Sys·tem·a·tion®
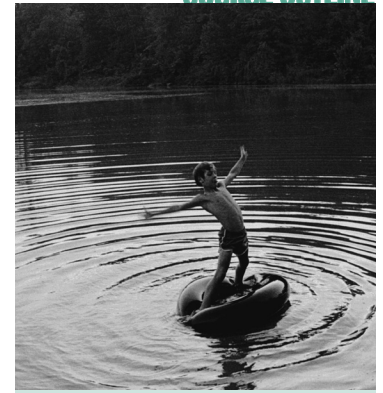
Estimating and Risk Management

Projects present their own unique set of characteristics and concerns, including development costs, speed of completion, quality and reliability. Mastering best practices estimation and risk management techniques is critical if one expects to deliver projects on time and within budget. This workshop not only helps students become more proficient at estimating the parameters of a project's time, cost and performance, but demonstrates the most effective methods of identifying and quantifying risks as well.

DURATION:
Traditional - 2 days.
Virtual - 16 hours.

CAPACITY: 20 people.

WHO SHOULD ATTEND: those who are involved in project estimating and risk management.

PREREQUISITES: none.

PDUs: 16 credits.

FEATURES

- Our facilitators bring real-world experience to every workshop.

- Participants will be led, not lectured, through a combination of presentations and hands-on exercises.

- Our workshops provide an experiential environment where participants can take risks and make adjustments based on their results before approaching large projects.

- Our workshop is consistent with the Project Management Institute's *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)*.

PMBOK is a registered mark of the Project Management Institute, Inc.

DISCOVER HOW TO

- Estimate project characteristics and delivery.

- Explore difficulties, problems, and concerns with estimating projects.

- Understand the obstacles that can occur in accurate estimating.

- Learn reliable estimating methods.

- Perform function point analysis.

- Apply network activity techniques.

- Identify risk.

- Understand the building of an estimating infrastructure.

COMPETENCIES

Initiation
Scope Planning
Risk Identification
Risk Analysis
Risk Response Planning
Cost Budgeting
Cost Control
Risk Management Planning

PM KNOWLEDGE AREAS

Scope Management
Time Management
Cost Management
Risk Management

OUTLINE SUMMARY

Estimating Concepts
- Estimating: what do you estimate and how is it used?
- Definitions
- Difficulties, problems, and concerns
- Project characteristics
- Estimating characteristics
- Estimating accuracy
- Obstacles to accurate estimating
- The estimating challenge
- How to develop accurate estimates

Estimating Methods
- Sizing vs. estimating
- Methods of sizing
- Methods of estimating
- Fuzzy logic
- The Delphi technique
- Comparative estimating
- Cost estimating models
- Effort distribution
- Parametric models
- Prototyping
- Task-based estimating
- Function point analysis
- Network diagrams
- Estimating tools

Task-Based Estimating
- Work breakdown structure (WBS)
- Methods of subdivision
- Understand the task
- Expert opinion
- Weighted average
- Resource profiling
- Baseline effort
- Work interruption factor
- Part-time effect
- Skill factor
- Normalized effort
- Task productivity

Function Point Analysis
- Business functions — outputs, inputs, inquiries, logical files, and interfaces
- Function complexity
- Processing complexity
- Adjusted function points
- Use of function point value
- Counting function points
- Model structure — process, data and data structure, behavior (state)

Network Techniques
- Two primary methods
- Two primary notations
- Network activity
- Precedence
- Precedence logic
- Estimating activity duration
- Network terms
- Formal activity notation
- Critical path

Risk Management
- Ways to identify risk
- Portfolio management
- Checklist
- Risk assessment
- Contingency planning
- Contingencies and reserves
- Risk management method

Infrastructure
- When do you estimate?
- Use of methods
- 7-step estimating program
- Why use metrics?
- Summary of methods
- When to use different methods

Sys·tem·a´·tion®

Get to the Heart of the Matter.®