.

In this era of globalization, the development of information and communication technology is increasingly advanced in various parts of the world, including Indonesia. Smartphone users in Indonesia have reached 92 million units and the projected internet users in Indonesia in 2020 will also reach 119.4 million users (Katadata, 2019). This technological development has brought many changes to various sectors of human life, one of which is in terms of financial transactions. In the past, Indonesian people used to use their money as a cash payment instrument. Now there is an innovation that makes it easier for people to make more efficient transactions, namely non-cash payments through e-money. Mosque administrators should utilize technology to be able to manage and obtain mosque funding sources to meet operational costs and the cost of mosque prosperity. One example is taking advantage of financial technology developments by using the QR Code to give alms and spend in mosques.

Having a QR Code in the charity box can increase the income of alms and infaq funds at the mosque because, with the Covid-19 virus, the payment method

has become cashless. One example of a mosque that does not only use charity boxes but already uses a QR Code to collect alms and infaq funds is the Andalusia Mosque, Bogor. We distributed questionnaires to 100 respondents; the result was only 20 people who had visited a mosque that has additional facilities for giving alms in addition to using a charity box. However, 72 people, or as many as 72% think they prefer to give alms using the QR Code compared to charity boxes, with the assumption that it is easier and more practical because they only use their respective smartphones and can still give alms even though they don't carry cash. In addition, people also think that using the QR Code for alms, will reduce the possibility of money being lost, such as the theft of charity boxes.

Literature Review

Alms

Sadaqah comes from the word *al-shidq*, which means truth. The word alms show the truth and/or justification of one's faith, both from an outward point of view (confession of faith) and inner expression (a form of sacrifice) through the property (Suma, 2015). Alms is part of the altruistic concept and is an activity in which we give care to others to improve their welfare (Otto and Bolle, 2011). According to Teah, et al (2014), charity is an activity that is encouraged by all religions, including Islam, Christianity, Buddhism, and Hinduism (Kasri & Ramli, 2019). Alms is also worship that has a double dimension, namely horizontal and vertical. The horizontal dimension relates to the form and pattern of relationships between humans, while the vertical dimension relates to the relationship between humans and God. Alms can be referred to as social worship. Social worship is worship that has a direct effect on the context of the lives of the surrounding community and contains values of cooperation and social responsibility so that it can be expected to spread economic income and eradicate poverty in society.

Electronic Payment

Electronic payment is a facility that can be used for online payments and transactions. Many companies have provided electronic transaction security guarantees for sellers and buyers. To ensure the security of these transactions, the intermediary company will work with several banking institutions to start facilitating electronic payments in a safe, fast, and practical manner. The use of electronic payments is claimed to be able to provide an increase in financial inclusion and is one of the main goals of e-government programs in almost all countries in the world. Electronic payment methods include ATMs and debit cards (Singh, 2004). In addition, credit cards, e-wallets, and e-money cards are also included in electronic payments.

Quick Response Code (QR Code)

The Quick Response Code is a matrix code or two-dimensional barcode created by the Japanese company Denso Wave in 1994 (Malik, 2010). Some of the benefits

contained in the barcode system include accuracy, ease of use, uniform data collection, timely feedback, security, increased productivity, and increased profit (Malik, 2010).

The development of the digital has made QR Codes increasingly used in many industries and life. How to make a QR Code barcode that is easy and can be obtained for free makes its use increasingly in demand by various groups. Moreover, the majority of people in Indonesia have smartphones that have a camera feature that can already be used as a QR Code reader (Damara, 2017).

