

Operational Risk Analysis Based on Enterprise Risk Management Approach (ERM) in Export Document Service Company (Case Study at CV Tarukalpa Dewata)

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Abstract: Every company in carrying out its operational activities will definitely face a risk. The various possible risks that can be experienced by the company in carrying out its operational activities need to be managed and controlled by carried out risk management. The implementation of risk management is expected to assist companies in identified, analyzed, assessed, and controlled risks and the impact of risks. One approach that can be used to perform risk management is Enterprise Risk Management (ERM). This research aims to analyze operational risks that occurred at CV Tarukalpa Dewata based on an Enterprise Risk Management (ERM) approach by identified risks, risk assessments, efforts to respond the risks and carry out risk controls to find out what actions must be taken to minimize the possibility of risks and impact risk. This research used a qualitative descriptive research method by collecting data through interviews, observations and questionnaires. The results showed that in the operational activities of CV Tarukalpa Dewata there were seventeen possible risks consisting of four risks originating from human resources owned by the company, five risks that occurred in the process of making export documents, two risks that occurred due to technological constraints, and six external risks. The results of the risk assessment showed that there were three levels of risk that occurred in the operational activities of CV Tarukalpa Dewata namely moderate, low, and very low. Responses to existing risks are carried out by monitoring, controlling management, and paying special attention (urgent) in the company's operational activities.

Keyword: *risk management, operational risk, enterprise risk management (ERM)*

1. Introduction

Every company in carrying out its operational activities to provide the best service for its customers will definitely face a risk. Risk is defined as a factor that comes from external or internal to the company that can cause uncertainty to achieve predetermined goals [1]. In addition, the risks can also cause losses for the company. Efforts that can be made to avoid these losses are by performing risk management. Risk

management is a structured process to identify, analyze, assess, control, avoid, minimize and eliminate risks that the company cannot accept [1].

CV Tarukalpa Dewata is a service company in Bali that is engaged in the service of making export documents. CV Tarukalpa Dewata offers document creation services for all types of finished goods except food products and illegal goods. The main document that is most often processed at CV Tarukalpa Dewata is a V-Legal document which is a permit document to export goods made of wood. In one month on average they serve 80 to 100 documents with various types of goods and various destination countries.

During its operational activities, the directors and employees of CV Tarukalpa Dewata said that the biggest risk in the company's operational activities was an error in making the required export documents. In addition, the risk experienced by the company is also in the document creation system, which sometimes experiences errors, causing delays in making documents required by customers. As a result of these risks, it will affect time efficiency and material losses for the company. Therefore, risk management is needed to find out the risks that have the potential to threaten the operational activities of CV Tarukalpa Dewata, so the company can carry out control activities to avoid possible risks and the impact of risks that can cause losses.

2. Literature Review

1. Risk

Risk is a situation that can bring the possibility of losses for the company[2]. Risk also leads to an event whose occurrence cannot be ascertained so that it causes a loss, both small and large losses which affect the achievement of objectives[3].

2. Operational Risk

Operational risk is a risk of loss that occurs as a result of direct consequences of inadequate or failed processes of the company's operational activities, human resources in the company, systems, and risks originating from external factors[4]. Operational risk is a potential deviation due to the malfunction of a system, human resources, technology, or other factors so that the results are not in accordance with the expected goals. Operational risk can occur due to factors from within and outside the company which includes all risks of fluctuations in the company's business results due to failures in supervision and systems used and events that cannot be controlled[5].

3. Risk Management

Risk management is a tool used to manage and control risk[6]. The complexity of the risks experienced, has resulted in companies needing to manage and control risks in order to maintain and expand their business by implementing risk management[7].

4. Enterprise Risk Management

Enterprise Risk Management is an integrated and continuous process to manage risks across the company including strategic, financial, operational, compliance and reputation risks to minimize unexpected performance variations and maximize the company's intrinsic value. This process empowers boards and management to make more informed risk or return decisions by meeting fundamental requirements related to governance and policy, risk analysis, risk management, and monitoring and reporting[8]. Enterprise Risk Management has eight components derived by COSO to achieve company goals, both strategic, operational, financial reporting, and compliance with statutory provisions[5]. The components consist of Internal Environment, Objective Setting, Event Identification, Risk Assessment, Risk Respond, Control Activities, Information and Communication, Monitoring.

