

Complex Project Management

Length: 4 Days

COURSE CONTENT

CONSIDERING THE LIMITS OF CONVENTIONAL PROJECT MANAGEMENT

- Stretching the limits of conventional project management
- Rethinking the future of project management

DEFINING COMPLEXITY SCIENCE, CHAOS THEORY AND PROJECT COMPLEXITY FACTORS

INTRODUCING COMPLEXITY SCIENCE AND CHAOS THEORY

- Comparing and contrasting simple and complex systems
- Applying various complexity modeling techniques

ADOPTING THE FOUR-DIMENSIONAL PROJECT COMPLEXITY DIAGNOSTIC TOOL

- Analyzing project boundary conditions to understand the complexity of your project
- Determining the edge of chaos
- Assessing the significance of complex project risks
- Communicating project complexity factors to others

EMPLOYING AN ADAPTIVE PROJECT MANAGEMENT PROCESS

BEGINNING WITH ADAPTIVE PRINCIPLES

- Building with Agile software development

- Borrowing from the combat operations loop and the scientific method

THE FOUR-STEP ADAPTIVE PROJECT MANAGEMENT PROCESS

- Implementing rolling wave planning and progressive elaboration
- Managing adaptive requirements, change and quality
- Scheduling, budgeting and metrics on complex projects

MINIMIZING SCALE ON STRATEGIC PROJECTS

ALIGNING WITH CORPORATE STRATEGY AND VALUE ENGINEERING

- Executing portfolio management strategies
- Making the business case and delivering value
- Utilizing business capability and purpose alignment models

DEVELOPING SMALL, STRATEGIC BATCHES OF WORK

- Applying Van Creveld's Iron Rule and Occam's Razor
- Delivering minimal marketable features

MANAGING PACE ON COMPLEX PROJECTS

MAINTAINING CONTROL THROUGH SPEED AND AGILITY

- Dealing with daily disruptions
- Employing fast-tracking and crashing
- Compressing the critical path

INCORPORATING CRITICAL CHAIN AND LEAN TECHNIQUES

- Evaluating Critical Chain project management
- Employing the theory of constraints and five focusing steps to eliminate waste and optimize flow

EXERCISING STRONG LEADERSHIP

LEADING ADAPTIVE TEAMS

- Developing your core competencies
- Growing your sphere of influence and managing politics

BUILDING CRACK TEAMS

- Facilitating emergent organization and self-management
- Agreeing on vision, goals, objectives and values
- Empowering and motivating the team
- Implementing effective feedback loops

RECOGNIZING AND MANAGING RISKS

IDENTIFYING AND MANAGING RISKS WITH SCENARIO MODELING

- Quantifying and mitigating risk threats
- Exploiting risk opportunities for disruptive innovation

IMPLEMENTING PROBABILISTIC ESTIMATING TOOLS AND TECHNIQUES

- Managing precision and accuracy
- Correcting estimating bias and reducing variability
- Revisiting the cone of uncertainty and order of magnitude estimating

- Leveraging PERT, Monte Carlo and Agile techniques

BUILDING YOUR PERSONAL ACTION PLAN

- Putting it all together
- Analyzing a real-world case study
- Assessing your own real-world projects
- Identifying specific actions you will take
- Gaining support and managing risks