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LCI/P2SL DESIGN FORUM

Changes in Roles with Integrated Project Delivery™
• Introductions
• Panelist Presentations
• Panel Discussion with Audience Q+A
INTRODUCTIONS

- **Sam Spata, AIA LEED™ AP**
  *Moderator*

- **Jessica Kelley, PE LEED™ AP**
  *Trade Partner*

- **Dean Reed**
  *Construction Manager*

- **Erleen Hatfield, PE LEED™ AP**
  *Structural Engineer*

- **Marc H. Flax, Associate AIA LEED™ AP**
  *Architectural Program Manager*

- **Philip Sun, AIA**
  *Owner*
Jessica’s Intro

• Sr. Project Manager for Southland Industries, Design Build Maintain Mechanical Contractor
  – Worked for Southland Industries for 10 year
  – Current Project – California Pacific Medical Center Cathedral Hill Hospital $900 MM project, $1.6B Program

• Graduate of Penn State University Architectural Engineering Program, Mechanical Emphasis

• Southland provided me an introduction to Lean Construction as a part of how we do business
  – Since the beginning, I have been drawn to working on projects and with team members who are interested in executing projects better
  – I was the PM on one of the first Sutter Healthcare projects using the IFOA
  – Am currently the PM on Sutter’s largest and most comprehensive IPD effort
• Lean Construction has been a part of Southland’s Culture for more than the 10 years that I have been with the company
• Working on official IPD Teams for 4 years
• Primary Client – Sutter Health
• Mapping of processes to communicate approach across team partners
• Bringing trade and design partners together earlier to produce the same or greater value at less cost
To be one of the MOST ADMIRE
dCompanies by the year 2030

planning • virtual design & construction processes • integrated teams • lean
• Role
  – Lean salesman coach and trainer

• Background
  – early proponent of Virtual Design & Construction, student of and advocate for lean project delivery

• IPD Experience
  – Sutter Health projects, assisted Autodesk One Market team, Chinese Hospital, hear and see many of DPR’s current Lean / IPD projects
• Principal at Thornton Tomasetti with over 16 years of experience
• Structural Engineer and BIM / Digital Delivery Specialist
• Member of the AIA IPD Discussion Group, AISC BIM Committee, AIA-NY Technology Committee Chair
• Teaches graduate class “Systems Integration” at Yale School of Architecture
• The 9 basics Principles of IPD are the core value of how we strive to work at TT

• IPD-ish projects with heavy collaboration have been our most successful!
Marc’s Intro

• Senior Vice President, Associate AIA, LEED AP
• HOK
• Architecture, Engineering, Interiors, Sustainability, Planning and Consulting
• Corporate Commercial Projects
Marc + IPD

- Principal In Charge, Program Manager, Architectural Representative of the PMT for IPD project
- Background in Marketing and Program Management and Group Management in the architectural and related industries for over 22 years
- First True IPD Project – Autodesk One Market Street Gallery and Office
• **Title:** Practice Leader

• **Company:** Jacobs (Jacobs Global Buildings)

• **Senior Vice President**

• **Business:** Diversified Built Environment

• **Area of Expertise**
  – *Health Care, Higher Education, Universities*
  – *Complex Problems*
Philip Sun

- **Professional Background**
  - Operations officer (Sr. VP for Planning, Design, Construction, Facilities Management, Auxiliary Services and Real Estate – facilities, physical plant, maintenance, auxiliary (publications, real estate, housing), housekeeping, glass shop, etc.)
  - Career as owner
  - Hospital System (400 projects)
  - Medical Research University
  - Sports Authority
  - Public University
• Harris County Hospital District (Houston)
• Ben Taub General Hospital
• LBJ General Hospital
• Community Health Program
• Rockefeller Laboratories
• Jacobs Field, Gund Arena
• John Muir Medical Center
• Chinese Hospital
PANELIST PRESENTATIONS
TRADE PARTNER

- Jessica Kelley
How Trade Partner Role is Changing

*Internal of my team* → *Across all team members*

*Schedule* → *Process*

*Receiving for cost* → *Selecting for fit*

*Limited* → *Extensive*
My Worst Thing About IPD

More Projects are Not Structured this way

- Some Challenges that come to mind
  - Time Management
  - Relationship Building
  - Target Value Design
  - Team Development
  - Commitment and Participation
My Best Thing About IPD

Building of Trust across Members of other Companies

- Sharing of Information
- Common Goal
- Partner Support
A Change I’d Like to See

Taking the team to the next project

• Building on the Established Trust
• Working as one project not multiple companies
• Building on the shared experience
• Building on the processes
CONSTRUCTION MANAGER

Dean Reed
• How Our Role Is Changing
  – Taking responsibility for delivering value in design as well as construction

• Hardest Worst Thing About IPD
  – Creating transparency and building trust
  – Moving from win / lose behaviors to win / win or lose / lose

• Best Thing About IPD
  – Shared responsibility and problem solving
  – Accountability
  – Creativity / Innovation

• A Change We’d Like to See
  – Invest much more time and effort in understanding new thinking, roles and behaviors
1 - How Our Role Is Changing

DPR VALUE STRATEGY

PEOPLE
LISTENING
TRUST
COMMITMENTS

MODELING
QUESTIONS
TESTING
SOLUTIONS
SHARED MIND

LEAN THINKING
SYSTEMS
VALUE
FLOW
WASTE
2 - Hardest Worst Thing About IPD

from

to

I'm sure glad the hole isn't in our end...
3 - Best Thing About IPD
4 - A Change You’d Like to See

Culture Change: Involve people in continuous improvement to eliminate waste through Lean Principles.
STRUCTURAL ENGINEER

Erleen Hatfield
How Engineer Role is Changing

• Earlier involvement allows better understanding of project goals
• Better collaboration allows better decisions by the project team
• Better design and less waste – structure is not an after thought
My Worst Thing About IPD

• Choose your partners wisely!

• Just because you trust your team - doesn’t mean they trust each other
My Best Thing About IPD

Collaboration allows unanticipated uses of the project BIM – that saved significant time and money
All team members use BIM as the collaboration medium and understand the value proposition of BIM
ARCHITECT

Marc Flax
How Architect Role is Changing

• Equally Valued Part of the Team- No longer do we see the architect versus the contractor.
• Collaborator as part of the larger team
• Empowered to work together to make decisions before the costs become too prohibitive
• Effort of design is transferred to the front of the design process.
• Greater emphasis on total project knowledge
Project Effort and Impact

- Ability to impact cost and functional capabilities
- Cost of design changes
- Traditional design process
- Preferred design process

Graphic originated by Patrick MacLeamy, FAIA
My Worst Thing About IPD

- Wrong Partners
- Not enough information up front
- Unrealistic expectations for budget and schedule
- People who say they are part of the team but don’t show it
- Coming late to the game
My Best Thing About IPD

• Working as a team to achieve a common goal
• The camaraderie
• The results
• The reward
• The value add to our clients
A Change I’d Like to See

• The model ownership and control
• Old Tricks Die Hard
• Education
OWNER

Philip Sun, Jacobs
How Owner Role is Changing

- Increased Up Front Costs
- Staff Dedicated to IPD
- Focus on Decision Management
- Selection of Teams vs Firms
- Focus on Participation
- Patience
My Worst Thing About IPD

• It depends on change and trust
• It depends on trust
My Best Thing About IPD

- Reduces waste
- Creates a new working dynamic
Some Owner Points About IPD

• It’s not a democracy
• It’s not easier
• It may not appear less costly
Thank You