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# FAILURE MODE AND EFFECT ANALYSIS ON THE IMPACT OF ZAKAT ON THE LOCAL ECONOMY

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#### **ABSTRACT**

**Purpose**: This study employs a risk management approach to analyze factors influencing the impact of zakat on the local economy, with a focus on stimulating economic activity and job creation.

**Design/methodology**: Data were collected from respondents involved in failure risk assessments based on frequency, impact, and detection capabilities of zakat institutions. Dominant factors were categorized into the collection, management, and utilization of zakat funds. The Failure Mode and Effect Analysis (FMEA) method was used to identify high-risk dominant factors.

**Findings**: The study reveals critical factors that need immediate improvement, including trust, transparency, social campaigns, accountability, responsibility, forecasting, capital provision, planning, organizing, and training.

**Practical implications**: This research highlights the need for zakat institutions to address key reflective indicators such as trust, transparency, social campaigns, accountability, responsibility, forecasting, capital provision, planning, organizing, and training to enhance the effectiveness of zakat in local economic development.

Originality/Value: This study applies the FMEA method in the context of zakat management, providing a novel approach to identifying and prioritizing critical risk factors for improving the impact of zakat on local economies. Keywords: FMEA, Zakat, Local Economy

## A. INTRODUCTION

Zakat is a social obligation that must be performed by Muslims under certain conditions (Suryadi, 2021). The purpose of zakat is to help and assist those in need within the Muslim community, promoting mutual aid (Faizin, 2023). Zakat serves as working capital for the poor, enabling them to create job opportunities and generate income, thereby meeting their needs and reducing the burden on the state concerning unemployment and poverty (Jaya, 2022). Zakat plays a crucial role in income distribution within the economy (Djatmiko, 2019). It also moderates social inequality, stimulates the grassroots economy, promotes innovative poverty alleviation models, and develops sources of funding for community welfare development outside the regional budget (Ahmadi & Sutrisno, 2022). Zakat is a vital instrument promising success in achieving welfare (Utami, et al., 2020). Zakat has significant potential as a development funding source (Fauziah, et al., 2021). The potential zakat in Indonesia reaches IDR 327 trillion per year, which is nearly equivalent to the government's social protection budget in 2022, amounting to IDR 431.5 trillion (Ditzawa, 2023). This significant potential should enable Indonesia to position zakat as a socio-economic capital for empowering communities (Yulinar, Irhamna, & Setiani, 2021).

Good zakat management not only positively impacts the local economy but also enhances welfare and reduces poverty levels (Fauziah et al., 2021). BAZNAS is the official body established by the government to collect and distribute ZIS at the national level (BAZNAS, 2023b). The zakat management carried out by BAZNAS applies modern

management principles (Masek et al., n.d.). One of BAZNAS' programs is the rural economic program, which empowers MSMEs (BAZNAS, 2023). This empowerment aims to enhance the role of MSMEs in regional development, create job opportunities, distribute income evenly, foster economic growth, and alleviate poverty (Lubuksikaping, 2022).

MSMEs are pillars in building the nation's economy (Sarfiah, Atmaja, & Verawati, 2019). MSMEs significantly contribute to economic growth in Indonesia (Indonesia, 2016). The contribution of MSMEs to GDP is 60.5%, with employment absorption reaching 96.9% of the total national workforce (Pers, 2022). According to research by Sarfiah, et al. (2019), MSMEs saved Indonesia from the economic crisis of 1997-1998. Syahbandir, et al. (2022), stated that Baitul Mal has contributed to economic development in the Aceh community through productive and consumptive zakat. Sa'adah & Hasanah (2021) emphasize that the economic empowerment program for zakat recipients should receive special attention and enhancement to achieve its goals.

In general, zakat can have a positive and relevant impact on the SDGs (Masek et al., n.d.). However, this can only happen if its management is proper, professional, and accountable (Djatmiko, 2019). For zakat management to work well, innovative and effective strategies are required to achieve inclusive and sustainable economic development goals. The FMEA method can be used to identify potential failures in the zakat distribution process and their impact on the local economy (QAPI, 2023). FMEA is an engineering method used to identify and analyze failures (LABMI, 2023). These failures can be described in three ontological elements: FM, FE, and FC (Spreafico & Sutrisno, 2023). The FMEA method is used to implement risk assessments in development processes (Duda & Juzek, 2023). In this research, FMEA can be used to understand the potential positive impacts of zakat on the local economy, minimize risks, increase zakat contributions, stimulate economic activity, and create more job opportunities.

For this research to be well-directed and to avoid deviations in the process, there must be clear boundaries within the research scope, namely regarding the Analysis of the Failure Mode and Effect Analysis (FMEA) Method on the Impact of Zakat on the Local Economy with a Focus on Stimulating Economic Activity and Job Creation. In this study, FMEA analysis is used to measure the impact of zakat on the local economy and job creation.

