LEANING YOUR ORGANIZATION

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THREE OPPORTUNITIES OF LEAN

• Impeccable coordination
• Projects as production systems
• Collective enterprise
THREE OPPORTUNITIES OF LEAN

Impeccable coordination: on Projects

- Coordination between specialists across contractual lines
- Coordination between designers on deliverables and information exchanges
- Coordination of programming with design, design with construction and construction with commissioning
- Coordination of fabrication, installation and operations

Production Systems: on Projects

- Enabling predictable workflow
- Coordination of handoffs between specialists across contract lines
- Moving resources to the right location at the right time
- Understanding cycle time and production as measures of installation
- Mitigating the effect of the 7 wastes
- Visible work place and transparency
THREE OPPORTUNITIES OF LEAN

Collective Enterprise: on Projects
• What’s best for the project, not the piece
• Moving money and resources across contractual lines
• Rewarding collaborative, transparent behavior
• Having confidence that if the project works, it will work for all the participants

THREE OPPORTUNITIES OF LEAN

Impeccable coordination: in house
• Coordination between specialists across departmental lines
• Coordination between contracts, accounting, payables and business development
• Coordination of continuous learning across all projects and all business units
• Removal of wasteful steps and processes that inhibit collaboration and coordination
THREE OPPORTUNITIES OF LEAN

Production Systems: *in house*
- Enabling predictable workflow
- Coordination of handoffs between specialists across *departmental* lines
- Moving resources to the right location at the right time
- Understanding cycle time and production as measures of *performance*
- Mitigating the effect of the 7 wastes
- Visible work place and transparency

THREE OPPORTUNITIES OF LEAN

Collective Enterprise: *on Projects*
- What’s best for the *company*, not just an individual worker
- Moving money and resources *smartly to enhance work, not impede it*
- Rewarding collaborative, transparent behavior
- Having confidence that if projects work, *if the company is always watching out for the customer, the company will work for all of its stakeholders*
CULTURE

From Wikipedia:

“set of shared **attitudes, values, goals, and practices** that characterizes an institution, organization, or group”

CULTURE: ATTITUDES

**Current**
- The Contractor is here only to take our money
- Designers only care about increasing project value and thus their fee
- Owners only want low price
- Trades know how to trick us into change orders

**Lean**
- The Contractor manages work for the benefit of the owner
- The Design Team designs only valuable, responsive projects
- Owners want value
- Trade partners actually perform the work—they are the ultimate deliverers of value
**CULTURE: VALUES**

**Current**
- The Contractor favors innuendo and misunderstanding
- Designers value only iconic design
- Owners want low price
- Trade partners value hitting home runs and staying alive

**Lean**
- Collaboration
- Transparency
- The relentless pursuit of waste
- The continual installation of value
- Learning organizations
- Continuous improvement

**CULTURE: GOALS**

**Current**
- The Contractor is here only to take our money
- Designers overdesign to avoid mistakes
- Owners want faster, lower priced quality projects
- Trades want to prolong projects and increase scope

**Lean**
- Everyone leaves work in the same condition they arrived
- Projects can be timely, cost effective and of substantial quality
- We will build the project faster and for less money
- We will work with the same team again
CULTURE: PRACTICES

Current
- Everyone for themselves
- Command and control
- Deep commitment to a multi-thousand task CPM schedule
- Cramming and massing at the end of a project to complete on time
- Draconian contracts

Lean
- Optimize the project
- Collaborate
- Reliable promising
- Effective learning
- Increase relatedness

CULTURAL NORMS

Sutter’s 5 Big Ideas
- Collaborate; Really Collaborate
- Increase Relatedness
- Optimize The Whole
- Networks of Commitment
- Tightly Couple Learning w/ Action
Collaborate, really collaborate

- What does your company do better than anyone else?
- Do your customers know that?
- Does your physical space allow you to produce that?
- Does your culture allow you to understand how you can make that happen?
  - What’s the mission?
  - What’s your part?
  - What do others do?
Collaboration, really collaborate

- What do you need to know about what others do?
- How does it contribute to the value proposition?
- How do you routinely review company processes, procedures and history to update based on lessons learned?
- Social collaboration?
- Professional?
- Protect private time? Respect for people?
Companies are networks of commitments

Company Commitments:

- Understanding the mission
- Sufficient and on-going training
- Sufficient resources
- A safety plan
- A growth plan
- A plan to share benefits
COMMITMENTS

Companies are networks of commitments

Worker Commitments:

• Commitment to customers
• Commitment that my work will release work for you in a reliable fashion
• Commitment to pulling, not pushing work through our system
LEARNING

"They stole all my karate books!"