3. Research Method

This research used a qualitative descriptive method which aims to explore, describe in detail the events or incidents that occur in the company's operational activities through data collection and based on the Enterprise Risk Management approach. Data type that used in this research was sourced from primary data. Primary data source obtained directly through distributing questionnaires to seven employees of CV Tarukalpa Dewata, the result of interview, and observation during three month. The data analysis

technique in this study was carried out through three stages based on Miles and Huberman, namely data reduction, data presentation, and drawing conclusions/verification[9].

4. Results and Discussion

CV Tarukalpa Dewata is a company engaged in the service of making export documents. In carrying out its operational activities, CV Tarukalpa Dewata has seven (7) employees consisting of one manager, two employees in the document department, two employees in the field or document delivery, and two employees in the finance and administration department. For one month, the company's operational activities can complete 80 – 100 export documents. As long as the company carries out its operational activities, of course, there will be risks and impacts that can interfere with business continuity and company goals. Therefore, risk management is needed to find out what risks have the potential to threaten the operational activities of CV Tarukalpa Dewata so the company can carry out control activities to avoid possible risks and the impact of risks that can cause losses. The stages of risk management carried out based on the Enterprise Risk Management (ERM) approach at CV Tarukalpa Dewata are:

4.1 Risk Identification

The risk identification stage that occurs in the operational activities of CV Tarukalpa Dewata is carried out by conducting interviews and observations. After identification, it can be seen that there are seventeen (17) risks that can threaten the continuity of the company's operational activities. The risks that threaten the operational activities of CV Tarukalpa Dewata can be seen in table 4.1.

Table 4.1 Risk Identification

| Jenis Risiko | Kode | Risiko |
|---------------------|------|-----------------------------------------------------------------------------------------------------------------------------------|
| Human Resource Risk | A1 | Risk of lack accuracy in examining published documents |
| | A2 | Risk of late delivery documents |
| | A3 | Risk of additional costs |
| Process Risk | A4 | Risk of work accident when sending documents |
| | B1 | Risk of error spelling the name of the importer |
| | B2 | Risk of currency recording errors |
| | B3 | Risk of error in recording the weight of goods |
| | B4 | Risk of error in writing address and port of destination of the importer |
| Technology Risk | B5 | Risk of errors in determining the type of wood used when issuing V-Legal documents |
| | C1 | Risk of system disruption when issuing document |
| | C2 | Risk of internet network problems |
| External Risk | D1 | Fire risk |
| | D2 | Risk of a change in the new provisions concerning export documents |
| | D3 | Risk of power outage |
| | D4 | Risk of data change from cargo or importer |
| | D5 | Risk of losing customers |
| | D6 | Risk of Recording CV Tarukalpa Dewata as the name of the owner of the goods in the issuance of goods export notification document |

After the risk identification has been carried out, it is followed by making a research questionnaire to determine the level of risk probability (occurrence) and risk impact (severity) based on the risk identification that has been done previously. The research questionnaire is divided into two parts, 17 question items to assess the level of risk (occurrence) and 17 question items to assess how big the impact of risk on the continuity of the company's operational activities (severity). After obtaining questionnaire data regarding the possible risks and impacts of risk, it is carried out by testing the validity of the data to determine whether the data obtained are valid and reliable to be used as a basis for risk assessment. The results of testing the validity of the questionnaire data are as follows:

a. Validity test

The data validity test was carried out using the Pearson product moment method on the IBM SPSS Statistic 25. The items tested were seventeen (17) risks with seven (7) respondents. The results of the validity test can be seen in table 4.2 and table 4.3 as follows:

