

## ANALISIS RISIKO DAN PENCEGAHANNYA PADA PELAKSANAAN PROYEK PEMBANGUNAN GEDUNG BERTINGKAT TINGGI DARI SISI KONTRAKTOR

Oleh : Bernardus Calvin

The population increase every year is increasing in the capital city of Jakarta but is not proportional to the existing land resources. Therefore, vertical construction or high rise building is one of the right solutions to overcome this problem. This study discusses the problems associated with the process of building high-rise buildings in Jakarta. This study discusses the dominant problems associated with implementing high-rise development projects, obtaining problem solving and providing recommendations or appropriate control of these risk variables. The research method used is to create risk variables from various journals and previous studies, validate variables with experts, test the questionnaire to the respondents. The data that has been obtained is then processed with the help of the AHP (Analytical Hierarchy Process) method to determine the relative importance (priority) of the improvement attributes and give weight to the scale parameters used. There are 9 risk categories obtained from this study including safety, health & environment, critical material & supply management, quality of contractors, subcontractors & vendors, engineering, project management, finance, human and external resources which consist of 64 variables issued. The results of the data analysis of 64 risk variables, obtained 21 variables included in the high risk category. Of the 21 variables, the most dominant risk variable or has the highest risk factor value from the design change of the owner. Preventive action or appropriate control of this risk variable can be carried out by the contractor by noting the owner that the work is related to the cost and time of the project, then the process must be discussed the terms of the contract used, see the process from the owner giving SI (site instructions) to the contractor for design changes until it is approved as VU (order of variation) by the owner. The resulting recommendations need to be required contract review conditions by the contractor during the project tender to analyze the risks in each of these new contract clauses and explain the contract clauses clearly and do not include clauses that require the contractor, whatever is designed according to the future plans of construction, then from it must be specified a specific contract clause that clearly changes the design in the future.

Keywords: Risk Management, Risk Identification, Analytical Hierarchy Process (AHP), High Rise Building