#### **B. LITERATURE REVIEW**

Zakat is an act of worship that encompasses two dimensions: a vertical dimension related to Allah (SWT) and a horizontal dimension related to human beings (Syahputra & Mukhtasar, 2021). Zakat has been used as a fiscal instrument in the economy since the time of the Prophet (Djatmiko, 2019). Zakat is the most prominent symbolic example of Islamic economic activity (Abdulagatov, 2022). As a shariah legitimacy, zakat is an act of worship with social impacts. It is believed to contribute to fostering a spirit of solidarity between the rich and the poor (Mazidah & Rahmatika, 2021). Zakat influences three indicators: aggregate consumption, aggregate investment, and aggregate supply (Mazidah & Rahmatika, 2021). In microeconomics, zakat has a significant impact on social welfare by increasing aggregate demand, thereby boosting economic growth and reducing inflation, leading to optimal welfare

and sustainable socio-economic development (Beik et al., 2014) in the book (Darmawan & Fasa, 2020). In Islamic macroeconomics, zakat affects non-productive means of production, allocation of productive wealth, income allocation between consumption and savings, savings allocation between productive goods and durable luxury goods, and long-term redistribution (Mazidah & Rahmatika, 2021).

Based on Law No. 23 of 2011, zakat management organizations have three main roles: Collection, Management, and Utilization (Indonesia, 2016). The collection of zakat is the most crucial source of income for zakat institutions (Saad, Ahmi, Sawandi, & Aziz, 2022). The primary principle of fund collection is trust (Aziz, Fasa, & Suharto, 2022). To increase zakat collection, trust, transparency, accountability, and social campaigns from zakat institutions are needed (Saad et al., 2022). Financial digitalization can also optimize the collection of ZISWAF (Pati, Pujiyono, & Pranoto, 2021). Additionally, inefficiency and lack of transparency in zakat institutions can lead to a lack of public trust, impacting zakat collection (Ryandono, Widiastuti, Cahyono, & Filianti, 2022).

Zakat management is a system to ensure zakat is managed professionally, competently, transparently, and fairly (Widiastuti et al., 2021). Zakat management is regulated by Law No. 23 of 2011 (Herianingrum et al., 2023). The basic concept of zakat management is derived from the Qur'an, Surah At-Taubah verse 103, indicating that collecting zakat is obligatory. Good zakat management can provide greater benefits for the community (Permana, Sukiati, & Syam, 2023). In the long term, it can also transform mustahiq (zakat recipients) into muzakki (zakat givers) (Fitriani & Anisa, 2022). Effective zakat management is expected to address social, economic, and communal issues (Chotib, 2021). Mismanagement of zakat will lead to low collection and inefficient distribution (Andam & Osman, 2019). According to Amalia (2019), good management consists of five principles: transparency, accountability, responsibility, independence, and fairness (Widiastuti et al., 2021). Transparency, accountability, and integrity are crucial in zakat management (Wahyuni, Haron, & Fernando, 2021).

According to the Indonesian Minister of Religious Affairs Decree No. 373 of 2003 on zakat fund management, zakat utilization must be based on social and economic development (Santoso, 2016). Zakat distribution is carried out in two ways: consumptive zakat, given directly to those in need, and productive zakat, which has a long-term impact as it is distributed in the form of capital (Mawardi, Widiastuti, Mustofa, & Hakimi, 2023). One way to alleviate poverty is by providing productive zakat (Taufiq, Kusnendi, & Nurasyiah, 2018). Productive zakat helps mustahiq become entrepreneurs, thus alleviating poverty and contributing to economic development (Saad et al., 2022). Productive zakat is divided into two types: conventional productive zakat, given in the form of goods that can be developed, and creative productive zakat, given in the form of business capital or MSMEs (Aziz et al., 2022). For productive zakat management to work well, forecasting, planning, organizing, and monitoring are needed (Aziz et al., 2022). Additionally, the effectiveness of zakat, such as providing capital, training, guidance, monitoring, and evaluation, also impacts business development (Mawardi et al., 2023).

In Indonesia, zakat management is officially entrusted to BAZNAS as an independent, non-structural institution that must report to the President through the Minister (Elvira, 2022). The zakat management system in Indonesia involves both the state and society (Fitriani & Anisa, 2022). The most important factor in zakat issues is the efficient and effective management of zakat institutions (Yusuf et al., 2022).

FMEA is a formal design methodology used in the 1960s by the aerospace industry. By the late 1970s, Ford Motor Company introduced FMEA to the automotive industry for safety and regulatory considerations (Sharma & Srivasta, 2018). FMEA involves identifying and eliminating process failures to prevent unwanted incidents (QAPI, 2023). The FMEA method is used to analyze failure modes, fault locations, and causes of failure (Zhang, Jia, Bian, Jia, & Zhicheng, 2023). FMEA also identifies potential failures, the hazards of failures, and the impact of failures (Duda & Juzek, 2023). The foundation of FMEA is identifying possible failures in the product or process being analyzed, assessing the risk of failure, and determining how the failure occurs (Spreafico & Sutrisno, 2023). Duda & Juzek (2023) describe FMEA in three ontological elements: 1) Failure Mode (FM) - a description of a failure, 2) Failure Effect (FE) - the direct consequence of operational failure, and 3) Failure Cause (FC) - the cause of the failure (Duda & Juzek, 2023).

The stages in developing FMEA include identifying potential failures in the cycle, identifying the frequency of a problem, implementing control systems, calculating risk priority numbers, and determining corrective actions (Sugiyanto & Darmawan, 2023).

