

Towards 3D As-Built – What Say The Professionals?

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SUMMARY

Building Information Modelling (BIM) is getting more attention from the professionals due to its benefits towards Architectural, Engineering, Construction (AEC) area. Elements in BIM, especially the 3D modelling, plays the important role for such attractions. Although BIM covers the overall process of building construction, the component of 3D modelling in BIM during post construction, which can also be known as 3D as-built, is underutilized due to several issues, specifically for existing buildings. This paper will highlights on the current concerns in generating 3D interior models, which in some applications can be used as the 3D as-built, based on the feedback obtained from related professionals. These concerns were obtained from surveys made towards surveyors, engineers, architects and facility / project managers. The importance of the survey is to highlights on the disadvantages of current methods in producing 3D interior models. Moreover, the results can also reflect the readiness of the related professionals in extending BIM, in particular the 3D modelling, for post construction purposes. All of the respondents have agreed that the existing, traditional laborious method is having disadvantages in visualization, features and standardization, apart from poor accessibility and poor data capture. However, to use laser scanner to generate 3D models is having its own limitations, mainly due to its cost, and other restrictions in software and features. From their opinions, there is a need to develop such required solution to overcome these disadvantages and limitations to ensure that BIM can be expanded to post constructions. In conclusion, 3D as-built can be generated especially for newly constructed buildings that implement BIM at the starting of preconstruction by optimizing the same 3D model used during construction. However, for existing buildings, there are limitations that can put off professionals to extend BIM, especially in generating the 3D as-built. It is important for BIM to be fully utilized and expanded to post construction, especially since BIM in pre and during construction has been fully exploited and matured. Therefore, more researches are needed to overcome these limitations as now is the perfect time to concentrate BIM for post construction.