Maturity Level Risk Management in State-Owned Enterprises
(Case Study: Perum Jasa Tirta II)

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ABSTRACT
Risk management is the company's efforts to prevent damage that may arise to the company's business processes. In a state-owned company, usually risk management is not something that important because the company have very minimum risk from the support of the government. As the time goes by, this perspective need to be revised because even the safest company still need to manage its risk and minimize it. Perum Jasa Tirta II is one of the State-Owned Enterprises (BUMN) that strives to implement risk management. Measurement of risk management maturity level using the RM Simple Model can be used as a benchmark for the implementation of corporate risk management. It is categorized in five dimensions. These dimensions include the D1 dimension: risk management, strategy and decision-making processes; D2: communication, information, and reporting; D3: organization, authority, and interaction; D4: IT tools and analysis; and D5: framework and process. Consecutively obtained results are 3; 4; 3; 3; 3. The results of this study conclude that the level of risk maturity in the standards of state-owned companies has a fairly mature system that allows to minimize existing risks.

Keywords: *Risk Management, RM Simple Model, Risk Maturity Level, State Owned Enterprise.*

1. BACKGROUND PROBLEM

Corporate governance does not exist in a vacuum; there are various indications of success that are consistent with the principles of corporate governance, such as the Tariff. (Transparency, Accountability, Responsibility, Independence, and Fairness) [1]. Risk management is one of the company's efforts in implementing good governance. Risk management has been a prominent concern for businesses, particularly those with large scale and operating divisions, and for good reason. ISO 31000 edition 2018 [2] and COSO ERM are two risk management standards that are frequently utilized (Sponsoring Organizations of the Treadway Commission Enterprise Risk Management).

The implementation of risk management has a positive impact on maintaining good corporate governance. The main purpose of risk management itself is to minimize and even prevent unwanted risks by the company. This is generally able to reduce the financial or operational impact of the company that may occur. Risk management also plays an important role in providing some objective views for decision making in the company.

Indonesia already has a risk management standard through SNI (Indonesian National Standard) [3] which is translated based on existing international risk management standards. The majority of implementation in Indonesia uses SNI ISO 31000 in state-owned companies. In fact, the implementation of risk management among state-owned companies must be carried out because the business scale is large and involves national interests.

Each company always provides the best quality of risk management through the implementation of risk management which can be measured through the company's risk maturity level. For state-owned companies, this is done to improve the company's image and public confidence in state companies, so that the taxes paid by the public can be accounted for objectively. Corporate governance and risk management should indeed be optimally embedded for state-owned companies to minimize non-conformance with the procedures implemented and to enforce the five principles of corporate governance.

One of the state-owned companies that is aggressively implementing risk management is Perum Jasa Tirta II (PJT II). PJT II is a company engaged in the service sector for water management and its derivatives along the Citarum river and Citarum tributaries. The area covers various cities in West Java and DKI Jakarta. Risk management at PJT II is the key to their success in managing their business, the responsibility for maintaining the Jatiluhur Dam is an example of how important it is for PJT II to implement risk management. If there is a problem with the dam, not only the company will receive the impact, but the community and the area around the Citarum River. In addition to the interests of society in general, the application of risk management can help companies to be more objective in making decisions and can also assist companies in creating and protecting company value in accordance with company goals.

2. THEORITICAL BASIS

The theoretical basis that will be used in this research includes risk management and RM simple method. The discussion will be explained below.

2.1 Risk Management

Risk management is the method of identifying, evaluating, and prioritizing risks, including the use of of coordinated and cost-effective resources to reduce, monitor, and control the likelihood and impact of unfavorable events. [4], [5]. According to the manual, risk is defined as the result of an uncertainty [2]. In addition, risk is defined as uncertainty regarding and the level of consequences of an activity related to something that is judged by humans [6]. Figure 1 shows the three main components in risk management based on ISO 31000

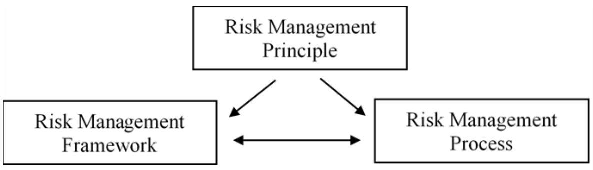


Figure 1 Three Components of Risk Management Based on ISO 31000.

