

Early Cost and Schedule Certainty: The ONEprojectTEAM Project Delivery Method

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I am sure you are familiar with the typical scenario that plays out on home renovation TV shows. The client shares a lengthy wish list of must-haves with the designer. All agree on the project's scope, a budget is set, the design is completed, permits are received, and construction starts.

Halfway through the demolition phase, the client pops in to see how the project is progressing and to announce they want to upgrade to granite countertops in the kitchen. It is unfortunate timing because the team just discovered water damage in the bathroom from an old leaky toilet. The entire bathroom floor and plumbing must now be replaced, which was not in the budget.

The designer is left scratching their head, wondering how to make space in the budget for these surprises. Instead of ordering the granite counter, they must account for the replacement subfloor and plumbing. The client is disappointed that they must sacrifice one of their must-haves to make it work, and they won't get what they want.

If you have ever worked on a traditional design-bid-build project, you can probably empathize with the disappointed reality show client.

You've most likely been on the receiving end of vague specifications, unforeseen conditions, schedule delays, and budget surprises for things that simply cost more than expected. You want to receive what you've asked for when you ask for it. There isn't any more money or time, so the project must be executed within the budget you initially planned, but miscommunication, scope definition, and schedule creep may



prevent you from getting everything you want.

What if there were a way to avoid the surprises? What if you could depend on your designer and construction manager as your trusted advisors, who show you design solutions you can afford and mitigate risk through scope definition and shared risk?

No More Surprises: The ONEprojectTEAM Project Delivery Method

Enter the ONEprojectTEAM project delivery method, emphasizing collaboration and communication to arrive at early cost and schedule certainty. This allows the design team to:

- » Prioritize safety and balance quality, schedule, and cost.
- » Create a culture of caring where innovation, trade-offs, quality, and value are integral to the project.
- » Use cost to inform design.
- » Provide early target cost and schedule certainty.
- » Deliver the best value on time and within the allowable budget.

ONEprojectTEAM uses a similar set of steps as a traditional delivery method to arrive at substantial completion but improves efficiency, resulting in overall time savings. Let's compare the steps.

OLD STEP: BASIS OF DESIGN (BOD)

The design phase results in a laundry list of program requirements with minimal concern for cost or schedule. The BOD is a one-and-done step without formal change control. The design team often refines the scope without regard for the value, requiring inefficient value engineering (VE) to return to budgeted cost.

NEW STEP: BUSINESS CASE AND CHARTER PHASE

The entire team of stakeholders develops the value proposition, clearly identifies the conditions of satisfaction, and determines whether the design solution is within the allowable cost. Interactive scope control works through trade-offs via continuous refinement of the scope, not scope reduction. Stakeholders are challenged to improve efficiency with just-in-time decisions.

You do not move on to the next step unless you have met all the criteria.

OLD STEP: PROCUREMENT

Traditional clients wait for the entire design evolution to reach 90% of issued for construction (IFC) before they start material and subcontractor procurement. Construction managers' estimates prepared during design at traditional 30-60-90% are only a non-binding opinion of probable cost without firm input from the material suppliers and specialized contractors who perform the work.

Estimates are beneficial in guiding the design process but typically result in VE without knowing what will be included in the final design or live market pricing. Anybody can take a set of IFC documents and competitively bid the work and

lose months of valuable project planning, coordination, and material fabrication. The wait-until-it-is-fully-designed step takes too long and has little to no ability to influence the overall price without inefficient time-consuming rework.

NEW STEP: TRADE PARTNER SELECTION AND DESIGN ASSIST

Choosing by advantages, a method designed to make decision-making more effective, replaces traditional lump sum bidding by deploying a qualifications-based selection. Trade partners are selected in the charter phase. They become integral stakeholders and trade experts with live market pricing and expertise to detail a federated design model with fabrication grade details.

This virtually eliminates the traditional "wait for design" ethos and replaces it with designing around the best quality material that fits the budget and schedule. The client has a team of subject matter experts to align the details with a keen eye toward best practices, maintenance reliability, and life-cycle cost.

OLD STEP: SCHEDULING

The traditional method tells people what to do without deeply engaging the exceptional planning and scheduling skills shared across the project team.

The plan is often just a well-intended laundry list of things that need to be done and is not bought into by the person performing the task. Nobody wants to be told what to do. High-performing team members prefer to be spoken to as subject matter experts who share the burden of completing the task as a team.

NEW STEP: PULL PLANNING

The key to keeping your schedule commitments is found in time management. Working from a target completion date backward allows tasks to be sequenced so their completion releases work when needed.

According to Parkinson's Law, schedules are self-fulfilling. Work tends to expand to fill the available time. You may take longer than necessary to complete a task or procrastinate, then complete the task right before it is due. Save time by breaking larger tasks into smaller steps and then finish each step in less time, which makes more time for later tasks that often take longer than expected.

Applying time management to design and construction results in lean project execution. With an overarching goal of showing respect for other people and their time, apply these tenets:

- » Optimize the whole.
- » Remove waste.
- » Focus on process and flow.
- » Generate value.
- » Continuously improve.

