THE IPA INSTITUTE
ADVANCING PROJECT KNOWLEDGE

Establishing Effective Capital Cost and Schedule Processes

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, organizations require accurate and reliable cost and schedule targets.

Key Benefits

- **DISCOVER** how to obtain data for building an estimate that enables effective option selection
- **UNDERSTAND** elements of high-quality cost estimates and effective project control plans
- **IDENTIFY** what drives needed contingency
- **ACQUIRE** skills on how to handle escalation in cost estimates
- **LEARN** to integrate cost estimates and a project's execution plan
- **APPLY** learnings to ongoing and future projects
- **NETWORK** with other project professionals

Course Format

Establishing Effective Capital Cost and Schedule Processes 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 privately for your organization. Customization includes an analysis of your organization's cost and/or schedule estimates.

The IPA Institute is recognized as a registered education provider with the Project Management Institute (PMI).

Attendees may claim 16 Professional Development Units (PDUs) upon completion of this course.

Project Management Institute
Registered Education Provider

Course Registration Cost

The cost of this 2-day seminar is US$2,000. Early registration and group discounts are available. To view course dates and additional registration details, and learn about special discounts, please visit our website at www.IPAInstitute.com, or call 703-729-8300.

Target Audience

The program is intended for representatives with an intermediate level of experience from owner companies and sponsor organizations, including cost estimators, those responsible for cost control or establishing project schedules, and professionals who have direct interaction with the project controls function.

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

- 2008 Course Attendee

Course Content

Cost Estimating Overview

- What is a project cost estimate?
- Estimate classifications throughout the project life cycle

Schedule Estimating Overview

- What is a project schedule?
- Work Breakdown Structure (WBS)
- Basis of schedule document
- The *Best Practical* level of schedule development at the end of FEL 2 / FEL 3

Cost & Schedule Integration Using the Project WBS

- Essential elements of the project Cost Breakdown Structure (CBS)
- What is the scope definition process?
- General execution strategy process
- High-level process of creating a WBS and its benefits
- Work packages as they pertain to a WBS

Project Controls

- Best Practices for the following areas that correlate with improved project outcomes:
  - Project controls
  - Scheduling
  - Early estimating

Core Competencies & Gatekeeping

- Core competencies within the project services activities and project services functions
- Staffing the gatekeeping function
- What are the benefits of a stage-gated project system?

Validation and Metrics

- The difference between cost/schedule estimate validation and review
- Methods and techniques used to validate cost and schedule estimates
- What are the benefits of cost/schedule estimate validation?

Metrics and Practices for Cost and Schedule Estimates

	CONCEPTUAL ESTIMATES *Determining the opportunity…*	FEASIBILITY ESTIMATES *Framing the scope…*	DETAILED ESTIMATES *Achieving the objectives…*
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 *(IPA PES® Analysis)*	• Documented basis for estimate –Frozen scope –PFDs and preliminary equipment list –Preliminary equipment quotes –Other elements factored *(CEC Metrics)*	• Detailed estimate for project control –Logical WBS –Firm quotes on major equipment –Quantity take-offs
To Answer:	• *What are the business constraints?* • *How does the investment fit into the portfolio?* • *What are the various project options?*	• *What is the best single option for the business case?* • *Is the cost estimate reliable enough to judge the robustness of the business case?*	• *Does the team have enough data and adequate definition to develop a competitive estimate?* • *Is the estimate prepared for control?*

Other Considerations

- The Estimate Basis Memorandum and specific elements within it
- What is contingency, and what is the objective for the contingency included in the estimate?
- Escalation in estimates
- Drivers of improved engineering and labor productivity

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