



Investigating the Synergy of Integrated Project Delivery and Building Information Modeling in the Conservation of the Architectural Heritage

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ABSTRACT

Architectural heritage conservation projects are one of the most risky and complex projects in the construction industry. Many studies have reported frequent performance failures in terms of time, cost and quality. To implement a quality management in the conservation projects and enhance their performance; we propose the adoption of two emerging and innovative approaches: Integrated Project Delivery (IPD) and Building Information Modeling (BIM). Through an analysis of literature review (journals, white papers, norms and standards) on the subject, a comprehensive qualitative study in theoretical term has been carried out to define the potential advantages of the synergy between the BIM and IPD to face conservation issues and constraints through project lifecycle. Finally, we draw some general conclusions, summarize the implications for practice and set out recommendations for further research.

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1. Introduction

Architectural heritage building is a complex system that embraces interlinked tangible and intangible values (Attenni et al., 2017). A worldwide awareness calls for the conservation of cultural heritage to preserve, enhance and integrate it harmoniously into the contemporary living environment; and ensure the development of cultural tourism (ICOMOS, 1999). Conservation project is a complex and

sensitive approach required various skills and knowledge; In addition to the risky and uncertain nature of these projects, their fragmented and hierarchical delivering has affected project effectiveness; notably cost

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