Project Primer

It's a Blast!

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Greetings

We'd like to announce a newly created service that we call the Project Management "Brown Bag" Training Seminar Series. These process-specific courses are designed to be presented during a 1-2 hour lunch session. Understanding the operational constraints associated with providing training services to personnel on active projects, we developed these process-specific training seminars to allow you to "take it to the field".

About Us

It's our 10 year anniversary this year!

10 year anniversary tidbits:

One of our best kept secrets was our engineering company subsidiary, Engineering Professionals & Constructors, Ltd (EPC)

Estimating

A sound estimate is a key element of every successful project. The Estimating Process is both a science and an art-form. The science is creating a consistent, repeatable, and complete process that presents cost data in a format that is easily understood by both the estimator as well as his audience. The art-form is the ability to interpret a customer's Request for Proposal (RFP) documents, understand what is required to execute the work package, develop a work plan to generate the deliverables, and finally reduce all that effort to proposal pricing that is both competitive and complete.

While the science of estimating can be taught, the art-form is developed through experience. This intellectual capital defines many companies and their competitive edge. Companies that have both a solid cost performance tracking system and formal lessons-learned feedback loop in place generally increase their intellectual capital at a

EPC was organized to build off of our construction management and crisis response capabilities. Sold off in 2007 we estimated, won, and performed engineering projects across the industrial, municipal, and commercial industries. Our specialty was providing structural engineering services to resolve field change requests on a "real-time" basis to minimize the impacts to project schedules and cost budgets for both Owners and Constructors. Projects included airport runway expansions, facility expansions & upgrades for telecommunication firms, multi-story closed-air substations, fuel tank inspections & removals, and structural peer review services in the City of Chicago.

Additional Estimating Resources

12 Tips for Accurate Project Estimating
Project Smart

Estimation
Wikipedia

Plan Your Project
Gantthead

Future Topics

If you have a topic of interest you'd like to see please submit your

much faster rate than their competitors, and as a result they are more successful and profitable.

The science of estimating is fairly straightforward:
1. Tabulate the scope deliverables
2. Break deliverables down into work tasks and activities
3. Sequence the work activities to meet bid schedule requirements
4. Review the work plan and compare to similar past projects
5. Transfer the work plan to a Bid Summary Recap sheet
6. Develop the Bid Summary Backsheet(s):
A. Quantity Takeoff sheet: captures the quantities of all items in the estimate.
B. Labor sheet: determine labor productivity rates, crew sizes, labor rates, and workweek schedule; price-up manpower needs.
C. Equipment sheet: determine equipment rates; price-up equipment needs.
D. Material sheet: obtain material quotes, and price material needs.
E. Subcontract sheet: Obtain subcontractor quotes when applicable.
F. General Conditions/Expense sheet: determine and price general conditions/expense items.
7. Enter the backsheet data into the Bid Summary Recap sheet and apply final mark-ups.

The art-form of estimating encompasses the entire process:

1. Scope

A complete scope may or may not be available and RFP packages generally leave a lot to the interpretation of the estimator. Implied requirements result from poorly written RFP packages, and when not handled properly during the estimating phase can set a project up for failure. Assumptions and clarifications are a powerful weapon that a skilled estimator uses to structure his proposal with a positive spin to address these types of issues and set the project up for success. Simply listing exclusions and exceptions can generate a negative perception of the proposal in the mind of the customer. The artful use of assumptions and clarifications requires seasoned experience and separates successful estimators from their peers.

2. Schedule & Work Plan

Estimators must also understand the appropriate level of detail required to develop a schedule that reflects a workable construction plan. This requires understanding the construction activity sequence well enough to identify and analyze the critical path activities against the contract milestone dates. The skilled Estimator knows how to socialize a workable plan with field staff to quantify the production risk and balance the estimate with Customer constraints to deliver a competitive bid.

3. Pricing

Assigning appropriate costs using the Bid Summary Backsheets requires understanding both the project requirements as well as your Company's business capabilities from the ground up; hence the term "bottoms-up" estimate was coined to reflect this detailed level of understanding.

suggestion on our website
Contact Form

Because creating estimates requires such an extensive knowledge-base, developing seasoned estimators and estimating databases should be an integral part of every successful company's business plan to increase their intellectual capital, competitive edge, and ultimately their market value.

Mike Allen, P.E.
President
Allen & Associates

Service Spotlight

If you haven't visited our website recently, check out our services page and click on the "Brown Bag" training seminar series for a detailed syllabus that describes our 1 to 2 hour lunchtime training courses. We'd be happy to discuss how we can tailor these courses to meet your company's specific needs.

We hope that this month's issue of the "Project Primer" offered you valuable insight on the topic of Estimating, which is crucial to every Company. In many cases this intellectual capital defines both the business and the Company's competitive edge. We hope you see value in the performance tracking tools we have used over the years to help improve this intellectual capital database.

If you have any questions just give us a call. We can be reached at (630) 515-0883 or you can submit a question using our website Contact Form.

Estimating Humor

Pete's Estimating Laws - A Humorous Look At Estimating

1. Everything takes longer than you think (sometimes a lot longer)
2. Thinking about everything takes longer than you think
3. Project Managing and leading a project team is a FULL TIME job, and then some
4. Estimators are always optimistic (generally REALLY optimistic)
5. Schedules are (almost) always wrong
6. If you under-estimated an early task when you wrote the WBS (schedule), you probably under-estimated middle and

later tasks. Revisit the later phases of the schedule as early as possible when you discover early phase schedule (estimate) errors

7. Initially, a good schedule estimate is 80% confidence for near term deliverables, 60-80% for long-term deliverables. Revisit the schedule and revise your estimates after the Initiation Phase (Kickoff) and again after the Design Phase to improve on these early confidence levels
8. Don't let yourself be bullied into committing to something you cannot achieve
9. Don't bully someone else into committing to something they cannot achieve
10. Most people's estimating skills improve with experience; some don't
11. Learn your own estimating flaws and compensate for them. Then learn the flaws in your new estimations and compensate for them. Repeat continuously while employed as a project manager
12. Learn others' estimating flaws and learn to compensate for them. Mentor them on improving their flaws and then compensate for their improvements. Repeat continuously while they are on your project team
13. In some environments, some people are hedging their estimates, some people are expecting them to hedge the estimates and some people are doing neither. It's an interesting problem to get all of them to stop this behavior and have people give honest, best-effort estimates. Laws 14 and 15 are useful for dealing with this variability while you are working to get your team members to be more honest with you. Laws 13-16 are part of the "people aspects" of the project management job - like it or not, we have to deal with these "real world effects" on the projects we manage
14. Be wary of anyone who wants 100% confidence in an estimate. 90% confidence is an exceptional human achievement for any complex task, even with extremely good data
15. Look up the word "estimate" in the dictionary. You may find it useful in a meeting