

Barrier Analysis to Implement Building Information Modeling (BIM) Execution Plan in Sri Lankan Construction Industry

GKE Perera^{1#}, MKM Nilupulee¹, WB Kalpani¹, YRW Dissanayake¹ and
KSPK Bandara¹

¹ *Department of Quantity Surveying,
General Sir John Kotelawala Defence University, Sri Lanka*

#37-qs-0056@kdu.ac.lk

Building Information Modelling (BIM) can render significant advantages to the project team. BIM can be used to improve a project's delivery and usage throughout its life cycle. The concept of BIM is currently being used in the construction industry worldwide. Currently, technologies such as 3D, 4D and 5D BIM are being used in the construction industry. Further, many countries use a BIM Execution Plan (BEP). A well-conceived BEP on a BIM-enabled project makes sure that advanced design technologies are successfully deployed. In contrast, the BEP focuses on improving work and model flow throughout a project to promote specialised interests for each individual stakeholder. Currently, in the light of the benefits BEP offers, it is practiced all over the world, but due to the numerous obstacles, it is less common in Sri Lanka. This study examined current BIM techniques in Sri Lanka, BIM adoption in Sri Lanka, BIM awareness in the country's construction industry, how an execution plan can help with BIM implementation, the challenges to modify a BIM implementation strategy for the Sri Lankan construction industry and suggestions to overcome the identified barriers. Through this study, suggestions for removing the identified barriers are also acknowledged. Lack of understanding of the idea and its advantages, government support for traditional documentation approach and lack of knowledge were identified as foremost barriers for the successful implementation of BEP. Additionally, findings suggested that Sri Lankans must undergo cultural changes in BIM practices, understand difficulties, and raise awareness among those involved in the construction industry.

Keywords: *building information modelling, BIM execution plan, Sri Lanka*