OLD STEP: ESTIMATING

When the client's maximum allowable cost (MAC) is a secret, the team is left to guess what combination of design solutions and schedule will meet the program requirements and still be within budget. We typically only find we are over budget at the 60% and 90% check estimates, which creates a pandemonium of VE. VE often leads to inefficient rework, cutting items the client requested and losing time.

NEW STEP: TARGET VALUE DELIVERY

Inserting value into the equation and having the client share their MAC builds trust. Team contingency is shared and there is no secret client management reserve.

Success is measured by whether the team delivered the best value within the allotted time and budget. There are no artificial budget constraints. Design, planning, estimating, and coordination are completed collaboratively with value-focused solutions. Surprises are eliminated through continuous alignment on cost and schedule certainty.

How The Project Team Improves Delivery

We are not advocating for converting all designers into cost control analysts, accountants, or estimators. We empower team members to deeply understand their scope of work and identify when a significant element changes beyond simple design development.

An example is a change to the required construction material to improve the system's quality. This alerts the team of the specification change to evaluate the return on investment. For instance, if the team agreed during the charter phase that water quality dictated the pipe specification to include mechanically polished 20rA 304SS as best practice and acceptable, they might reconsider their choice during detailed

design and consider a change to electropolished 15rA 316SS.

To summarize, these are the critical points to maximizing delivery with ONEprojectTEAM:

- » Focus on the best solution for the client. Evaluate what can be done versus what cannot be done.
- » Identify MAC (all-in) budget, completion dates, and value proposition before detailed design commences.
- » Establish minimum criteria for quality.
- » Identify blind spots or places the estimate may need more development. Maintain a risk and opportunities register for the assessment.
- » Empower all team members to collaborate daily to affect the outcome. Fine-tune deliverables along the way to maximize value.
- » Make sure everyone is 100% bought-in with skin in the game. Everyone is empowered to raise their hand when they observe behavior or predict the outcome will be different than expected.
- » Emphasize that new features and elements of scope definition are not additive. Supplemental funding is not an option. If the team missed a project scope item and it is a true program requirement, the team must decrease, or eliminate, a nice-to-have element to compensate as a trade-off.
- » Do not allow change orders or schedule extensions unless the program charter is changed. The client is not going back to the well for supplemental funding if the fundamental program has not changed. Changing the color of paint is not a program change.
- » Monitor design progress and replace predictions (quantity, size, capacities, materials) on scope, firm up expected cost, and price with current market pricing from the contractor performing the work. Present any variances for target value delivery trending and trade-off suggestions.
- » Utilize a variance (trend log) tracking tool for perpetual alignment. Offset funding from within or across work groups before funding from contingency.
- » Synchronize target value delivery with cost accounting and status reports for a current estimate at the complete forecast to improve confidence with value decisions.

How ONEprojectTEAM Builds Trust and Improves Communication

This delivery method enables all stakeholders to build trust and respect, improve integrity and communication through innovation, and promote value, teamwork, and enhanced communication. It allows the client to feel and be heard and not have to deal with an elaborate, never-ending to-do list.

With ONEprojectTEAM, the team shares priorities and everyone helps to get done what needs to be done, when it needs to be done, and hand it off to the person needing the information. The positive impacts of the ONEprojectTEAM with the designer, construction manager, and trade partners can be summed up as follows:

- » Enables the team members to expand their role as a trusted advisor. The method helps clients select the best team based on value and qualifications prior to a competitive bid cycle, where initial low price is routinely the primary driver. The team creates a differentiator by solving program needs with an integrated solution before competitors are engaged. It complements relationship building in early design.
- » Empowers the team to improve efficiency, eliminate waste, deliver design and construction just in time, improve the employee experience, boost morale and quality by getting it right on the first try, and avoid VE, which results in minimal or no rework.
- » Permits the team the ability to lock in scope control where program and design equal, or are always lower than, the budget and nothing is designed that is not in the budget. There is zero balance with clear delineation between scope increase and design development.
- » Allows clear visibility into procurement influence (buy-out), estimate variances, and pending changes to allow near real-time estimate-at-complete forecast.
- » Facilitates maximum client satisfaction by including the client in key project decisions and benefits from technical quality, timeliness, cost-effectiveness, dependability/reliability, cooperation, communication, and high performance.

The Positive Effects of ONEprojectTEAM

The ONEprojectTEAM mindset eliminates the “us” and “them” and creates a team where members are proactively engaged to meet project challenges and have fun. It is encouraged for all to check their ego at the door. It is perfectly acceptable for anyone to share their vulnerability and say they do not have the answer and allow anyone to ask for help without embarrassment. It embraces the philosophy that everyone wants to do a good job and help each other achieve more than they thought was possible.

The positive effects include:

- » Creates a psychologically safe working environment where both client and designer share vulnerability and have fun.
- » Facilitates collaborative conversations that are led with empathy, trust, respect, and integrity and build the foundation for lasting relationships.
- » Relieves the designer from the burden of having to turn down a feature or element of design by simplifying any new scope requests with the question, “Does the budget support the request?”
- » Removes barriers and creates high-performing teams, allowing incremental design decisions to be made when needed to support construction.
- » Cultivates an environment for continuous improvement by recognizing a task well done, positively reinforcing good behavior, and identifying any deltas with suggested corrective action.
- » Establishes strong relationships that allow team members to deliver greater value to the client by removing inefficiencies. 🖋️



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