Start, Stop & Continue: Texas Chapter Develops Best Practices for Project Delivery

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It’s a classic case of two steps forward and one step back for the construction industry. And it’s costing billions. The Texas Chapter of COAA instituted a surprisingly simple process to begin addressing abysmal industry productivity rates with the hope of improving the project delivery process.

It’s well documented that construction productivity has declined over the past 50 years\(^1\). Waste in labor coordination and materials installation ranges between 25-50\(^%\)\(^2\). Inadequate technology interoperability is costing up to $15.6 billion in losses per year\(^3\). And the Federal Facilities Commission estimated\(^4\) transactional costs to resolve construction claims and disputes at $4 billion -$12 billion annually. New tools and delivery methods like BIM and Integrated Project Delivery can hopefully reverse the decline in construction productivity.

With the apparent advances in design and delivery, COAA Texas wanted to understand root causes behind the productivity decline. And with that knowledge, the question was then, “what are the opportunities for improvement?” Chapter leaders used a basic method to start unraveling the current industry productivity challenges – and that was, to ask all project stakeholders.

**Candid conversations to uncover concerns**

COAA, more than any other industry organization, gathers all the major entities involved in construction. Owners, developers, architects, engineers, contractors and even large sub-contractors and suppliers are actively involved in chapters across the country. COAA Texas recognized the value in this complete perspective available from members, as a way to better understand how the action of one entity impacts the entire project team.

The chapter formulated a “START/STOP/CONTINUE” roundtable process to uncover specific productivity issues in the project continuum. The chapter kicked off the roundtables at the COAA Texas Winter Workshop in September 2014. The premise was to gather the major team players around one table to find out what actions should START happening during the project life-cycle to improve the process and outcomes; which ones were detrimental and should STOP occurring; and what was working well and should CONTINUE. All stakeholders shared their unfiltered input – the good, the bad, and the ugly – through a moderator.

David Bammerlin, Assoc. VP for Research and Education Facilities at The University of Texas MD Anderson Cancer Center and COAA Texas Chapter President, was instrumental in outlining the process. “Every COAA member wants the same thing, which is a positive outcome for their part in a project. COAA is a place where we can have hard conversations, but still be friends. If we are talking about better project delivery, and a project stakeholder isn’t at the table, a perspective is missing. And that means a possible solution is also missing,” Bammerlin said.

**Tough pills = good medicine**

Organizers planned a series of START/STOP/CONTINUE sessions over the course of two COAA Texas workshops. Input from the first roundtables laid the foundation for the second one. Participants divided into groups of owners, architects and contractors to share their varying perspectives. More than glorified gripe sessions, moderators probed participants to articulate possible causes of adverse outcomes during the project life-cycle. Though the participants were divided by project role, several common issues emerged:

**Front-End Planning**

- The owner’s consultant selection process is not clearly defined
- All major project parties are not involved early enough
- Numerous project starts and stops increase changes and re-work
- Team Building
- Lack of a collaborative environment does not foster trust
- Key executives from all parties do not maintain involvement throughout the project
- Cloaked communication of problems inhibits team problem-solving
- System Integration
• BIM is not used effectively between team members
• Information-sharing needs overall improvement
• Data is not effectively transferred to owner for O&M use at close-out

Architects and contractors shared one surprising concern: not everyone feels empowered to engage. Which begged the question – is the client’s organization the main source of risk to project success?

Possible paths forward
The first roundtables were open-ended discussions to identify the issues. The second ones, at the COAA Texas Winter Workshop in February 2015, focused on possible solutions. Again, all key project roles were represented, but this time participants did not segregate by role. Instead, they self-selected from among four specific discussion topics pared down from the February workshop:
• Coordination of review time among stakeholders
• Fostering team collaboration in problem-solving
• Improving the consultant selection process
• Determining the process for updating the BIM model

Facilitators guided the discussion of each topic, with the task of distilling input into the top three recommended actions to resolve the issue.

Coordination of Review Time Among Stakeholders
Facilitated by an Owner, participants were asked to provide suggestions targeted specifically at Owners. Their input:
• Conduct face-to-face, facilitated reviews of design deliverables with stakeholders, including the full design team and end user. A related recommendation – obtain stakeholder drawing approval at key milestones.
• Educate stakeholders early about the review process and expectations, with a pre-established timeline and schedule for reviews.
• Maintain continuity of reviewers and consistency in the review process.

Transparency was a common element of all comments shared. Contractors and the A/E team want to know who has final authority, how decisions will be made, and when major reviews must be completed. Ideally, this information would be shared with the full team at the same time.

Fostering team collaboration in problem solving
Take-aways from this roundtable were directed at contractors:
• Establish the rules of engagement at the project outset and recognize that how the first problem is addressed will set the tone. And keep in mind this acronym – QTIP: Quit Taking It Personally.
• Create a culture of trust in order to maintain transparency. Measure the success of the whole team rather than individually.
• Embrace a collaborative environment and empower team members at all levels to disclose concerns.

Participants had practical suggestions that would be easy to implement at any project phase, such as offering a potential solution when discussing a problem.

Improving the consultant selection process
The selection process typically is the first official interaction between A/Es and Owners, and the A/Es offered one pointed suggestion for Owners:
• Provide more details about the A/E selection process. How will selection criteria be weighted? What is the project scope and schedule? If there are multiple Owner stakeholders, whose goals matter most? What are the metrics for project success?

With ample details, A/E firms can be more selective about pursuing projects that align with their experience, and Owners will get a better pool of choices.

Determining the process to update the BIM model
BIM is now widely used, but many questions exist across project teams for its effective and integrated use. A/Es made these recommendations for contractors:
• Information is king and is THE most important item to keep updated. Owners may be best to manage raw data, but the digital representation is better left with the contractor or architect.
• Owners must provide clear contractual requirements. Even with clear requirements, the group felt a project ‘Technology Kick-Off’ meeting would be beneficial for the entire team to get on the same page.
• Though each team member purpose-builds the model for their specific needs, all stakeholders recognize that BIM has value in the delivery process and therefore is worthy of dedicated time to establish a process for maintaining one master model.

Models are starting to serve new needs for Owners’ operations and maintenance, prompting the idea that perhaps Owners should provide the one family to be used by the full team. All participants felt that BIM discussions too commonly are theory-based; they want an interactive workshop focused on the current possibilities and limitations within BIM.

What next?
New tools and delivery methods are available resources that can be leveraged by team members to improve construction productivity. However, a productive TEAM is at the heart of an efficient project. Denton Wilson, Vice-President of Design & Construction at Methodist Health System, set out to not only improve their delivery process, but to permanently change their culture. He leveraged collaboration to change the mindset of every participant on his projects.

“Every project participant had a vested interest in the project, so we started with the question of what would define common value. That helped to cultivate trust. And thankfully so, because I pushed members of the team completely out of their comfort zone. Our covenant was ‘Thou shall cross the line,’ which gave every person a voice AND accountability. It was painful at times, but I asked the team members to be invested in the project enough to grow, both professionally and personally.”

Wilson is the exception among Owners pushing team collaboration to the outer limits. And he admits there were successes and potholes in his process. Considerable “learning on the fly” occurred, but with it came new ideas to implement in the future. Outside of an active project, COAA Texas is the avenue to bring all project stakeholders together for candid discussion and idea sharing. Through programs like START/STOP/CONTINUE, all team members can share real pain points and brainstorm possible solutions rather than more “learning the hard way” on a project.

Citations

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