## C. METHOD

The data collection method involves distributing questionnaires to 328 respondents to assess the risk of zakat failures impacting the local economy. The sample size determination follows Roscoe's (1975) method (Sekaran & Bougie, 2016). The evaluation uses Failure Mode and Effect Analysis (FMEA), with criteria for frequency, impact, and detection scored on a numeric scale from 1 to 5 (Sharma & Srivasta, 2018).

Table I. Failure Occurrence Scoring Based on Frequency Criteria

No	Rank	Qualitative Description	Score
1	Never Occurred	The event has never occurred	1
2	Rarely Occurred	The event has occurred 3 times	2
3	Occasionally Occurred	The event has occurred 7 times	3
4	Frequently Occurred	The event has occurred 20 times	4
5	Very Frequently Occurred	The event occurs repeatedly	5

Table 2. Impact of Failure

No	Rank	Qualitative Description	Score
1	No Impact	No impact on zakat objectives	1
2	Minor Impact	Minor impact on zakat objectives	2
3	Moderate Impact	Moderate impact on zakat objectives	3
4	Major Impact	Major impact on zakat objectives	4

5	Very Severe Impact	Very severe impact on zakat objectives	5
Source	· Sharma & Srivasta 2018		

**Table 3. Detection of Failure** 

No	Rank	Qualitative Description	Score
1	Not Detectable	Management cannot detect the	1
		problem	
2	Slightly Detectable	Management has limited ability to	2
		detect the problem	
3	Detectable	Management can detect the problem	3
4	Manageable	Management can handle the problem	4
5	Very Manageable	Management can very effectively	5
		handle the problem	

Source: Sharma & Srivasta, 2018

The principle behind Failure Mode and Effect Analysis (FMEA) involves evaluating three parameters for each failure mode: severity of failure effects, likelihood of occurrence, and ease of detection (Stamatis, 2019). FMEA analysis uses Risk Priority Number (RPN) and linguistic methods to assess risk severity, occurrence, and detection (Subriadi & Najwa, 2020).

# Potential Failure Modes and Indicators

# 1. Zakat Collection

The factors relevant to zakat collection are measured using reflective indicators and failure events as outlined in the table below.

Table 4. Zakat Collection Variables, Reflective Indicators, and Failure Events

Indicator	Failure Events				
Trust	Lack of public trust in zakat institutions				
	Collected funds are not accurately distributed to those in need				
Transparency	Insufficient knowledge about how zakat funds are used				
	Lack of transparent information regarding zakat utilization				
Accountability	Lack of accountability in zakat operations				
	Absence of financial reports or information from zakat				
	institutions				
Social Campaign	Absence of open social campaigns to clarify zakat utilization				
	Social campaigns do not raise public awareness about zakat				
	importance				
Financial Digitalization	Financial digitalization does not improve zakat collection				
	efficiency				
	Technology or innovations do not enhance zakat collection				
	efficiency				
Efficiency	Inefficiencies in zakat institutions				

Source: data process

# 2. Zakat Management

The factors relevant to zakat management are detailed below:

Table 5. Zakat Management Variables, Reflective Indicators, and Failure Events

Indicator	Failure Events
Transparency	Lack of transparent information on zakat management
	Inadequate assurance that zakat funds are used appropriately
Accountability	Lack of routine reporting on zakat fund usage
Responsibility	Failure to ensure zakat funds reach intended recipients
Independence	Lack of sufficient independence in managing zakat funds
	Absence of independent oversight mechanisms
Fairness	Unfair distribution of zakat funds
Integrity	Lack of integrity and involvement in questionable practices
	Insufficient focus on transparency, accountability, and integrity in zakat
	management

Source: data process

## 3. Zakat Utilization

The factors relevant to zakat utilization are outlined below:

Table 6. Zakat Utilization Variables, Reflective Indicators, and Failure Events

Indicator	Failure Events
Forecasting	Lack of public participation in productive zakat programs
	Insufficient understanding of how zakat utilization programs work
Capital Provision	Lack of public participation in productive zakat programs
Planning	Insufficient understanding of zakat utilization programs
Organization	Lack of public participation in productive zakat programs
Training	Absence of training related to business management
	Training does not support business success
Guidance	Absence of guidance related to business management
	Guidance does not contribute to business success
Evaluation	Absence of periodic evaluations of business progress
	Evaluations do not improve program success
Monitoring	Absence of oversight on zakat fund utilization

Source: data process

## Risk Priority Number (RPN)

Various risk estimates are calculated using the RPN formula (Sharma & Srivasta, 2018). The Risk Priority Number (RPN) is calculated based on severity (S), occurrence (O), and detection (D) (Li, He, Lin, & Lin, 2022), using the formula:

$$RPN = S \times O \times D$$

First, the total RPN is calculated by averaging the RPN values for each indicator. Next, the critical risk priority number (RPN) is determined by averaging the total RPN values. Comparing the RPN for each indicator with the critical RPN identifies the highest failure modes according to RPN ratings. A higher RPN indicates crucial areas needing immediate

improvement to enhance the impact of zakat on the local economy and minimize future failures.

