

Building Information Management Advantages, Adaptation, and Challenges of Implementation in Kabul Metropolitan Area

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Abstract : Building Information Management (BIM) at recent years has widespread consideration on the Architecture, Engineering and Construction (AEC). BIM has been bringing innovation in AEC industry and has the ability to improve the construction industry with high quality, reduction time and budget of project. Meanwhile, BIM support model and process in AEC industry, the process include the project time cycle, estimating, delivery and generally the way of management of project but not limited to those. This research carried the BIM advantages, adaptation and challenges of implementation in Kabul region. Capital Region Independence Development Authority (CRIDA) have responsibilities to implement the development projects in Kabul region. The method of study were considers on advantages and reasons of BIM performance in Afghanistan based on online survey and data. Besides that, five projects were studied, the reason of consideration were many times design revises and changes. Although, most of the projects had problems regard to designing and implementation stage, hence in canal project was discussed in detail with the main reason of problems. Which were many time changes and revises due to the lack of information, planning, and management. In addition, two projects based on BIM utilization in Japan were also discussed. The Shinsuizenji Station and Oita River dam projects. Those are implemented and implementing consequently according to the BIM requirements. The investigation focused on BIM usage, project implementation process. Eventually, the projects were the comparison with CRIDA and BIM utilization in Japan. The comparison will focus on the using of the model and the way of solving the problems based upon on the BIM. In conclusion, that BIM had the capacity to prevent many times design changes and revises. On behalf of achieving those objectives are required to focus on data management and sharing, BIM training and using new technology.

Keywords : construction information management, implementation and adaptation of BIM, project management, developing countries

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