

Adopting Integrated Commissioning For Greater Project Success

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We all have a favorite project, the one that went so well we are excited for the next. We try to replicate that project repeatedly. How did we do it, why was that one so great? Most likely, it was because we started with the end in mind, the commissioning, and we built from that end to the beginning as a team.

Not an easy task at the start of a project. So much is going on; who's onsite, what percent complete are the drawings, and where is my equipment?

But who's worried about the last day, right? We need to deal with the first day right now.

Typically, everyone works in silos. Procurement starts getting everything ordered, construction spins up crews where they can, quality struggles to be included, and commissioning team shows up when we notify them the initial phase is ready to walkdown.

But what if we started as a team, defined our completion criteria and sequencing, developed our processes, constructed our databases, system boundaries, and metrics together with an integrated project team? And what if we had a single goal through all the phases – turnover to operations?

By doing things in an integrated manner, our cost and schedule goals can be achieved with little effort because everything is running in tandem. Let's dig in to the why and how of it all.

The Importance Of Milestones

Planning completions milestones into your day-one activities



will pay dividends throughout the life cycle of your project through all its normal phase.

Completions milestones typically relate to the payment structure, so it's important to have them clearly defined to avoid disruptions and claims on your project. By clearly defining them – and getting all team members trained on the requirements and expectations – you can keep your work organized, meeting the contractual requirements with ease.

Ensuring Success From The Beginning

So, what can we do to ensure success after we have an integrated team, with clearly defined milestones, starting with the end in mind? Below are some crucial key actions:

- **Take Teamwork and Trust Seriously.** Handover of control to the subsequent group is never the easiest thing to do. Engineering may have feelings that the construction team doesn't fully appreciate the complex design,

construction wants to build fast to beat cost and schedule, they may feel like the commissioning team will slow them down by being too focused on function. All stakeholders have their own objectives to achieve. By creating an integrated team, we can build the trust we need to meet all those objectives together. Make sure to include your safety and quality teams.

- **Share Databases.** This allows transparency between design, procurement, construction, quality, and the commissioning team in real time. Knowing the life cycle of the equipment, having one source of the data is key to successful projects.
- **Keep Digital Records in an Integrated System.** This provides visibility into records, procedures, installations, and certifications. Knowing where you are on a system or subsystem at any given time is key to the communication during the phases.
- **Assign Leadership and Authority in Every Phase.** As the project moves forward the teams will change, ebb and flow. Leadership will need to guide that flow and the new players in and out of every transitional phase.
- **Communicate, Communicate, Communicate!** Communication is crucial in every project at every phase, but specifically during the commissioning phase. Why? Because it's a complex phase that requires leadership, planning, and teamwork to ensure vital checks on entire systems. Trust and transparency within all teams needs to be established early on a project but specifically within the commissioning team.

Now, thinking back again to that one project that holds a special place in your heart, were any of these key components prevalent? If so, now you should be able to see how integrating your efforts and teams can help you on the first day and the last day, right up through commissioning.

Because even on the first day, final turnover to operations should be the goal. That means what we do at the beginning of the project can make that final turnover easy – or something we may live to regret, or at least may not want to live through again. ✍️



About the Author

Brandi Heffner is a Director at InEight. She drives the development of InEight Compliance, which solves regulatory compliance challenges for contractors, owners, and engineers. Prior to joining InEight, Brandi worked for Kiewit for 20 years as a document control manager, audit manager, and quality manager on multiple megaprojects, mainly in the civil sector. She also played a key leadership role in implementing a corporate-wide health, safety, environment, and quality (HSEQ) solution at Kiewit.

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