

A Quantitative Method for Ranking the Influence of Competitive Factors on Industrialised Building System (IBS) Decision-making

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The number of building projects contemplating the integration of modern building methods such as Industrialised Building System (IBS) into their strategic plans and daily operations is continuously increasing. In order to evaluate competitive aspects that will effect IBS decision-making, this paper presents the test results of an IBS decision-making model. The rationality of this study is to explore the applicability of a three dimensional IBS decision model, defined as the symmetrical process, for decisionmaking within the building projects. This decision model was based on the results of a related qualitative analysis and practice in the area of construction business practices. The resulting IBS decision model is applied to construction stakeholders within a northern region in Malaysia to illustrate its utility as a research transfer strategy. Specifically, this paper presents research evidence using a quantitative method through questionnaire surveys for ranking the influence of competitive factors on IBS decision-making, with attention to the hierarchy of each competitive aspect and outcome measures reported. It is concluded that the significant competitive factors are risks, technology alternative, profit margins and collaboration. It is recommended that the decision model is tested using a greater number of research participants.