

Project Risk Assessment to Anticipate Potential Business Risk: A Case Study at PT Telkom Indonesia

Rifa Herdian¹, Raden Isma Anggraini^{2,*}

¹*Government Service, PT Telkom Indonesia, Jakarta, Indonesia*

²*School of Business, IPB University, Bogor, Indonesia*

**Corresponding author. Email: isma.anggraini@apps.ipb.ac*

ABSTRACT

In project management, project risk assessment has a significant role in anticipating business risks. PT Telkom as one of the State-Owned Enterprises in Indonesia has implemented many projects aimed at providing the best service for customers in the field of telecommunications services. For this reason, PT Telkom needs to carry out a risk assessment project to mitigate the risk of loss, facilitate the implementation of work and facilitate control and supervision within the framework of Enterprise Risk Management (ERM). This study aims to identify project risks and identify the stages of project risk assessment as a guide in anticipating business risks. This study uses document testing methods or document review to identify project risks with and interview with an internal expert. The results of the study indicate that significant project risk is the risk associated with the collectibility of account receivables. Stages in the project risk assessment include customer assessment, project assessment, and mitigation plans. The next step that can be taken is to develop IT systems to support integration between systems and conduct periodic evaluations to ensure compliance with these guidelines.

Keywords: ERM, business risk, mitigation, project risk assessment, telecommunications

I. INTRODUCTION

In project management, risk assessment has a significant role in anticipating business risks. Project risk management is the science of identifying, analyzing, and responding to uncertainties over the project's life and still ensuring the achievement of project objectives [1]. Project risk management includes the step of understanding and identifying potential problems that might occur, evaluating risks in influencing project success, monitoring and managing risks [2].

As one of the State-Owned Enterprises (SOE) companies in Indonesia, PT Telkom has implemented many projects to provide the best service for customers in telecommunications services. For this reason, PT Telkom needs to conduct a project risk assessment to mitigate the risk of loss, facilitate the implementation of work and facilitate control and supervision within the framework of Enterprise Risk Management (ERM). Project risk management aims to identify risks in a project and develop strategies to minimize risks and maximize opportunities that exist [3].

This study aims to identify the type of project risk that is a concern for PT Telkom and identify the stages of the project risk assessment as a guideline for the company in anticipating business risk.

II. MATERIALS AND METHODS

A. Location and Time

The research was conducted at PT Telkom, a State-Owned Enterprise (SOE), which is engaged in telecommunications in Indonesia. Data collection was conducted in 2018-2019.

B. Data

The type of data used in this study is qualitative data and quantitative data. Sources of data in the study consisted of primary data and secondary data. Primary data obtained are the results of interviews with management. Secondary data in this study refers to the literature review of various library materials, namely books, scientific journals, and previous research related to this research topic.

C. Research Design

The study was conducted with a descriptive qualitative method that collects and presents data with analysis and interpretation to provide an explanation related to the object under review. Data presented in the form of descriptive data discusses project risk management at PT Telkom.

D. Data Analysis

The stages in data processing and analysis are as follow and the research framework is shown in Fig.1.

1. Qualitative descriptive analysis in the form of a description of exposure to research results.
2. Identify project risks
It is a process of recognizing risks and risk components inherent in an activity directed to an appropriate risk management process [2]. Researchers identify risks by using document testing methods or document review [4].
3. Identify the stages of project risk assessment
Identification of the project risk assessment stage is carried out by conducting interviews with internal management experts in PT Telkom. Risk assessment is a process that is carried out repeatedly and in collaboration with relevant parties based on the views and insights of stakeholders on risk [4].

