

Benefits & Challenges of 5D BIM Adoption: Perception of Quantity Surveyors

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SUMMARY

5D Building Information Modeling (BIM) is a technology that integrates 3D design, construction, and maintenance information with time and cost data, allowing for the creation of a dynamic model of a building or infrastructure project towards its enhanced management. The study aims to assess the perception of Nigerian Quantity Surveyors' perception of the benefits and challenges of adopting 5D BIM. The Quantitative method of data collection was used, and the data obtained were analysed using descriptive and inferential statistics. The results highlight the potential benefits of using 5D BIM, which include improving project planning and decision-making, reducing errors and rework, and enhancing collaboration among project stakeholders. The findings also identified several challenges to the widespread adoption of 5D BIM, including the need for standardisation and interoperability, the lack of skilled users, and the high initial costs of implementing the technology. Overall, this study provides a comprehensive overview of the potential benefits of 5D BIM and the challenges affecting the facilitation of its widespread adoption in the construction industry. This implies and poses a major task for the Nigerian Institute of Quantity Surveyors to embark on a systematic and deliberate approach to BIM software training for members in construction-related themes. The result also recommends accreditation agencies and tertiary institutions review the current curriculum to incorporate the concept of 5D BIM into teaching and learning to equip students with the digital skills required for the fourth industrial revolution.