ANALYTICAL HIERARCHY PROCESS MODEL FOR CONSTRUCTION CONTRACTOR PREQUALIFICATION IN THE OIL AND GAS COMPANY

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ABSTRACT

The selection of contractors is one of the important aspects in construction projects. The success of a project is determined by the quality of the selected contractor. In the selection of the contractor, prequalification is a strategic step to ensure companies get a competent contractor and meets the desired quality. Currently, pre-qualification for construction contracts in Company Z has not been done comprehensively, so it is often found that the contractor does not have sufficient capacity and lead to delays in the completion of the project.

It is designed for a construction contractor prequalification evaluation process by utilizing the technique of Analytic Hierarchy Process (AHP). Multi-criteria evaluation system is designed to dirangkaian after the pre-qualification criteria of health, environmental, and safety that already exist in the company Z. Methods of research that has been done to identify criteria and determination hierarchy based on focus group discussion. Data collection of weighting criteria based on questionnaires as criteria pairwise comparison judgments of respondent to get the weighting for each criteria in the model construction contractor prequalification.

As the result of this study, obtained a construction contractor prequalification models that can be used to assess the competence of contractors with Experience in Project criteria weight by 25.5 %, Financial Support by 23 %, Management by 19.6 %, Human Resources by 14.6 %, and the Performance in Project Previous by 13 %.

Key words: Prequalification, Analytical Hierarchy Process (AHP), Contract, Construction, Project