



Project Managers Network

Creating capability in Project Management

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Course PMNSWR – Mastering Software Risk

Project Managers Network Pty Ltd offers clients a variety of courses dealing with all levels of experience in Project Management. All the courses and workshops run by the company are based upon the ANSI standard framework developed by the Project Management Institute of the USA (A Guide to the Project Management Body of Knowledge – PMBOK®) and now an Australian Standard **CB 025-2002**. They are also aligned with Australia's National Competency Standards for Project Management (NCSPM).

Mastering Software Risks is an intensive one-day IT management workshop that reviews the full spectrum of risks and risk management techniques commonly encountered in Software Development. Risk is an inherent part of the software development life cycle which must be managed to ensure success. As a result, successful software project managers are usually skilled risk managers, since software projects are risky by nature.

This workshop reviews a systematic eight-step system for consulting stakeholders, identifying, assessing, and managing software project risks throughout the development cycle. Attendees will learn how to analyse and classify risks, to establish an acceptable level of risk, and to develop a practical risk response plan.

The workshop is aimed at IT management and practicing project managers or team leaders who currently are usually engaged in software development projects. All participants are assumed to have a working knowledge of PM practices and some hands-on project management experience.

Learning outcomes

The course will extend the attendees by providing applying best practices in a team situation to simulate major tasks and decisions made by project managers:

- Manage software project risks using a proven eight-step process
- Understand risk as a part of the software life-cycle
- Apply simple but effective tools to identify, assess, prioritise and respond to risks
- Develop appropriate responses or control strategies to identified risks
- Overcome psychological barriers to risk in stakeholders and team members
- Develop practical response strategies for the most common (and most serious) software risks
- Obtain stakeholder commitment for your risk management programme

Attendance

One day's duration. The program will run from 9.00 am to 5.00 pm with short breaks for lunch, morning and afternoon refreshments. The course is intensive and covers considerable material. Maximum attendance is 20 to allow reasonable levels of interaction.

Learning approach

Interactive presentations by the Course Leader are used to elicit what the group already knows about Software Risk Management, and to provide a context for explaining principles.

Small workshop groups will be formed to work on case study examples and specific exercises provided during the workshop, to assist with the application of the principles and to provide feedback to participants. Handouts will show suggested solutions to selected case study questions and exercises, and time will be provided for reflections on the learning experience within each session.

A comprehensive workbook of course material and suggested worked solutions for workshop exercises will be provided to each participant.

Attendees are asked to bring a simple calculator to the sessions, to assist in some of the risk assessment exercises.

Course outline

Unit No.	Topic	Content
1	Introduction	<ul style="list-style-type: none">a) Introduction to course. Review of reference materials and case examplesb) Why software risk management is crucial<ul style="list-style-type: none">• Avoiding disasters - examples• Avoiding reworkc) How to develop a software risk management plan – an overview (PMBOK and Australian Risk Standard)
2	Software Risk Management Process	<ul style="list-style-type: none">• The 8 steps to managing risks – planning & consulting, identifying, analysing, prioritising, developing responses, assigning responsibilities, implementing and reviewing.
3	Common tools and techniques	<ul style="list-style-type: none">• Risk registers, risk rating systems, the Australian Standard and its methods• Review of software tools
4	Specific Software Risks and response strategies	<ul style="list-style-type: none">• External Risks Vs Internal risks• Most common software risks and the most serious software risks• Risk factors which resist change - what to do about them• Risk Factors associated with commercial software (COTS) products

Unit No.	Topic	Content
6	Analysing the impact of software risks	<ul style="list-style-type: none"> a) Classifying risks – risk tolerance; factors related to a project’s size, complexity, and personnel capabilities b) Weighing risk factors c) Methodologies for assessing financial risk <ul style="list-style-type: none"> • Return on Sales • Net present value • Return on assets • Economic value added • Expected value d) Tools for analysing risk <ul style="list-style-type: none"> • Work breakdown structures • PERT/CPM analysis • Gantt charts and staffing curves • Performance modelling • Prototyping
7	Controlling and responding to software risks	<ul style="list-style-type: none"> • Practical issues affecting your risk response strategies - assigning responsibilities • Monitoring risk – ongoing responsibilities; looking for risk indicators; reassessing risks • Responding and taking corrective actions – revising the plan, communicating the plan
7	Wrap up	<ul style="list-style-type: none"> • Applying the principles. Other sources of information. • Developing a life cycle risk plan • Establishing links between stakeholders / customers and the developers • Verifying and validating software requirements and design specifications