

Risk Management in Digital Transformation of Zakat Collection and Information Systems in Indonesia

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ABSTRACT

Indonesia as a country with a Muslim majority has enormous potential in the management of zakat. In its development, the collection and information system for zakat is done digitally, which is a new breakthrough to make it easier for muzakki to pay their zakat. All systems in the network have potential risks that must be minimized so that the security of users can be maintained. This study uses a qualitative descriptive method that discusses in depth the object of research sourced from various literatures. This study uses an OCTAVE analysis approach which then finds that there are six identified risks in the digital transformation of payments and zakat information systems. With two risks from inside/internal and four risks from outside/external. By managing these risks, an integrated, informative, and multi-purpose collection system can be formulated. So that risk management is very important to be applied in a digital zakat collection and information system so that operational aspects, muzakki trust, and reputation can always be guaranteed.

Key words: Risk Management, Zakat Collection, Information System.

INTRODUCTION

Indonesia has the fourth largest population in the world with a population of 272,229,372. Of this number, Indonesia is also one of the countries with the largest number of Muslims, reaching 236.53 million people or equivalent to 86.88% of the population (Kemendagri, 2021). With the large number of adherents of this religion, of course, daily life will not be separated from the influence of this religion. In Islam there are worship that are the pillars or pillars of Islam, namely shahada, prayer, zakat, fasting, and hajj.

In general, zakat can be divided into 2, namely zakat fitrah and zakat maal, both of which have their respective provisions with the aim of cleaning property and remembering to others that in our assets there is also a part of those in need. Zakat has its own uniqueness as a form of worship, namely as a form of solidarity

between religious adherents in need. Zakat has rules that are only intended for certain groups which are then referred to as asnaf. Asnaf consists of 8 groups, namely indigent, poor, amil, mu'alaf, riqab, gharim, fi sabilillah, and ibn sabil. While people who carry out zakat are called muzakki. A muzakki can carry out his worship directly or through an amil zakat body or institution while remaining in the sharia corridor.

Institutionally, the zakat organization is divided into two, namely the National Amil Zakat Agency as an official government institution that regulates and manages zakat and is directly responsible to the government and the Amil Zakat Institution as a community-formed amil institution based on the same purpose and forms a zakat management organization while remaining responsible to the government either directly or indirectly.

Along with the development of the times, zakat organizations continue to innovate where everything is digital. Digital is a change or shift in the way of working using information technology to gain efficiency and effectiveness in performance (Danuri, 2019). With this digitalization, the collection, distribution, and utilization process will be easier and reach every level of society more efficiently. Collection of zakat through online systems and payment systems is certainly inseparable from the threat of cyber crime and also some risks to the efficiency goal of zakat collection. Therefore, it is necessary to control the various possible risks that will be faced.

Muhammad Fitrahuddin Ajmal Nazir (2018) in a study entitled "Manajemen risiko operasional di lembaga amil zakat nasional (studi kasus pada lembaga amil zakat nasional yang memiliki kantor pusat di surabaya)" found that risk management has been carried out in the national amil zakat institution by identifying and managing risk and mentioned that the biggest failure was the internal systems and processes of human resource management. In this study, it is still discussed internally and has not touched the external side of the operational role and there is no disclosure related to services in the network or online from the collection and how the risks faced by institutions and muzakki.

Furthermore, in research conducted by Siti Masruroh (2018) in "Implementation of Risk Management on Zakat Fund Management: case study of IZI(inisiatif zakat indonesia) DIY" found that the current risk of collecting zakat funds is only concerned with concerns about muzakki's trust. and the reputation of zakat institutions in society. Have not discussed in depth what causes the trust to rise or fall and how to improve the reputation of the institution. In this study, further discussing with the development of an all-digital era, of course increasing

reputation cannot be separated from the digital world so that risk identification in collecting zakat digitally and the information system presented must be managed properly.

Furthermore, Nurhafifah et al (2018) in " Analisis Manajemen Risiko Keamanan Data Sistem Informasi(Studi Kasus RSUD XYZ)" suggested that the Octave Allgro method for evaluating information system security risks found that trust and reputation were the highest values or positions that determine risk in a company. This study tries to determine a system with a method similar to the object of collection and zakat information system in zakat organizations in Indonesia.

