

Constructs influencing disputes in building information modelling construction projects: a thematic literature review

ABSTRACT

Building Information Modelling (BIM) is a process commonly practiced among engineering, architecture, and construction professionals in the operation of construction projects. While previous researches revealed that disputes often arise due to difficulties in implementing BIM, mainly due to critical BIM readiness issues, there is negligible literature or research readily available that discusses constructs that influence disputes in BIM construction projects. The scarce number of publications in this area of study has encouraged many researchers to explore more on handling and preventing disputes during the initial phase of building works. Accordingly, this study focuses on specific rules and regulations that typically influence disputes in BIM construction projects between 2011 and 2020 using Atlas.ti 8. To achieve this purpose, a number of research studies and papers were then reviewed by undertaking a thematic literature review. The researchers filtered the information obtained examining SCOPUS, Web of Science, and Mendeley databases, in which 92 scholarly journal articles were identified. The final process involving inclusion and exclusion criteria were then carried out and finally selected 20 articles for study review. The researchers have identified five initial codes that are commonly used in characterizing the constructs that resulted to disputes in construction projects involving the BIM process. These constructs were then grouped into four clusters: legal, organization, process, and technology. As a result, the pattern obtained from the thematic review highlighted several influencing factors that led to disputes. This finding represents a significant contribution to the development of new guidelines to reduce disputes in construction works.