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Society Readiness Index using Blockchain Technology in Zakat Payments: Technology Readiness Index Approach

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Abstract

Purpose *- To find out the index and segmentation of West Java society in their readiness to accept blockchain technology in zakat payments.*

Design/Methodology/Approach *– The testing method used in this research is a quantitative method with a descriptive approach. Data analysis techniques use TRI to find out the magnitude of the technology acceptance readiness index and the categorization formula to determine the segmentation of community groups in their readiness to accept blockchain technology. The sample used was 145 Moslem communities in West Java.*

Results *– The results of the study show that the readiness of the people of West Java to use blockchain technology for zakat payments is at high technology readiness. The attitude of the people of West Java to the acceptance of blockchain technology for zakat payments is in the pioneer group or groups who have a great desire to use blockchain technology for zakat payments, but if the technology does not meet expectations or is difficult to use, it will be easy to abandon and difficult to develop.*

Research Limitation/ Implication *– The research conducted is still limited only to determine the index or level of readiness to accept technology. In addition, public literacy regarding blockchain technology is still lacking, so filling out the questionnaire is based on the respondent's experience in using digital transactions. The results obtained are not fully optimal. For further research, it is necessary to identify what factors influence people's readiness to accept blockchain technology in zakat payments in order to realize a better development of blockchain zakat technology in the future.*

Originality/Value *– This research combines two disciplines, namely technology and Islamic economics to obtain new research findings, besides that, the use of the technology studied is the latest and most up-to-date technology for zakat management.*

Keywords *– Technology Readiness, Blockchain Technology, Technology Acceptance Segmentation, Zakat, West Java.*

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1. INTRODUCTION

Zakat is part of certain assets that must be issued by Muslims to be given to groups who are entitled to receive it (Hawwa, 2004). Zakat has a big role as an instrument for distributing wealth so that it is not concentrated on certain groups and can have a good impact on the economy (Martono dkk., 2019). Zakat can also stimulate the economy so the greater the zakat.

The potential for zakat can be measured, one of which is by the number of Muslim population because zakat is only paid by Muslims, the greater the number of Muslims in a country, the greater the potential for zakat (Ardani & Pujiyono, 2021). Indonesia itself is the country with the largest number of Muslims in the world. The Royal Islamic Strategic Studies Center (RISSC) states that the current Muslim population in Indonesia is 231.06 million. This number can place the Indonesian state as a country with the largest Muslim population in the world (Kusnandar, 2021). So that the potential for zakat in Indonesia is quite large.

Zakat Outlook for 2020 The National Amil Zakat Agency (BAZNAS) shows that the total potential for zakat in Indonesia is 327.6 trillion rupiahs, with several types, namely agricultural zakat 19.9 trillion rupiahs, livestock zakat 19.51 trillion rupiahs, zakat money 58.78 trillion rupiahs, income zakat and services of 139.7 trillion rupiahs, and corporate zakat of 144.5 trillion rupiahs (PUSKAS BAZNAS, 2020).

Indonesia itself has rules that have been established to manage this enormous zakat potential, namely Law No. 23 of 2011 concerning Zakat Management, Government Regulation No. 14 of 2014 concerning Implementation of Law Number 23 of 2011 concerning Management of Zakat, Regulation of the Minister of Religion Number 52 of 2014 concerning Requirements and Procedures for Calculation of Zakat Mal and Zakat Fitrah and Utilization of Zakat for Productive Businesses, Decree of the Head of BAZNAS Number KEP. 016/BP/BAZNAS/XII/2015 concerning the 2016 Income or Profession Nishab Zakat Value and other regulations (PPID BAZNAS, 2022).

Based on this regulation, two organizations have the authority to manage zakat funds, namely the National Amil Zakat Agency (BAZNAS) and the Amil Zakat Institution (LAZ) (PP No. 14, 2014). The existence of regulatory support and an organization specifically formed to manage zakat funds is expected to maximize the collection of zakat in Indonesia. But in fact, the realization of receiving zakat is very far from its potential.

As for what causes the low realization of national zakat receipts a survey by the Muhammadiyah Zakat Amil Institute (LAZISMU) shows that Indonesian people tend to pay zakat to the unofficial Zakat Management Organization (OPZ). As much as 61.5% of the community distributes their zakat to social institutions such as mosques and prayer rooms, then as much as 22.8% distributes their zakat to mustahik and 27.5% to national amil zakat institutions/agencies (Lazismu Pusat, 2021; Republika, 2021).

Maintaining the credibility of OPZ is very important to do because it can affect the trust of the community (Muhammad & Saad, 2016). It is feared that the rise of news regarding the misuse of zakat funds could reduce public trust in OPZ. News of the misuse of zakat funds includes cases of embezzlement of zakat funds (Fauzi, 2021), cases of corruption of zakat funds (Ayyubi, 2021), as well as other cases of embezzlement of zakat funds at several UPZ (Nurliyani, 2021). Some researchers explain that public trust can also influence the receipt of zakat funds (Canggih dkk., 2017; Kashif dkk., 2018; Ninglasari & Muhammad, 2021), so by maintaining the credibility of the OPZ it is hoped that it will be able to increase the realization of receiving zakat funds.

Zakat organizations need to have a good strategy for restoring public trust and increasing access to services to facilitate safe and comfortable Zakat payments. One of the strategies to increase accessibility and credibility that can be pursued is the application of

technology in the collection and management of zakat funds (Ninglasari & Muhammad, 2021). In the 4th International Zakat Conference in 2020 organized by BAZANAS RI, one of the strategies pursued to increase the accessibility and credibility of amil zakat agencies/institutions is to use blockchain technology (HUMAS BAZNAS, 2020).

Blockchain technology is an immutable decentralized data set, that connects data chains using cryptography that ensures their security. Blockchain is a distributed peer-to-peer ledger system that uses software to negotiate the information content of ordered blocks of data and links them together using cryptographic techniques. The idea is to create a transparent and reliable environment to exchange data and carry out transactions through a decentralized and immutable network system (Casino dkk., 2019).

The application of blockchain technology in a digital zakat payment platform has the potential to enable OPZ to increase public trust and facilitate access to zakat payments (Putri, 2021). Blockchain in Islamic philanthropic institutions enables greater transaction security, higher efficiency, and transparency which can produce more significant social impacts (Rangone & Busolli, 2021). The existence of blockchain technology in zakat institutions is expected to become a new transaction medium because it can contribute to higher transparency in increasing the clarity of the relationship between charitable giving (muzaki) and managers (OPZ) (Cole dkk., 2019).

In preparing blockchain technology for zakat payments, of course, there must be readiness from both users, namely the zakat administrators and the community (muzaki). Based on FOZ and Indonesian Philanthropy research, 78% of respondents or 82 OPZ stated that they were ready to transform into the digital era (Tim Research Forum Zakat, 2020). The digital transformation includes online zakat through websites and applications, blockchain technology, and virtual assistants (Fauzia dkk., 2021). This research shows that most of the OPZ in Indonesia is ready to transform into the digital era by using the latest technology. However, not many studies have investigated the community's readiness to use blockchain technology for zakat payments.

There are several models for examining community readiness to use technology such as the Technology Acceptance Model (TAM), the Unified Theory of Acceptance and Use of the Technology (UTAUT), and the Technology Readiness Index (TRI) model. The TAM and UTAUT models are used to determine the factors that influence people's readiness to use technology, but cannot determine the index or level of readiness, so researchers tend to use TRI.

Based on some of the explanations that have been presented, research related to people's readiness to use blockchain technology in zakat payments is very important to research, if not researched it can lead to the rejection of technology so that blockchain technology in zakat payments cannot be utilized as fully as possible. Therefore, the author is interested in conducting research with the title "Society Readiness Index Using Blockchain Technology in Zakat Payments: Technology Readiness Index (Tri 2.0) Approach".

