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BARRIERS TO IMPLEMENTATION OF BUILDING INFORMATION MODELLING (BIM) IN THE PALESTINIAN CONSTRUCTION INDUSTRY

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ABSTRACT

The objective of this study is to determine potential barriers faced by the implementation of BIM in the Palestinian construction industry. The data collection was obtained using a questionnaire-based survey of 270 professionals in the construction industry. The results obtained from the factor analysis clustered the BIM barriers in four components, namely: the lack of interest in BIM, the organization's resistance to change workflows, the lack of BIM knowledge, and the cost implementation and cultural barriers towards adopting new technology and training requirements. The main reason given for not using BIM in the construction industry in the Gaza Strip is due to the fact that the clients and other contracting parties did not require the use of BIM. This study adds to the current body of knowledge on BIM in developing countries, especially in Palestine. The contributed knowledge establishes a good platform for future research to identify meaningful ways of providing solutions to the barriers, and facilitating a smoother and more successful transition in the adoption of BIM technologies and innovations in the construction industry. Thus, it is recommended that the government should assume a proactive role in promoting the use of BIM. Demonstrating the value-added to construction projects, especially those procured by the government would go a long way to break the key identified barriers.

Keywords: construction, BIM, challenges, implementation, performance

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