

Title: Mitigating Project Failure: Challenges in Developing Effective Building Information Modeling Execution Plans

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Abstract: The successful adoption of Building Information Modelling (BIM) relies on efficiently executing BIM Execution Plans (BEPs). Therefore, developers of BEP have to develop mitigation strategies that ensure the successful completion of BIM projects by executing effective BEPs. Nevertheless, establishing effective BEPs must deal with specific challenges. This study aims to identify the challenges in developing effective BEPs. To achieve that aim, semi-structured interviews were conducted with BIM professionals and analyzed using thematic analysis. The analysis identified eight themes of challenges: communication, document, information, knowledge, process, standard, technology, and people. Furthermore, ten subthemes were identified: BEP communication, BEP document, BEP information, BEP knowledge, BIM process, BIM workflow, BIM standard, BIM technology, human attitude, and agreed BEP. The study findings support BIM professionals in developing effective BEPs and ensuring the successful completion of BIM projects.

Keywords: Building information modelling, BIM execution plan, Construction projects, Challenges, Thematic analysis

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