

ABSTRACT

PT XYZ is a company operating in the Information and Communication Technology (ICT) services industry and telecommunications network in Indonesia. The company faces challenges in monitoring and controlling multiple projects simultaneously. Preliminary analysis identified several contributing factors, including slow change management due to a semi-manual system, non-real-time information distribution, and the absence of a data-driven decision-making tool.

This study aims to develop a Project Management Information System (PMIS) that serves as a real-time integration platform between employees and management for monitoring and controlling projects. The system is equipped with key features such as data-driven project progress visualization, project progress reporting, and project summaries, designed to assist companies in improving the monitoring and control of large-scale projects. The system was developed using the waterfall methodology and includes data-based project progress visualization features, utilizing the Earned Value Management method. The system design involved user requirements analysis and close collaboration with company employees as prospective end users, ensuring the features provided meet the company's needs.

The research results indicate that the developed system successfully meets user requirements, as evidenced by verification and validation processes conducted with prospective users. This PMIS provides real-time information, visualizes project progress, and integrates reporting between employees and supervisors, thus supporting the overall project monitoring and controlling process.

Keywords: Project Management Information System (PMIS), Monitoring, Controlling, Waterfall, Earned Value Management