Session 1-B: Toward Lean Methods

Room 203

Track: Integration
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Questions:

- What is your understanding of lean in construction?
- How do you implement lean on your projects?
- What lean methods do you use?
- What are the challenges in implementing lean?
- What types of resources are available to you to support in your lean implementations?
- What type of resources would help advance implementation of lean on more projects?
- What do owners ask for regarding lean?
- How should owners ask for lean processes or methods?
- How can we better engage project teams in planning and deploying lean?

Notes:

- When thinking of lean, the terms that come to fore front are: efficiency, scheduling, simplicity, value, culture, pull planning, empowerment of downstream workforce, communication.
- On how organizations and project teams implement lean (strategies):
    - Pull everyone (example: foreman) into validation
    - Use partners vs. subcontractors
    - Start by picking one project to implement lean
    - Pick a lean champion
    - Pick a few methods in the beginning
    - Align with inherent culture and practices
    - Engage in routines that empower the entire workforce and project team
    - Educate project team and/or organizational members
    - Targeted training focused on implementation to develop lean champion
    - Not force but use supportive strategies: such as a selection process for lean partners, consistent onboarding, lead by example and model lean behavior when engaging trade partners
- Methods use: Last Planner System, Target Value, Value stream mapping, Gemba, Ohno circles, Daily huddles, Takt/ SIPS, A3, Kanban, Dashboard, Prefab/modular
- Resource needs:
    - Awareness/knowledge,

    - Expertise/experience,
    - Support & education,
    - Trade and other lean partner buy-in
    - PM efficiency
    - Owner buy in to avoid resistance (early involvement) - one off versus repeat
    - Upfront resources needed:
        - Less work for designers if they understand TVD, etc.
        - Function of timing - late adoption - "rework"
- Reminiscent of BIM adoption
    - Figure out planning
    - Define process
    - Owner requirement
- Drivers:
    - Speed of projects goes up
    - Resources available goes down
- Contractual CPM vs. Last Planner
    - Duplication of work
    - Potential conflicts
- Waste in contractual requirements
    - Meeting minutes
    - CPM reporting
- What teams need
    - information: trickle down
    - buy-in to culture versus going through the motions
    - committing the resources (time)
- How are we measuring success?
    - KPIs
    - Conditions of satisfaction
- Student topics/questions:
    - standardization for tools/methods
    - managing LPS versus Gantt/CPM schedule win contract?
    - 'proof' of time/money savings
    - employee satisfaction on lean project
    - market sector, value (healthcare sector versus office building
    - lean methods by project delivery (example: colocation, big room, last planner, etc.

*missing some designer perspective due to lack of representation....but there is value in developing some structure around using lean in design such that they do not feel it is extra work.