The research questions posed are how big is the index or level of community readiness in adopting blockchain technology in zakat payments, how is society's readiness to adopt blockchain technology in zakat payments and what is the attitude of society to adopting blockchain technology in zakat payments. The purpose of this study is to determine the index or readiness of the community in adopting blockchain technology for zakat payments, know the conditions of community readiness in adopting blockchain technology for zakat payments, and know the attitude of the community in adopting blockchain technology in zakat payments.

2. LITERATURE REVIEW

2.1 Zakat and Blockchain

Zakat means to purify, grow or develop. According to syara' terms, zakat is giving out a certain amount of property that is given to people who are entitled to receive it (mustahik) following the rules and conditions that have been determined in Islamic law (Wibisono, 2015).

The definition of zakat is also explained in Law No. 23 of 2021 concerning the Management of Zakat:

"Zakat is the property that must be issued by Muslims or business entities to be given to those who are entitled to receive it following Islamic sharia law"

There are 8 groups entitled to receive zakat (mustahiq). In Q.S. At-Taubah verse 60 it is explained that the 8 groups are the poor, the poor, zakat administrators, people who open their hearts and convert to Islam (converts), to free slaves, who are in debt, used for activities in the way of Allah, and for those on the go. In paying zakat, muzaki or people who are obliged to pay zakat can distribute it directly to mustahik or through amil zakat agencies/institutions. The zakat payment mechanism is also very religious, you can come directly to the amil zakat institution/agency or through digital payments.

Digital zakat transactions are currently the main strategy of amil zakat agencies/institutions in collecting zakat from the community, this is done to increase zakat receipts from muzaki (Akmal & Muafit, 2022). One of the digital technologies currently being designed for the payment and management of zakat is blockchain technology (Urfiyya, 2021).

Blockchain is a public ledger managed by a distributed computer network that does not require a central authority or third party, so the system is decentralized. Blockchain consists of three main components, namely transactions, and systems that verify and store data (Omar & Khairi, 2021). Blocks are generated through open-source software and record information about when and in what order transactions occurred. The main innovation of blockchain is the integrity record of public transactions without a central authority. Blockchains are by nature decentralized being shared by all nodes connected to a defined network. Blockchain technology offers everyone the opportunity to participate in secure contracts from time to time (Darlington, 2021).

The integration of blockchain technology in zakat payments can be used by muzaki to find out the flow of zakat funds that have been given to amil zakat institutions/institutions. The blockchain that has a high transparency system is expected to increase muzaki's trust in amil zakat bodies/institutions and is expected to increase zakat receipts.

OPZ parties can make requests for receiving zakat with certain conditions using the smart-chain feature. The request will be distributed to several networks consisting of many computers (users). If the muzaki will make a zakat payment transaction, there is a special algorithm that will automatically validate the transaction. If the transaction is valid, a new node will be created which will be connected to other nodes and form a block. A new block will be formed and will be joined with other blocks automatically using a cryptographic chain (Pritama, 2021). Muzaki who pay zakat will get a hash code to see the history of payments and the flow of management of the zakat funds until they reach the mustahik. So that mustahik will know the flow of these funds, increase the transparency of zakat management, and facilitate the zakat audit process.

2.2 Technology Readiness Index Concept

Acceptance of technology can be interpreted as the extent to which users can accept or understand this technology, which is important to determine the success of implementing this technology. Lack of user acceptance will affect the success of technology implementation. Therefore, user acceptance must be seen as a central factor that will determine the success or failure of technology implementation (Nasir, 2013). Human feelings will also determine individual use intentions in using technology (Venkatesh dkk., 2003). This statement shows that individual feelings about receiving technology can be positive (motivator) and negative (inhibitor). Users with a very positive attitude will express very significant support for technology services, on the other hand, if a user expresses a negative attitude then he will hesitate in using technology (Alharbi & Sohaib, 2021).

One of the models used to measure people's readiness to use new technologies such as blockchain is the Technology Readiness Index (TRI 2.0) model developed by Parasuraman and Colby (2015). Parasuraman explained that:

"Technological readiness is a gestalt of motivators and inhibitors that collectively determine a person's tendency to use new technology" (Parasuraman & Colby, 2015, p. 60)

The construct consists of four dimensions, namely: a) Optimism; b) Innovative; c) discomfort; and e) insecurity. Of the four dimensions, optimism and innovation are motivators or dimensions that contribute to encouraging people's readiness to use technology, while discomfort and insecurity are inhibitors that reduce it. In addition, the four dimensions are relatively different, which means that an individual has a different combination of technology acceptance traits. The four constructs also sometimes lead society to a paradoxical situation consisting of strong motivation forged by strong obstacles as well (Parasuraman, 2000).

2.3 Technology Acceptance Motivator

The motivator dimension has two constructs that can encourage people's readiness to use blockchain technology in zakat payments, namely optimism, and innovation.

In the context of technology readiness, optimism is a positive view of technology and the belief that technology offers people in their lives increased control, flexibility, and efficiency (Parasuraman, 2000). In another study, it was explained that optimism is a positive attitude of people and tends to experience effective results in their lives (Scheier & Carver, 1992). Individuals who are optimistic about technology will feel that using technology is easy and are not worried about the negative side effects that arise from it (Walczuch dkk., 2007).

Then an innovative attitude in accepting technology means the attitude of someone who tends to want to be a technology pioneer and become a leader in the use of technology. This means that innovative nature is one of the factors that support society in accepting the latest technology so that they become pioneers or are the first to try this technology. Individuals who are highly innovative in viewing technology will also have high motivation to accept the new technology (Nugroho & Fajar, 2017).

2.4 Technology Acceptance Inhibitors

There are two dimensions of inhibitors or dimensions that hinder people from using blockchain technology in zakat payments, namely inconvenience, and insecurity.

Discomfort in adopting technology is an individual's perception of a lack of control over technology so that they feel overwhelmed in using the technology. This lack of control according to Kristy, Wahyuni, and Hayatin (2020) is an individual's inability to control new

technology so that the individual will feel overwhelmed and will hinder his readiness to adopt new technology.

Insecurity is a perception of individual distrust in technology that comes from an attitude of skepticism or suspicion about their ability to work well using technology or about the potentially dangerous consequences of using technology (Sumaryadi, 2021). If people feel that new technology is considered unsafe, it will become an obstacle to their readiness to accept technology. Therefore, discomfort and insecurity will be a factor that hinders people's readiness to adopt new technologies, especially in the field of zakat. These factors can lead to significant rejection of the use of technology (Alharbi & Sohaib, 2021).

3. METHODOLOGY

The research method used in this research is quantitative with a descriptive research design. The population in this study is the people of West Java because West Java is the first province that has the highest potential for digital zakat in Indonesia (Fauzia dkk., 2021).

Operational variables are determined as part of an important stage in the preparation of research instruments. The variable in this study is the community readiness index to accept blockchain technology in zakat payments. This variable has 4 dimensions including optimism with indicators of control enhancement, more efficiency, and good relationships (Ajwang dkk., 2021; Alharbi & Sohaib, 2021; Parasuraman, 2000; Parasuraman & Colby, 2015). Innovativeness dimensions with indicators of technology user pioneer, follow developments, Technology benefits, technology advanced interest (Ali dkk., 2020; Amilia dkk., 2021; Parasuraman, 2000; Parasuraman & Colby, 2015; Soebardi, 2012). Discomfort dimensions with indicators of difficult language, difficult use, shame of incompetence (Adhitama dkk., 2022; Ariani dkk., 2018; Faizani & Indriyanti, 2021; K. A. Ismail & Wahid, 2020; Parasuraman, 2000; Parasuraman & Colby, 2015). Insecurity dimensions with indicators of dangerous risk, data misuse, unvalidated, scepticism (Nugroho & Fajar, 2017; Nurdiansyah & Jayanto, 2021; Panday dkk., 2019; Parasuraman, 2000; Parasuraman & Colby, 2015; Pradipta & Resen, 2019).

