BIM implementation in Sarawak construction industry: Awareness, readiness and challenges

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Abstract. Lack of coordination and fragmentations have always existed among the stakeholders and parties involved in the implementation of planning, design and construction process of construction projects, especially in the aspects of information transfer. In the recent trends, Building Information Modelling, BIM has been introduced to address the fragmentation issues. The BIM framework is based on the notion of coordination between stakeholders in digital format for information exchange throughout the construction progress. Although BIM technology has been implemented in Malaysia for several years, low adoption is found within the Sarawak construction industry. This paper aims to assess the awareness and readiness for BIM implementation in the Sarawak construction industry. The study was carried out using questionnaire survey across the districts in the Southern Region, Central Region and Northern Region of Sarawak. There are in total 404 responses received, and it is revealed that only 14% of the participants have experience in BIM-related projects. This is still far from the goals set by the Construction Industry Development Board (CIDB) Malaysia. Meanwhile, 63% of respondents had heard of BIM and 46% of them had attended some seminar or program related on BIM. The investigation of awareness, readiness and challenges of BIM implementation has been further inferred and compiled as a foundation guideline for the proposed solution framework to increase BIM usage in the state. It is hopeful that proposed solution framework can help in overcoming BIM implementation barriers in the Sarawak Construction Industry.

1 Introduction

The construction industry has governed the modernization of countries around the world over centuries. The construction industry controls, in particular, the economic trend of a country, which means that any impact of this industry will have an impact on the entire economic condition of a country and vice versa. It is important to recognize that the

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