Research Reference

Researchers conducted a meta-analysis of several literature studies related to previous research. Research by Malita Puspa & Darna (2022) concerning Determinants of Decision Determinants for Mosque Congregations to Pay ZIS through the QRIS Application (Case Study of the Bintaro Jaya Grand Mosque), provides research results that 2 factors determine decisions in issuing ZIS through QRIS, namely; a) Technological Ease Factor, and b) Social Influence Factor. The same research by Sarah Lutfiyah Nugraha & Ika Yunia Fauzia (2021) concerning the Role of e-wallets in collecting zakat, infaq, and alms (Case studies on ovo, go-pay, funds, and linkaja) provides research results that e-wallets are an application that can be used for the tithe, infaq, and alms in two ways, namely scanning QRIS and directly through the menu in the e-wallet application. In addition, the e-wallet has also carried out its role as expected, namely as a reminder, making it easier and more flexible for its users.

Another study by Norhalipah, Akhmad Hulaify & Arie Syantoso (2020) concerning the Effects of Strengths and Weaknesses in the Application of the QR Code on the Collection of Infaq Funds from the Perspective of Sharia Economics (Case Study on Baznas City of Banjarmasin and Hasanuddin Majdi Mosque) gives the results of the factors of advantages and disadvantages in terms of simultaneously affect the application of the QR Code transaction system.

Research from Muhammad Al Faridho Awwal & Dewi Wahyu Setyo Rini (2021) regarding Alms QR (SQR): Charity System in the Modern Era, which has the result that Millennials are interested in using the Alms QR (SQR) service when there is a good perception of the service, therefore researchers can assume this service will be received positively in the future.

Last, research from Mega Rachma Kurniaputri et al, (2020) concerning the Behavioral Intentions and Religiosity of the Millennial Generation on ZIS Payment Decisions Through Digital Platforms yields the result that millennial behavioral intentions have a significant influence on the decision to pay ZIS through online platforms. The results of this study indicate that religiosity has a non-significant influence on millennial decisions in Jabodetabek in issuing zakat, infaq, and alms online.

Research Methods

The subjects in this study were the general public in JABODETABEK (Jakarta, Bogor, Depok, Tangerang, Bekasi). The determination number of samples developed by Roscoe in Sugiyono (2015) is a feasible sample size in research which is between 30 to 500. Meanwhile, Frankel and Wallen in Amiyani (2016) suggests a minimum sample size for descriptive research of 100. So, based on theory The sample that is used as a reference by researchers is at least 100 respondents. In this study, the number of samples collected was 101 respondents which were carried out using a purposive sampling method through questionnaires distributed to the community in Jabodetabek.

This study uses primary data. According to Savitri (2017) states that primary data is data obtained directly through the source to be observed and recorded, then processed into valid data. The primary data used in this study is in the form of a questionnaire which will then be processed using a Likert scale to convert qualitative data into quantitative.

The data collection method used in this research is literature study and field study. A literature study is carried out by looking for previous research journals of the same type using journals, books, articles, and websites that are relevant to the research. Furthermore, field studies in this study were carried out using a questionnaire via Google Form which was distributed to the general public in the Jakarta, Bogor, Depok, Tangerang, and Bekasi regions. The data in this study were obtained from respondents' answers to the questionnaire that had been given using a purposive sampling method. Furthermore, the received data is processed and analyzed using descriptive analysis to produce a comprehensive conclusion.

Finding and Analysis

The mosque is one of the important elements in the structure of Islamic society. The mosque for Muslims has a great meaning in life, both physical and spiritual meaning. However, when the Covid-19 pandemic emerged, the mosque was one of the places that had a major impact on Muslims because all places of worship were closed and they were advised to worship in their respective homes, resulting in a significant reduction in the amount of alms funds generated. As stated in the circular letter of the Ministry of Religion of the Republic of Indonesia No. SE 15 of 2020 concerning the Implementation of the Covid-19 Handling Protocol at homes/mosques, there is also a health protocol from the Police and the Covid-19 Task Force. With this circular letter, all mosques were temporarily closed during Covid-19, causing a decrease in the income of mosque alms funds for operational costs. In this case, the QR Code can make it easier for pilgrims to donate and give alms more easily and can be done anytime and anywhere.

