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HERITAGE MANAGEMENT**

(10th REHABEND Congress)

Gijón (Spain), May 7th-10th, 2024

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Civil Engineering School

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Building Technology R&D Group (GTED-UC)

Avenue Los Castros 44, 39005 SANTANDER (SPAIN)

Tel: +34 942 201 761 (43)

Fax: +34 942 201 747

E-mail: rehabend@unican.es

www.rehabend.unican.es

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CODE 234**INCLUSION OF BIM METHODOLOGY AND OPEN BIM WORKFLOW IN SMALL ENGINEERING PROJECT OFFICES****Carvalho, Márcio^{1*}; Oliveira, Rui A. F. de²; Rodrigues, Hugo³**

1: University of Aveiro

e-mail: marcio.carvalho.engc@gmail.com

2: Polytechnic Institute of Bragança

e-mail: roliveira@ipb.pt

3: University of Aveiro. RISCO (Research Center for Risks and Sustainability in Construction)

e-mail: hrodrigues@ua.pt

KEYWORDS: Building Information Modeling (BIM); OpenBIM; Interoperability; Projects; Specialty projects.

ABSTRACT

Due to technical demands and the continuous evolution of technologies in the development of engineering specialty projects, Building Information Modeling (BIM) has emerged as a tool with enormous potential for utilization. However, there are still many gaps in the implementation of this methodology, especially in small-scale project offices, where the transition to this "new era" of construction information is not yet fully accessible and facilitated.

It remains a challenge with inherent problems related to the specialization and training of stakeholders in the sector, as well as the initial investment cost. However, these issues can be addressed with long-term planning, in addition to considerations for cost, time, and quality in project development, alongside keeping pace with market demands for new technologies. Even professionals working with BIM face difficulties in adapting to and accommodating conventional two-dimensional models and even paper formats, which are still required by licensing authorities. Just as these entities, which are also not adjusted to the evolution of BIM technology, receive projects without the necessary information in the 3D models.

This article provides a detailed literature review related to the problems and implementation challenges in BIM technology within engineering project offices, more specifically practical knowledge in some engineering offices.

The article aims to demonstrate several alternatives and potential solutions to facilitate the adaptation and implementation of BIM methodology in small-scale project offices, particularly in the field of specialty projects. It also intends to propose a workflow involving designers, project offices, and licensing authorities so that 3D models developed in BIM can be maximized, aiming to reduce resource and information losses while licensing authorities are not updated to analyze projects in BIM format.