

The Implementation of Building Information Modeling in Construction Industry (COSTX-Application)

Prepared by: Nah Phei Sze

ABSTRACT

CostX is one of the 5D BIM tool which allows seamless transfer of digital information between designers, cost managers and estimators. The involvement of BIM in construction projects is low. However, the degree of usage of ICT tools in Malaysian construction industry is high. This might be a good sign for implementing BIM into Malaysian construction industry since they are willing to accept technology tools in their works. The aim of the study is to explore the implementation of BIM– CostX in Malaysian Construction Industry, more specifically in Malaysian QS Consultancy Firms. The first objective of this research is to identify the quantity surveyors scope of works that can integrate to CostX, the second objective is to determine the degree of usage of CostX in Malaysian QS consultancy firm while the third objectives is to evaluate the obstacles and possible solutions for implementing CostX in Malaysian quantity surveying consultancy firm. The research had carried out via survey questionnaire and semi-structured interviews towards consultant quantity surveyors within Kuala Lumpur and Selangor. There are 59 respondents from quantitative method and 5 interviewees from qualitative method participated. According to first objective, taking off quantities is the most popular task that consultant quantity surveyors used it with CostX in all range of years of experiences. Furthermore, the research also found that most frequently use of CostX feature is 2D measurement which majority of the respondents used it almost every day. The main obstacles of implementing CostX are high implementation cost and there is alternative software available. However, the result shown that the respondents are willing to adopt CostX if there are ready pools of CostX experts although it has high implementation cost. The most important implication of the implementation of CostX in Malaysian construction industry is the current quantity surveying consultancy firms are not fully utilized with the CostX. Cooperation of various construction players are required to boost the knowledge of CostX in order to increase the utilization of CostX in Malaysian construction industry.