The population in this study is the people of West Java. In determining the sample, the researcher uses a non-probability sampling technique with the type of sample used is purposive sampling which is a sampling technique limited to certain types of people who can provide the desired information, either because they have the information or fall into the criteria set by the researcher (Ferdinand, 2014; Sekaran & Bougie, 2017). The sample criteria needed in this study are as follows:

1. Muslim/Muslimah who live in the province of West Java
2. Generation Y (born in 1981 – 1996 or aged between 26 – 40 years in 2022) and Generation Z (born in 1997 – 2012 or aged between 10 – 25 years in 2022).
3. Using technology in conducting transactions.

The sampling technique uses the formula (Hair dkk., 2017) which results in a maximum calculation of 190 samples of Muslim communities in West Java. However, the researcher only chose 145 respondents, this number was also based on the researchers' limitations in terms of time, cost, allocation, and other matters.

The research instrument uses primary data through a questionnaire or questionnaire method with a series of questions that are written, compiled, and formulated before the respondent records the answers (Sekaran & Bougie, 2017). The scale research instrument uses an interval scale because it has a means that allows calculating averages, standard deviations, statistical parameter tests, correlations, and so on (Ferdinand, 2014). The scale was developed using a semantic differential to get good results about respondents' perceptions (Sekaran & Bougie, 2017).

Instrument testing is done by testing the validity and reliability. The validity test aims to test each research instrument so that it can be seen whether the research instrument is appropriate for measuring what it should measure (Sekaran & Bougie, 2017). The level of validity of a questionnaire is calculated using the correlation product moment formula (Sugiyono, 2017) which can be seen in the formulation below:

$$rxy = \frac{n(\sum xy) - (\sum x)(\sum y)}{\sqrt{\left(n\sum x^2 - (\sum x)^2 . (n\sum y^2 - (\sum y)^2)\right)}}$$

The criteria for the validity test decision are as follows:

a. If r count ≥ r table then the question items from the questionnaire are valid.
b. If r count ≤ r table then the question items from the questionnaire are invalid.

The reliability test is a test or measurement that can show the extent to which the instrument is without bias or error. This reliability test can guarantee consistency of measurement over time and at various points in the instrument (Sekaran & Bougie, 2017). Calculating the reliability is done by using Cronbach's Alpha coefficient. The instrument for measuring each variable is said to be reliable if it has a Cronbach Alpha > 0.60 (Sujarweni, 2014). The following is the formula used:

$$r_{11} = \left(\frac{k}{k-1}\right) . \left(1 - \frac{\sum S_i}{S_t}\right)$$

After the instrument is declared valid and reliable, the next step is to carry out a TRI analysis to calculate the community's readiness index to accept blockchain technology for zakat payments. The TRI calculation method is calculated from the mean value of each questionnaire multiplied by the weight of each statement. Each variable weights 25%. The weight will then be divided by the number of statements for each variable. After getting the value of the weight of each statement, the mean value of the statement is multiplied by the weight of the statement to get the total score of the stated value. Then, the variable score is obtained from the total value of the statement and the total TRI score is obtained from the total value of the variables. The formula for calculating the TRI index can be described as follows:

$$Statement\ Weight = \frac{25\%}{\sum Variables\ Statement}$$

$$Statement\ Value = \frac{\sum(Number\ of\ answers\ x\ Answer\ Score)}{Number\ of\ Respondent}\ x\ Statement\ Weight$$

$$Variable\ Value = \sum\ Statement\ Value$$

$$TRI\ Value = \sum\ Variable\ Value$$

There are 3 categories in determining community readiness to use technology. The three categories are listed in Table 1.

Table 1. TRI Model Category

Low Technology Readiness Index	If TRI value <= 2.89
Medium Technology Readiness Index	If TRI value 2.90 – 3.51
High Technology Readiness Index	If TRI value > 3.51

Source : (Lazuardi, 2013; Syamfithriani dkk., 2021)

In categorizing people's attitude towards the use of technology, Parasuraman stated that there were 5 types of technology customers which can be seen in Table 2.

Table 2. Technology Customers in TRI

	OPT	***INV***	***INS***	***DSC***
Explorers	*High*	*High*	*Low*	*Low*
Pioneers	*High*	*High*	*High*	*High*
Skeptics	*Low*	*Low*	*Low*	*Low*
Paranoids	*High*	*Low*	*High*	*High*
Laggards	*Low*	*Low*	*High*	*High*

Source: (Demirci, 2008; Parasuraman & Colby, 2015)

As for determining the high, medium, or low category, the researcher uses the formula in Table 3.

Table 3. Category Measurement Scale

Scale	Category
$X > (\mu + 1{,}0\sigma)$	High
$(\mu - 1{,}0\sigma) \leq X \geq (\mu + 1{,}0\sigma)$	Medium
$X < (\mu - 1{,}0\sigma)$	Low

Sumber : (Azwar, 2012)

4. RESULTS AND DISCUSSION

4.1 General Description of the Research Object

Amil Zakat Agency/Institution is an institution whose job is to collect, manage and distribute zakat funds from the community. There are approximately 27 amil zakat agencies/institutions in West Java that have been recognized by BAZNAS RI, one of which is the Amil Zakat Board of West Java province, Rumah Zakat, Dompet Dhuaffa Republik, and

Daarul Tauhid Peduli. The growth in zakat receipts at BAZNAS West Java, Rumah Zakat, DT Peduli, and Dompet Duafa in the last 5 years can be seen in Figure 1.

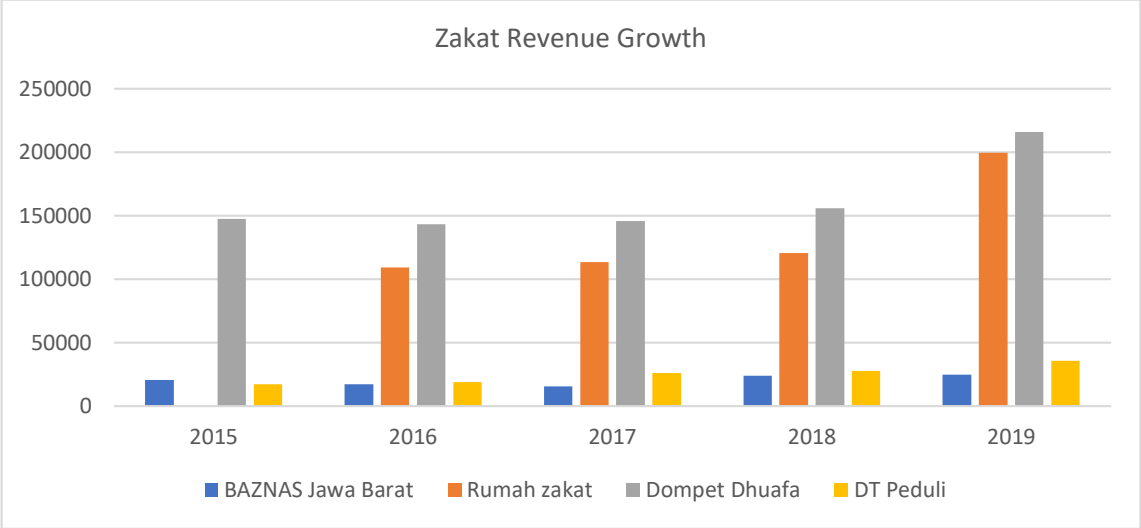

Figure 1. Zakat Revenue Growth 2015 – 2019
Source: (BAZNAS, 2020; Daarul Tauhid, 2021; Dompet Dhuafa, 2021; Rumah Zakat, 2022)

