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Investigating the Challenges Experienced by the South African Construction Industry in Adopting Lean Construction Principles to Deliver Projects

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ABSTRACT

Lean construction is considered to be a valuable solution to the problems of declining productivity and the poor success rates of projects in the South African construction industry. This research report seeks to answer the research question: What are the challenges experienced by the South African construction industry in delivering projects when adopting lean construction principles?

Many construction projects in South Africa are completed late, and with a cost overrun and poor quality as a result of inadequate/ poor management of the programme. During the construction phase of projects, there are many opportunities to implement lean construction principles and techniques that would have a positive impact on a project.

This research explored the current challenges experienced by the South African construction industry and the challenges of implementing lean construction project management principles in South Africa and provides recommendations on how to address these challenges.

A qualitative methodology was used in the research. Semi-structured interviews were held with eight experienced individuals in the field of construction and lean construction in South Africa. Five research themes shaped the interview dialog that probed the participants' experiences and insight regarding the overall research question and the research objectives. The themes that arose prompted responses regarding the barriers that are preventing successful implementation of lean construction in South Africa. Interviewees also suggested strategies to successfully promote and implement lean construction.

The findings revealed several barriers to successfully implementing lean construction in South Africa. These challenges are further impacted by the current state of the South African construction industry, the challenges relating to the role of senior management, the level of education and technical training and expertise in the industry, financial constraints and issues, government related challenges, and human attitudes that negatively influence the adoption of a lean culture and lean construction principles.