

LAST PLANNER SYSTEM: EXPERIENCES FROM PILOT IMPLEMENTATION IN THE MIDDLE EAST

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ABSTRACT

The work described in this paper is devoted to evaluate the effectiveness of implementing Last Planner to improve construction planning practice in Saudi construction industry. Firstly, the primary results of implementing Last Planner System (LPS) in two construction projects in Saudi Arabia are presented. Action research strategy was undertaken with different data collection methods employed included interviews, observation and survey questionnaire. Secondly, benefits gained in terms of improving construction management practice are presented, the critical success factors for LPS implementation are discussed, and potential barriers for implementing LPS revealed from the studies are presented. The results demonstrated numerous benefits were gained in terms of improving construction planning and site management. The fact that the structural work in one of the sites finished two weeks ahead of schedule is a clear evident of this improvement. However, there are some potential barriers reported which hindered the achievement of full potentials of LPS. Finally, a comparison between the outcome of this study and some previous studies on Last Planner in other countries is briefly carried out.

KEY WORDS:

Action Research, Construction Industry in Saudi Arabia, Construction Planning, Critical Success Factors and Barriers, Last Planner System.

INTRODUCTION

Construction management suffers from many problems and the majority are practical which need to be solved or better understood (Love et al., 2002; Wing et al. 1998). As a result, the construction industry is overwhelmed by delay and often has suffered cost and time overrun. In their critical evaluation of previous studies on construction delay, Alsehaimi and Koskela (2008a) reported that the poor project management was a dominant and common reason for delay in construction projects. The authors criticised the previous studies as they fell short to provide clear recommendations demonstrating how project management practice could be improved since the majority of recommendations where made are general in nature and do not lead to a focus on a specific area (Alsehaimi and Koskela, 2008b). Consequently, these problems associated with management in particular, should be understood and efforts need to be directed towards developing solutions and more efficient methods of operation (Alsehaimi and Koskela,

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