Table 4.2 Possible Risk Validity Test Results (Occurrence)

| Question Items | Pearson Correlation | Sig (2-Tailed) | Description |
|-----------------------|----------------------------|-----------------------|--------------------|
| A1 | 0,911 | 0,004 | Valid |
| A2 | 0,897 | 0,006 | Valid |
| A3 | 0,927 | 0,003 | Valid |
| A4 | 0,768 | 0,044 | Valid |
| B1 | 0,852 | 0,015 | Valid |
| B2 | 0,960 | 0,001 | Valid |
| B3 | 0,928 | 0,003 | Valid |
| B4 | 0,971 | 0,000 | Valid |
| B5 | 0,960 | 0,001 | Valid |
| C1 | 0,877 | 0,010 | Valid |
| C2 | 0,881 | 0,009 | Valid |
| D1 | 0,941 | 0,002 | Valid |
| D2 | 0,941 | 0,002 | Valid |
| D3 | 0,941 | 0,002 | Valid |
| D4 | 0,941 | 0,002 | Valid |
| D5 | 0,894 | 0,007 | Valid |
| D6 | 0,941 | 0,002 | Valid |

Table 4.3 Risk Impact Validity Test Results (Severity)

| Butir Pertanyaan | Pearson Correlation | Sig (2-Tailed) | Keterangan |
|-------------------------|----------------------------|-----------------------|-------------------|
| A1 | 0,863 | 0,012 | Valid |
| A2 | 0,777 | 0,040 | Valid |
| A3 | 0,869 | 0,011 | Valid |
| A4 | 0,788 | 0,035 | Valid |
| B1 | 0,981 | 0,000 | Valid |
| B2 | 0,963 | 0,001 | Valid |
| B3 | 0,911 | 0,004 | Valid |
| B4 | 0,912 | 0,004 | Valid |
| B5 | 0,981 | 0,000 | Valid |
| C1 | 0,883 | 0,008 | Valid |
| C2 | 0,781 | 0,038 | Valid |
| D1 | 0,863 | 0,012 | Valid |
| D2 | 0,863 | 0,012 | Valid |
| D3 | 0,867 | 0,011 | Valid |

| | | | |
|----|-------|-------|-------|
| D4 | 0,867 | 0,011 | Valid |
| D5 | 0,950 | 0,001 | Valid |
| D6 | 0,758 | 0,048 | Valid |

Based on table 4.2 and table 4.3, a total of 17 risk items are declared valid with a Pearson correlation value above 0.3 and a Sig (2-tailed) value below 0.5[10].

b. Reliability Test

The reliability test was carried out using the Cronbach Alpha analysis method on the IBM SPSS Statistic 25 program. After the analysis, the following results were obtained:

| Reliability Statistics Occurrence | |
|------------------------------------------|-------------------|
| <i>Cronbach's Alpha</i> | <i>N of Items</i> |
| .975 | 17 |

| Reliability Statistics Severity | |
|----------------------------------------|-------------------|
| <i>Cronbach's Alpha</i> | <i>N of Items</i> |
| .971 | 17 |

The results of the reliability test showed that the reliability test of the questionnaire on the possibility of risk (occurrence) and the questionnaire on the impact of risk (severity) showed a value of 0.975 and 0.971, respectively, so it can be said that the data from the questionnaire is reliable data because the results are above 0.6 [11].

4.2 Risk Assessment

Risk assessment is carried out by multiplying the average occurrence value and the average severity value for each risk. The results of the risk assessment that occurred in CV Tarukalpa Dewata can be seen in table 4.4.

Table 4.4 Risk Assessment

| Risk Type | No | Risk | Occurrence | Severity | Risk Scoring |
|---------------------|-----------|--------------------------------------------------------|-------------------|-----------------|---------------------|
| Human Resource Risk | A1 | Risk of lack accuracy in examining published documents | 2,86 | 3,00 | 8,57 |
| | A2 | Risk of late delivery documents | 2,57 | 2,71 | 6,98 |
| | A3 | Risk of additional costs | 2,29 | 2,43 | 5,55 |
| | A4 | Risk of work accident when sending documents | 1,57 | 2,00 | 3,14 |
| Process Risk | B1 | Risk of error spelling the name of the importer | 2,71 | 2,29 | 6,20 |
| | B2 | Risk of currency recording errors | 2,43 | 2,00 | 4,86 |
| | B3 | Risk of error in recording the weight of goods | 2,57 | 2,29 | 5,88 |

