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Realizing sustainable building information modelling (BIM) construction projects through the adoption of relational multiparty collaborative contract

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Abstract

The establishment of the Green Building Information Modelling (BIM) notion proclaims the aptness of BIM in fulfilling sustainable development goals. Despite the myriad benefits offered through its adoption, inexhaustive planning in accommodating the integration and collaboration among the stakeholders could render the adoption of Green BIM inefficacious. While collaborative working is also one of the stimulant factors in realizing sustainable development goals, the effectuation of a befitting collaborative working is indeed laborious. Thus, this paper discussed the concept of relational multi-party collaborative contract

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(MPCC) within a BIM project in an attempt to achieve a more sustainable BIM-enabled project. The study employed a survey research method with the questionnaire distributed to individuals experienced in BIM. Using the Relative Important Index (RII) analysis, fifty-six (56) highly important relational contracting factors (RCF) for MPCC were identified. The top ranking RCFs are (1) 'open and clear communication', (2) 'conducting staff training to prepare parties with skills and knowledge' (3) use of proper communication technology device', (4) 'developing information sharing procedure', and (5) 'effectuation of consent from joint-discussion & all parties to participate in discussions and meetings'. These relational contracting factors are significant in realizing more collaborative relationships among parties within BIM projects. The study also found that the relational MPCC might not only be suitable for partnering/alliancing arrangement, but could also be applied to other contracting methods. The findings provide a lesson learned for industry players to consider relational MPCC in implementing BIM projects, regardless they are 'green' projects or otherwise. © 2021, Construction Research Institute of Malaysia. All rights reserved.

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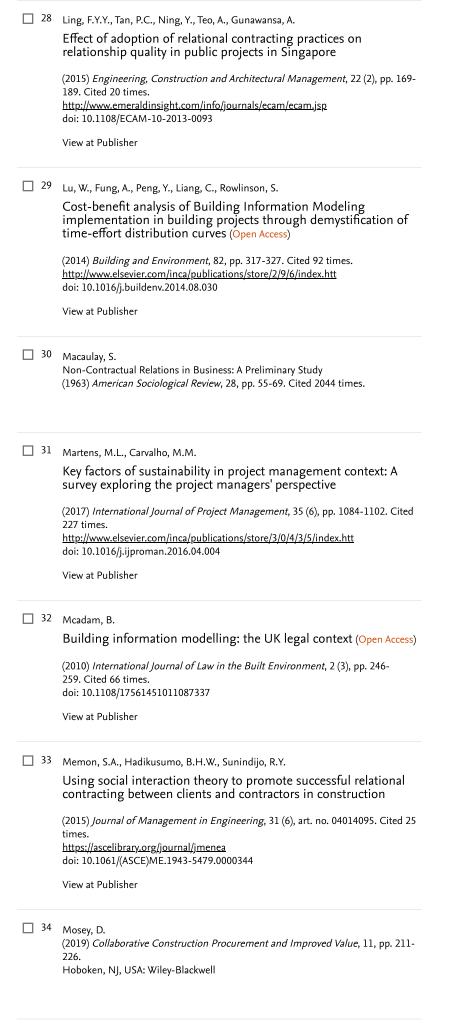
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