EVALUASI PENJADWALAN PROYEK KONSTRUKSI MENGGUNAKAN *SOFTWARE PRIMAVERA PROJECT PLANNER P6 PROFESIONAL*

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ABSTRAK

Penjadwalan dalam proyek merupakan hal penting dalam suatu proyek kontruksi. Penjadwalan yang tepat dapat menghindari kerugian seperti, keterlambatan, pembengkakan biaya, dan perselisihan. Proyek Pembangunan Balai Karantina Pertanian Kelas 1 Semarang masih dilakukan dengan menggunakan *Microsoft Excel*. Penjadwalan ulang bertujuan untuk mengetahui durasi waktu dan biaya proyek dengan menggunakan *Software Primavera Project Planner P6 Profesional* dan perbandingan yang lebih efektif antara proyek asli, dengan melakukan percepatan (*crashing*) dengan penambahan jam kerja (lembur).

Tahapan yang dilakukan pada penelitian ini meliputi *Input Activity Relationship, Input WBS, Input* harga satuan upah dan pekerja, Input kebutuhan *Resources* pada setiap *activity*. Hasil yang didapatkan berupa *Bar Chart, Network Planning* dan Kegiatan Kritis. Kemudian dilakukan percepatan *(Crashing).*

Berdasarkan hasil Analisa diketahui durasi dan biaya pada proyek asli adalah 210 hari kalender dengan biaya Rp.10.777.777.000,00. Hasil *reschedule* dengan *Software Primavera Project Planner Profesional P6* didapat durasi 204 hari kalender dengan biaya Rp.10.785.716.093,00. Setelah dilakukan dengan penambahan jam kerja (lembur) 3 jam percepatan pada beberapa kegiatan kritis yaitu : urugan tanah, pembesian kolom pedestal K, kuda-kuda dan kaki kuda-kuda, pasangan dinding bata ringan lantai 1, plesteran dinding lantai 1, pasang *homogenous tile* lantai 1, dan pasang *homogenous tile* lantai 2 dihasilkan 194 hari kalender dengan biaya Rp.10.817.954.210,00. Dapat disimpulkan *reschedule* lebih efektif karena mendapatkan efisien waktu optimal dengan penambahan biaya sebesar 0,07% dari biaya proyek asli.

Kata kunci : biaya, *crashing*, durasi, jadwal proyek

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EVALUATION OF CONSTRUCTION PROJECT SCHEDULING USING PRIMAVERA PROJECT PLANNER P6 PROFESSIONAL SOFTWARE

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ABSTRACT

Project scheduling is an important thing in a construction project. Proper scheduling can avoid losses such as delays, cost overruns, and disputes. The Class 1 Semarang Agricultural Quarantine Development Project is still being carried out using Microsoft Excel. Rescheduling aims to determine the duration and cost of the project using the Primavera Project Planner P6 Professional Software and a more effective comparison between the original project, by accelerating (crashing) with the addition of working hours (overtime).

The stages carried out in this study include Input Activity Relationship, WBS Input, Wage and Worker Unit Price Input, Input Resources Needs in each activity. The results obtained are in the form of a Bar Chart, Network Planning and Critical Activities. Then do the acceleration (Crashing).

Based on the analysis, it is known that the duration and cost of the original project is 210 calendar days at a cost of Rp. 10,777,777,000.00. The results of rescheduling with Primavera Project Planner Professional P6 Software obtained a duration of 204 calendar days at a cost of Rp. 10,785,716,093.00. After doing this with the addition of working hours (overtime) 3 hours acceleration in several critical activities, namely: landfilling, fixing pedestal column K, trusses and trusses, light brick masonry 1st floor, plastering 1st floor walls, installing homogeneous tiles 1st floor, and install homogeneous tiles on 2nd floor resulting 194 calendar days at a cost of Rp.10,817,954,210.00. It can be concluded that rescheduling is more effective because it gets optimal time efficiency with an additional cost of 0.07% of the original project cost.

***Keywords** : cost, crashing, duration, project schedule*

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