

Lean: A Sustainable Approach to Design and Construction for Environmental Sustainability

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Abstract : This study aims to contribute to the pursuit of environmental sustainability through the built environment practices of design and construction. Activities within the built environment and particularly within the construction industry have a significant role in ensuring environmental sustainability. The adoption of Lean principles and approaches would ensure that project deliverables are sustainable. This is because the processes that integrate lean principles reduce waste, add value to productivity, ensures customer satisfaction and are mindful of future productivity. Additionally, the lean principles for development are sustainable in themselves and thus promotes environmental sustainability. The study encourages further research with other methodologies and recommends the development of monitoring and evaluation mechanisms in order to promote the global concern for environmental sustainability.

Keywords : built environment, construction, design, lean, sustainability

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