Based on Figure 1, it can be seen that zakat receipts at Dompet Dhuafa and Rumah Zakat are very high compared to the others, this is because the branches in the two LAZNAS are spread across various cities and provinces in Indonesia, this is what causes the receipt of zakat to be the highest. In addition, Rumah Zakat and Dompet Dhuafa utilize social media and expand public relations to market their programs so that revenue can be maximized by gaining the trust of the public. Whereas BAZNAS West Java, the receipt of zakat is dominated by professional zakat following government regulations that all ASN who are Muslim are required to pay zakat from the producer of 2.5%. with a large number of civil servants in West Java, of course, affects the amount of zakat received by West Java BAZNAS. When compared to other LAZNAS, DT Peduli's zakat receipts are lagging behind Zakat Houses and Dompet Dhuafa, this is because the spread on social media and their public relationships is still lacking and the ratification of DT Peduli to become LAZNAS can be considered very new, but every year zakat receipts go through DT Peduli continues to experience good growth and consistently develops in its performance.

The technology used by BAZNAS West Java, Rumah Zakat, Dompet Dhuafa, and DT Peduli in collecting funds from the public can be done through mobile banking or ATM transfers at BCA, BRI, BJB, BNI Syariah, BJB Syariah, Bank Mandiri, Mandiri Syariah banks CIMB Niaga, CIMB Syariah and various other banks. Zakat payments can also be made through the official websites of each institution. In addition, payments can be made through available online channels including kitabisa.com, go pay, LinkAja, and WeCare.id. as well as via QRCode in various other e-commerce.

4.2 Respondent Characteristic

Characteristics of respondents based on gender can be seen in Table 4 where female respondents are larger than male respondents. This shows that women have a greater tendency to use digital technology in electronic transactions (Putri, 2021). Apart from that, this is in line with the data that women dominate the use of the latest technology in facilitating transactions or work (Sulistyowati dkk., 2020).

Table 4. Respondent's Gender Classification

Gender	Frequency	Percentage
Male	61	42%
Female	84	58%
Total	145	100%

Source: Researcher's findings.

Characteristics of respondents based on age can be seen in Table 5 where the average age of respondents in this study was dominated by the age of 21-30 years. This is because the author seeks to distribute questionnaires through various social media. Kominfo's research (2017) shows that internet users in the productive age category (20-29 years) are higher in to use the internet than other ages by 60.15% with internet usage activities for communication by 81.90% and web browsing by 60.24%, so this represents that the millennial generation in their productive age is more attached to technology.

Table 5. Classification of Respondents Based on Age

Respondent's Age	Frequency (person)	Percentage (%)
11 – 20	9	6%
21 – 30	122	84%
31 - 40	14	10%
Total	145	100%

Source : Researcher's Findings

Characteristics of respondents based on their latest education can be seen in Table 6 where respondents with the last education level S1/D4, D3, and SMA/SMK/equivalent are higher than those with other levels of education. This is because researchers in distributing questionnaires utilize social media. Following research conducted by the Research and Development Center for Kominfo, the most users of social media are people with undergraduate and high school educational backgrounds, at 97.5% (Kominfo, 2017).

Table 6. Respondent's Last Education Classification.

Last Education	Frequency (person)	Percentage (%)
Junior High School	6	4%
Senior High School	93	64%
Diploma	15	10%
Bachelor	30	21%
Masters	1	1%
Total	145	100%

Source: Researcher's Findings

The characteristics of respondents based on work can be seen in Table 7 where the respondents in this study were dominated by students, compared to the work of other respondents. This is because the author takes advantage of several relationships that the author has, as well as looking for respondent data from various communities on social media, the majority of which are students.

Table 7. Classification Based on Respondent's Occupation

Respondent's Job	Frequency (person)	Percentage (%)
Employees of Stated-Owned Enterprises	29	15%
Privat Employees	9	5%
Students	88	47%
Businessman	33	18%
Total	186	100%

Source: Researcher's Findings

The characteristics of respondents based on domicile can be seen in Table 8 where the dominant respondents in this study came from Region IV, namely Kab. Bandung, Bandung city, Cimahi city, district. West Bandung, district. Sumedang district. Garut, district. Tasikmalaya, city of Tasikmalaya, district. Ciamis and the city of Banjar. This is because the city of Bandung is the city with the largest number of technology users in Indonesia. Following a survey conducted by Dana digital wallet shows that the city of Bandung is the largest user of technology such as digital wallets at 69.4% and the most e-commerce users at 85.9% in Indonesia (Rachmawati, 2022).

Table 8. Classification Based on Respondent's Domicile

Respondent's Domicile	Frequency (Person)	Percentage (%)
District I	20	14%
District II	31	21%
District III	25	17%
District IV	69	48%
Total	145	100%

Source: Researcher's Findings

The characteristics of respondents based on the use of digital transactions can be seen in Table 9 where the respondents in this study are dominant often using digital technology in transactions. This is in line with data taken from the website databoks.katadata.co.id which shows that West Java is the second province after DKI Jakarta with the largest digital transactions with a total of 1.06 billion transactions (Kusnandar, 2022).

Table 9. Respondent's Digital Transactions

Digital Transactions	Frequency (Person)	Percentage (%)
Always	17	11%
Often	81	60%
Sometimes	41	28%
Seldom	6	1%
Total	145	100%

Source: Researcher's Findings

Figure 2 can be seen that the dominant respondents in this study often use digital transactions in transferring money and purchasing goods/services. This is in line with the West Java provincial economic report from Bank Indonesia which shows that there has been an increase in digital transaction volume of 21.56% or reaching more than Rp. 250 million transactions. One of the reasons for this increase in volume was the purchase of consumer goods in e-commerce by 138.1 million people (Bank Indonesia, 2021; Open Data Jabar,

2021).Therefore it can be concluded that respondents who are people of West Java have a high tendency to use technology in digital transactions.

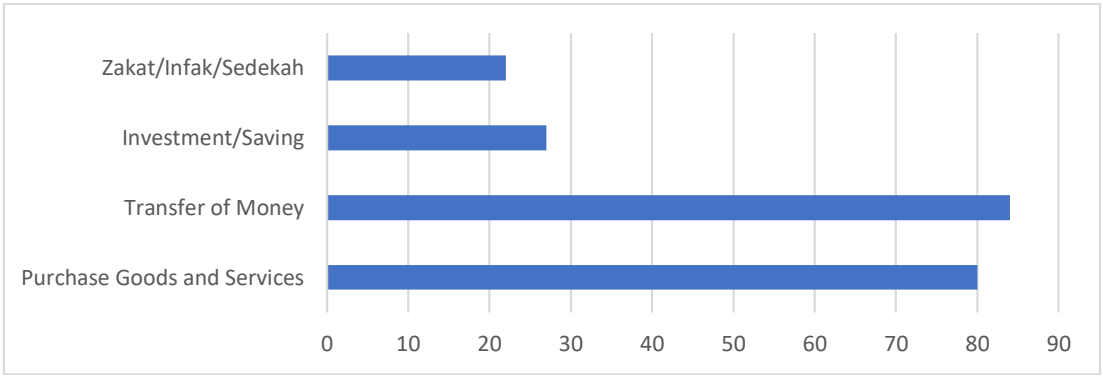

Figure 2. Respondent's Use of Digital Transactions
Source: Researcher's Findings

Next is public knowledge regarding blockchain technology. Table 10 shows that the majority of respondents do not know about blockchain technology. This is in line with Putri's findings (2021) where the majority of respondents do not know about blockchain technology but are familiar with or have heard of blockchain technology.