(1) Risk Management Principle

In the context of implementing corporate risk management, risk management principles serve as a foundation for thinking and doing. It is possible to show that the index of strong corporate governance is related to future operating performance by applying and analyzing the content of this concept. [7].

(2) Risk Management Framework

The framework is a conceptual design as the elaboration and application of risk management principles. Based on the ISO 31000:2018 standard, in the context of implementing risk management in the company, the risk management framework is a cycle of stages of systematic management implementation based on PDCA (plan-do-check-action) which is dynamic, iterative and responsive to changes so that this can be achieved. applied to various divisions and departments in the company [2].

(3) Risk Management Process

The Risk Management process is a series of activities developed in a systematic and structured manner in order to produce certain outcomes and outputs. In the context of implementing risk management in the company, the risk management process is a series of stages of risk management effectiveness developed as a form of elaboration of the implementation aspects of risk management in the risk management framework cycle.

2.2 RM Simple Method

Maturity refers to the ability to expand one's capacities and abilities in processing information and applying it to all organizational undertakings. [8]. This model will focus on the objectives to be achieved. The objective is defined by five dimensions in a company [9], [10]. Companies can use this methodology to determine their Ambition Maturity Level (AML) and potential areas for improvement. D1: risk management, strategy, and decision-making process; D2: communication, information, and reporting; D3: organization, authority, and interaction; D4: IT tools and analysis; and D5: framework and process are the five elements of this approach.

(1) D1: Dimensions of risk management, strategy, and decision-making processes

The company must respond to the objective in this dimension, namely that it feels it can make all decisions based on an assessment of the risks and opportunities that will be faced. This factor is linked to the decision-making mindset of those in positions of leadership (leadership). On the other side, it is believed that a leader's charisma when combined with pressure from other stakeholders increases the likelihood of fraud in the workplace. [11]. Therefore, risk and opportunity assessment can be an alternative for making decisions objectively

(2) D2: Dimensions of communication, information and reporting

Companies are expected to meet the objective dimension in this dimension, which is to enable ongoing communication with essential data on a regular basis. Communication is crucial to the successful implementation of risk management in the workplace. Communication can be defined as the process of communicating meaning from one entity or group to another through the use of mutually understood signs, symbols, and semiotic norms. [12]. This means that the company can create its own form of communication that is easily understood by the stakeholders of the company itself. Regular and thorough socialization is also an important point of this dimension.

(3) D3: Dimensions of organization, authority, and interaction

Because there is a link between the composition of the board of directors and a negligent organizational structure and the occurrence of corporate fraud [13], the company must prepare a resource allocation plan that is tailored to the company's needs in order to maximize the implementation of risk management. To keep company communication flowing smoothly, the company must also manage the employee code of ethics. A code of conduct is a vital aspect of fostering an inclusive culture, but it is not a complete answer. Organizational leaders who embody their ethics in their attitudes and conduct generate an ethical culture [14].

(4) D4: Dimensions of IT tools and analysis

When compared to the conventional method, using IT makes the job process faster and more accurate. The goal of the analysis can be accomplished in this fashion. The process of breaking down a difficult topic or substance into smaller bits in order to have a better knowledge of it can be viewed as the analysis. [15]. Companies need to dig up the most relevant information to provide to leaders so that decision-making has careful consideration.

(5) D5: Dimensions of framework and process

The risk management framework itself consists of five components based on ISO 31000:2018, namely, 1) Integration; 2) Design; 3) Implementation; 4) Evaluation; and 5) Improvements that have been described in the Risk Management subsection above. Companies can use a variety of tactics to achieve their goals in this area. Benchmarking with organizations that already have processes and risk identification are two of these methods [16]. The outcomes of using the risk management framework and procedure might assist businesses in developing a good organizational system. This organizational framework can then be used to help create future organizational development strategies and directions [17].

3. METHODLOGY

This study uses a mixed method research method, which is a type of research that combines quantitative and qualitative methods to calculate the maturity level of risk management at Perum Jasa Tirta II.

This research will use interactive model in data management. The interactive model itself has 4 (four) components, namely (1) data collection, data were collected through observation, interviews and questionnaires, as well as documentation. There are three main sources in this study along with a description of their positions and their weights, which are listed in table 1.

(2) data reduction, in this process, not all data is presented so that the topic of discussion does not widen. Data reduction is useful for filtering relevant data used and processed as analytical data to sharpen and focus on leading to problem solving and answering research questions.

