Certified Courses

Professional Certificate

Decision Making in Projects (Engineering)

INTRODUCTION

- Project management professionals are increasingly required to make business decisions under pressure in complex, uncertain and highly dynamic situations. Some decisions expect and allow thorough data gathering and analysis, some are made based on an educated guess or driven by intuition. What drives our choices and judgments? How do we improve the quality of our decisions? How do we influence others' conclusions?
- Through decision making models we do not essentially plan for the risks, but we perform a reality check with what should be the step which shall be taken in response to a particular situation. This situation may account for positive or negative risks and for the risks we can deduce a risk response plan accordingly. Project management thrives on the rationality of decisions and here is where it is important for professionals to have a process which enables project team to decide rationally about different aspects of the project. Rational decision making is required throughout the project life cycle and at each project stage.
- Decision Making in Projects training course explores how to use rational decision-making tools to ensure projects deliver valuable outcomes within time and budget constraints. It covers key decisions during project initiation, planning, monitoring and control to solve typical project management problems. It also considers how to manage uncertainty through the use of contemporary risk management techniques.

Participants on Decision Making in Projects training course will develop the following competencies:

- Identify the problem, gather relevant information
- Look out for the constraints and limitations
- Find, analyse all the alternatives and select the best of them
- Implement and establish a control and valuation system

PROGRAMME OBJECTIVES

Decision Making in Projects training course aims to help participants to develop the following critical objectives:

- Understand the meaning and impact of critical thinking and rational decision making in projects
- Know how to apply key project management tools and techniques at strategic, corporate and operational levels
- Develop and justify viable project management solutions based on a rational analysis and latest findings of decision science
- Appreciate project management processes and knowledge areas
- Improve the quality of business decisions through effective idea generation and analysis, critical thinking, creative problem solving & risk assessment
- Develop skills in project initiation, planning and control
- Apply key qualitative and quantitative analysis techniques to typical project situations

WHO SHOULD ATTEND?

Decision Making in Projects training course is suitable for a wide range of professionals, but will be particularly beneficial to:

- Project management professionals
- Financial planning and forecasting specialists
- Internal auditors and management accountants
- Professionals who make or support project decisions and would like to be able to develop well justified business solutions

TRAINING METHODOLOGY

- Decision Making in Projects training course will combine presentations with instructor-guided interactive discussions between participants relating to their individual interests. Practical exercises, video material and case studies aiming at stimulating these discussions and providing maximum benefit to the participants will support the formal presentation sessions. Above all, the course leader will make extensive use of case examples and case studies of issues in which he has been personally involved.

PROGRAMME SUMMARY

- Decision Making in Projects training course is designed to present the basics of decision science in the project management context, and will have above all a practical focus on decision-making in typical project situations.
- The focus of this training course is on the understanding project management processes and activities. This will include detailed presentation and discussion of contemporary leading-edge approaches to project selection, planning, estimating, scheduling, and effective control.

PROGRAM OUTLINE

Fundamentals of Project Management and Decision Analysis

- Fundamentals of business decision making processes and factors that influence them; decision science; critical thinking
- Strategic, corporate and operational decisions
- What is project management and why is it important?
- Typical problems and difficulties of projects
- The project life cycle and project management processes
- Fundamentals of project selection, classification and option analysis

Project Initiation and Risk Management

- Identifying business needs and their relevant strategic context; problem definition
- Collecting project requirements
- Determining project objectives and scope, priorities and constraints
- Managing risk in projects
- Using analytical tools to help make effective decisions under certainty, risk and uncertainty; payoff tables, decision trees

Problem Solving and Decision Making During Project Planning

- Analysing and developing a project work breakdown structure
- Establishing logical progression of work – project networks
- Estimating task durations and budgets
- Quantitative analysis techniques
- Time scheduling: Critical path ad float

Project Resourcing, Monitoring and Control

- Resource scheduling and budgeting
- Preparing for project execution and communicating the plan
- Project monitoring and control
- Earned Value Analysis
- Decision making to address project creeps and time delays

Project Evaluation and Benefit Realisation

- Successful project completion and hand-over
- End of project evaluation
- Assessing benefit realisation
- Learning lessons from the project
- Improving project decisions

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