| | | | | | |
|-----------------|----|-----------------------------------------------------------------------------------------------------------------------------------|------|------|-------|
| | B4 | Risk of error in writing address and port of destination of the importer | 2,43 | 2,71 | 6,59 |
| | B5 | Risk of errors in determining the type of wood used when issuing V-Legal documents | 2,43 | 2,29 | 5,55 |
| Technology Risk | C1 | Risk of system disruption when issuing document | 2,71 | 3,00 | 8,14 |
| | C2 | Risk of internet network problems | 2,86 | 2,71 | 7,76 |
| External Risk | D1 | Fire risk | 1,29 | 3,00 | 3,86 |
| | D2 | Risk of a change in the new provisions concerning export documents | 3,29 | 3,00 | 9,86 |
| | D3 | Risk of power outage | 3,29 | 2,43 | 7,98 |
| | D4 | Risk of data change from cargo or importer | 4,29 | 3,43 | 14,69 |
| | D5 | Risk of losing customers | 3,43 | 3,29 | 11,27 |
| | D6 | Risk of Recording CV Tarukalpa Dewata as the name of the owner of the goods in the issuance of goods export notification document | 4,29 | 3,43 | 14,69 |

The results of the risk assessment are presented in the form of a risk matrix to facilitate the determination of responses to existing risks. The risk matrix can be seen in table 4.5.

Table 4.5 Risk Matrix Results

| | | <i>Severity</i> | | | | |
|---------------------|------------------|----------------------|---------------------------------|----------------|--------------|-----------------------|
| | | 1 | 2 | 3 | 4 | 5 |
| <i>Significance</i> | | Insignificant Impact | Minor Impact | Moderate -Mino | Major Impact | Major Impact to Large |
| <i>Occurrence</i> | 5 Almost Certain | | | | | |
| | 4 Likely | | | D4, D6 | | |
| | 3 Moderate | | D3 | D2, D5 | | |
| | 2 Unlikely | | A2, A3, B1, B2, B3, B4, B5, C2, | A1, C1 | | |
| | 1 Rare | | A4 | D1 | | |

4.3 Risk Response

After conducting a risk assessment and making a risk matrix, it can be seen that the level of risk contained in CV Tarukalpa Dewata's operational activities consists of three levels of risk, namely very low risk, low risk, and moderate. By knowing the level of each risk, it is possible to carry out risk response activities. Risk response is an activity carried out to determine whether the risks that occur in the company's operational activities can be accepted or avoided. The response of risks that can be carried out in the operational activities of CV Tarukalpa Dewata can be seen in table 4.6.

Table 4.6 Risk Response

| No | Risk Score | Risk Level | Risk Response |
|----|------------|------------|-------------------------------------------|
| A1 | 8,57 | Low | Management control |
| A2 | 6,98 | Very low | Management control |
| A3 | 5,55 | Very low | Monitoring |
| A4 | 3,14 | Very low | Monitoring |
| B1 | 6,20 | Very low | Management control |
| B2 | 4,86 | Very low | Monitoring |
| B3 | 5,88 | Very low | Monitoring |
| B4 | 6,59 | Very low | Management control |
| B5 | 5,55 | Very low | Monitoring |
| C1 | 8,14 | Low | Management control |
| C2 | 7,76 | Very low | Management control |
| D1 | 3,86 | Low | Monitoring |
| D2 | 9,86 | Moderate | Management control |
| D3 | 7,98 | Low | Management control |
| D4 | 14,69 | Moderate | Must Become Management Attention (urgent) |
| D5 | 11,27 | Moderate | Must Become Management Attention (urgent) |
| D6 | 14,69 | Moderate | Must Become Management Attention (urgent) |

4.4 Risk Control

The risk management stage that is carried out after the risk response is controlling risk. Risk control aims to prevent the company from any possible risks or to minimize the impact of these risks for the continuity of the company's operational activities. The risk control carried out at CV Tarukalpa Dewata are:

