

€ TRAINING

Value Engineering for Performance
Excellence





Value Engineering for Performance Excellence

Introduction:

This training program is designed to provide the participants with expert guidance for securing real benefits and cost savings by implementing VE in their projects. It significantly enhances creative thinking, problem-solving, objective assessment, and informed decision-making skills.

Program Objectives:

At the end of this program the participants will be able to:

- Gain fundamental knowledge of Value Engineering and Analysis principles.
- Understand how Value Engineering enhances project management practices throughout project development.
- Appreciate the importance of gathering detailed information for developing a comprehensive project scope.
- Organize relevant cost and project information for key project elements effectively.
- Incorporate stakeholders' input into project charter and plan development.
- Evaluate the relationships among cost, value, and function critically to improve overall project value.

Targeted Audience:

- Project or Program Sponsors.
- Project Managers.
- Cost Estimators and Controllers.
- Engineers.
- Designers and Project Staff.
- Anyone Involved in Project Initiation, Engineering Design, and Critical Assessment of Projects.

Program Outlines:

Unit 1:

Framework for Applying Value Engineering in Projects:

- Understand the significance of Value Engineering and its role in project optimization.
- Define Value Engineering concepts and principles to establish a foundation for application.
- Explore the purpose and methodologies of Value Engineering and Value Analysis.
- Assess the strengths and weaknesses of Value Engineering to leverage its benefits effectively.
- Learn how and when to apply Value Engineering in project development stages.
- Initiate the Value Engineering Process by defining project scope, conducting stakeholder analysis, and implementing life-cycle costing techniques.

Unit 2:

The Function Analysis Phase - Expressing Project Functional Needs and Constraints:

- The need for Function Analysis in projects.
- Defining project constraints - relationships and tradeoffs.
- Conceptual project cost estimating techniques and Function-Cost-Worth Analysis.
- Developing FAST Diagrams to identify critical project components.
- The Technical FAST Model to perform project value analysis.
- Case Study.
- Cross-Functional Project Team Approach.

Unit 3:

The Creative Phase - Inspiring Creativity in Your Project Team:

- Creativity and Creative thinking within the project environment.
- Individual vs. Group thinking to improve the quality of project decisions.
- Creativity techniques as applied to optimize project value within the team.
- Brainstorm project solutions.
- Reaching consensus and leveraging the power of project team collaboration.
- Project risk perception and identification.
- The output of the Creative Phase.

Unit 4:

The Evaluation Phase - Making Informed Project Decisions:

- Screen project ideas and evaluate them using both quantitative and subjective methods.
- Utilize objective data and criteria weighting to perform quantitative evaluation of projects.
- Revisit project life-cycle costing analysis and incorporate inflation for accurate economic assessment.
- Conduct project risk and scenario analyses, including life-cycle simulation modeling for best and worst-case cost scenarios.
- Identify pitfalls associated with existing economic models and apply incremental benefit-cost analysis for project evaluation.
- Facilitate effective decision-making in a project environment by synthesizing the output of the Evaluation Phase.

Unit 5:

The Planning and Reporting Phases - Getting Results Through Effective Communication:

- Develop and assess VE proposals to optimize project value.
- Develop action plans and assign project roles and responsibilities.
- Reporting VE findings to Senior Management and project stakeholders.
- Mastering oral presentation techniques & interpersonal skills.
- Strategies for project plan execution.
- Incorporating VE into the early project phases.
- Integrating VE with Continuous Improvement Techniques.