Strategic Decision-Making for Engineering Projects

Duration: 5 Days

Language: en

Course Code: PO3-104

Objective

Upon completion of this course, participants will be able to:

- Understand the importance of critical thinking and rational decision-making in project management.
- Apply essential strategic, corporate, and operational management tools and practices.
- Formulate and justify viable management solutions through rational analysis.
- Appreciate the various processes and knowledge areas involved in project management.
- Enhance decision quality through effective idea generation, problem-solving, and risk assessment.
- Develop skills in project initiation, planning, execution, and control.
- Apply qualitative and quantitative analysis techniques to typical project situations.

Audience

This course caters to a diverse audience, including:

- Project management professionals seeking to enhance their decision-making skills.
- Financial planning and forecasting specialists involved in project management.
- Internal auditors and management accountants engaged in project decision support roles.
- Professionals responsible for making or supporting project decisions and seeking to develop well-justified business solutions.

Training Methodology

This course employs a comprehensive and interactive training methodology designed to blend theoretical knowledge with practical application. Participants will engage in various learning activities, including interactive lectures, hands-on exercises, and group discussions, to explore the principles of strategic decision-making. Real-world case studies and scenario-based tasks will provide opportunities to apply decision-making tools and techniques in realistic project settings. Role-playing exercises and simulation activities will help participants practice critical thinking, problem-solving, and risk assessment. Reflective practices and self-assessment tools will allow attendees to evaluate their decision-making processes and identify areas for improvement. This multifaceted approach ensures that participants leave with the skills and confidence to make high-quality decisions in complex project environments.

Summary

In today's fast-paced and complex business environment, management professionals often make critical decisions under pressure. This course is designed to equip participants with the necessary tools and techniques to make high-quality decisions amidst uncertainty. It delves into rational decision-making processes and essential management practices, addressing key challenges in project initiation, planning, execution, monitoring, and control.

Course Content & Outline

Section 1: Foundations of Business Decision Making

- Understanding the fundamentals of decision-making processes and the factors influencing them.
- Differentiating between strategic, corporate, and operational decisions.
- Exploring project management challenges, project life cycles, and management principles.
- Basics of project selection, classification, and option analysis.
- Strategic planning techniques, including problem definition, risk management, and identifying business needs.
- Establishing project objectives, requirements, priorities, and constraints.
- Utilising analytical tools to facilitate effective decision-making.

Section 2: Project Planning and Execution

- Analysing and establishing project structures, networks, task durations, and budgets.
- Application of quantitative analysis techniques in project management.
- Resource scheduling, budgeting, and allocation.
- Preparing for project execution, monitoring progress, and implementing control measures.
- Introduction to Earned Value Analysis (EVA) for project performance evaluation.
- Decision-making strategies to address project creeps and delays.

Section 3: Project Completion and Evaluation

- Achieving successful project completion and handover.
- Evaluating project outcomes and assessing benefit realisation.
- Extracting valuable lessons from completed projects for future improvement.
- Continuous enhancement of project decision-making processes.

Section 4: Risk Management and Scenario Analysis

- Identifying potential risks and uncertainties in engineering projects.
- Classifying risks: technical, financial, operational, and environmental.
- Risk assessment tools: probability-impact matrix, sensitivity analysis, and Monte Carlo simulation.
- Developing mitigation and contingency plans.
- Scenario planning to evaluate alternative courses of action.
- Integrating risk considerations into strategic decision-making.
- Case studies on risk-driven decision revisions in complex projects.

Section 5: Stakeholder Engagement and Communication Strategies

- Mapping internal and external stakeholders in engineering projects.
- Understanding stakeholder influence on project decisions and priorities.
- Strategies for stakeholder alignment and expectation management.
- Communication frameworks to support transparent decision-making.
- Using decision logs and documentation to enhance accountability.
- Managing conflicts and facilitating consensus in high-stakes environments.
- Evaluating stakeholder feedback to improve future decision frameworks.

Certificate Description

Upon successful completion of this training course, delegates will be awarded a Holistique Training Certificate of Completion. For those who attend and complete the online training course, a Holistique Training e-Certificate will be provided.

Holistique Training Certificates are accredited by the British Assessment Council (BAC) and The CPD Certification Service (CPD), and are certified under ISO 9001, ISO 21001, and ISO 29993 standards.

CPD credits for this course are granted by our Certificates and will be reflected on the Holistique Training Certificate of Completion. In accordance with the standards of The CPD Certification Service, one CPD credit is awarded per hour of course attendance. A maximum of 50 CPD credits can be claimed for any single course we currently offer.

Categories

Consultation & Services, Finance, Accounting & Budgeting, Quality & Productivity

Tags

Planning, Decision Making, Project management, Engineering

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