Study on Building Information Modeling (BIM) for Structural Design

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Abstract: *BIM is an Digital Transformation of AEC (i.e) Architectural, Engineering and Construction Industry, it is a technology not a software, used to create, manage data during the design, construction and operation process. BIM integrates multi- disciplinary data to create detailed digital representation and are managed in Open Cloud Platform for real time collaboration. The main objective of the project is to plan and Design Structural Truss model in Revit Software and apply changes to the structure and parameter study, also identify potential errors and risks, enhance accuracy and autogenerate drawing using Revit software. BIM concept is applied to handle the analytical model in Revit software and bring the analytical result in Revit using Robot Structure Analysis and Advanced steel Software to create fabrication documents. Limitation Observation (i.e) Identify any loss of data during model transfer from Revit to Robot Structure, Support condition check-verify boundary condition are loaded assigned in structural model, Data transfer using plugin are made using single userface. The major scope is to generate a complete report for structural design model and do the optimization & scheduling and load analysis along with that.*

Keywords: BIM Model, Revit software, Model transfer , Scheduling, connections

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