IMPLEMENTASI METODE *HYBRID* DALAM PENGENDALIAN BIAYA DAN WAKTU UNTUK MENGURANGI RESIKO PINALTI PADA PROYEK RENOVASI GEDUNG *TENANT* STP PUSLIT

Faqih Figo Ramadhani
Dosen Pembimbing :
Amri Gunasti, ST., MT. (1) ; Ir. Totok Dwi Kuryanto, MT. (2)
Program Studi Teknik Sipil, Fakultas Teknik, Universitas Muhammadiyah Jember
Jl. Karimata 49, Jember 68121, Indonesia
Email : figoramadhan30@gmail.com

RINGKASAN

Manajemen proyek adalah suatu proses perencanaan, pelaksanaan, pengendalian, dan koordinasi agar proyek mencapai target waktu, biaya, dan mutu. Penelitian ini menggunakan data primer melalui studi literatur terkait manajemen proyek, metode *Earned Value Management* (EVM), dan Crash Program. Studi dilakukan pada proyek pembangunan Gedung Tenant STP Puslit di Desa Nogosari, Rambipuji, Jember, dengan nilai kontrak Rp. 2.578.693.890 dan durasi 88 hari. Tanpa pengendalian yang tepat, proyek diprediksi terlambat dan mengalami pembengkakan biaya hingga Rp2.707.628.584,50. Pada hari ke-36, nilai SPI sebesar 0,93 menunjukkan keterlambatan, sehingga metode *crashing* diperlukan. Hasil analisis menunjukkan bahwa penambahan tenaga kerja (Rp. 43.058.195,68) lebih ekonomis dibandingkan lembur (Rp. 79.624.462,50). Jika terjadi keterlambatan maksimal, denda yang dikenakan bisa mencapai Rp. 5.430.618.572,00. Kontraktor juga telah melaksanakan kewajiban membayar upah lembur sesuai Undang-Undang Nomor 13 Tahun 2003 dan Nomor 11 Tahun 2020 tentang Cipta Kerja, dengan persetujuan pekerja.

Kata Kunci: *Crashing*; *arned Value*; Manajemen Kontruksi; Penambahan Jam Lembur; Penambahan Tenaga Kerja.

IMPLEMENTATION OF HYBRID METHOD IN COST AND TIME CONTROL TO REDUCE PENALTY RISK IN STP PUSLIT TENANT BUILDING RENOVATION PROJECT

Faqih Figo Ramadhani

Supervisor :

Amri Gunasti, ST., MT. [(1)] ; Ir. Totok Dwi Kuryanto, MT. [(2)]

Civil Engineering Study Program, Faculty of Engineering

Muhammadiyah University of Jember

Karimata Street 49, Jember 68121, Indonesia

Email : figoramadhan30@gmail.com

ABSTRACT

Project management is a process of planning, implementing, controlling, and coordinating so that a project achieves its time, cost, and quality targets. This study uses primary data through literature studies related to project management, the Earned Value Management (EVM) method, and the Crash Program. The study was conducted on the construction project of the STP Puslit Tenant Building in Nogosari Village, Rambipuji, Jember, with a contract value of Rp2,578,693,890 and a duration of 88 days. Without proper control, the project is predicted to be late and experience cost overruns of up to Rp2,707,628,584.50. On the 36th day, the SPI value of 0.93 indicated a delay, so the crashing method was needed. The results of the analysis showed that adding workers (Rp43,058,195.68) was more economical than overtime (Rp79,624,462.50). If there is a maximum delay, the fine imposed can reach Rp5,430,618,572.00. The contractor has also carried out the obligation to pay overtime wages in accordance with Law Number 13 of 2003 and Number 11 of 2020 concerning Job Creation, with the consent of the workers.

Keywords: *Crashing, Earned Value; Construction Management; Addition of Overtime Hours; Addition of Workforce.*