Management or risk management is needed in various ways so that individuals or groups must have a system or procedure in anticipating all risks that will be faced. This study seeks to reveal a risk management governance system in digital transformation of collection and zakat information systems in zakat organizations by achieving the goals of efficiency and effectiveness of performance oriented to trust and reputation in an institution.

LITERATURE REVIEW

Risk management

Risk has the meaning of any event that has the possibility or potential to occur and can cause harm/inconsistency in an individual or group (Masruroh, 2018). Management is a method or method in which there are directing, organizing, monitoring and planning activities as the basis for carrying out a system. So that risk management is a method or method that studies the identification, planning, regulation and management of risk with the aim of sustainability in order to achieve individual or group goals.

In the implementation of risk management, various benefits will be obtained, namely:

1. Have a directed picture of a phenomenon or activity that is being carried out
2. Can determine plans for various risks found so that they can be avoided so that all initial plans for an activity can be carried out properly
3. Provide accurate analysis of the phenomenon that is happening so that there is no misinterpretation of an event that is being or will be faced
4. Can avoid various risks that were previously predicted to occur or reduce the possibility of a risk occurring so that losses or deviations from the original purpose can be minimized.

To achieve these benefits, the implementation of risk management has several stages that must be passed as a method. In general, the stages in implementing risk management are (Hanafi, 2012):

1. Risk Identification
The identification process is the initial process as a process to identify or see the picture and phenomena being faced, starting from determining what risks are faced in various internal and external factors to determining the causes and scale of risk measurement which will later produce a product, namely a risk list.
2. Evaluation and Measurement (Analysis) of Risk
After carrying out all prevention or other options in minimizing risk, it is necessary to evaluate and measure the achievements obtained from the plans that have been prepared so that if there are deficiencies, they can be corrected and used as evaluations in subsequent activities so that the risks that fail to be handled do not recur in the next period.

3. Risk Management

Risk management is the act of implementing the plans that have been prepared and making decisions on what method will be used in dealing with a risk. The usual way is to minimize, divert or prevent, and control the risk to run as desired. Matters related to risk management can be achieved by developing human resources, facilities, and procedures or systems that are not good in individuals or groups.

METHODOLOGY

This study uses a qualitative method with a descriptive and detailed approach based on various literature sources. Qualitative method is a research method based on natural conditions based on data or facts that reveal the quality of a phenomenon that leads to the acceptance or rejection of a theory that is used with in-depth observations. This study aims to find a risk management system for digital transformation of collection and zakat information systems with the OCTAVE method sourced from various literatures that can support this research.

DISCUSSION & RESULT

In the field of zakat, there are several risks that have been identified by the work union on the core principles of international zakat or the International working group on zakat core principles (IWGZCP) where there are four types of risks which include:

1. Reputation risk and loss of trust muzakki
The reputation and trust of the muzakki are at the core of the running of a zakat organization so that the biggest risk they face is betting on the reputation and trust of the muzakki. In a digital system, of course, what and how something is displayed will affect how people perceive it.

2. Operational risk
Operations also have a big risk because a system depends on who is ready to operate it. Because human resources here are the implementing elements of all plans that have been prepared to achieve goals. The security of information and payment systems also depends on operations so that management in preventing the risk of operator incompetence is very necessary to maintain the continuity of the organization.
3. Distribution risk
4. Risk of transfer of zakat between countries

Digital Zakat Collection Risk Management and Information System

In the evaluation of information systems there is a method that is often used to see risk, namely the OCTAVE method. OCTAVE is an approach in evaluating information security risk that is systematic and directed with several component indicators in seeing a phenomenon. In testing or viewing a phenomenon, this method has three stages, namely:

- a. Building Threat-Based Assets Profile, where the development or provision of both physical and non-physical assets which include supporting networks and security aspects as well as data information that can be used to build and deal with a threat.
- b. Identification of information system support network infrastructure, data collection on information systems so that they can formulate sustainable plans to achieve goals.
- c. Development of security strategy and planning, after data and planning are available, operational development must be carried out with good risk management planning.