Table 10. Blockchain Technology Knowledge

Blockchain Technology Knowledge	Frequency (Person)	Precentage (%)
Yes	57	39%
No	67	46%
Maybe	21	15%
Total	145	100%

Source: Researcher's Findings

Researchers try to ask for references or sources of information that respondents get in knowing blockchain technology. Based on the findings in Figure 3, shows that the dominant respondents have heard of blockchain from viral news regarding the price of bitcoin which suddenly rose drastically to hundreds of millions of rupiah, the news was released in 2021 went viral where the price of bitcoin at that time was almost close to Rp. 900 million (Kompas, 2021), this news had gone viral at the time. So it can be concluded that the people who are warm to blockchain come from viral information or news about blockchain.

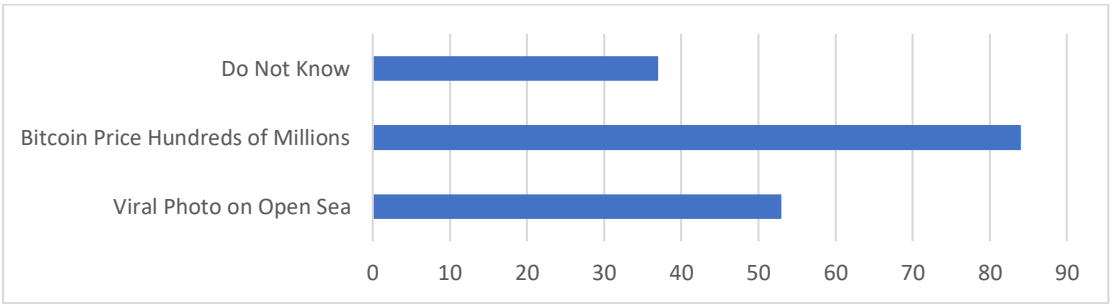

Figure 3. Blockchain News Reference
Source: Researcher's Findings

Then in Figure 4, it can be seen that respondents know the dominant blockchain technology for carrying out digital transactions and cryptocurrency investments according to the information they obtain about bitcoins and photos being sold at Open Sea. So that most respondents think that blockchain technology is a medium that can only be used for digital transactions as well as a medium for investing.

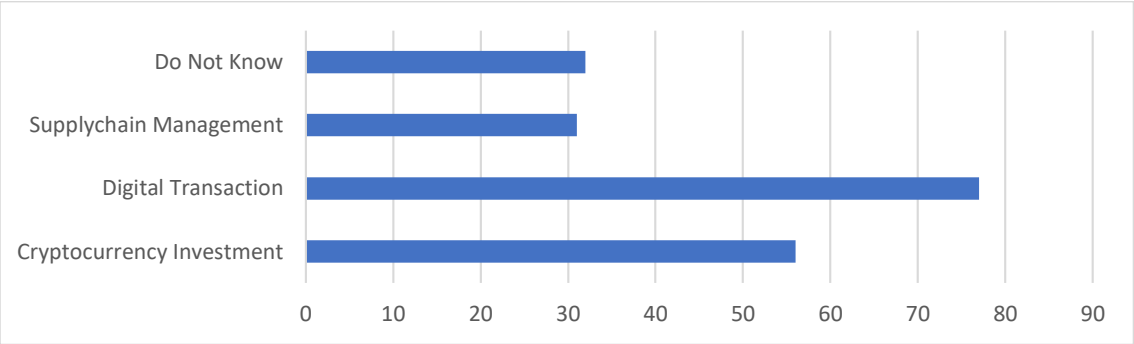

Figure 4. Benefits of Blockchain Technology
Source: Researcher's Findings

Based on this scale, the class of each indicator in the Level of Household Prosperity of MSMEs (Y), the Level of Application of Islamic Wealth Management (X), and the Level of Business Sustainability of MSMEs (Z) in Table III. Descriptive Analysis of The Research variables.

4.3 Instrument Test and TRI Analysis

4.3.1 Validity Test

To obtain the level of validity of a research data, the researcher conducted a validity test. The validity test in this study used SPSS version 26. The validity of a data can be seen by comparing the values of r counts and r tables. if r count > r table then it is declared valid, while r count < r table then it is invalid. The following results of the validity test obtained can be seen in Table 11.

Table 11. Validity Test

No	r count	r table	Information
OPT1	0.641	0.374	Valid
OPT2	0.670	0.374	Valid
OPT3	0.785	0.374	Valid
OPT4	0.724	0.374	Valid
OPT5	0.795	0.374	Valid
INV1	0.568	0.374	Valid
INV2	0.402	0.374	Valid
INV3	0.514	0.374	Valid
INV4	0.529	0.374	Valid
INV5	0.688	0.374	Valid
DSC2	0.381	0.374	Valid
DSC3	0.645	0.374	Valid
DSC4	0.531	0.374	Valid
INS1	0.656	0.374	Valid
INS2	0.648	0.374	Valid
INS3	0.763	0.374	Valid

INS4	0.577	0.374	Valid
INS5	0.557	0.374	Valid

Source: Researcher Findings through SPSS

4.3.2 Reliability Test

The reliability test was carried out using Cronbach's Alpha value. This reliability test can guarantee consistency of measurement over time and at various points in the instrument (Sekaran & Bougie, 2017). In this study, the data is declared reliable if Cronbach's Alpha (> 0.6). The following reliability test results obtained can be seen in Table 12.

Table 12. Reliability Test

Variable	*Cronbach Alpa*	r table	Information
Optimism	0.932	0.60	*Reliable*
Innovativeness	0.756	0.60	*Reliable*
Discomfort	0.682	0.60	*Reliable*
Insecurity	0.871	0.60	*Reliable*

Source: Researcher Findings

4.3.3 Analysis of Technology Readiness Index

The TRI test is used to measure the extent of a person's readiness to use the latest technology. To measure how far a person's level of readiness is with current technology, four measurement dimensions can be used, namely Optimism, Innovativeness, Discomfort, and Insecurity. Using these four dimensions will make it easier to measure a person's readiness to use new technologies that exist today. In this study, the level of readiness of blockchain technology users in paying zakat is measured and analyzed using the TRI method.

The TRI value calculation method is calculated from the mean value of each question associated with the weight of each statement. Each variable weighs a total of 25%. The weight of the total is then divided by the number of statements for each variable. After getting the weight of each statement n, then the mean value of the statement is multiplied by the weight of each statement to get the total score for each statement. The variable score is obtained from the total score of the statements in that variable. The total TRI score is obtained from the sum of the values of all variables. After collecting and testing, the following results are obtained:

Table 13. TRI Score Calculation

No	Total Score	Total Respondent	Statement Weight	Mean	Statement Value	Variable Value	TRI Value
OPT1	659	145	0.05	4,503448	0,225172		
OPT2	679	145	0.05	4,655172	0,232759	1,122069	
OPT3	657	145	0.05	4,482759	0,224138		
OPT4	632	145	0.05	4,337931	0,216897		
OPT5	652	145	0.05	4,462069	0,223103		
INV1	628	145	0.05	4,303448	0,215172		4,392295
INV2	650	145	0.05	4,455172	0,222759	1,136207	
INV3	660	145	0.05	4,537931	0,226897		
INV4	697	145	0.05	4,786207	0,23931		
INV5	677	145	0.05	4,641379	0,232069		
DSC2	630	145	0.08	4,303448	0,358619	1,033329	

DSC3	584	145	0.08	4,006897	0,333907	1,10069
DSC4	598	145	0.08	4,089655	0,340803	
INS1	642	145	0.05	4,365517	0,218276	
INS2	677	145	0.05	4,648276	0,232414	
INS3	636	145	0.05	4,351724	0,217586	
INS4	642	145	0.05	4,393103	0,219655	
INS5	622	145	0.05	4,255172	0,212759	

Source: Researcher's Findings

It can be seen from Table 13 shows that the total TRI score obtained in this study was 4.38. It can be concluded that the level of readiness of the people of West Java in using blockchain technology for zakat payments is at a high level of High Technology Readiness because the TRI value obtained is greater than 3.51. Based on this score, it can be concluded that the people of West Java are ready to accept blockchain technology in Zakat payments. Similar research that shows readiness to accept technology is at high technology readiness is research (Kristy dkk., 2020; Marthasari dkk., 2020; Pradipta & Resen, 2019). The results of this study are different from those (Fikri & Mariana, 2022; Sumaryadi, 2021; Yasirandi dkk., 2021), where the results of this study show that technological readiness is in the medium or low category.