Descriptives Analysis of Respondents

Respondent's Age

Age is one of the factors that influence the considerations in this study. With this age criterion, the author can find out the age range of respondents who give alms using the QR Code. Can be seen in the image below:
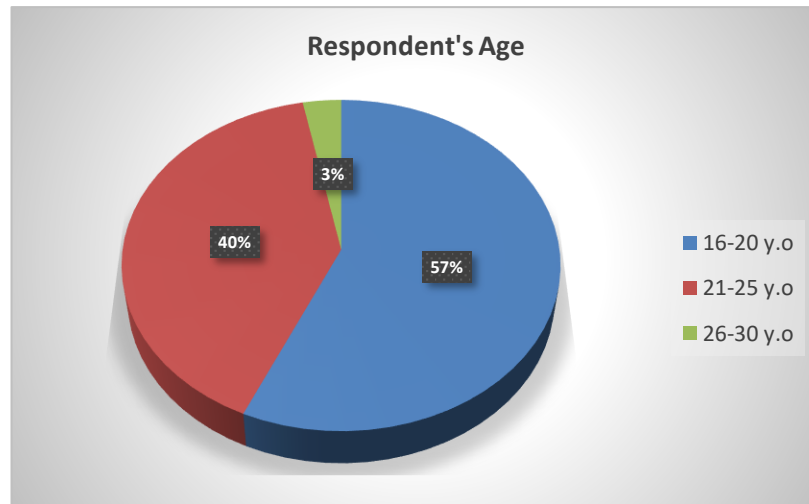

Figure 1. Respondent's Age

Based on the picture above, the result is that the characteristics of respondents based on age consist of 55% of respondents aged 16-20 years or as many as 56 respondents. Furthermore, respondents who were aged 21-25 years were 39% of respondents or 39 respondents, and respondents who were aged 26-30 years were 6% or 6 respondents. In this study, it was found that the respondents who already knew the QR Code in giving alms at the mosque were dominated by the age range of 16-20 years.

Respondent's Domicile

The domicile of the respondent's residence is a matter of concern to the writer. In this case, where are the domiciles with the most respondents in this study which will then be analyzed and developed.
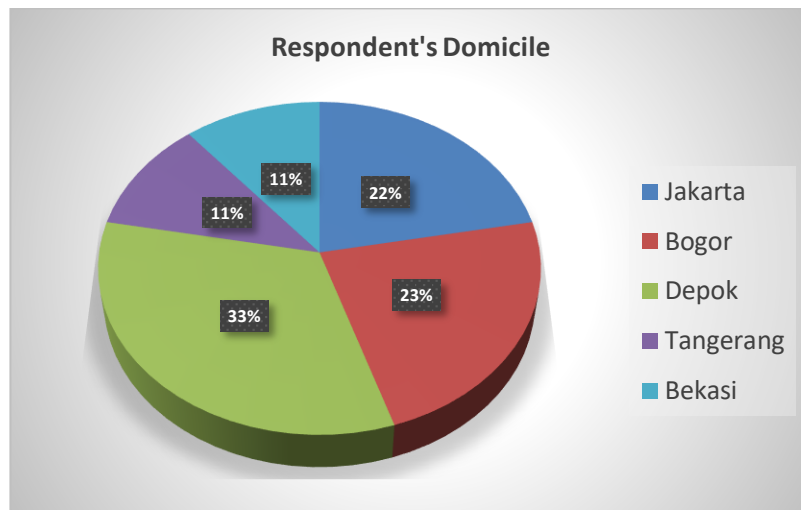
Figure 2. Respondent's Domicile

As many as 33% or 34 respondents live in Depok. Meanwhile, 23% of 23 respondents live in Bogor. And as many as 22% of 22 respondents live in Jakarta. And as much as 22% live in Bekasi and Tangerang. This shows that most of the respondents are people who live in the Depok area.