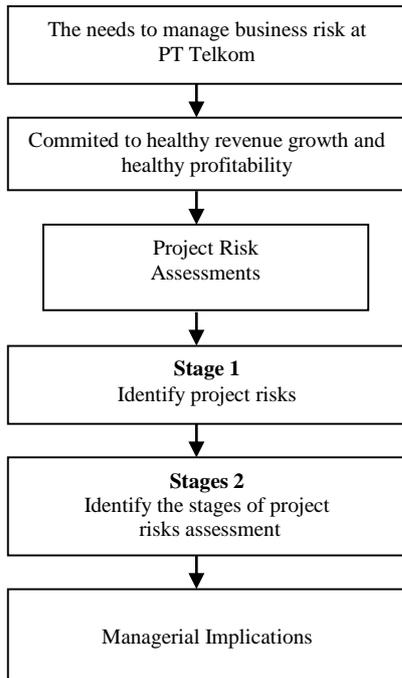


Figure 1. The research framework

III. RESULTS

A. Identify project risks

The results showed that the project risks assessed as having the potential to cause project failure were risks associated with account receivable (AR) collectability. The risk of not being able to bill according to the contract and collecting receivables from consumers is classified as financial risk [5]. Every event that can endanger the achievement of objectives can be identified as a risk [2].

TABLE 1. REVENUE GROWTH AND COLLECTION RATIO COMPARISON

No	Division	Revenue Growth 2017-2018 (%)	Collection Ratio (%)	
			2017	2018
1	DES	6	81	72
2	DBS	(18)	82	80
3	DGS	31	100	97

Table 1 shows the comparison between revenue growth and collection ratio in the three divisions in PT Telkom, namely Division of Enterprise Services (DES), Division of Business Services (DBS) and Division of Government Service (DGS). In DES Division, revenue growth for the 2017-2018 period was 6%, while the collection ratio showed a decline, from 81% in 2017 to 72% in 2018. In DBS Division, revenue growth for the 2017-2018 period showed a negative value, -18%, and the collection ratio decreased from 82% in 2017 to 80% in 2018. In DGS Division, revenue growth during 2017-2018 showed a value of 31%, and a

collection ratio decreased from 100% in 2017 to 97% in the year 2018.

B. Identify the stages of project risks assessment

The results showed that the stages in the project risk assessment include customer assessment, project assessment, and mitigation plans.

- Customer assessment is conducted to assess the legal aspects, site visits, and financial performance. Identification of 5C, namely character, capacity, capital, collateral, and condition.
- Project assessment carried out to analyze the project, project profitability and partner. Identification is carried out on four components: the scope of the project, project profitability, implementation time, and project characteristics
- Mitigation plan conducted to determine the risk profiling and mitigation of the project based on the historical evaluation results of AR profiling and the results of the project status evaluation. The mitigation plan includes payment methods and types of service.

IV. DISCUSSION

Researchers identified risks by comparing revenue growth and collection ratio data in three divisions at PT Telkom, namely DES division, DBS division, and DGS division. Based on these data, it can be stated that the urgency of project risk assessments at PT Telkom is motivated by the need to identify and manage risks that will affect the collectibility of account receivables (AR) and the need to minimize risk through the development of a set of policies [6]. The company is committed to achieving healthy business growth and healthy profitability, where healthy growth is characterized by an increase in revenue growth in line with increased AR collectability.

Project risks can cause additional costs and delays in project completion schedules [7]. The urgency of project risk assessment at PT Telkom is motivated by the need to identify and manage risks that will affect the collectibility of account receivables (AR) and minimize risk through the development of a set of policies [6]. The company is committed to achieving healthy business growth and healthy profitability. Healthy growth is characterized by AR collectability, that is in line with revenue growth.

This condition shows PT Telkom's commitment to two things, namely, healthy growth and healthy profitability. Healthy growth means that growth has to be sustainable and above the industry average. Healthy growth is a new growth engine in digital business to secure revenue proportions, and AR collectability should be in line with revenue growth. Whereas healthy profitability is characterized by three things: product leadership from internal capabilities with competitive offering to gain better margins, go to the market and internal transaction alignment should improve the margins and do the lean processes and organization to drive cost-effectiveness. In line with these conditions, PT Telkom needs two things, namely the need to know and manage risks that would effect the AR collectability, and the need to mitigate the risks through developing a set of interrelated policies from directorate to divisions.