#### D. RESULT AND DISCUSSION

The data from respondent assessments were analyzed using the Failure Mode and Effect Analysis (FMEA) method. The identification steps began with entering the respondent assessment results on risk severity (frequency), failure impact, and detection capability. The output included critical indicators for the variables of zakat fund collection, zakat fund management, and zakat fund utilization to prioritize immediate improvements. The results highlight important indicators requiring immediate attention for improvement. After revision, these can be re-evaluated and used for continuous improvement until they are no longer critical and do not require immediate modification. Respondent assessment data were then used to calculate the Risk Priority Number (RPN), which includes RPN indicators, total RPN, and critical RPN as shown in Tables VII, VIII, and IX below:

Table 7. Risk Priority Number (RPN) Calculation Based on Respondent Assessment of Zakat Fund Collection Failures

Zakat Fund Collection	Failure Event	Risk Assessment (Average)				RPN	Total RPN	Critical RPN	Remarks
Indicator		S	О	D	•				
Trust	Lack of public trust in zakat institutions	2.91	3.16	3.22	29.7			Critical	
	Collected funds are not properly allocated	2.84	3.28	3.23	30.09	29.89		Critical	
Transparency	Lack of knowledge about how donated zakat funds are used	2.99	3.24	3.22	31.3			Critical	
	Lack of transparent information on zakat usage	2.96	3.22	3.19	30.39	30.85		Critical	
Accountability	Zakat institutions do not operate with adequate accountability	2.78	3.1	3.07	26.42	26.0		Not Critical	
	Absence of financial reports from zakat institutions	2.82	3.13	3.1	27.38	26.9	28.5	Not Critical	
Social Campaigns	Lack of open social campaigns by zakat institutions	2.93	3.18	3.16	29.4	28.77		Kritis	
	Social campaigns do not raise awareness about zakat importance	2.85	3.13	3.15	28.14	28.77		Not Critical	
Financial Digitalization	Financial digitalization does not improve efficiency	2.78	3.03	3.13	26.36	26.36		Not Critical	
Efficiency	Lack of efficiency in zakat fund collection	2.83	3.11	3.18	28.04			Not Critical	
	Technology or innovation does not improve zakat collection efficiency	2.88	3.14	3.14	28.47	28.25		Not Critical	

Source: data process

Based on the analysis using the Failure Mode and Effect Analysis (FMEA) method as presented in Table VII, the identification results were evaluated by comparing the RPN indicators to the critical RPN. For the first variable, zakat fund collection, the dominant factors were identified based on reflective indicators and failure events:

1. Trust: Total Risk Priority Number (RPN) = 29.89 is higher than Critical RPN = 28.50. This indicator is critical and needs immediate improvement due to failures in zakat fund collection related to trust.

- 2. Transparency: Total RPN = 30.85 is higher than Critical RPN = 28.50. This indicator is critical and requires immediate attention due to failures in zakat fund collection related to transparency.
- 3. Accountability: Total RPN = 26.90 is lower than Critical RPN = 28.50. This indicator is not critical and does not require immediate improvement.
- 4. Social Campaigns: Total RPN = 28.77 is higher than Critical RPN = 28.50. This indicator is critical and needs immediate improvement due to failures in zakat fund collection related to social campaigns.
- 5. Financial Digitalization: Total RPN = 26.36 is lower than Critical RPN = 28.50. This indicator is not critical and does not require immediate improvement.
- 6. Efficiency: Total RPN = 28.25 is lower than Critical RPN = 28.50. This indicator is not critical and does not require immediate improvement.

Table 8. Risk Priority Number (RPN) Calculation Based on Respondent Assessment of Zakat Fund Management Failures

Zakat Fund Management			Risk Assessment (Average)			Total RPN	Critical RPN	Remarks
Indikator		S	O	D				
Transparency	Lack of transparent information on zakat management	3.07	3.27	3.27	32.86			Critical
	Zakat institutions fail to ensure funds are used appropriately	2.99	3.3	3.22	31.73	32.3		Critical
Accountability	Zakat institutions do not report fund usage regularly	2.95	3.22	3.18	30.18	30.18		Critical
Responsibility	Zakat institutions fail to ensure funds reach those in need	2.81	3.15	3.19	28.26	28.26		Critical
Independence	Zakat institutions lack independence in fund management	2.73	3.1	3.11	26.37	26.40	28.13	Not Critical
	Lack of independent procedures for monitoring fund management	2.72	3.13	3.12	26.61	26.49		Not Critical
Justice	Zakat fund distribution is not fair	2.69	3.03	3.1	25.32	25.32		Not Critical
Integrity	Zakat institutions lack integrity and	2.68	3.03	3.08	25.01			Not Critical
	engage in questionable practices Lack of focus on improving transparency, accountability, and integrity	2.81	3.12	3.13	27.48	26.20		Not Critical

Source: data process

Based on the same method, the Risk Priority Number (RPN) for zakat fund management variables was calculated as shown in Table VIII. Dominant factors were identified based on reflective indicators and failure events:

- 1. Transparency: Total Risk Priority Number (RPN) = 32.30 is higher than Critical RPN = 28.13. This indicator is critical and needs immediate improvement due to failures in zakat fund management related to transparency.
- 2. Accountability: Total RPN = 30.18 is higher than Critical RPN = 28.13. This indicator is critical and needs immediate improvement due to failures in zakat fund management related to accountability.
- 3. Responsibility: Total RPN = 28.26 is higher than Critical RPN = 28.13. This indicator is critical and needs immediate improvement due to failures in zakat fund management related to responsibility.
- 4. Independence: Total RPN = 26.49 is lower than Critical RPN = 28.13. This indicator is not critical and does not require immediate improvement.