Respondent's Profession

Figure 3. Respondent's Profession

As many as 80% of 80 respondents have a profession as a student. Meanwhile, 18% or 8 respondents have a general profession. And as many as 2% or 2 respondents have a profession as a student. This shows that most of the respondents have a profession as a student.

Descriptives Analysis of Variable

Aware of QR Code

Based on the picture below it can be seen that as much as 95% or as many as 96 respondents already know the QR Code. Furthermore, as many as 5% of 5 respondents did not know the QR Code. It can be concluded that the majority of respondents already know the QR Code.
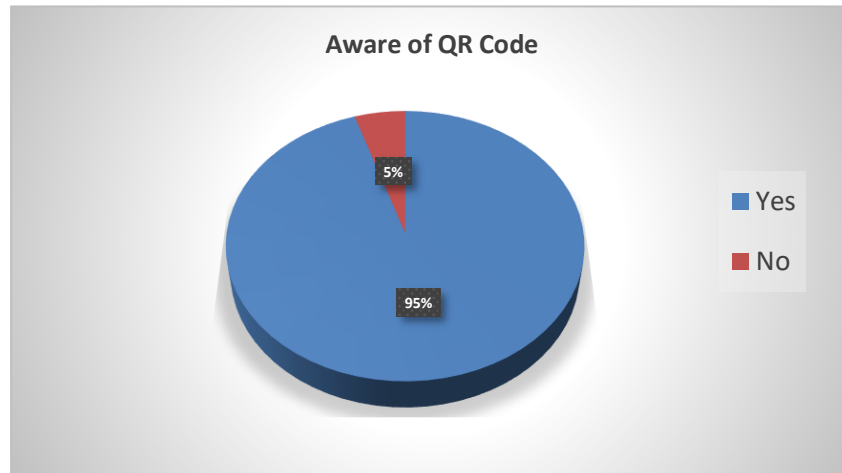

Figure 4. Aware of QR Code

Giving Alms using QR Code

With the previous analysis which resulted in the respondent knowing the QR Code, the next hope in this research is that the respondent has given alms through the QR Code.
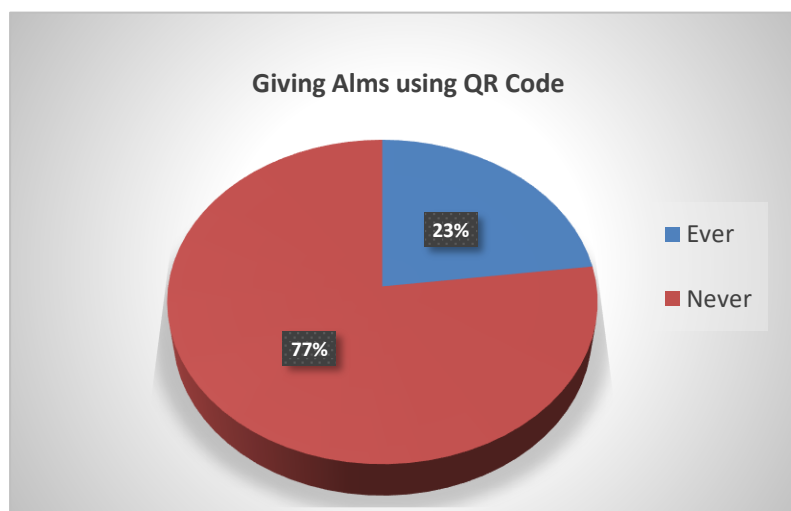

Figure 5. Giving Alms using QR Code

Based on the picture above, it is produced that as many as 77% of respondents, or 78 people have never given alms using the QR Code. Meanwhile, only 23% of respondents, or 23 people have ever given alms using the QR Code. So so far the

respondents only know what the QR Code is and how it is used, but not many use the QR Code as a facility to give alms at the mosque.

