

# Advanced Project Risk Management

Apply the principles of Risk Management with practical tools to make effective business decisions



## Seminar Focus

- Develop Enterprise-Wide Risk Management by understanding the hierarchy of business objectives
- Use Return on Sales, Return on Investment and Economic Value Added to analyse risk to the bottom line
- Investigate Business Care by assessing risks to business benefits
- Analyse Contractual Risks with financial metrics to assess impacts both to margin and cash flow
- Use Simulation Techniques including Monte Carlo simulation with @Risk® software
- Explaining Emotional Literacy, understanding and controlling risk attitudes

## Overview

**This seminar sets off with the accepted principles of project risk management, then moves quickly onto some of the really practical tools and techniques that are being used as best practice**

You will see how risks can be modelled not just using standard tools such as Microsoft Excel®, but also using decision and simulation tools such as @Risk®. The software will be used on real project data in a simulation exercise. You will be invited to use a demonstration copy of @Risk® on your own laptop or follow the exercises on the presenter's data projector.

This seminar looks not only at project risk, but also risk to the achievement of business benefit, using appropriate financial analysis techniques applied to the project and across your business portfolio.

Another emphasis is on contract risk – every clause in your contract with customers or suppliers may have an impact on the real price you pay or are paid, and even more importantly the cash-flow implications to your business. You will see how these risks can be identified, measured and mitigated by using the right contract structure.

This seminar will show you how to understand the risks you face in your projects and how the right contract type incentivises optimum performance.

You will see how best case, worst case and expected case can be realistically calculated and budgeted for in your project, with effective control of a contingency fund. Plan your risk responses and use PrecisionTree™ software to analyse and calculate complex decisions.

Lastly some consideration will be given to how risks may be perceived in your organisation, and how you can move your organisation towards a truly risk-thinking one.

## Benefits of Attendance

**This seminar will use real-life case study material to explore tools and techniques appropriate in any Risk Management environment**

Experienced Project Managers who need to improve management of risk will learn new practical tools and techniques including:

- Financial Measurement of Risk – the use of financial measures such as Return on Sales, Return on Investment and Economic Value Added to analyse risk to the bottom line
- Business Case Risk – Assessing risks to business benefit. Analysing risk within the RFP (Request for Proposal)
- Customer – Partner – Supplier Risk - Developing the Right Contract – the different types of contract, fixed price, cost re-imburement, incentivised “pain - gain” contracts. When and how to use them
- Using Monte Carlo simulation @Risk® software to assess the range and probability of various project outcomes. Application to business models in both Microsoft Excel® and Microsoft Project®
- Use practical tools for decision making including PrecisionTree™. Apply sensitivity analyses to see where the critical areas of the project lie
- Risk Monitoring & Control – budgeting for risk response, calculating a realistic contingency fund and effective budgeting
- Enterprise-Wide Risk Management – the hierarchy of business objectives and applying risk management across them
- Project Risk Maturity – Move towards being a “risk-thinking” company

All delegates will receive a course workbook containing the full course presentation, with supplementary exercises, solutions and case studies, plus a demonstration CD version of @Risk® from Palisade.

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## Who Should Attend

- This event is a must for anyone involved in a project which is subject to uncertainty, especially: Project/Program Leaders, Project Sponsors, Program Managers and experienced Project Managers.
- Participants MUST have a solid understanding of basic Risk Management techniques

## Course Topics

### DAY ONE

#### Session 1 ~ Key Concepts

- Uncertainty, risk and opportunity
- Review of the PMBOK (PMI)® risk management process
- Structuring risk using the Risk Breakdown Structure (RBS)

#### Session 2 ~ Pre-Contract Risk Management

- Aspects of Business Case risk
- Assessing risks to business benefit
- Seller risks - analysing risk within the tender/bid document
- Buyer risks - analysing risk within the proposal
- Separating sources of risks, risks and impacts of risk

### Case Study ~

#### Session 3 ~ Financial Measurement of Risk

- Quantifying risk impacts on the bottom line
- Financial measures of risk: Return on Sales, Return on Investment, Economic Value Added

### Exercise ~

#### Session 4 ~ Analysing Contract Risks

- The nature of contractual obligations
- How risks are apportioned in contracts
- Analysing where the risks and opportunities lie in the contract
- Using financial measurements to quantify risks in contract

### Case Study ~

#### Session 5 ~ Contract Type

- Understanding different contract types
- Fixed price, cost-reimbursement, time & materials, incentivised "pain-gain" contracts
- When and how to use the different types of contract

### Exercise ~

## Testimonials from past Advanced Project Risk Management courses:



I'm very pleased with the course and impressed by Rick's professionalism and knowledge.

**SAP**

Great! The part related to contractual risks could be presented as a separate course. I feel a great value of it.

**Penkiu Kontinentu**

Very useful and professionally conducted.

**Carlsberg**

It was a good course, specially trainer is excellent person, do give this kind of course. I am looking forward for the cooperation with him (of course our company).

**Mittal Steel**



# Course Topics

## DAY TWO

### Session 6 ~ Reserves (Contingency) Planning

- Overview: creating a realistic budget to include contingency reserves
- Managing time, resource & financial reserves

### Session 7 ~ Quantitative Risk Analysis (QRA)

- Review of impact vs. probability analysis
- Calculating and using expected values
- Identifying best, worst and likely cases within the budget as well as acceptable tolerance

## Exercise ~

### Session 8 ~ Monte Carlo Analysis

- Quantifying risk using Monte Carlo simulation
- Setting up the model
- Analysing simulation outputs
- Applying Monte Carlo to quantification of realistic project contingency reserves
- Understanding sensitivity analysis

### Session 9 ~ Business Case Analysis using @Risk™ for Microsoft Excel

- Setting up the model
- Running the simulation
- Analysing simulation output

## Case Study ~

### Session 10 ~ Schedule Analysis using @Risk™ for Microsoft Project

- Setting up the model
- Running the simulation
- Analysing simulation output
- Understanding criticality

## Case Study ~

### Session 11 ~ Decision Analysis

- Using decision trees to plan optimum risk responses
- Use of PrecisionTree™ software to calculate complex decisions
- Analysis of sensitivity

## Exercise ~

### Session 12 ~ Managing Risk Attitudes

- Emotional Literacy
- Understanding and controlling risk attitude

### Session 13 ~ Moving Towards Risk Maturity

- Enterprise-Wide Risk Management – the hierarchy of business objectives and applying risk management across them.
- Project Risk Maturity – How to move your company towards being a “risk-thinking” company

## Seminar Timetable

Registration will be from 08.00 to 08.30 every morning. Lunch and refreshments will be provided. The course will finish at approximately 17.00 each day.