(3) data presentation, after the results of data management can be interpreted, the results need to be presented in a structured form. Researchers use spider diagrams according to the RM Simple Model methodology for presenting research data

(4) conclusion or verification, final process of this research is to make conclusions and verification. Researchers use gap analysis to draw conclusions from the data that has been obtained

This study uses three resource persons as responsible for the implementation of risk management at Perum Jasa Tirta II. Table 1 shows the sources along with their positions and weights of importance

Table 1. Resource Description

Name	Position	Weight of Importance
Respondent 1	Risk Division Head	0,50
Respondent 2	Risk Manager	0,30
Respondent 3	Risk Assistant Manager	0,20

3.1 Company Profile

Perum Jasa Tirta II (PJT II) is a company engaged in the water sector and all its derivatives. PJT II has involved the needs of many people's lives with water management, especially in the areas of West Java and DKI Jakarta. This company profile section will explain about the company's history, vision and mission, line of business, and the company's organizational structure. The operational activities of Perum Jasa Tirta II concentrate on water and electricity resources and their business activities. The business activities carried out by Perum Jasa Tirta II are as follows:

- Raw water services for drinking water, industry, agriculture, flushing, ports, power plants, and meeting other water needs.
- Provision of electricity to Perusahaan Listrik Negara.
- Generation, distribution of hydroelectric power, drinking water, business consulting services in the field of Water Resources technology.

Optimizing the potential of the Company's resources for offices, warehousing, tourism, hotels and resorts, sports and recreation, hospitals, telecommunications infrastructure and energy resources, rental services and the exploitation of the Company's facilities and infrastructure

4. ANALYSIS AND DISCUSSION

The obtained risk management maturity level is used to measure the performance of each risk management dimension created by the company. The risk management framework must be continuously improved to deal with changes that occur in both internal and external contexts.

Measurement of risk management maturity level was conducted by interviewing 3 main sources who are considered as risk management experts in the company. Each resource person has a different weight depending on their knowledge and position in the company's risk management division. The table below is the result of filling out the questionnaire that has been filled in by each resource person on each criterion.

Table 2. Measurement of Maturity Level of Each Dimension

Dimension	Maturity Level Score			SCORING RESULTS MATURITY	MATURITY LEVEL
	Nr. 1	Nr. 2	Nr. 3		
	0,5	0,3	0,2		
Risk management, strategy and decision-making processes	7	8	7	**7**	**3**
Communication, information and reporting	8	8	8	**8**	**4**
Organization, authority and interaction	7	8	7	**7**	**3**
IT Tools and Analysis	6	5	7	**6**	**3**
Framework and Process	7	7	7	**7**	**3**

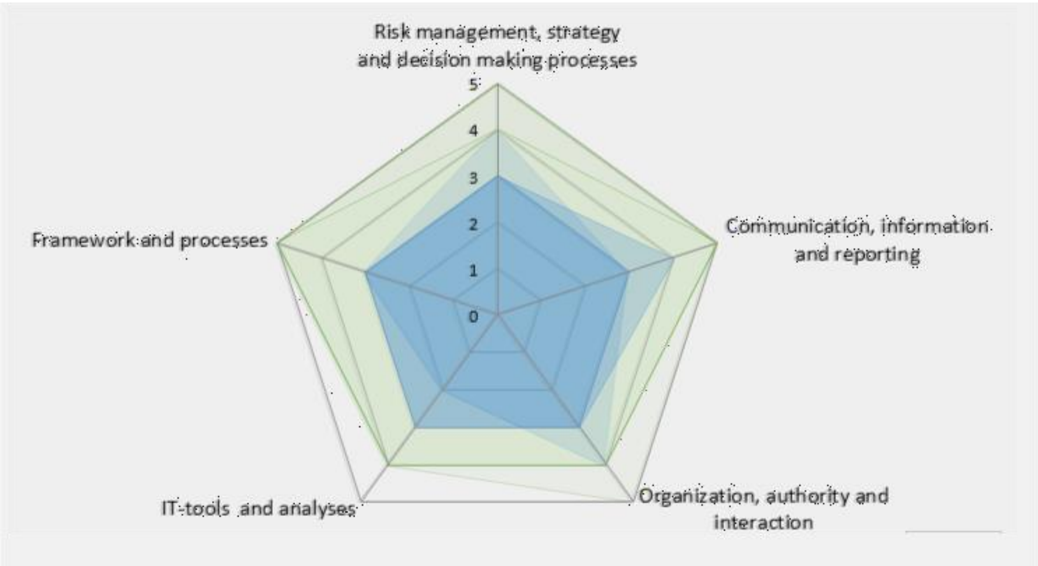
Then mapped the results of measuring the level of risk for each resource, which is shown in Figure 2 in the form of a spider diagram according to the RM Simple Model methodology. The results did not find significant differences between each resource person, thus indicating the similarity of knowledge in each resource person

