

Establishing Effective Capital Cost and Schedule Targets

Setting attainable cost and schedule targets is an important consideration in making investment decisions. Most organizations have more opportunities than they have funds to invest. To make the most effective use of available capital and to manage cash flows, organizations require accurate and reliable cost and schedule targets.

Key Benefits

- ▶ **DISCOVER** the data required to provide a sufficient quality estimate to select between options
- ▶ **UNDERSTAND** elements of high quality cost estimates and effective project control plans
- ▶ **IDENTIFY** what drives needed contingency
- ▶ **LEARN** how to handle escalation in cost estimates
- ▶ **INTEGRATE** cost estimates and a project's execution plan
- ▶ **APPLY** learnings to ongoing and future projects
- ▶ **NETWORK** with other project professionals

Course Format

The Establishing Effective Capital Cost and Schedule is a 2-day seminar. Research findings are communicated through lectures. Participants also share their experiences and relate learnings to their own experience through facilitated discussions. In addition, the course includes case studies that enable participants to apply course learnings to real projects. This course can be customized into a private course for your organization. Customization includes an analysis of your organization's cost and/or schedule estimates.

Course Registration Cost

The cost of this 2-day seminar is US\$2000. Early registration and group discounts are available. To view additional registration details and learn about special discounts, please visit our website at www.IPAInstitute.com, or call 703-729-8300.

Certificates with the number of course hours will be distributed to attendees to attain PDUs and continuing education credits.

Target Audience

The program is intended for representatives from owner companies who manage, control, or execute capital projects of all sizes. The program is especially useful for cost estimators and those responsible for cost control or establishing project schedules.

"I learned a lot of specific action that we can take to improve our organization's scheduling and project performance."

- 2008 Course Attendee



Course Content

Evolution of the Project Controls Group Assurance Responsibilities

- Description of the core assurance activities and function within the project services group

Estimate Basis Memorandum (EBM) and Project Cost Environment

- Description of the required deliverables and elements for the EBM
- Quality of the cost and schedule estimates as they progress through the project cycle
- Key project controls, cost and schedule engineering deliverables for each project definition stage
- Relationship between cost estimates and scope development

Other Estimate Considerations

- Understanding cost and schedule tradeoffs
- Contingency setting techniques
- Historical escalation trends for major project cost categories
- Drivers of construction labor and engineering productivity

Project Control Estimating and Scheduling Best Practices

- Quantitative research findings for the following areas:
 - Project controls practices
 - Scheduling practices
 - Early estimating practices
 - Core competencies

Schedule and Estimate Integration

- Project scope and the Work Breakdown Structure (WBS)
- Activity constraints and work calendars
- Schedule diagramming and basic scheduling computations
- Building the baseline schedule
- Resource-loading and cost-loading

CASE STUDY: Using Metrics

- A case study on using metrics to understand estimate quality

Metrics and Practices for Cost and Schedule Estimates

	CONCEPTUAL ESTIMATES <i>Determining the opportunity...</i>	FEASIBILITY ESTIMATES <i>Framing the scope...</i>	DETAILED ESTIMATES <i>Achieving the objectives...</i>
Accuracy	• Bottom line cost (-25% to +30% / -50% to +100% depending on complexity)	• Complete level 1 breakdown (±20% confidence range)	• Authorization estimate (±10% confidence level)
Best Practices	• Estimate for comparing options – High-level scope descriptions – Historical data – Parametric Models (<i>IPA PES® Analysis</i>)	• Documented basis for estimate – Frozen scope – PFDs and preliminary equipment list – Preliminary equipment quotes – Other elements factored (<i>CEC Metrics</i>)	• Detailed estimate for project control – Logical WBS – Firm quotes on major equipment – Quantity take-offs
To Answer:	• <i>What are the business constraints?</i> • <i>How does the investment fit into the portfolio?</i> • <i>What are the various project options?</i>	• <i>What is the best single option for the business case?</i> • <i>Is the cost estimate reliable enough to judge the robustness of the business case?</i>	• <i>Does the team have enough data and adequate definition to develop a competitive estimate?</i> • <i>Is the estimate prepared for control?</i>

Establishing Effective Gated Process

- Key elements, roles, and benefits in the gated process
- Use and misuse of early estimates in decision-making