

STRATEGIES FORMULATION TO OVERCOME BARRIERS IN BIM SYSTEM IMPLEMENTATION IN THE SRI LANKAN CONSTRUCTION INDUSTRY WITH REGARD TO COST OVERRUNS

PSP SIRIMEWAN¹ and KASGS KARUNANAYAKE²

¹Undergraduate, ²Visiting Lecturer

**Department of Quantity Surveying, Faculty of Built Environment and Spatial Sciences
General Sir John Kotelawala Defence University, Sri Lanka**

ABSTRACT

Cost performance is one of the key indicators of project profitability and productivity in the construction industry. Therefore, it is essential to complete the project within budget but in the present day but cost overruns have identified as one of the major issues in the construction industry. With new trends in the industry, some of the countries controlled it up to some extent. Building Information Modeling (BIM) also an upcoming developing technology that can gain more benefits and it is used as an integrated solution to problems occurred in the construction activities including cost overruns.

The aim of this research is to formulate the suitable strategies to overcome the barriers in the implementation of BIM through identifying the potential barriers for adopting BIM applications in Sri Lankan construction industry. The research was categorized under mixed method because it included both qualitative and quantitative research characteristics and for the analysis of data collected from questionnaire surveyor and interviews it was used the descriptive statistical method and analytical writing methods.

With the research study, it was identified that implementing BIM in the construction industry will lead to mitigate the causes of cost overruns and the suitable strategies to overcome the barriers in implementation of BIM in Sri Lankan construction industry as, Conduct seminars and workshops by current BIM practice project stakeholders, Increase the government support by giving necessary incentives to the BIM related activities, Conduct seminars and workshops with the help of Construction Industry Development Authority (CIDA) to increase the knowledge and application of BIM in any type of construction projects, Invite oversea expertise to implement BIM in Sri Lankan construction industry with their experiences, Upgrade the university course modules to increase the knowledge and application of BIM in construction industry, Introduce a BIM implementation framework for the Contractors by integrations of BIM for their current practice

Keywords: Building Information Modeling, Implementation, Cost Overruns, Barriers