TUGAS AKHIR

ANALISA KETERLAMBATAN PROYEK DENGAN MENGGUNAKAN METODE EARNED VALUE PADA PROYEK GEDUNG KECAMATAN KENDAL KABUPATEN KENDAL

Diajaukan sebagai syarat dalam menyelesaiakan Pendidikan tingkat sarjana

Program strata 1 (S-1) Program studi Teknik sipil

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FEBRUARI 2025

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Disusun untuk memenuhi salah satu persyaratan dalam menyelesaikan
Pendidikan Sarjana Program Strata Satu (S-1) pada
Progran Studi Teknik Sipil Fakultas Teknik
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Dinyatakan telah sah memenuhi syarat dan disetujui.

Tanggal; 26 Februari 2025

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ABSTRACT

ANALYSIS OF PROJECT DELAYS USING THE EARNED VALUE METHOD ON THE KENDAL DISTRICT GOVERNMENT BUILDING PROJECT, KENDAL REGENCY

Construction projects are a series of tasks carried out within a specific time frame, involving planning, execution, and optimization of limited resources. This research aims to evaluate the time and cost performance, as well as estimate the cost and duration required to complete the construction of the Kendal District Office Building, Kendal Regency. From these two aspects, project control can be done using the Earned Value Method. This study uses data such as the Budget Plan (RAB), Project Time Schedule, Actual Project Time Schedule (from week 5 to week 8), and Weekly Project Progress Reports to calculate the values of BCWS, BCWP, and ACWP using the Earned Value method. By analyzing these using Earned Value, the Schedule Variance (SV), Schedule Performance Index (SPI), Cost Performance Index (CPI), Cost Variance (CV), and estimates of the final project cost and total project completion time (ETC and EAC) can be obtained. The analysis results for delays from week 5 to week 8 show a negative SV, an average SPI of 0.78 (<1), an ETC of 11 weeks (3 weeks later than the initial plan), resulting in a total project duration of 19 weeks (3 weeks longer than the initial plan of 16 weeks), and an estimated remaining project cost of IDR 615,894,308.3, with an estimated total cost of IDR 1,030,999,089.4 (higher than the initial budget of IDR 880,877,648.6). Based on these calculations, it can be concluded that the project implementation has been delayed by 3 weeks from week 5 to week 8, meaning the project performance and completion do not align with the original plan. Therefore, to improve project performance, a re-scheduling is needed to align the project's progress with the initial plan, thus minimizing time and cost losses and ensuring the project is completed according to the original schedule.

Keywords: cost control, time control, Earned Value method.