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INVESTIGATION ON PRACTICES AND BARRIERS OF LEAN CONSTRUCTION IMPLEMENTATION IN SELANGOR

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DECLARATION

"I declare that this dissertation is the result of my own research and that all sources are acknowledged in the references"

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ABSTRACT

Lean Construction (LC) emphasizes waste reduction and increased efficiency in projects to maximize value for stakeholders. Although LC practices are considered as having a lot of potential advantages in achieving better project performance, reducing construction costs, and making the entire process more efficient. There are a lot of challenges that are faced in the implementation of LC in the construction industry in Selangor. Therefore, major barriers to the adoption of LC within the implementation process include the lack of understanding and awareness of LC among practitioners and professionals within the industry, resistance to change from the culture of the construction organization, and management support. This study, therefore, points at such barriers, with strategies toward overcoming them so that LC practices can be extended to a large extent within construction organizations. The research focuses on establishing the current level of implementation of lean construction in Selangor, identification of critical barriers to lean construction adoption in Selangor, and finding solutions that would increase adoption of LC principles amongst stakeholders in the construction industry. This shall be assisted by the use of a quantitative approach such as a detailed literature review and a questionnaire survey among contractors' companies in Selangor. The questionnaire were distributed to 251 G7 contractors' companies. The findings indicate that while the respondents generally had an awareness of lean construction, actual implementation is relatively moderate, particularly in collaborative planning, standardization, and performance measurement. Other critical barriers identified include general lack of awareness and understanding of lean principles, fragmented project delivery systems, resistance to change, and financial constraints. Hence, the study proposes a several of measures to achieve these challenges through workshops, training programs, successful case studies, encouragement of collaboration and teamwork, performance measurement systems, and government incentives and support toward lean construction adoption.

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