As for the next, the researcher will try to examine the readiness segmentation group to accept the technology of the people of West Java. In determining high or low, the researcher uses the categorization formula described in Table 3. The results obtained after scoring the categorization can be seen in Table 14.

Table 14. Recapitulation of Technology Readiness Segmentation Categorization Results

Dimension	**F**	**R**	Category
Optimism	72	49.7%	High
Innovativeness	100	69.0%	High
Discomfort	109	75.2%	High
Insecurity	89	61.4%	High

Source: Researcher's Findings

All dimensions are in the high category. If you look at Table 2, if all dimensions are in a high category, it can be concluded that the people of West Java are included in the Pioneers category in their readiness to accept blockchain technology in zakat payments.

The pioneer's group is a group that has an equally high level of optimism and innovation. This means having a positive outlook and high expectations for the presence of new technology and having the same high desire to use the technology to facilitate their work. But on the other hand, this pioneer group has a high level of discomfort and insecurity as well, meaning that this group has high worries and fears that the technology is not in line with expectations so they become more careful in accepting a new technology (Parasuraman, 2000; Parasuraman & Colby, 2015).

This research shows that some of the people of West Java are pioneers, which means that the people of West Java have a high sense of optimism and innovation in using blockchain technology for zakat payments. But on the other hand, the people of West Java also have a sense of discomfort and insecurity in facing this blockchain technology to pay zakat, meaning that if blockchain technology does not meet expectations or find discomfort and insecurity in using blockchain technology then this technology will be abandoned.

The results of similar studies where community groups are included in the pioneer group are research (Effendy & Pratiwi, 2020; Pradipta & Resen, 2019; Syamfithriani dkk., 2021). Whereas research is different from the results of this study where the community group is not included in the pioneer segmentation (Kadar dkk., 2017; Yusuf dkk., 2020; Zakiyyah & Rosyidah, 2022) where in this research the community group accepting technology is in the explorer's group or skeptics.

5. CONCLUSION

Based on the results of research and findings in the field, it can be concluded that the readiness level of the people of West Java to use blockchain technology in zakat payments is at high technology readiness or is at high readiness but this high readiness is accompanied by a high sense of discomfort and insecurity. On the optimism and innovation dimension, the TRI results show that the people of West Java have a positive view of blockchain technology for zakat payments and have the desire to use it. On the other hand, the TRI score for the dimensions of discomfort and insecurity shows that the people of West Java also have fears of the harmful consequences of blockchain technology on zakat payments and have great concerns about not being able to use it.

The attitude of the people of West Java in their readiness to use blockchain technology in paying zakat is in the pioneer community group, this is because every dimension is in a high category. The pioneer community group means that the people of West Java have a high sense of optimism and innovation in using blockchain technology for zakat payments. But on the other hand, the people of West Java also have a high sense of discomfort and insecurity in dealing with blockchain technology to pay zakat. That is, if blockchain technology does not meet expectations or finds discomfort and insecurity in using blockchain technology, this technology will be abandoned.

REFERENCES

Adhitama, R., Wijayanto, A., & Kusumawardani, D. M. (2022). Analisis tingkat kesiapan pengguna sistem informasi koreksi essay otomatis berbasis web menggunakan model technology readiness index (TRI). *J. Sistem Info. Bisnis*, *11*(2), 161–167. https://doi.org/10.21456/vol11iss2pp161-167

Ajwang, S. O., Abila, J., & Dakay, I. (2021). Adoption conceptual model for intelligent waste management in smart cities: theoretical review. *International Journal of Computing Sciences Research*, *5*(1), 426–440. https://doi.org/10.25147/ijcsr.2017.001.1.50

Akmal, M., & Muafit, K. (2022). *Digitalisasi zakat*. OSF Preprints. https://doi.org/10.31219/osf.io/mtrj2

Alharbi, A., & Sohaib, O. (2021). Technology readiness and cryptocurrency adoption: PLS-SEM and deep learning neural network analysis. *IEEE Access*, *9*, 21388–21394. https://doi.org/10.1109/ACCESS.2021.3055785

Ali, S., Khalid, N., Javed, H. M. U., & Islam, D. Md. Z. (2020). Consumer adoption of online food delivery ordering (OFDO) services in Pakistan: the impact of the COVID-19 pandemic situation. *Journal of Open Innovation: Technology, Market, and Complexity*, *7*(1), 1–23. https://doi.org/10.3390/joitmc7010010

Amilia, S., Puspita, D. A., & Putra, H. S. (2021). Kesiapan usaha mikro kecil dan menengah (UMKM) menerapkan standar akuntansi keuangan entitas mikro kecil dan menengah (SAK EMKM). *Jurnal Akuntansi Universitas Jember*, *18*(2), 102–109. https://doi.org/10.19184/jauj.v18i2.19438

Ardani, M., & Pujiyono, A. (2021). The priority problems and solutions in formulating strategies to optimize zakat collection in Indonesia. *International Journal of Zakat*, *6*(3), Art. 3. https://doi.org/10.37706/ijaz.v6i3.290

Ariani, A., Napitupulu, D., Jati, R., Kadar, J., & Syafrullah, M. (2018). Testing of technology readiness index model based on exploratory factor analysis approach. *Journal of Physics: Conference Series*, 012043. https://doi.org/10.1088/1742-6596/1007/1/012043

Ayyubi, S. A. (2021, Agustus 7). Diduga korupsi dana Baznas, Bupati Solok dilaporkan ke kejagung—Kabar24 Bisnis.com. Bisnis.com. https://kabar24.bisnis.com/read/20210709/16/1415771/diduga-korupsi-dana-baznas-bupati-solok-dilaporkan-ke-kejagung

Azwar, S. (2012). *Penyusunan skala psikologi*. Pustaka Belajar.

Bank Indonesia. (2021). Laporan perekonomian Provinsi Jawa Barat Mei 2021. https://www.bi.go.id/id/publikasi/laporan/lpp/Pages/Laporan-Perekonomian-Provinsi-Jawa-Barat-Juni-2021.aspx

BAZNAS. (2020). *Statistik zakat nasional 2019*. sub divisi pelaporan. https://pid.baznas.go.id/wp-content/uploads/2020/09/STATISTIK-ZAKAT-NASIONAL-2019.pdf

Canggih, C., Fikriyah, K., & Yasin, A. (2017). Potensi dan realisasi Dana Zakat Indonesia. *al-Uqud : Journal of Islamic Economics*, *1*(1), Art. 1. https://doi.org/10.26740/al-uqud.v1n1.p14-26

Casino, F., Dasaklis, T. K., & Patsakis, C. (2019). A systematic literature review of blockchain-based applications: current status, classification and open issues. *Telematics and Informatics*, *36*, 55–81. https://doi.org/10.1016/j.tele.2018.11.006

Cole, R., Stevenson, M., & Aitken, J. (2019). Blockchain technology: implications for operations and supply chain management. *Supply Chain Management: An International Journal*, *24*(4), 469–483. https://doi.org/10.1108/SCM-09-2018-0309

Daarul Tauhid. (2021). Laporan keuangan Daarul Tauhiid Peduli. https://dtpeduli.org

Darlington, N. (2021, November 25). What is Blockchain technology? a step-by-step guide for beginners. blockgeeks. https://blockgeeks.com/guides/what-is-blockchain-technology/

Demirci, A. (2008). Technology readiness for innovative high-tech products: how consumers perceive and adopt new technologies. *The Business Review*, *11*(1), 302–309.