Based on this method, management can be formulated as follows. In the

collection and digital zakat information system, several risks can be identified as follows:

Internal	Problematic or less compatible digitization support system (operational)
	Human resources are less competent and disciplined (operational)
External	Cyber attacks on payment systems (muzakki's reputation and trust)
	Cyber attacks on information systems (muzakki's reputation and trust)
	The public does not understand the digital procedures made by the organization (muzakki's reputation and trust)
	Competition with other zakat organizations (muzakki reputation and trust)

Based on the identification of these risks, the following is a risk analysis related to the collection and digital zakat information system:

Internal	Lack of maintenance and/or funding to complete the need for a support system that results in a less effective and optimal system
	Unstructured recruitment patterns and ability orientation so that human resources lack the ability. In addition, it is also due to the absence or ineffectiveness of competency development training
External	A system that is easy to hack is due to the lack of a strong system wall so that hackers can change and take advantage of data and information
	A system that is easy to hack is due to the lack of a strong system wall so that hackers can change and take advantage of data and information
	The face-to-face system is complicated and there are no instructions for use so that people

	are confused about the use of a system
	Performance orientation will always be improved by each zakat organization so that people will tend to choose zakat organizations that have the best performance to distribute their zakat.

With this identification and analysis, risk management is needed for all these possibilities to eliminate or reduce the risk, here is the risk management for the collection and digital zakat information system:

Internal	Prepare a period of regular repair and replacement so that the quality of the support system is maintained along with the times
	Recruiting employees by looking at their abilities and work orientation. Conduct training to employees according to their respective duties.
External	Have or train employees with payment security standards that exist in Indonesia. Cooperating with related banks which are the means of collecting funds from muzakki
	Have or train employees with payment security standards that exist in Indonesia.
	Create a face-to-face system that is easy to use by the general public and create a video or guide for the implementation of zakat payments digitally
	Always improve the quality of services and information systems that are open, reliable/trustworthy, and of high quality.

Integrated, Informative and Multipurpose Collection System

In the current digital era, applications that make it easier for someone are needed, especially in this case discussing forms of worship and concern for religious people.

The potential that exists for the financing system from ZISWAF is very large but has not been managed properly. Therefore, this application is very necessary so that the optimization of ZISWAF in Indonesia is more optimal which can later be used on a wide scale so that it can become a driver and strengthen the national economy which will later provide large jobs. Discussing this then the question arises what distinguishes this application from the existing one. Based on these questions, the following is an explanation.

The existing application only has several features, namely:

1. Personal data
Contains several things, namely those related to the biodata of a person who wants to channel their social funds.
2. Calculation of zakat
The calculation feature is only a basic calculation, which is only about how much wealth is then multiplied by the amount of zakat obligation without being accompanied by details of what the zakat obligation is and how the obligation is fulfilled or not.
3. Payment
The last feature is the payment medium that will be chosen so that later the funds or assets that want to be distributed can be paid easily according to the payment method taken. Then you have to confirm if you have made a transfer or payment.

Basically, the application has achieved its basic goal, namely payments can be made easier, but if you look at the development of an increasingly fast era, it is felt that this feature has not been able to keep up with the needs and great opportunities of ZISWAF. So that the authors get some shortcomings along with the underlying reasons why these features are needed, namely as follows:

Disadvantages of existing applications:

1. Calculation of zakat

Zakat has many categories and in each category has a different calculation instrument. Therefore, the features contained in the calculation of zakat must be more detailed because it relates to the obligations of a ummah. There are 2 options that can later be developed from this zakat calculation menu, namely:

- Application service users update the required data periodically according to user needs or circumstances, either in one payday (monthly), once in harvest, once in production and so on. The data required in this case can contain detailed income and expenses which later this data can only be seen by service users and their privacy data is maintained.
- Service users only directly fill in the data needed for calculations. Some types of zakat have a detailed calculation pattern that requires a lot of data, such as corporate zakat which is differentiated according to the type of business of the company.

2. Integrated payments

This payment will be directly entered into the account system of the selected management institution without having to re-confirm, this makes it easier for service users and management institutions without having to do work twice. Payments that are integrated in this system can be likened to an online buying and selling application system where sellers and buyers get the convenience of the system so that technological developments like today really help facilitate manual work which tends to complicate things in this easy-going era.

3. Controlled-free channeling

This menu can later be used by users so that they are free to choose which institution the ZISWAF funds are distributed to so that the capabilities of each institution will be taken into consideration for every user who will compete to make innovations and the best distribution activities. With this system, the improvement of each institution will be carried out properly so that the ZISWAF institution will not only be oriented towards monotonous matters in its management but can innovate with all the institution's products which will later be able to achieve a larger scope, namely community empowerment with various productive innovations.