- 5. Justice: Total RPN = 25.32 is lower than Critical RPN = 28.13. This indicator is not critical and does not require immediate improvement.
- 6. Integrity: Total RPN = 26.20 is lower than Critical RPN = 28.13. This indicator is not critical and does not require immediate improvement.

Table 9. Risk Priority Number (RPN) Calculation Based on Respondent Assessment of Zakat Fund Utilization Failures

Zakat Fund Utilization	Utilization		Risk Assessment (Average)			Total RPN	Critical RPN	Remarks
Indicator		S	O	D				
Forecasting	Lack of community participation in productive zakat fund utilization programs organized by zakat institutions	3.09	3.31	3.2	32.74			Critical
	Lack of community understanding of how productive zakat fund utilization programs work	3.21	3.36	3.22	34.72	33.73		Critical
Capital Provision	Many mustahik have not received capital or financial assistance from zakat institutions for productive businesses	3	3.23	3.16	30.68	30.68		Critical
Planning	Lack of support provided by zakat institutions in productive business planning	3.03	3.23	3.18	31.17	31.17		Critical
Organizing	Lack of support from zakat institutions in organizing productive businesses	2.97	3.21	3.18	30.34	30.34		Critical
Training	Lack of training from zakat institutions related to business management	3.03	3.26	3.11	30.71	20.01	30.32	Critical
	Business training provided does not support business success	2.91	3.14	3.16	28.91	29.81		Not Critical
Guidance	Lack of guidance from zakat institutions related to business management	2.95	32	3.15	29.69	29.56		Not Critical
	Business guidance provided does not determine business success	2.92	3.17	3.18	29.42	29.30		Not Critical
Evaluation	Lack of periodic evaluation regarding the progress of the business being run	2.98	3.19	3.16	30.09			Not Critical
	Evaluation conducted by zakat institutions does not improve the success of the programs conducted	2.83	3.12	3.1	27.3	28.7		Not Critical
Supervision	Lack of supervision over the use of zakat funds provided by zakat institutions	2.92	3.16	3.1	28.58	28.58		Not Critical

Source: data process

Based on the analysis using the same method, the Risk Priority Number (RPN) for the variables of zakat fund utilization, which includes the RPN indicators, total RPN, and critical RPN as shown in Table IX, can be identified. The dominant factors can be identified based on reflective indicators and failure events as follows:

- 1. Forecasting Indicator: The total RPN = 33.73 is higher than the critical RPN = 30.32. Therefore, this indicator is critical and very important to address immediately, as there is a failure in zakat fund utilization based on forecasting. This is due to a lack of community participation and understanding regarding productive zakat.
- 2. Capital Provision Indicator: The total RPN = 30.68 is higher than the critical RPN = 30.32. Therefore, this indicator is critical and very important to address immediately, as there is a failure in zakat fund utilization based on capital provision. Many mustahik have not yet received business capital assistance from zakat institutions.
- 3. Planning Indicator: The total RPN = 31.17 is higher than the critical RPN = 30.32. Therefore, this indicator is critical and very important to address immediately, as there is a

failure in zakat fund utilization based on planning. There is insufficient support from zakat institutions regarding productive business planning.

- 4. Organizing Indicator: The total RPN = 30.34 is higher than the critical RPN = 30.32. Therefore, this indicator is critical and very important to address immediately, as there is a failure in zakat fund utilization based on organizing. There is insufficient support from zakat institutions regarding the organization of productive businesses.
- 5. Training Indicator: The total RPN = 29.81 is lower than the critical RPN = 30.32. Therefore, this indicator is not critical and not a priority for immediate improvement. However, training in business management is needed as soon as possible.
- 6. Guidance Indicator: The total RPN = 29.56 is lower than the critical RPN = 30.32. Therefore, this indicator is not critical and not a priority for immediate improvement.
- 7. Evaluation Indicator: The total RPN = 28.70 is lower than the critical RPN = 30.32. Therefore, this indicator is not critical and not a priority for immediate improvement.
- 8. Supervision Indicator: The total RPN = 28.58 is lower than the critical RPN = 30.32. Therefore, this indicator is not critical and not a priority for immediate improvement.

In general, with the identification of dominant factors causing zakat failure, the Failure Mode and Effect Analysis (FMEA) method can be used as a tool to monitor the direction of improvements that zakat institutions can develop to minimize the risk of future failures. Good and targeted risk management will enhance competitiveness and continuously develop competitive advantages. With these efforts, indicators with high-risk potential are likely to see a reduction in risk. Effective improvements can be made until critical indicators become non-critical and are no longer a priority for immediate correction (Velasquez, Carhuamaca, & Farje, 2021). More broadly, the analysis of dominant factors that may cause failure risks can also be applied to service functions involving a larger number of muzakki. With improvements, public satisfaction levels will increase. Consequently, the required accuracy will enhance effectiveness and accuracy. Various satisfaction surveys are conducted to identify which dominant factors are unsatisfactory and require immediate priority improvements. This process will continue until optimal improvement results are achieved (Stamatis, 2019).