Dompet Dhuafa. (2021). Laporan tahunan Dompet Dhuafa Republika. *Pusat Data Dan Penerbitan Dompet Dhuafa*. https://publikasi.dompetdhuafa.org/laporan-publik-tahunan/

Effendy, L., & Pratiwi, S. D. (2020). Tingkat adopsi teknologi sistem jajar legowo padi sawah di Kecamatan Cigasong Kabupaten Majalengka. *Agrica Ekstensia*, *14*(1), Art. 1. https://doi.org/10.55127/ae.v14i1.44

Faizani, S. N., & Indriyanti, A. D. (2021). Analisis pengaruh technology readiness terhadap perceived usefulness dan perceived ease of use terhadap behavioral intention dari quick response Indonesian standard (QRIS) untuk pembayaran digital (studi kasus: pengguna aplikasi e-Wallet Go-Pay, DANA, OVO. *Journal of Emerging Information System and Business Intelligence (JEISBI)*, *2*(2), Art. 2.

Fauzi. (2021, September 9). Diduga gelapkan dana zakat ratusan juta rupiah oknum Baznas diperiksa. Kuasakata. https://kuasakata.com/read/berita/37981-diduga-gelapkan-dana-zakat-ratusan-juta-rupiah-oknum-baznas-diperiksa

Fauzia, A. S., Mulatsih, S., & Alexandi, F. (2021). Mapping the potential of zakat collection digitally in Indonesia. *International Journal of Zakat*, *6*(3), Art. 3. https://doi.org/10.37706/ijaz.v6i3.355

Ferdinand, A. (2014). *Metode penelitian manajemen*. Badan Penerbit Universitas Diponegoro.

Fikri, H. T., & Mariana, R. (2022). Technology readiness dan computer self efficacy pada guru dalam sistem pembelajaran daring. *Analitika: Jurnal Magister Psikologi UMA*, *14*(1), Art. 1. https://doi.org/10.31289/analitika.v14i1.6015

Hair, J. F., Hult, G. T., Ringle, C. M., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)*. SAGE Publications.

Hawwa, S. (2004). *Al-Islam*. Gema Insani.

Humas BAZNAS. (2020, Agustus 10). *Konferensi zakat internasional ke-4 ICONZ 2020 hasilkan sembilan resolusi*. Badan Amil Zakat Nasional. https://baznas.go.id/Press_Release/baca/Konferensi_Zakat_Internasional_ke-4_ICONZ_2020_Hasilkan_Sembilan_Resolusi/642

Ismail, K. A., & Wahid, N. A. (2020). A review on technology readiness concept to explain consumer's online purchase intention. *International Journal of Industrial Management*, *6*(1), 49–57. https://doi.org/10.15282/ijim.6.0.2020.5629

Kadar, J. A., Napitulu, D., & Jati, R. K. (2017). Klasifikasi UKM berdasarkan tingkat kesiapan teknologi menggunakan algoritma k-means. *Jurnal Penelitian Pos dan Informatika*, *07*(02), 97–108.

Kashif, M., Faisal, J. K., & Abdur, R. M. (2018). The dynamics of zakat donation experience among muslims: A phenomenological inquiry. *Journal of Islamic Accounting and Business Research*, *9*(1), 45–58. https://doi.org/10.1108/JIABR-01-2016-0006

Kominfo. (2017). *Survei penggunaan TIK serta implikasinya terhadap aspek sosial budaya masyarakat*. Pusat Penelitian dan Pengembangan Aplikasi Informatika dan Informasi dan Komunikasi Publik.

Kompas. (2021, April 13). Cetak rekor baru, harga bitcoin tembus rp 900 juta. KOMPAS.com. https://money.kompas.com/read/2021/04/13/160317126/cetak-rekor-baru-harga-bitcoin-tembus-rp-900-juta

Kristy, R. D., Wahyuni, E. D., & Hayatin, N. (2020). Analysis of the readiness level of children encyclopedia using technology readiness index (TRI). *Jurnal Repositor*, *2*(2), 129–136.

Kusnandar, V. B. (2021). RISSC: Populasi muslim Indonesia terbesar di dunia | Databoks. Databoks. https://databoks.katadata.co.id/datapublish/2021/11/03/rissc-populasi-muslim-indonesia-terbesar-di-dunia

Kusnandar, V. B. (2022). Transaksi kartu ATM dan debit capai 7,4 miliar transaksi pada 2021 | Databoks. https://databoks.katadata.co.id/datapublish/2022/06/23/transaksi-kartu-atm-dan-debit-capai-74-miliar-transaksi-pada-2021

Lazismu Pusat. (2021, Januari 7). Hasil survei Lazismu: pendapatan masyarakat turun, namun tetap berderma. lazismu.org. https://lazismu.org/view/hasil-survei-lazismu-pendapatan-masyarakat-turun-namun-tetap-berderma

Lazuardi, A. (2013). *Tingkat kesiapan (readiness) pengadopsian teknologi informasi: studi kasus Panin Bank*. Universitas Indonesia.

Marthasari, G. I., Hayatin, N., Wahyuni, E. D., & Kristy, R. D. (2020). Measuring user readiness of web-based encyclopedia for kids based on technology readiness index. *Jurnal Media Informatika Budidarma*, *4*(2), Art. 2. https://doi.org/10.30865/mib.v4i2.2005

Martono, S., Nurkhin, A., Luthfiyah, F., Fachrurrozie, F., Rofiq, A., & Sumiadji, S. (2019). The relationship between knowledge, trust, intention to pay zakah, and zakah-paying behavior. *International Journal of Financial Research*, *10*(2), 75. https://doi.org/10.5430/ijfr.v10n2p75

Muhammad, S. A., & Saad, R. A. J. (2016). Determinants of trust on zakat institutions and its dimensions on intention to pay zakat: A pilot study. *Journal of Advanced Research in Business and Management Studies*, *3*(1), 40–46.