Visiting Mosque with QR Code as Charity Facility

With the emergence of mosques that provide a QR Code as a facility for giving alms in addition to giving alms using a charity box, it is necessary to know how many respondents have visited a mosque that provides a QR Code as a charity facility.
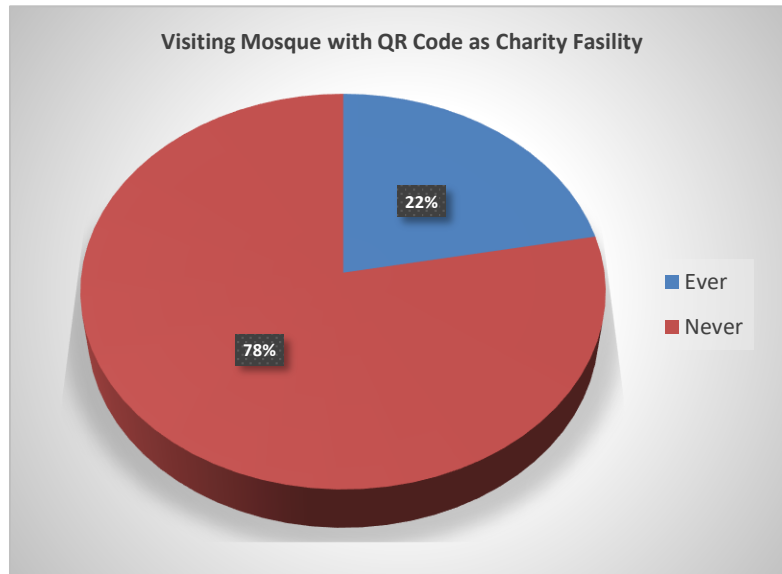

Figure 6. Visiting Mosque with QR Code as Charity Facility

Based on the picture above, it can be concluded that 78% of respondents, or as many as 79 respondents have never visited a mosque that provides a QR Code as a facility for giving alms. However, as many as 22% of respondents, or as many as 22 people have visited a mosque that provides a QR Code as a facility for giving alms. The respondent mentioned his area, and it resulted that several mosques that have provided QR Codes in giving alms are Istiqlal Mosque, Andalusia Mosque, Bogor City Grand Mosque, Al-Hikam Depok Mosque, South Jakarta Sub-Department Mosque, Nurul Iman Mosque Blok M, Al-Jihad Mosque, Ittihadul Mukhlisin Mosque, and mosques in Pasar Minggu, South Jakarta, and Kelapa Gading locations.

Based on the responses given by respondents, most of the mosques in the City Region of each region such as Istiqlal from Jakarta, and Andalusia from Bogor have provided QR Code facilities for charity.

Preference in Charity

This study also seeks to know the preferences of respondents in giving alms. With the new facility, namely the QR Code, or by using the traditional method, namely by using a charity box.
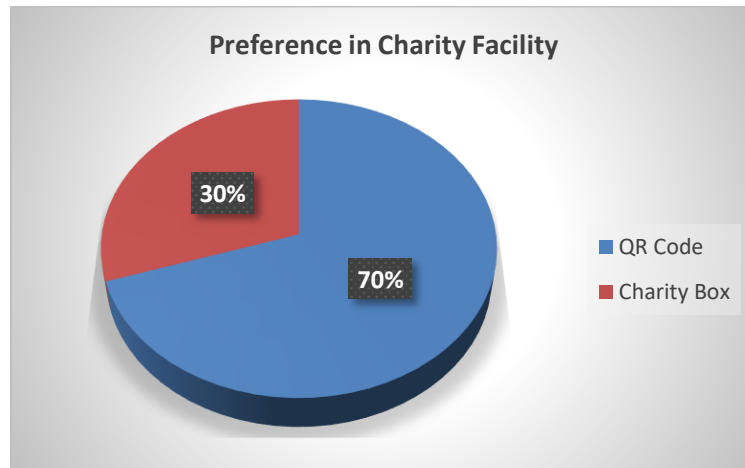
Figure 7. Preference in Charity Facility

Based on the picture above, it can be generated that 70% of respondents, or as many as 71 people have a preference for using the QR Code in giving alms. Furthermore, as many as 30% of respondents, or as many as 30 people said they had a preference for giving alms using a charity box. It can be seen that people in Jabodetabek have started to have a preference or tendency to choose to give alms using the QR Code in the future.