Based on the measurement of 5 dimensions and 50 criteria. The level of risk management shown in Figure 2. The results are not optimal because there is still a gap between the current realization (blue diagram) and maximum ambition (green diagram). Therefore, it is necessary to do a gap analysis that will show the cause of the risk management maturity level of PJT II is not maximized.

Gap Analysis will be divided into two parts. First, analysis on each criterion that gets the maximum score that needs to be maintained. Second, the criteria that still get a score that is not maximized and need to be analysed to find the root of the problem. In the dimensions of risk management, strategy, and decision-making processes, based on the measurement results, PJT II gets a criterion measurement score of 7 and enters the risk management maturity level 3. As for the ambition maturity level in this dimension, a score of 5. That means PJT II has a score gap of 2 and needs to increase the score of the criterion measurement until it reaches 10.

PJT II considered to have carried out risk management supervision very well. In 2020, the company has developed a Risk Management Information System (SIMRIsk) which is used to improve the company's risk management process. Through this system, the process of identifying, measuring, mapping, managing and monitoring risks can be carried out properly. This needs to be maintained by holding regular and periodic socializations to maintain the knowledge of each work unit in the face of company dynamics

Figure 2. Calculation Result of Risk Management Maturity Level of Perum Jasa Tirta II



The implementation of PJT II risk management is based on and in accordance with ISO 31000 guidelines regarding risk management. That way, all definitions of risk assessment and measurement have been translated through ISO 31000 guidelines. However, in practice there are still some minor differences due to differences in understanding of risk management for each company staff which causes differences in the completeness of documents displayed in each work unit in managing risk.

The company has also provided a risk management policy for each level of risk faced. For example, at low risk, the company will accept the risk because it will not significantly disrupt the company's finances and operations. It is different with strategic risk, where the risk has a very significant impact on the company's finances and operations, such as the risk of a dam bursting which is included in the strategic risk of PJT II. Therefore, the identification and management of these strategic risks need to be continuously improved by carrying out routine maintenance and presenting technicians with very good quality.

Companies can be judged to have not been consistent in implementing risk management, there is an inconsistency between risk appetite and tolerance level with implementation in the field such as the preparation of the 2020 RKAP. supervisor. The absence of a special committee that examines the implementation of corporate risk management is a self-evaluation for the company so that the abundance of tasks does not only accumulate in the Risk subdivision with the level of power and interest far below that of other stakeholders such as the main board of directors and the supervisory board. However, having a risk management committee at the same level as the main board of directors and supervisory board will help specifically in conducting risk management studies within PJT II.

In measuring the company's performance, PJT II consistently monitors and evaluates performance on a monthly, quarterly, semester, and annual basis. More attention is needed, especially in the context of the level of risk that is still not fully integrated into the company's performance assessment used, namely the KPKU (Excellent Performance Assessment Criteria) so that the company can objectively assess the achievement weight of each KPI (Key Performance Indicator) used.

Perum Jasa Tirta II already has regulations and plans that are outlined in several rules. The Code of Conduct Guidelines are guidelines that contain the employee's code of ethics while carrying out all activities on behalf of the company. Including ethics and ways of communicating are regulated in this guideline. As for some routine communication activities as outlined in the company's work agenda, which regularly brings together company representatives, both directors or company officials, with external stakeholders such as the Supervisory Board, Consumers, or the Ministry of SOEs, all of which have been regulated in the company's annual work agenda. Likewise, in carrying out risk management, companies interpreted by the PKRSM division routinely communicate with external stakeholders in the framework of the work agenda and ensure security and comfort for all parties.

Risk management leaders have access to external reporting regarding regulatory and administrative requirements needed by the company to provide standardization of risk management used by the company so that the information provided is relevant to the needs of the company's external parties. The company's support for this is also reflected in the existence of a digital administration system to store all procedure documents, guidelines and decrees that apply in the company in real time. Access to the system is also given to the head of PJT II risk management.

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