

# **Building Information Modeling (BIM) to Enhance Stakeholder Satisfaction in Architecture, Engineering, and Construction (AEC) Projects**

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## **Abstract**

This research discusses the building information modelling drivers that can improve stakeholder satisfaction in Architecture, Engineering and Construction (AEC) projects. Kotter's Change Model is used as a lens to identify the role of the BIM implementation drivers such as training, knowledge, legalization, management, software, and standards, in enhancing stakeholder satisfaction, with innovation as the moderator. To assess these relationships, the data was obtained from 300 AEC professionals from a developing nation, through a structured questionnaire, using an exploratory deductive research approach. The findings put into perspective the current effectiveness of legislation and management and point to a general need for the enhancement of legal reforms and management practices. The failure to observe a moderating role of innovation means that within the framework of this research, innovation does not play a role in changing the nature of the relationship between the drivers and stakeholder satisfaction. This study extends the knowledge of adopting BIM in developing countries through the empirical test of BIM drivers as implementation and motivation enablers. Recommendations are preferred in the form of concrete strategies, including the scheduling of BIM awareness sessions with end-users to explain its benefits and solicit support, as well as the establishment of an organization-wide training program through which staff members can learn from BIM advancements made by other organizations. These initiatives are focused on growing the effectiveness of BIM and its adoption, advancing management ideas to boost organizational performance, and optimizing business practices to increase the satisfaction of the stakeholders and, thus, project outcomes.

## **Keywords**

Building Information Modeling, Stakeholder Satisfaction, AEC Projects, BIM Implementation Drivers, Change Management.

## **Biographies**

**Dr. Maqsood Ahmad Sandhu** is a Professor of Marketing and Entrepreneurship at the College of Business and Economics, UAEU. He holds a Ph.D. in Business Administration and has served as Head of the Department of Business Administration. His research focuses on entrepreneurship, innovation, and project management.

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**Asiya Siddiq** is a student at NUST. She is focused on developing her academic foundation in project planning, operations, and management principles.