The last decades have been characterised by the spread of Building Information Modelling (BIM) in the Architecture, Engineering and Construction (AEC) field [1]. BIM consists of 3D virtual models of buildings that are embedded with both data and metadata [2-3]. The virtual building elements are not just volumetrics, but rather “smart objects” [1-3], identified by numerical parameters [6-8] and linked to schedules [9]. BIM is currently used for new buildings [9-10], as it features standardised planning procedures. The aim of this research is to analyse the state-of-art of one typical BIM workflow currently used in built heritage, in order to clearly identify gaps, such as software deficiencies, and, eventually, to propose solutions or areas requiring further research.

• Surface investigation had to be conducted using old technology (Autodesk AutoCAD).
  • It is not possible to work with the BIM model whilst displaying images.
• BIM can be used to describe heritage buildings
  • With the current state-of-the-art, strategies are needed
  • Renderings and schedules.

RESULTS

• Modelling of surface degradation
  • Predictive capacity of BIM models
  • Heritage-specific plug-ins for existing BIM platforms

FURTHER RESEARCH

• A BIM model of a heritage building allows both professionals and stakeholders to access all related information [1-2, 11]
  • Help in decision making [3, 12] and maintenance planning [3-4, 13]
  • A BIM model could be exploited to attract and engage visitors.

REFERENCES


BENEFITS & IMPACT

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