

ABSTRACT

PT XYZ is one of the companies in the telecommunications industry, carrying out projects with various partners. In 2023, PT XYZ collaborated with PT ABC to implement projects named the Activation Project and the Feeder Project of PT ABC. However, there were several challenges during the project implementation, causing delays or hindrances. After conducting interviews, the delays were attributed to the presence of waste or inefficiencies.

Lean Project Management (LPM) is an approach to project planning, focusing on waste minimization, identifying risk issues, and estimating project-related needs. One tool that can help systematically and proactively analyze and identify waste in a system is Waste Failure Mode Effect Analysis (W-FMEA), which can be used to assign weight to the waste occurring in a project. The highest weighted waste is then minimized, and one way to minimize waste in resource allocation is through scheduling that incorporates safety time in the form of buffer time, known as Critical Chain Project Management (CCPM).

The goal of this final project research is to design a Lean Project Management system based on the analysis conducted through interviews and categorization of inefficiencies that occurred during the project. Data processing will be carried out using the Critical Chain Project Management (CCPM) method to achieve more efficient scheduling. Additionally, the Failure Mode and Effects Analysis (FMEA) method will be applied to calculate the potential risks, adverse impacts, and the level of difficulty in handling them.

Keywords: Projects, Lean Project Management, Waste Failure Mode Effect Analysis, Critical Chain Project Management