

Lean Construction Techniques: A Framework Towards Elimination of Waste in Construction Industry

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Abstract

The responsibility of the project management team is to discover, utilize and deploy tools, skills, techniques and available resources for meeting and controlling schedule, budget and quality. However, it's been argued that the current practices of project management or conventional project management approaches rest on defective model and its control and therefore has been criticized to be ineffective to influence construction projects cycle significantly. This has resulted in a number of wastes created in the industry. In this dynamic environment with complexities, uncertainties, fast tracked and short duration projects, multiple competing, frequent changing demands from clients, technology and the market, the application of the concept of production philosophy, known as 'Lean Production', which focuses on the elimination of wastes including; overproduction, lead time, transportation, inappropriate processing, inventories, unnecessary movements, rework, making do and design wastes has been very significant and effective approach, thus, 'Lean Construction (LC)'. The concept of LC as indicated by many researchers leads to improved delivery systems and processes through the elimination of wastes, increase productivity, fulfill client's requirements, ensures environmental sustainability and improve overall project and financial performance. This paper discusses the concept of LC and highlights the significance of its application in the construction industry.

Keywords

Conventional Project Management, Lean Construction (LC), Lean Production, Performance, Waste,

Biography

Richard Hannis Ansah is a Research Assistant at the Faculty of Industrial Management, University of Malaysia Pahang. He holds Postgraduate Diploma in Human Resources Management from ICM, Postgraduate Certificate in Human Resources Management from Management Development and Productivity Institute (MDPI), Ghana, Bachelor of Arts in Political Science and Linguistics at University of Ghana, and currently pursuing Master of Science in Industrial Management at University of Malaysia Pahang. He has published and reviewed a number of journal and conference papers. Hannis has completed research projects with Ghana Statistical Services and University of Ghana. His research interests include; construction, TQM, procurement, supply chain and logistics, operations research, manufacturing, lean, project management, occupational health and safety, human resources management, etc. He has worked as a procurement specialist with a major construction company (SASCO GROUP) in Qatar, research supervisor at Ghana Statistical Services, research and teaching assistant at University of Ghana, among others.

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