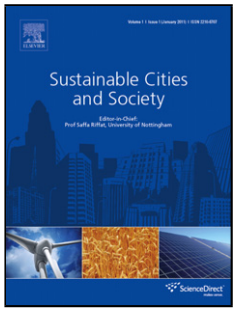

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Identifying and Prioritizing the Benefits of Integrating BIM and Sustainability Practices in Construction Projects: A Delphi Survey of International Experts

Timothy O. OLAWUMI[1]*, Daniel W.M. CHAN[2] (Ph.D.)

*[1]*PhD candidate, Department of Building and Real Estate, Faculty of Construction and Environment, The Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong. Email: timothy.o.olawumi@connect.polyu.hk (*corresponding author)*

[2]*Associate Professor and Associate Head (Teaching and Learning), Department of Building and Real Estate, Faculty of Construction and Environment, The Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong. Email: daniel.w.m.chan@polyu.edu.hk*

Highlights

- Identifying the practical benefits of BIM & sustainability practices implementation is critical to their adoption in construction projects.
- The perceptions of 14 international experts were gathered via a two-round Delphi survey.
- Key benefits to its integration were identified as well as a strong consensus among the expert panel was reached.
- Strategies were recommended for the practical and successful adoption of BIM and sustainability practices in the construction industry.

Abstract

The recent initiatives of the construction industry to embed sustainable strategies in its processes can be enhanced when clear and practical benefits of such integration are available to project stakeholders to support their decision-making. Hence, this study purports to evaluate the perceived benefits of integrating BIM initiatives and sustainability practices in construction projects. Delphi survey technique was used to solicit the perceptions of expert panel on the 36 identified benefits. Statistical tools were employ yed to analyze the derived data, and the consensus reached by the expert panel was validated using the interrater agreement statistics. The three most important benefits included the ability to enhance overall project quality and efficiency and improve the ability to simulate building