



Lean Construction Institute

Building Knowledge in Design and Construction

Many of you have been requesting more information regarding the Agenda for the LCI/P2SL/AIA Lean Design Forum in Berkeley on the 16th and 17th of February. This will be the first (of many) Fora co-sponsored with the American Institute of Architects. Thanks to one of the presenters and organizers, and LCI Board Member, Markku Allison for making the co-sponsorship happen. We treasure our ongoing relationship the Project Production System Laboratory (P2SL), Iris Tommelein, Glenn Ballard and their corporate sponsors and we thank them for hosting this year's event. LCI couldn't afford to do this without our sustaining sponsors, NewForma and ClientFeedbackTool.

Mostly, I'd like to thank Markku, David Mar and Laura Lesniewski for developing the following agenda, getting the speakers and driving us to be better than we are right now:

LCI : P2SL : AIA Design Forum

The Garden Room, Clark Kerr Campus, UC Berkeley

February 16, 17

Day 1

7:30a – 8:30a Registration and Continental Breakfast

8:30a – 8:45a Opening Remarks and Introductions

8:45a – 10:00a Session 1 – The State of Lean Design

title: Lean During Design: Yesterday, Today, and Tomorrow

speakers: Laura Lesniewski, BNIM

Markku Allison, AIA Resource Architect

In 2005, David Mar, Glenn Ballard and others put forward a written proposition that became the basis for the Lean Construction Institute's Design Forum. It's now 2012. This session is focused on consideration of the original proposition in light of industry evolution since then. A brief presentation will revisit the original proposition and suggest new or continued directions for efforts as regards Lean During Design, followed by group discussion and validation. Outcomes from the session will inform a revised version of the paper to more clearly define focus for the future of the Design Forum.



10:00a – 10:30a

break

10:30a – 12:00

Session 2 – Becoming a Lean Enterprise

title:

Driving Transformation - Behaviors and Results

moderator:

Romano Nickerson, Boulder Associates

panel:

Todd Henderson, Boulder Associates

Bill Whipple, HGA

Laura Lesniewski, BNIM

Ron Migliori, Buehler & Buehler

At the LCI Congress in Pasadena, Glen Ballard and Greg Howell spoke about the nature of the lean revolution, drawing upon the work of Thomas Kuhn (*The Structure of Scientific Revolutions*). They proposed that we would need to actively seek evidence of behaviors and report on results to transform the landscape in construction. How does this posture translate to design behaviors and evidence? Presented in a panel format composed of representatives from firms currently engaged in lean transformation, the session will propose various topics and allow panelists to discuss the impact of the topic within their firm, sharing examples, anecdotes, and perhaps confirming or denying the validity of the topic in question. Topics will be drawn from the following:

1. Tools, Techniques, and Methods
2. Behavior (individual, team, firm, industry)
3. Continual Improvement (PDCA)
4. Philosophy (Hoshin)
5. Standard Processes
6. Measurement and Reporting

12:00 noon – 1:00p *lunch*

1:00p – 2:30p

Session 3 – Set-Based Design

title:

Explorations Using Set Based Design

speaker:

David Mar, Tipping Mar

The practice of set-based design can help teams stretch the potential design space. It also keeps teams from developing “tunnel vision” and producing just another formulaic version of a traditional project, naturally void of innovation. However there is tension between the desire to explore multiple options, and the need to progress expeditiously to preserve time and resources to ensure high production quality. Fortunately, individual design options do not exist in isolation, for this would suggest that there are an almost infinite number of permutations or design possibilities. Rather, some individual design choices are linked together to form valid design option clusters. This talk will explore understanding the connective tissue between small scale design options to form rational option clusters.

title:

Applied System Integrated Design - Mechanized Set Design

speaker:

Zig Rubel, Aditazz



Set design in other industries has been developed by using component pieces integrated back to a greater whole. Aditazz uses discrete pieces of a building design requirement to examine options analytically and then to stitch these variants into project possibilities. This discussion will showcase how unique design tools from other industries that drive factories are being applied to building design and construction that can enable Manufacturing and Assembly of buildings.

2:30p – 3:00p *break*

3:00p – 4:30p Session 4 – Lean Design Tools

moderator: Glenn Ballard, UC Berkeley

In this session, several speakers will present useful tools that have been developed for managing design. Tools support production quality control, change management, value definition and assessment, design sequencing, and decision support.

3:00p – 3:15p C A D: An Embedded Kanban QC System
David Mar, Tipping Mar

3:15p – 3:45p Change Management Tool
Corrie Messinger, NBBJ, Percy Hsieh, Kaiser Permanente and Chris Pechacek,
McCarthy

3:45p – 4:15p Valid: a Tool to Define Subjective Value and Assess Emerging Solutions
DSM: a Tool for Sequencing Design Tasks
Jamie Hammond, AML Technologies

4:15p – 4:40p Wecision: a Decision Support Tool
John Haymaker, Wecision

Day 2

7:30a – 8:30a Continental Breakfast

8:30a – 8:45a Housekeeping

8:45a – 10:00a Session 5 – Intuition and Design

title: Intuition and Design in the Lean Enterprise

moderator: Will Loftis, SmithGroupJJR

panel: Byran Shiles, WRNS Studio
Marl McVay, SmithGroupJJR



Sing, goddess....

Einstein is reputed to have said " Not everything that counts can be counted and not everything that can be counted counts".

Management of the value stream to drive out waste is at the heart of the Lean enterprise. Presuming that design matters – that design beyond function, cost effectiveness and code compliance provides value for a client – what does an effort to drive out waste mean for the design process?

Intuition – access to knowledge without reasoned inference – is often fundamental to the design process. How does one manage such a thing? Let's examine how that happens!

Will Loftis will open the session and frame the issues. Bryan Shiles and Mark McVay will each make a presentation, followed by a panel discussion/Q&A.

10:00a – 10:30a *break*

10:30a – 12:00 noon Session 6 – New Directions in the Design Process

title: Title to follow
moderator: Bill Whipple, HGA

Description to follow.

12:00 noon – 12:20p Plus-Delta

12:20p – 12:30p Wrap-up

Please check out the additional events following this note. Hope to see you in Berkeley next month and at your local COP this month.