

ABSTRACT

PT XYZ is a company under a State-Owned Enterprise (BUMN) that focuses on various fields. Currently, PT XYZ is executing several projects, one of which is the construction of a Pembangkit Listrik Tenaga Surya (PLTS Atap). In the realization of its projects, the documentation and project reports are not well-integrated, causing each project team to lack real-time updates on the progress of their ongoing projects. This obstacle hampers project monitoring, as the project team relies solely on tools like Excel and communication platforms like WhatsApp and Telegram to exchange updated information. During the final project reporting, many documentation data are not consolidated into a single data collection tool, resulting in delays in report generation.

To avoid such issues, the need for a real-time data collection tool is evident. One such tool that can be utilized is a Google Data Studio-based dashboard. The dashboard design employs the waterfall methodology, where all project stages and deliverables are predetermined from the outset.

In this design, several features will be displayed on the dashboard, including the Project Charter, project's S-curve, SPI calculations, project timeline and activities, stakeholder register, as well as the risk register. The SPI calculations conducted have produced an SPI value of 0.5 for the first day, indicating the project is behind schedule. On the second day, the SPI value is 1.0, indicating the project is on schedule. For the third day, the SPI value is 0.93, signifying the project is behind schedule. The features presented in the Pembangkit Listrik Tenaga Surya (PLTS Atap) dashboard encompass the necessary project elements for monitoring and controlling. They also include the data required for the project's final report, "Berita Acara" (BA), at the end of each project phase. As a result, the project team only needs to input the ongoing project progress into a Google Sheet, and the dashboard display will automatically adjust based on the inputted data.

Keywords: Dashboard, Waterfall, Monitoring and Controlling, SPI