ABSTRACT

In a project, problems often occur caused by design changes due to adjustment of construction that affects the additional work. Innovations emerge in every field, especially in the construction planning method Building Information Modelling (BIM) concept. Therefore, this study conducts assessment of effectiveness of planning phase of Building Information Modeling in the industrial building. The research process started by collecting data related to the construction project of palm oil mill those are man-hour data, investment value, human resources necessity, time planning, number of design drawings, and contract value. The result of this research show that BIM methods is shorter and the human resources necessity is less than conventional planning method in finishing the design. The usage of BIM method also can reduce the potential of additional works due to the adjustment of the design. However, the investment of the usage of BIM is more expensive than the conventional method.

Keywords: Building Information Modelling (BIM), Effectiveness, Industry