

# Case study on barriers to building information modelling implementation in Malaysia

Building  
information  
modeling

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## Abstract

**Purpose** – There is a dearth of studies conducted by local academics on actual building information modelling (BIM) projects to analyse the actual hurdles of BIM adoption. The majority of BIM research focuses on the technology's general advantages, disadvantages, issues and limitations. In addition, research on actual BIM projects that have integrated BIM throughout the project is necessary to increase the current low number of BIM users in Malaysia. Consequently, the purpose of this study is to examine the challenges BIM adopters experience while implementing BIM in their projects and how they overcome them.

**Design/methodology/approach** – An in-depth interview session was used to collect data based on a case-study methodology. In Malaysia, three BIM projects were chosen, given the available resources. To evaluate the data in this qualitative study, NVivo was used.

**Findings** – According to the findings, the most important elements influencing the adoption of new technology and innovation were people and capital. The most significant impediments to BIM adoption are the appraisal of time and finances, as well as the tolerance of changes in approach.

**Originality/value** – Collaborative training and BIM education have been the most explored solutions for reducing BIM difficulties. As a result, these concerns and solutions should be investigated and implemented to ensure project success and fully use technological innovation.

**Keywords** Construction industry, Barriers, Malaysia, Case study, Challenges, Building information modelling (BIM)

**Paper type** Case study

## 1. Introduction

The construction sector is critical to a country's socio-economic progress. The construction industry accounts for 6% of the global gross domestic product (World Economic Forum, 2018). In addition, the architectural, engineering and construction (AEC) sector has been noted to be



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*Data availability statement:* Some or all data, models or code generated or used during the study are proprietary or confidential in nature and may only be provided with restrictions (e.g. anonymized data).