ABSTRACT

PT XYZ is a company that manages an industrial estate located in Cilegon City. The company is currently undertaking a project to construct an Export Processing Zone (EPZ) warehouse within the Krakatau Industrial Estate 1 (KIK 1). A dedicated division within the company is responsible for supervising and controlling all ongoing projects. However, this division has faced several challenges in carrying out its duties, including delays in receiving weekly progress reports from vendors, a limited number of staff with diverse backgrounds in the Project Control division, and the absence of adequate supporting tools. These issues have led to ineffective project supervision and control, increasing the risk of cost overruns and project delays. To address these challenges, a spreadsheet-based monitoring and controlling dashboard was designed using the Agile Development method. In addition, project performance was evaluated using the Earned Value Management (EVM) method to assist the division in monitoring and controlling the project in terms of cost and time.

The developed dashboard consists of five worksheets: Dashboard, Project Schedule, Weekly Progress, PV EV AC, and Performance Report. The results indicate a Schedule Performance Index (SPI) of 1.00 and a Cost Performance Index (CPI) of 1.05 in week 23, signifying that the project is on schedule and experiencing cost savings. The Estimate at Completion (EAC) values were IDR 24,900,587,649.17 (method 1), IDR 24,756,530,700.00 (method 2), and IDR 24,743,855,715.40 (method 3), with the corresponding Estimate to Complete (ETC) values being IDR 2,881,138,983.36, IDR 2,737,082,034.19, and IDR 2,724,407,049.59. The time estimate for project completion is 26 weeks, indicating that no additional time is needed. These results demonstrate that the dashboard improves the efficiency and ease of project implementation.

Keywords: Dashboard, Monitoring & Controlling, EVM, Agile Development.