

The Last Planner System: Conversations that Design and Activate The Network of Commitments

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The Last Planner System® (LPS) creates and improves predictability of workflow on projects. These outcomes are the result of people working together in a series of planning conversations that design and activate the network of commitments required to identify work needed to achieve milestones, make that work ready, assure a person has promised to complete it, and to learn from their experience.

The network of commitments, rather than a published schedule, is the supporting mechanism for engaging the project supervisory staff in executing work consistent with the overall promises of the project.

Toyota focuses on three enemies of value for their customers and themselves: waste (*muda*), unevenness (*mura*) and over-burdening (*muri*). Reliability, the opposite of unevenness, is a first requirement for pursuing a lean approach in any setting. Project-based production systems are no exception.

While specifics of the LPS can be tailored to project circumstances, the intention of the system and the fundamental nature of the practices involved are clear:

Produce predictable uninterrupted workflow by creating a coherent set of commitments that connects the work of the specialists to the promise of the project to the client and coordinates their actions.

This happens in five recurring conversations each designed so the team can manage the network of commitments inside each of their accountabilities.

Pull Planning

The team of people responsible for delivering a project milestone plan together how that will happen. The planning conversation produces a plan for what will be delivered at each hand-off, a schedule for those hand-offs and prepares the team to be in action together as the always uncertain future unfolds. The plan is developed as a series of requests starting from the milestone and working backwards – the *pull*. This designs the network of commitments necessary – without unnecessary tasks – to deliver the phase and establishes when the work should happen.

Make-Ready Planning

Each responsible individual (RI) for a group of performers (crews, teams, and individual performers) reviews the work in the coming six weeks look-ahead period, identifies whatever is needed to do the work and makes the requests and receives promises necessary to assure the wherewithal will be available when required. The RIs ask for help whenever they lose

confidence that the work will be ready when required. The team adjusts or reaffirms the plan in regular meetings during the lookahead period. The make-ready plan establishes what can happen and serves as the basis for securing reliable promises for the coming week's work.

Weekly Work Planning

Final coordination of the work in the coming week (or two) is completed as each last planner makes promises to the project manager stating what will be delivered and by when. Capacity is allocated by day in support of those promises. These promising conversations occur in a group setting allowing other last planners to assess coherence with their own promising. Adjustments to the weekly work plan (WWP) are made during the meeting.

Daily Commitment Management

Brief “stand-up” meetings (or conference calls) are held daily to report WWP completions, adjust to the circumstances, re-promise as necessary, get help from each other and record plan variances and their reasons. This meeting serves as an autonomous controlling or steering function that allows those closest to the work to adjust to the always-changing circumstances of the project so they can complete all of their promises.

System Improvement

The aim of LPS is to improve the planning system performance. It is measured as promises completed divided promises made. This is a daily measure. Action is taken daily to help the team stay on their own plan. The reasons for not completing work are reviewed each week and actions are taken to prevent recurrence. Teams that take this seriously improve their reliability in a matter of weeks.

Opportunity

The Last Planner System provides a basis for big improvement. Just like Toyota's two pillars of *just-in-time* and *stop-the-line* stand on operational stability, *lean construction's* principles stand on planning reliability. Once LPS is operating, waste can be driven from the project, people are available for innovation and learning rather than expediting and doing over and our clients will receive all the value we promise... and then some.