# E. CONCLUSION

Based on the analysis of dominant factors affecting zakat failures using a risk management approach, several key issues have been identified. Immediate attention is needed to address the lack of public trust, transparency, and accountability in zakat institutions. There is also a need for better social campaigns to inform the public about zakat utilization, improved reporting mechanisms, and enhanced responsibility to ensure funds reach those in need. Additionally, challenges in forecasting, capital provision, planning, organizing, and training for productive enterprises must be addressed to prevent zakat management failures.

The study has several limitations. The findings are based on a specific sample of respondents from zakat institutions, which may not fully represent all stakeholders. Data collection via questionnaires might introduce biases that affect accuracy. Moreover, the study's focus on predefined indicators may overlook other relevant factors such as external economic

conditions or institutional changes. The research was conducted at a single point in time, potentially affecting its relevance as conditions evolve. Lastly, the reliance on Failure Mode and Effect Analysis (FMEA) limits the capture of all nuances in zakat management failures.

Future research should aim for broader sampling and incorporate a mixed-methods approach to provide a more comprehensive view of zakat management challenges. Expanding indicators to include technological, policy, and socio-economic factors, conducting longitudinal studies, and exploring alternative analytical methods could offer deeper insights. Investigating the impact of external factors on zakat practices will also be beneficial. Addressing these areas will enhance the effectiveness of zakat management and improve overall practices in the sector.

#### F. BIBLIOGRAPHY

- Abdulagatov, Z. M. (2022). Zakat In The Islamic Consciousness Of Dagestanis: History and Current Trends. *History, Archeology and Etnography Of The Caucasus*, 18(4), 975–992. https://doi.org/10.32653/CH184975-992
- Ahmadi, A. Y., & Sutrisno. (2022). Zakat Solusi Kesenjangan Ekonomi di Indonesia. *Jurnal of Educational and Language Research*, 1(7), 1–10. https://doi.org/10.53625/joel.v1i7.1482
- Andam, A. C., & Osman, A. Z. (2019). Determinants of Intention to Give Zakat on Employment Income Experience from Marawi City, Philippines. *Journal of Islamic Accounting and Business Research*, 10(4), 528–545. https://doi.org/10.1108/JIABR-08-2016-0097
- Aziz, A., Fasa, M. I., & Suharto. (2022). Strategi Pengelolaan Zakat Produktif dalam Pengentasan Kemiskinan (Studi Kasus BAZNAS Kota Bandar Lampung). *Jurnal Bina Bangsa Ekonomika*, 15(1), 151–158.
- BAZNAS. (2023a). Ekonomi Pedesaan. Retrieved October 19, 2023, from https://baznas.go.id/program/ekonomi-pedesaan#
- BAZNAS. (2023b). Tentang BAZNAS. Retrieved October 19, 2023, from https://kalbar.baznas.go.id/tentang-baznas/
- Chotib, M. (2021). Zakat Management Concept to Accelerate Health and Economic Recovery during the COVID-19 Pandemic. *Scientific Foundation Spiroski, Skopje, Republic of Macedonia*, 9(1), 1213–1217. https://doi.org/10.3889/oamjms.2021.7394
- Darmawan, & Fasa, M. I. (2020). *Manajemen Lembaga Keuangan Syariah* (1st ed.). Yogyakarta: UNY Perss.
- Ditzawa. (2023). Potensi Mencapai 327 T, Ini Tiga Fokus Kemenag dalam Pengembangan Zakat. Retrieved September 6, 2023, from 23 Agustus website: https://kemenag.go.id/nasional/potensi-mencapai-327-t-ini-tiga-fokus-kemenag-dalam-pengembangan-zakat-LobJF
- Djatmiko, H. (2019). Re-formulation Zakat System as Taxreduction in Indonesia. *Indonesian Journal of Islam and Muslim Societies*, 9(1), 135–162. https://doi.org/10.18326/ijims.v9i1.135-162
- Duda, A., & Juzek, T. (2023). Use Of The Method FMEA For Hazard Identification. *Management Systems in Production Engineering*, 31(3), 332–342. https://doi.org/10.2478/mspe-2023-0037
- Elvira, R. (2022). Pengukuran Kinerja Pengelolaan Zakat Nasional menggunakan Indeks Zakat. *Baabu Al-Ilmi*, 7(2), 1–12. https://doi.org/10.29300/ba.v7i2.7942

