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Effective design of the construction supply chain: A case of small buildings in Thailand

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Abstract
Effective management of the construction project can be achieved by implementing the supply chain management approach. Upstream and downstream construction activities are collaboratively conducted. Logistics activities must be considered during the design phase. Information sharing among designers, suppliers, construction engineers, distributors, and project managers are key aspects in using just-in-time (JIT) approach in construction supply chain. Consequently, performance of projects can be improved e.g. less material handling and storage activities can reduce costs. Simulation is used to model and measure the performance of construction supply chain. Finally, the actual building construction case is studied and validated. Objectives of research are (i) to identify critical factors in the construction supply chain, (ii) to reduce logistics cost in the building construction project, and (iii) to implement the supply chain management in the actual construction project. © 2011 IEEE.

Author Keywords
Construction supply chain; just-in-time; product design; simulation modeling

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