4. Fund usage information

Reports on the use of funds in every activity are made open so that the people who distribute their ZISWAF are always motivated and more active in carrying out their obligations or care for fellow religious people.

In this report, there will also be a categorization of the sources of funds used and this includes each user receiving a report on what the disbursed funds were used for. With this information on the use of funds, the transparency of ZISWAF's collection of funds can be accounted for clearly.

5. Submission of distribution of funds.

With this feature, the public can submit proposals for the creation or implementation of activities that are for the benefit of the people. This can be in the form of: making places of worship, repairing roads, repairing schools, making productive sharia-based businesses that will later be able to manage the surrounding environment, and so on with fiqh guidelines and innovations that can support the benefit of the people and this sharia system can strengthen the national economy.

In this feature, users can submit or provide assistance according to existing programs and in what form they want to provide assistance. In addition, the proponent of the proposal is obliged to submit the progress of activities and reports on the use of funds periodically either weekly or monthly or even yearly depending on the type of innovation activity made.

6. Jurisprudence and FAQ

In addition to making it easier for users and managers in distributing, managing, and supervising this application, it will also provide knowledge for users about what they do under religious law. With this feature, it is hoped that users will further strengthen the quality of their faith.

7. Contact person or admin / complaint.

With this complaint menu, the user will later become one of the evaluators for both the system and the institutions contained within the scope of this system so that all forms of complaints can be an improvement which will later achieve the goal with this system, namely an application that supports the times regarding ZISWAF so that it can be more optimal. and can support the country's economy in a wider sector if it can be used in the scope of productive business.

With a variety of features that already exist and also the shortcomings obtained, the final conclusion of this application has the following features:

1. Profile
 - a. Biodata
 - b. Payment data and e-money accounts
2. Zakat Counter
3. Payments integrated with selected institutions

4. Periodic reports on disbursed funds
5. Information on the use of funds in each program or activity that has ended
6. Post a request for help
 - a. Activity
 - b. Buildings or goods and all forms of submission in physical form
7. Jurisprudence in ZISWAF and FAQ
8. Complaints contact person

After seeing the description of innovation or application completeness that is in accordance with the current development of the digital era and in order to realize the collection and management of ZISWAF with a large scope, it is necessary to know what makes the application or system above an advantage. There are several things that are advantages, namely:

1. Make it easier for Muslims to worship and help others and advance the Indonesian economy
 With this integrated system, users no longer need to bother coming to the ZISWAF institution, but simply by downloading this application and getting various conveniences from distribution, supervision, and complaints. With this ease and openness, later the spirit of the Muslim community will be more enthusiastic in worship and optimization of collection will be maximized which then the funds can be used for managing the community environment with productive efforts even with large business sectors where the complexity is on behalf of the people and the profits are also used for empowerment of the people.
2. Controlled transparency
 With the information feature or reporting on the use of funds on a regular basis, all forms of fund use are properly monitored and with this feature, the public can monitor clearly

and avoid unwanted things related to people's funds.

3. Enlarging the opportunity to realize ZISWAF as a productive system to strengthen the national economy
With maximum collection, the funds obtained will be large so that they can be used in large-scale productive sectors as well. This large-scale sector can be started from small things by making MSMEs in various sectors with competent managers and every time there is a good development it will receive another injection of funds so that the business can grow bigger which will later create large jobs for the surrounding environment. in particular and the scope of the state or national in general. With the expertise of a good manager and system, it is hoped that in various fields it can spread to all corners of Indonesia.
4. The quality of the institution will improve
Due to the competition that arises indirectly because it is related to the innovation of each institution in managing its finances, each institution will try to do its best with various innovations so that people will be more interested in the various institutions with the programs or activities they make.
5. Better equity and convenience for the community
The submission feature from users will make it easier for the community to get funds for ongoing activities. As with the construction of a mosque, the community or mosque administrators no longer need to look for donations on the street or at red lights because this integrated system makes people prefer to directly see, supervise, and sympathize directly.

CONCLUSION

The collection and digital zakat information system requires risk analysis that can identify, analyze, and manage risks properly. Risk management is very important in preventing all possibilities that can reduce or thwart a plan so that the management of human resources and activity tools must be measured in a systematic and good manner. The main goal of achieving effectiveness and efficiency of a management will increase goodness in the collection and digital zakat information system.

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