Tightly couple learning with action

- Knowledge for knowledge’s sake?
- Learning without doing
- Learning organization
- Encourage people to ask “why”
- Empower people to ask “why”
LEARNING

Tightly couple learning with action

- Importance of value stream mapping and rapid process improvement
- VSM is all about looking at things from beginning to end.
  - support side
  - actual material flow / work – e.g. requisition of materials through receipt, fabrication, delivery and installation)
LEARNING
Tightly couple learning with action
Rapid Improvement/Kaizen events –
• engaging people in change, training them on tools, avoiding sub-optimization
• Start looking at how the actual work is being done
• engaging people so they understand, and are focused on improving a process from beginning to end
• cross-functional activities focused on problem solving across the organization and intercompany optimization

LEARNING
Tightly couple learning with action
Rapid Improvement/Kaizen events –
• events build relationships between departments – team building
• teach people VA/NVA, 8 wastes, how to improve, problem solving tools
• Change the way people look at work, change the conversations between the people, change the decisions that people make
OPTIMIZE THE WHOLE

For the benefit of all . . .

- Customer centric
- Respect for people, in and out of the organization
- Respect for the mission:
  - Healthy attitudes
  - Belief in the values
  - Support the goals
  - Engage in the practices that enhance the values and goals
**OPTIMIZE THE WHOLE**

For the benefit of all . . .

- Across the desk
- Across the aisle
- Across the hall
- Across departments
- Across divisions
- Across locations
- Across all barriers

**INCREASE RELATEDNESS**

Peanuts by Charles M. Schulz

Dick Bayer "Leaning your Organization"
INCREASE RELATEDNESS

Your friends, your colleagues

- Know your co-workers: know their work
- Know your customers: know their values
- Know your work: share it with others
- Know your competition: understand their work and their challenges
- Share openly, steal with permission
- What makes the process better (in and out of the company), makes us all stronger

WHAT WE CAN DO

“We must go green - but where do we start?”
**STRATEGIC INITIATIVES. . .**

- **Institutional Excellence**
  - A leader in the industry
  - A learning organization
  - Driving value to clients
  - Driving out waste
  - Educating clients, trades & vendors
  - Supporting industry transformation

- **Pre-Construction**
  - Integrating with Design
  - Choosing trade partners early
  - Driving costs out of projects
  - Designing project delivery during the design process
  - Developing and maintaining systems sets
  - Coordination, Collaboration, Integration
  - Developing deep trade partnerships
STRATEGIC INITIATIVES.

### Quality
- Built in Quality Planning
- Mock-ups
- First Run Studies
- Designing and documenting project delivery for on-site, real time use
- Trade quality plans and empowerment

### Safety
- Safety as an inherent system in design and delivery
- Buildings designed to enhance safety in project delivery and operations
- Use pull planning as the launching pad for your safety plan
- Lessons learned and education
**STRATEGIC INITIATIVES. . .**

- **Risk Management**
  - Structure contracts to manage risk not sell it
  - Increase knowledge as early as possible
  - Manage project work with Owner and Designer
  - Help develop sensible, efficient, cost-effective insurance programs

- **Operations**
  - Rapid Improvement Events
  - Value stream mapping
  - Making your company a preferred owner, a premier GC, a world class designer, a go to trade partner, an essential vendor
  - 5S in the workplace:
    - sorting,
    - straightening,
    - systematic cleaning,
    - standardizing and
    - sustaining
STRATEGIC INITIATIVES

Operations

- Continuous Improvement
- Institutionalizing Lessons Learned
- Cultivating a learning culture
- One that always asks why? And then asks it again.
- Transparency and openness in all processes
- Promoting improvement suggestions at all levels—and then implementing

Next Steps?

- Start with the end in mind: Better Projects
- Move backwards to establish the steps that will get you to your goal: Identify criteria
- Use the PDCA cycle:
  - Plan: 20% faster
  - Do: Create a milestone schedule with no buffer
  - Check: Monitor it monthly; and
  - Adjust: As necessary
NEXT STEPS . . .

DON'T THINK OF YOURSELF AS A POWERLESS PEON IN A BOX.

YOU'RE AN AGENT OF CHANGE IN A DYNAMIC, NATURAL WORK GROUP!

CAN I PUT THAT ON MY BUSINESS CARDS?

I'D RATHER NOT LEAVE A PAPER TRAIL.

The Lean Construction Institute

Thanks...

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