ABSTRACK

Comparative Analysis of Cost Budget Plan (BOQ) Between Conventional and BIM 5D Methods (Case Study: Total Rehabilitation Project of SDN Pejaten Timur 11)

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The calculation of the Budget Plan (RAB) and design drawings for building renovation and construction in Indonesia still uses conventional methods. Conventional methods often lead to problems and errors during the planning phase, such as changes in design drawings that require recalculating the work volume and costs, resulting in a longer planning process. Therefore, a system is needed to make the planning process more efficient, which can be achieved by using BIM. This study aims to compare the costs obtained from the conventional method and BIM. The object of the study is the structural and architectural work of the total rehabilitation project of SDN Pejaten Timur 11, by analyzing the cost comparison of the Budget Plan (RAB) between the conventional method and BIM. The cost obtained from the conventional method was IDR 26,387,657,483.90, while the cost from BIM was IDR 25,236,861,547.77. The cost difference between the two methods was IDR 1,150,795,936.13, with the BIM method being 4.36% lower than the conventional method.

Keywords: Cost Budget Plan (RAB), Building Information Modelling (BIM), Conventional, Work Unit Price Analysis (AHSP)

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