

Uptake of Off-Site Construction: Benefit and Future Application

Authors : Faisal Alazzaz, Andrew Whyte

Abstract : Off-site construction methods have played an important role in the construction sector in the past few decades. It is increasingly becoming a major alternative technique and strategic direction compared to traditional in-situ method. It produces a significant amount of value for the construction industry and the economy more generally. To date, an impressive number of studies have been lunched on the perceived perception of off-site construction. However, it seems that a quantifying benefit on the offsite construction area is lacking. Therefore, this paper examines the recent research literature on the benefits of off- site construction and provides future direction. In the beginning, this paper provides a brief history and current value of the off-site construction followed by a detailed discussion on the benefit of off-site construction. These benefits include but not limited to time saving, quality improvement, relieving skills shortages, cost reduction and productivity improvement. Toward this end, off-site construction should learn from other productive industry similar to services or manufacturing industry by applying operational management tools and techniques with extensive focus on employee empowerment will shed the light on future uptake of Off-site construction. This study is of value in providing scholars have a clear picture of perceived benefit of off-site construction research and give an opportunities for future uptake of off-site method.

Keywords : building projects, employer empowerment, off-site construction benefits, productivity

Conference Title : ICBSE 2014 : International Conference on Building Science and Engineering

Conference Location : Sydney, Australia

Conference Dates : December 15-16, 2014