- Faizin, R. (2023). Keuntungan dan Manfaat Membayar Zakat Fitrah. Retrieved October 13, 2023, from https://baznas.jogjakota.go.id/detail/index/26668
- Fauziah, N. D., Hana, U. A., Muawanah, & Mauliana, E. (2021). Analisis Dampak Zakat terhadap Perekonomian untuk Kemaslahatan Masyarakat Miskin. *Jurnal Perbankan Syariah Dan Ekonomi Syariah*, *3*(2), 93–102. https://doi.org/10.59636/saujana.v3i02.37
- Fitriani, L., & Anisa, L. N. (2022). Analisis Strategi Pengelolaan Dana Zakat Bagi Ketahanan Ekonomi Masyarakat (Studi Kasus Badan Amil Zakat Kabupaten Ngawi). *Jurnal Perbankan Dan Keuangan Islam*, 1(2), 102–114. https://doi.org/10.56997/commodityjurnalperbankandankeuanganislam.v1i2.752
- Hasan, A., Hassan, R., Ali, E. R. A. E., Ali, E. M. T. E., Abduh, M., & Noordin, N. H. (2019).
   A Proposed Human Resource Management Model for Zakat Institutions in Malaysia. ISRA International Journal of Islamic Finance (IJIF) Nternational Journal of Islamic Finance (IJIF), 11(1), 98–109.
- Herianingrum, S., Supriani, I., Sukmana, R., Effendie, Widiastuti, T., Fauzi, Q., & Shofawati, A. (2023). Zakat as an Instrument of Poverty Reduction in Indonesia. *Journal of Islamic Accounting and Business Research*, 1759–0817. https://doi.org/10.1108/JIABR-11-2021-0307
- Indonesia, D. B. (2016). Pengeloaan Zakat Yang Efektif: Konsep dan Praktik dari Beberapa Negara (1st ed.). Jakarta: Bank Indonesia.
- Jaya, T. K. (2022). The Potensial of Zakat in an Effort To Alleviate Poverty. *Jurnal Ilmiah GEMA PERENCANA*, 1(2), 93–102.
- LABMI. (2023). Failue Mode and Effect Analysis (FMEA). Retrieved October 19, 2023, from https://labmi.trunojoyo.ac.id/failure-mode-and-effect-analysis-fmea/
- Li, X., He, M., Lin, X., & Lin, Y. (2022). Biosafety Management Risk Analysis for Clinical Departments of Military Central Hospitals in the Fujian Province of China. *Original Research SAGE Open*, 1–10. https://doi.org/10.1177/21582440221085270
- Lubuksikaping. (2022). Pemberdayaan UMKM. Retrieved October 13, 2023, from https://djpb.kemenkeu.go.id/kppn/lubuksikaping/id/data-publikasi/berita-terbaru/3015-pemberdayaan-umkm.html#:~:text=Pertama adalah menumbuhkan dan mengembangkan,dan pengentasan rakyat dari kemiskinan.
- Masek, A., Paimin, A. N., Halim, A., Hashim, S., Abdullah, N. S., & Muda, W. H. N. W. (n.d.). The Role of Knowledge, Emotion, and Intention in Influencing Students' Behaviors During COVID-19 Pandemic. *Original Research*, 1– 13. https://doi.org/10.1177/21582440221089954
- Mawardi, I., Widiastuti, T., Mustofa, M. U. Al, & Hakimi, F. (2023). Analyzing the Impact of Productive Zakat on the Welfare of Zakat Recipients. *Journal of Islamic Accounting and Business Research*, *14*(1), 118–140. https://doi.org/10.1108/JIABR-05-2021-0145
- Mazidah, I., & Rahmatika, A. N. (2021). Pengaruh Zakat terhadap Perekonomian Masyarakat Jawa Timur (Tinjauan Index Zakat Nasional). *Jurnal Ekonomi Pembangunan Dan Ekonomi Syari'ah*, 4(2), 25–32. https://doi.org/10.56998/jr.v4i02.38
- Pati, U. K., Pujiyono, & Pranoto. (2021). Sharia Fintech as Sharia Compliance Solution in The Optimization of Electronic-Based Mosque's Ziswaf Management. *PJIH*, 8(1).
- Permana, H., Sukiati, & Syam, S. (2023). Pengelolaan Zakat BAZNAS Kota Binjai Pada Masyarakat di Masa Pandemi Covid-19 (Studi Penerapan UU No. 23 tahun 2011 tentang Zakat). *Jurnal Interpretasi Hukum*, 4(1), 92–99. https://doi.org/10.55637/juinhum.4.1.6758.92-99

