

IS THE LAST PLANNER SYSTEM APPLICABLE TO DESIGN? A CASE STUDY

Farook R. Hamzeh¹, Glenn Ballard² and Iris D. Tommelein³

ABSTRACT

The Last Planner™ system has been successfully implemented in construction to increase the reliability of planning, improve production performance, and create a predictable workflow. However, some practitioners question the function of the Last Planner™ system during design especially that design processes involve iterations and circular chains of interaction between different parties. The purpose of this paper is to report on research comprising the application of Last Planner™ system in design. The paper describes the developments and adjustments introduced to the Last Planner™ system to better suit design processes on a health care project in North America. Novel standardized planning practices used on the project are reported and analyzed. The study findings suggest that the Last Planner™ system principles account for both deliberative and situated action models. On one hand, deliberative planning⁴ takes place at the master and phase scheduling level where a premeditated rigid course of action is undertaken in setting milestones and identifying handoffs. On the other hand, situated planning is performed at the lookahead planning and weekly work planning stages where planning takes into account changes in the environment and the uncertainty affecting inputs, processes, and outputs of design activities.

KEY WORDS

Lean design, last planner™ system, lookahead planning, production control, lean construction.

INTRODUCTION

Processes in the Architecture, Engineering, and Construction (AEC) industry are inherently variable and uncertain. Variability undermines project performance and disrupts workflow

¹ Ph.D. Candidate, Civil and Environmental Engineering Department, 215 McLaughlin Hall, University of California, Berkeley, CA 94720-1712, USA, farook@calmail.berkeley.edu

² Research Director, Project Production Systems Laboratory <http://p2sl.berkeley.edu> and Associate Professor, Civil and Environmental Engineering Department, 215 McLaughlin Hall, University of California, Berkeley, CA 94720-1712, USA, ballard@ce.berkeley.edu

³ Director, Project Production Systems Laboratory <http://p2sl.berkeley.edu> and Professor, Civil and Environmental Engineering Department, 215-A McLaughlin Hall, University of California, Berkeley, CA 94720-1712, USA, 510/643-8678, FAX: 510/643-8919, tommelein@ce.berkeley.edu

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