

## Complex Project Management - 4 Days

### Achieving Success on the Edge of Chaos

*Course 287 Overview*

#### You Will Learn How To

- Manage complex projects involving strategic risks and aggressive time scales
- Incorporate the emerging science of complexity thinking into your project management strategies
- Apply a unique complexity assessment model and an adaptive four-step process to strategic projects
- Minimize uncertainty by leveraging best practices from Critical Chain, Agile and Lean approaches
- Lead adaptive teams and exploit opportunities for project performance and product innovation
- Build a strategic project management toolkit to establish yourself as a thought leader within your organization

#### Course Benefits

Emerging sciences of complexity, chaos and agility provide new models and strategies to improve the conventional approaches to project management. Through an intensive four-day project simulation, you experience real-world situations in which your recommendations and decisions impact the outcome of your project. You also develop a toolkit of templates and productivity tools for use back at work.

#### Who Should Attend

Anyone managing, preparing or aspiring to manage large-scale, strategic or complex projects. Experience at the level of Course 296, "Project Management: Skills for Success," or Course 340, "Project Management for Software Development," is recommended.

#### RealityPlus™

Through an authentic case study simulation, you gain experience managing business issues in a complex project. Activities include:

- Identifying the limits of conventional project management
- Analyzing the components of a complex project
- Applying a complexity assessment model to a realistic case study
- Building an adaptive project management plan using a four-step process
- Decomposing a complex program into manageable components
- Delivering probabilistic estimations
- Optimizing your project with Critical Chain, Agile and Lean best practices
- Tracking lessons learned for improvement

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#### Course 287 Outline

#### Considering the Limits of Conventional Project Management

- Charting the evolution of 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

- Exploring foundational shifts in philosophy and science
- Comparing and contrasting simple and complex systems
- Appreciating the implications for project management

#### Adopting the four-dimensional project complexity diagnostic tool

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

#### Employing an Adaptive Project Management Process

##### Beginning with systems engineering

- Building with Agile software development
- Integrating the Cynefin Framework, scientific method, the Deming cycle and combat operations loop

##### The four-step adaptive project management process

- Implementing the four steps and putting it all together
- Overcoming complexity one step at a time

#### Minimizing Scale on Strategic Projects Aligning with corporate strategy and value engineering

- Executing portfolio management strategies
- Making the business case and delivering value

#### Employing adaptive requirements and change management processes

- Running adaptive project iterations and delivering product increments
- Managing change and ensuring quality among dynamic user needs

#### Managing Pace on Complex Projects Maintaining control through speed and agility

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

#### Assessing Critical Chain, Lean and Kanban

- Evaluating Critical Chain project management
- Integrating Lean, Value Stream Mapping, Kanban and Kaizen

#### Exercising Strong Leadership

##### Leading adaptive teams

- Developing your core competencies as a complex project manager
- Growing your sphere of influence and managing office politics

##### Building CRACK teams

- Facilitating emergent organization and self-management
- Agreeing on command intent, objectives, values and ground rules
- Empowering and motivating the team
- Implementing effective feedback loops

#### Recognizing and Managing Risks 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

#### Identifying and managing risks with scenario modeling

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

#### Building Your Complex Project Management Toolkit

- Assessing the complexity of your projects
- Mapping your transition to adaptive project management
- Anticipating challenges and risks
- Overcoming organizational resistance
- Building your personal action plan