Table 4.7 Risk Control

| Level | Kode | Name of Risk | Risk Control |
|----------------------|------|------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Moderate Risk</i> | D2 | Risk of a change in the new provisions concerning export documents | a. Provide regular training on new provisions regarding export documents b. If the document has been issued and the company does not know that there is a change in regulations, it must be coordinated with customs regarding the latest regulations |
| | D4 | Risk of data change from cargo or importer | c. Always maintain a good communication with clients so that there is no miscommunication |
| | D5 | Risk of losing customers | d. Providing services rates that compete with competitors e. Provide satisfactory service for clients |
| | D6 | Risk of Recording CV Tarukalpa Dewata as the name of the owner of the goods in the issuance of goods | f. If it is known by the company in the same month, it can be done notul PEB to rename CV Tarukalpa with the original owners of the goods g. However, if it is known that one month has passed from the date of issuance, a statement letter is made between CV Tarukalpa Dewata and the owner of the |

| | | | |
|----------------------|----|----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Low</i> | A1 | export notification document Risk of lack accuracy in examining published documents | goods stating that the exported goods really belong to the owner of the goods, not CV Tarukalpa Dewata h. Do a double check with the data that sent by the client before the document is issued i. Provide a draft document to be issued to the client, so that if something goes wrong document the client who will be responsible |
| | C1 | Risk of system disruption when issuing document | j. Reporting to the party handling the export document issuance system and waiting for improvement from the system provider |
| | D1 | Fire risk | k. Provide a small fire extinguisher (APAR) |
| | D3 | Risk of power outage | l. The company is expected to prepare the availability of generators m. Ensuring that the estimated purchase of electricity pulses in a month has been fulfilled |
| <i>Very Low Risk</i> | A2 | Risk of late delivery documents | n. Make a list of the ship's departure schedule with an estimated time for completion of documents, so that the documents that must be prioritized can be sorted o. Documents can be issued in Surabaya so that time efficiency occurs if the ship used is about to depart. |
| | A3 | Risk of additional costs | p. Issuing documents on time before the ship departs and the ship arrives at the destination country so that there is no delay in sending documents |
| | A4 | Risk of work accident when sending documents | q. Facilitate every employee with Health insurance such as BPJS Kesehatan |
| | B1 | Risk of error spelling the name of the importer | r. If there is an error in writing the name of the importer when the goods have not been sent to the destination country, the company will revise the document by charging an additional fee to the client s. If an error occurs when the goods have arrived at the destination country, the company will make a statement letter and make a chronology letter regarding the document error that was made |
| | B2 | Risk of currency recording errors | t. Ensure to the cargo party the currency used in the LC (Letter of Credit) agreement |
| | B3 | Risk of error in recording the weight of goods | u. If there is an error in recording the weight of the goods when it has not been sent to the destination country, the company will revise the document by charging an additional fee to the client |
| | B4 | Risk of error in writing address and port of destination of the importer | v. If there is an error in writing the importer's address when the goods have not been sent to the destination country, the company will revise the document by charging an additional fee to the client w. If an error occurs when the goods have arrived at the destination country, the company will make a statement letter and make a chronology letter regarding the document error that was made |
| | B5 | Risk of errors in determining the type of wood used | x. Communicating with the client regarding the type of wood used as raw material for the product |

| | | |
|----|-----------------------------------|--------------------------------------------------------------------------------------|
| | when issuing V-Legal documents | y. Provide training on the types of timber that are allowed to be exported |
| C2 | Risk of internet network problems | z. Make sure to use an internet provider with good quality with speeds above 20 Mbps |

5. Conclusion

Based on the results of the discussion, there are several conclusions that can be drawn after conducting an operational risk analysis based on the enterprise risk management (ERM) approach, as follows:

1. Human resource risks that occurred in the company's operational activities consist of four risks that are at low and very low levels which can be taken to respond the risks by monitoring and internal control efforts by management.
2. Risks in the process of making documents that occurred in the company's operational activities consist of five risks that are at a very low level. An effort can be made to respond to risks by monitoring and internal control efforts by management.
3. Risks due to technological constraints in the company's operational activities consist of two risks that are at low and very low levels, efforts can be made to respond to risks by implementing internal controls.
4. External risks that occurred in the company's operational activities consist of six risks that are at low and moderate levels, efforts can be made to respond to risks by carrying out internal controls and must be a special concern for management because they are directly related to external parties of the company so that it will greatly impact on company operational activities.

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