

Towards Optimising Building Information Modelling and Building Management System in Higher Education Institutions Facility Management: A Review

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Abstract : With BIM rapidly implemented in the design and construction stage of a project, researchers begin to focus on improving the operation and maintenance stage with the aid of BIM. Since the increasing amount of electronic equipment installed in the building, building management system becomes mainstream for controlling a building, especially in higher education institutions that can play an important role in terms of reducing carbon emission and improving energy efficiency. Currently, an approach to integrate BIM and BMS to improve HEIs facility management has not been established yet. Thus, this paper aims to analyse the benefits, issues, and trends of BIM and BMS integration and their application in HEIs. A systematic literature review was carried out on SCOPUS by applying the PRISMA methodology. 73 articles have been chosen based on keywords, abstracts, and the full content of the articles. The benefit and existed issues from the articles are analysed. The review shows the need to develop a tool to improve facility management through BIM BMS integration.

Keywords : BIM, BMS, HEIs, review

Conference Title : ICBIMI 2021 : International Conference on Building Information Modelling and Interoperability

Conference Location : Istanbul, Türkiye

Conference Dates : November 08-09, 2021