The identification stages of the project risk assessment include three things, namely customer assessment, project assessment, and mitigation plan. The customer assessment phase includes identification of the 5C components, namely character, capacity, capital, collateral, and condition. Character is information on customer payment history through surveys and interviews. Capacity can be seen from a customer's ability to run a business, whether the company is experiencing financial problems. Capacity assesses the customer's ability to pay for the project. Capital includes identification of the condition of assets and assets owned, capital is identified through the company's financial statements. Collateral is the identification of collateral that can be converted into cash. Condition is the identification of macro variables surrounding the company regionally, nationally and internationally. In this case, mainly economic variables.

In conducting customer assessment, they assisted with the media customer assessment form. The form contains components which include: company data, document completeness review, financial performance evaluation, and financial performance results. Company data is a review and assessment of the company's legal aspects, including company name, address, directors, company site visit results, and site visit projects. Review the completeness of documents that include company establishment deed documents and amendments, tax identification number, citizen card, financial statements, tax reports, company newspaper accounts, directors' statements, letters of need for goods and or services, certificate of no arrears and historically subscribed to Telkom Group. Financial performance evaluation is an evaluation of the balance sheet, income statement, and financial ratios. The results of the analysis of customer financial performance is an analysis of cash flow and ability to pay customers for the project to be delivered.

The customer assessment stage has become a critical stage where, in recent years, the provision of banking facilities has faced the problem of customer credit risk and directly affected profitability [8]. Customer assessment is used to distinguish right prospective customers from a group of potential customers who will experience a failure in repayment.

At the project assessment stage, there are four things done, namely the scope of the project, project profitability, time of implementation, and project characteristics. The project's scope is an assessment of the project to determine the suitability of the project with Telkom's group portfolio. Project profitability is the calculation of the project's gross margin and net margin. Implementation time is the period of delivery or completion of the project. The project's characteristics are an evaluation of the project to be implemented a standard plan or a strategic project.

The project assessment phase aims to analyze the project and analyze the profitability of the project and its partners. These activities are carried out through the project assessment form. The project assessment form consists of project analysis, partner evaluation, project profitability, and project assessment results. Project analysis is an analysis of the legality and project portfolio, completeness of business license, list of work goods and services, effects of the visit,

project duration, and project characteristics. Partner evaluation evaluates the suitability of the business portfolio with the Telkom Group, the financial and technical capabilities of partners in conducting project delivery. Project profitability contains the results of an analysis of project profitability based on contract value, costs, and net margin value. The results of the project assessment provide recommendations for project feasibility.

The mitigation plan phase is carried out to determine the risk profiling and mitigation of the project based on the historical evaluation results of AR profiling and the project status evaluation results. The mitigation plan form contains historical US profiling and project status. Historical AR profiling is an evaluation of history collection performance by looking at customers' ability and desire to pay. Project status is an evaluation of the terms of payment and services provided. The mitigation plan stage in project management is in line with [9] statement, which states that risk mitigation is an effort to reduce the risk of giving credit to consumers.

V. CONCLUSIONS

PT Telkom and all work units must manage identified risks to minimize the effects. One risk that must be mitigated is the risk associated with the company's AR collectibility to achieve healthy revenue growth. Therefore we need guidelines for customer managers in the business segment, enterprise segment, and government segment in selecting and making decisions on a project for the supply of products and services through the implementation of project assessment.

The steps in conducting a risk assessment project at PT Telkom include; 1) the customer assessment stage to assess the legal aspects, site visit results, and financial performance; 2) the project assessment stage to analyze the project, project profitability and partner; 3) the mitigation plan stage to determine risk profiling and project mitigation based on the historical evaluation results of AR profiling and the results of the project status evaluation.

VI. RECOMMENDATION

The relevant directorates can conduct periodic evaluations to ensure compliance with the implementation of the project risk assessment. The related division needs to coordinate with the IT Division to develop IT systems that can support integration between systems such as existing integrated customer databases, including customer databases with bad debt.

Further research can be carried out using business continuity management as the latest risk management framework [10] to enable PT Telkom to improve resilience in addressing the risks identified. This is in line with PT Telkom's goal of implementing a risk project assessment to enlarge opportunities to capture business prospects and develop the Telkom Group's capabilities.

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