- Pers, S. (2022). Perkembangan UMKM sebagai Critical Engine Perekonomian Nasional Terus Mendapatkan Dukungan Pemerintah. Retrieved October 13, 2023, from https://www.ekon.go.id/publikasi/detail/4593/perkembangan-umkm-sebagai-critical-engine-perekonomian-nasional-terus-mendapatkan-dukungan-pemerintah
- QAPI. (2023). Guidance for Performing Failure Mode and Effects Analysis with Performance Improvement Projects. Retrieved October 19, 2023, from https://www.cms.gov/medicare/provider-enrollment-and-certification/qapi/downloads/guidanceforfmea.pdf
- Ryandono, M. N. H., Widiastuti, T., Cahyono, E. F., & Filianti, D. (2022). Efficiency of Zakat Institutions in Indonesia: Data Envelopment Analysis (DEA) vs Free Disposal Hull (FDH) vs Super-Efficiency DEA. *Journal of Islamic Accounting and Business Research*, 1759–0817.
- Saad, R. A. J., Ahmi, A., Sawandi, N., & Aziz, N. M. A. (2022). Zakat Administration Reformation Towards an Effective and Efficient Zakat Revenue Generation. *Journal of Islamic Accounting and Business Research*, 14(8), 1232–1260. https://doi.org/10.1108/JIABR-05-2021-0151
- Santoso, I. R. (2016). Manajemen Pengelolaan Zakat. Gorontalo: Ideas Publishing.
- Sarfiah, S. N., Atmaja, H. E., & Verawati, D. M. (2019). UMKM Sebagai Pilar Membangun Ekonomi Bangsa. *Jurnal REP Riset Ekonomi Pembangunan*, 4(2), 137–146. https://doi.org/10.31002/rep.v4i2.1952
- Sawmar, A. A., & Mohammed, M. O. (2021). Enhancing Zakat Compliance Through Good Governance: a Conceptual Framework. *ISRA International Journal of Islamic Finance*, 13(1), 136–154. https://doi.org/10.1108/IJIF-10-2018-0116
- Sekaran, U., & Bougie, R. (2016). Research Methods for Business (Sevent). John Wiley & Sons.
- Sharma, K. D., & Srivasta, S. (2018). Failure Mode and Effect Analysis (FMEA) Implementation: A Literature Review. *Journal of Advance Research in Aeronautics and Space Science*, 5(1&2), 1–17.
- Spreafico, C., & Sutrisno, A. (2023). Artificial Intelligence Assisted Social Failure Mode and Effect. *Sustainability*, *15*(11), 1–16. https://doi.org/10.3390/su15118678
- Stamatis, D. H. (2019). *Risk Management Using Failure Mode and Effects Analysis (FMEA)*. Amerika: Quality Press.
- Subriadi, A. P., & Najwa, N. F. (2020). The Consistency Analysis of Failure Mode and Effect Analysis (FMEA) in Information Technology Risk Assessment. *Heliyon*, 6(1), 1–12. https://doi.org/10.1016/j.heliyon.2020.e03161
- Sugiyanto, & Darmawan. (2023). The Failure Mode and Effect Analysis of Tender for Construction Companies in Indonesia. *General Management Quality Access to Succes*, 24(192), 44–52.
- Suryadi, N. (2021). Zakat Sebagai Pengurang Penghasilan Kena Pajak. *Syarikat: Jurnal Rumpun Ekonomi Syariah*, 4(2), 10–17.
- Syahputra, A., & Mukhtasar. (2021). Digitizing Zakat Collection Through the E-payment System. *Al-Amwal: Jurnal Ekonomi Dan Perbankan Syari'ah*, *13*(1), 14–30. https://doi.org/10.24235/amwal.v13i1.7962
- Taufiq, I. F., Kusnendi, & Nurasyiah, A. (2018). The Effect of Productive Zakat, Business Experience, and Mentoring on Farmers' Revenues (Survey on Lumbung Desa Program by Sinergi Foundation in Cibaeud Village, Cigalontang District, Tasikmalaya Regency). *International Journal of Zakat*, 3(3). https://doi.org/10.37706/ijaz.v3i3.95

- Utami, P., Suryanto, T., Nasor, M., & Ghofur, R. A. (2020). The Effect Digitalization Zakat Payment Against Potential of Zakat Acceptance. *Iqtishadia*, *13*(2), 216–239. https://doi.org/10.21043/iqtishadia.v13i2.7809
- Velasquez, D., Carhuamaca, S., & Farje, J. (2021). Risks Management Model Integrating the Analysis Mode and Failure Effects Within the Last Planner System to Improve The Time of Real Estate Construction Projects. *Congreso Internacional de Innovacion y Tendencias En Ingenieria*.
- Wahab, N. A., & Rahman, A. R. A. (2011). A Framework to Analyse the Efficiency and Governance of Zakat Institutions. *Journal of Islamic Accounting and Business Research*, 2(1), 43–62. https://doi.org/10.1108/17590811111129508
- Wahyuni, I. S., Haron, H., & Fernando, Y. (2021). The Effects of Good Governance and Fraud Prevention on Performance of The Zakat Institutions in Indonesia: a Sharīʻah forensic accounting perspective. *International Journal of Islamic and Middle Eastern Finance and Management*, 14(4), 692–712. https://doi.org/10.1108/IMEFM-03-2019-0089
- Wahyuningsih, T., Rahmatika, A. N., & Ashlihah. (2020). Konsep Pengelolaan Zakat Produktif Berdasarkan Indeks Desa Zakat di Desa Cupak, Kabupaten Jombang. *Jurnal Manajemen Zakat Dan Wakaf*, *I*(2), 177–183.
- Widiastuti, T., Cahyono, E. F., Zulaikha, S., Mawardi, I., & Mustofa, M. U. Al. (2021). Optimizing Zakat Governance in East Java Using Analytical Network Process (ANP): The Role of Zakat Technology (ZakaTech). *Journal of Islamic Accounting and Business Research*, 12(3), 301–319. https://doi.org/10.1108/JIABR-09-2020-0307
- Yulinar, I., Irhamna, S., & Setiani, T. (2021). Pemberdayaan Zakat Produktif Terhadap UMKM dalam Pemulihan Ekonomi Nasional. Retrieved October 12, 2023, from https://himaeksyar.unsil.ac.id/2021/05/27/pemberdayaan-zakat-produktifterhadap-usaha-mikro-kecil-dan-menengah-dalam-pemulihan-ekonomi-nasional/
- Yusuf, S. N. S., Sanawi, N. H., Ghani, E. K., Muhammad, R., Daud, D., & Kasim, E. S. (2022). Examining Technology Improvement, Procedural Application and Governance on The Effectiveness Zakat Distribution. 1–24. https://doi.org/10.1108/IJOES-02-2022-0031
- Zhang, K., Jia, Z., Bian, R., Jia, K. H., & Zhicheng. (2023). Reliability Prediction and FMEA of Loading and Unloading. *Applied Sciences*, 13(8), 1–17. https://doi.org/10.3390/app13084951