ABSTRACT

THE EFFECT OF CONTRUCTION HEAVY EQUIPMENT MANAGEMENT ON PROJECT AND COMPANY PERFORMANCE IN GREATER JAKARTA USING STRUCTURAL EQUATION MODELING (SEM)

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In construction's world right now, the use of heavy equipment is become a vital thing and will have an impact directly into project performance. Therefore, many contractors in indonesia invest money in various types of a heavy construction equipment to increase the volume of development. A proper, effective, and efficient selection is required for heavy equipment in accordance with its use. So, construction equipment management is vital to ensure that investment efficiently can be controlled to meet the condition of projects and companies.

This research aims to review the influence and the significance among those the variables. This research using Structural Equation Modeling (SEM) to analyze data. SEM is a multivariate analysis method that comprehensive (complete) for the calculation and testing of theories related to the relationship and influence between variables. SEM is called complete because its consists of Confirmatory Factor Analysis (CFA), regression, and path diagram.

Respondents in this research were people who experienced in using of heavy construction equipment. In analyzing this research data, it is assisted by the program which called LISREL 8.80. Based on the results of the LISREL output, it shows that this model is fit to present the results of the research just only by looking at the values of Chi-Square (p-value = 0.076), RMSEA (0.00), CFI (1.00), and RMSR (0.022) which generated at LISREL output. So that the conclusion from this research that the three latent variables are mutually positive and significant

Kata kunci: Heavy equipment management, project performance, company performance, Structural Equation Modeling (SEM)