

Which procurement method accommodates what Lean principles by means of which tool?

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Abstract

Different procurement strategies developed and practised over the period of time in the construction industry to improve the performance. Meantime management concepts and theories applied to the construction industry to gain performance. This trend, which is based on new philosophy, rather than on technology (Koskela, 1997). Lean construction is such management concept to manage the construction. The objective, principles and techniques of lean construction taken together form the basis for a new project delivery system(Howell, 1999). Unlike current approaches to managing construction (including design-build) and programmatic improvement efforts (partnering and TQM), lean construction provides the foundation for an operations based project delivery system(Howell, 1999).

Objective of this study is to identify which procurement method accommodates what Lean principles by means of which tool? The method adopted for this study is a literature review method and it contains several steps namely identify lean and lean construction principles, identify different procurement methods, analyse characteristics of different procurement methods, and correlate with lean principle. It is found that alliance contracts contain more correlation with lean principles compare to other contract types. But it is clear that contract type is not a major factor for successful implementation of lean philosophies. It is necessary to first understand the potential for lean management and the opportunities available to generate value and minimise waste particular in projects with cyclic and repetitive processes by introducing lean tools.