The Ease of Using QR Codes in Charity

After the statement regarding the respondent's preferences in giving alms, then there is an important thing that should not be left behind, namely the respondent's perception of the ease of using the QR Code in giving alms. Can be seen in the image below.
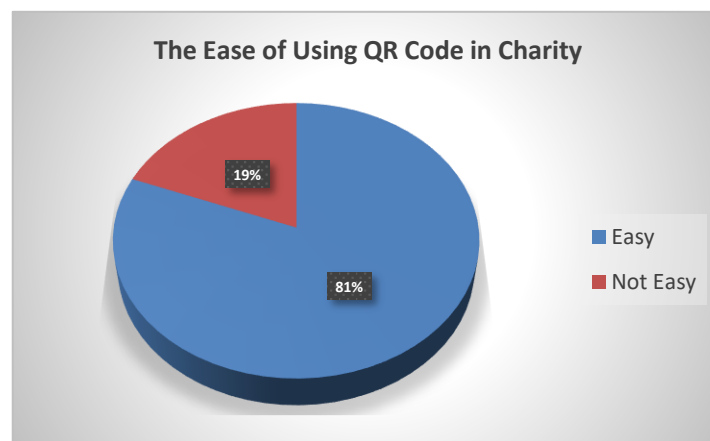

Figure 8. The Ease of Using QR Codes in Charity

Based on the picture above, it can be generated that 81% of respondents, or as many as 81 respondents feel the ease of using the QR Code as a facility for giving alms. However, there are still 19% of respondents, or as many as 20 respondents who said that giving alms using the QR Code does not provide convenience when compared to giving alms directly using a charity box.

Based on the respondent's statement, this is due to several things, namely, not everyone understands how to use the QR Code in giving alms and some think that it is difficult if you need to download an application just to give alms. These 20 people thought it would be easier if they used cash directly in charity and through charity box facilities.

Conclusion

Based on the results of the study that as much as 95% of respondents or 96 respondents knew the QR Code. However, only 23% of respondents, or 23 respondents have ever given alms through the QR Code facility. So, it can be concluded that as many as 78 respondents still use the traditional method, because the number of mosques in Greater Jakarta is still small that implement the QR Code feature and so far, only large mosques have implemented the QR Code. Respondents revealed several reasons for choosing to give alms traditionally, namely because not everyone understands how to use the QR Code in giving alms and some think that it is difficult if you need to download an application just to give alms. This is due to the lack of massive literacy and education regarding the use of the QR Code in giving alms so only a few people know and has ever given alms using the QR Code. In addition, not all mosques use the QR Code facility to give alms, especially the smaller mosques.

Therefore, it is necessary to have a special program, namely socialization or education to the general public regarding a new way of giving alms, namely through the QR Code. This program will also increase public literacy regarding technology. Apart from that, it is also necessary to increase the number of mosques that provide the QR Code feature for giving alms and not only placed above the charity box, but also in other places that can be reached by the congregation. As well as there needs to be a special account in each mosque for alms via the QR Code so that the calculation of incoming alms funds can be updated in real-time. With the increasing use of QR Code technology used in this mosque, it can increase the development and use of sharia fintech in Indonesia.

Recommendation

From the results of this study, the authors can recommend:

1. There is a special program, namely outreach/education to the general public regarding a new way of giving alms, namely through the QR Code. This program will also increase public literacy regarding technology,
2. There needs to be an increase in the number of mosques that provide QR Codes for giving alms and not only placed above the charity box, but also in other places that can be reached by the congregation.
3. There needs to be a special account in each mosque for giving alms through the QR Code so that the calculation of incoming alms funds can be updated in real-time.

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