Nasir, M. (2013). Evaluasi penerimaan teknologi informasi mahasiswa di Palembang menggunakan model UTAUT. *Seminar Nasional Aplikasi Teknologi Informasi (SNATI)*. https://journal.uii.ac.id/Snati/article/view/3006

Ninglasari, S. Y., & Muhammad, M. (2021). Zakat digitalization: effectiveness of zakat. *Journal of Islamic Economic Laws*, *4*(1), 26–44. https://doi.org/10.23917/jisel.v4i1.12442

Nugroho, M. A., & Fajar, M. A. (2017). Effects of technology readiness towards acceptance of mandatory web-based attendance system. *Procedia Computer Science*, *124*, 319–328. https://doi.org/10.1016/j.procs.2017.12.161

Nurdiansyah, Y., & Jayanto, A. D. (2021). Pengukuran kesiapan pengguna aplikasi face to face polsek semboro menggunakan metode TRI (Technology Readiness Index). *Prosiding Seminar Nasional Sains Teknologi dan Inovasi Indonesia (SENASTINDO)*, *3*, 135–144. https://doi.org/10.54706/senastindo.v3.2021.155

Nurliyani, W. O. (2021). *UPZ Mesjid Al Mukaqarrobin Baubau laporkan pengurus mesjid dugaan penggelapan zakat* [RRI Kendari]. Hukum dan Kriminal. https://rri.co.id/kendari/hukum-dan-kriminal/1095447/upz-mesjid-al-mukaqarrobin-baubau-laporkan-pengurus-mesjid-dugaan-penggelapan-zakat

Omar, N., & Khairi, K. F. (2021). Zakat and blockchain: a review. *International Journal of Islamic Economics and Finance Research*, *4*(2 December), Art. 2 December. https://doi.org/10.53840/ijiefer.v4i2.53

Open Data Jabar. (2021). Transaksi digital jadi jalan pintas selamatkan UMKM Jabar? https://opendata.jabarprov.go.id/id/infografik/transaksi-digital-jadi-jalan-pintas-selamatkan-umkm-jabar

Panday, R., Wibowo, A., & Mardiah, S. (2019). Analisis technology readiness acceptance penggunaan komputer dan teknologi informasi pada manajemen proyek kontraktor. *Jurnal Ilmiah Manajemen Ubhara*, *6*(1), 33–44.

Parasuraman, A. (2000). Technology readiness index (TRI): a multiple-item scale to measure readiness to embrace new technologies. *Journal of Service Research*, *2*(4), 307–320. https://doi.org/10.1177/109467050024001

Parasuraman, A., & Colby, C. L. (2015). An updated and streamlined technology readiness index: TRI 2.0. *Journal of Service Research*, *18*(1), 59–74. https://doi.org/10.1177/1094670514539730

Peraturan Pemerintah No. 14. (2014). *Peraturan Pemerintah Republik Indonesia nomor 14 tahun 2014 tentang pelaksanaan Undang-Undang nomor 23 tahun 2011 tentang pengelolaan zakat*. Kemenkumham.

PPID BAZNAS. (2022). Peraturan – PPID BAZNAS. *Peraturan*. https://pid.baznas.go.id/peraturan/

Pradipta, A. D., & Resen, P. T. K. (2019). Kesiapan penerimaan teknologi bagi dosen dalam mengadopsi imissu di Universitas Udayana. *Jurnal Ilmiah Widya Sosiopolitika*, *1*(1), 15. https://doi.org/10.24843/JIWSP.2019.v01.i01.p04

Pritama, A. (2021, Oktober 30). Blockchain for agriculture [Web If Unila]. http://web.if.unila.ac.id/arbianpritama24/2021/10/30/blockchain-for-argiculture/

Puskas Baznas. (2020). *Outlook Zakat Indonesia 2021*. BAZNAS.

Putri, C. A. A. (2021). Exploring the potential of blockchain technology for zakat administration in Indonesia. *International Journal of Zakat*, *6*(3), 101–120.

Rachmawati, A. R. (2022). Pengguna e-commerce terbesar ada di Bandung. https://www.pikiran-rakyat.com/ekonomi/pr-01321279/pengguna-e-commerce-terbesar-ada-di-bandung

Rangone, A., & Busolli, L. (2021). Managing charity 4.0 with blockchain: a case study at the time of covid-19. *International Review on Public and Nonprofit Marketing*, *18*(4), 491–521. https://doi.org/10.1007/s12208-021-00281-8

Republika. (2021, Mei 7). 5 tantangan lembaga zakat peroleh kepercayaan masyarakat. https://www.republika.co.id/berita/qvrv8l320/5-tantangan-lembaga-zakat-peroleh-kepercayaan-masyarakat

Rumah Zakat. (2022, Maret 8). *Financial report—Rumah Zakat*. Rumah Zakat - NGO pengelola zakat, infak, shadaqah & dana kemanusiaan. https://www.rumahzakat.org/id/homepage

Scheier, M. F., & Carver, C. S. (1992). Effects of optimism on psychological and physical well-being: theoretical overview and empirical update. *Cognitive Therapy and Research*, *16*(2), 201–228. https://doi.org/10.1007/BF01173489

Sekaran, U., & Bougie, R. (2017). *Metode penelitian untuk bisnis: pendekatan pengembangan keahlian*. Salemba Empat.

Soebardi, R. (2012). Perilaku inovatif. *Jurnal Psikologi Ulayat*, *1*(1), Art. 1. https://doi.org/10.24854/jpu4

Sugiyono. (2017). *Metode penelitian administrasi dilengkapi dengan metode R&D*. Alfabeta.

Sujarweni, W. (2014). *Metodologi penelitian lengkap, praktis dan mudah dipahami*. Pustaka Baru Press.

Sulistyowati, R., Paais, L., & Rina, R. (2020). Persepsi konsumen terhadap penggunaan dompet digital. *Isoquant : Jurnal Ekonomi, Manajemen dan Akuntansi*, *4*(1), Art. 1. https://doi.org/10.24269/iso.v4i1.323

Sumaryadi, M. Y. (2021). Peningkatan technology readiness index peternak kambing perah melalui pelatihan aplikasi teknologi reproduksi. *Pengembangan Sumber Daya Perdesaan dan Kearifan Lokal Berkelanjutan XI*, *11*, 129–136.

Syamfithriani, T. S., Mirantika, N., Daswa, Yusuf, F., & Kurniadi, E. (2021). M-commerce application acceptance analysis using technology readiness index (TRI) Model in Kuningan Regency. *Journal of Physics: Conference Series*, *1933*(1), 1–6. https://doi.org/10.1088/1742-6596/1933/1/012012

Tim Research Forum Zakat. (2020). *Analisis kesiapan lembaga amil zakat dalam menghadapi era digital* (hlm. 13). Forum Zakat dan Filantrophi Indonesia.

Urfiyya, K. (2021). Digital system blockchain sebagai strategi untuk optimalisasi pengelolaan dana zakat: studi konseptual. *Jurnal Studi Agama dan Masyarakat*, *17*(2), 83–95. https://doi.org/10.23971/jsam.v17i2.3157

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: toward a unified view. *MIS Quarterly*, *27*(3), 425–478. https://doi.org/10.2307/30036540

Walczuch, R., Lemmink, J., & Streukens, S. (2007). The effect of service employees' technology readiness on technology acceptance. *Information & Management*, *44*(2), 206–215. https://doi.org/10.1016/j.im.2006.12.005

Wibisono, Y. (2015). *Mengelola zakat Indonesia diskursus pengelolaan zakat nasional dari rezim Undang-undang no. 38 tahun 1999 ke rezim Undang-Undang no. 23 tahun 2011* (1 ed.). Prenadamedia Group.

Yasirandi, R., Oktaria, D., & Yuda, M. K. (2021). Pengukuran IT readiness pada KBRI Quito ekuador sebagai perwakilan pertukaran budaya menggunakan TRI model. *Jurnal Teknik Informasi Dan Komputer (Tekinkom)*, *4*(2), Art. 2. https://doi.org/10.37600/tekinkom.v4i2.343

Yusuf, F., Syamfithriani, T. S., & Mirantika, N. (2020). Analisis tingkat kesiapan pengguna e-learning Universitas Kuningan dengan menggunakan model techonology readiness index (TRI). *Nuansa Informatika*, *14*(2), 39–50. https://doi.org/10.25134/nuansa.v14i2.2991

Zakiyyah, A. M., & Rosyidah, U. A. (2022). Analisis technology readiness sebagai upaya mitigasi teknologi pada UMKM di Jember. *JUSTINDO (Jurnal Sistem dan Teknologi Informasi Indonesia)*, *7*(1), Art. 1. https://doi.org/10.32528/justindo.v7i1.4974