



MONASH University

ITS PROJECT OFFICE

Risk Management @ Monash

*A guide to Risk Management
of IT projects at Monash*

Table of Contents

1. Introduction.....	1
2. Benefits of Risk Management.....	1
3. The Risk Management Process.....	1
3.1 Risk Management Plan.....	1
3.2 Risk Identification.....	2
3.3 Risk Analysis.....	2
4. Responsibilities.....	4
5. Glossary.....	5
6. References.....	5
Appendix A: Likelihood and Impact Rating Guidelines.....	6
Appendix B: Overall Risk Rating Matrix.....	7
Appendix C: Risk Management Plan Template.....	8

1. Introduction

This guide to project risk management at Monash aims to define and promote an understanding of the main elements and requirements of risk management for the successful implementation of information technology (IT) projects. It also outlines tools and documentation that should be utilised when employing risk management practices.

This guide is based on the Monash Audit and Risk Management Branch's "*Risk Management: Policy & Guidelines*", the thomsett organisation's 'third wave' project risk management process and the Risk Management Standard AS/NZS 4360:1999.

2. Benefits of Risk Management

Well-managed projects, employing best practice processes and techniques, are more likely to be successful and not experience delays and budget overruns. The effective management of project risks is an integral part of best practice project management and contributes to a smooth and successful project development and implementation.

By focussing on potential risks in the planning stages of a project and implementing strategies that reduce the impact and likelihood of those risks occurring, costly surprises can be avoided. A rigorous risk management process makes it easier for the Project Manager to keep the project on schedule and budget. It also provides a framework for ensuring that unavoidable risks are adequately insured.

The adoption of a methodical risk management process promotes greater openness in decision-making and improves communication within the project team and with stakeholders. It also provides senior management with a register of the major risks affecting the project and a mechanism to ensure that appropriate resources are directed towards areas of high risk.

3. The Risk Management Process

3.1 Risk Management Plan

The major deliverable of the project planning phase is the Project Charter, which defines the scope, objectives, plans and other significant aspects of the project. This includes a detailed identification and analysis of the project risks, and is specified in a Risk Management Plan, which needs to be approved by the Project Sponsor.

A Risk Management Plan includes the following information:

- A description of each project risk and how it will affect the project;
- The likelihood that a risk will occur and the associated impact on the project;
- A risk rating (low, medium, high or critical);
- A description of the mitigation strategies that can include preventative, minimisation and/or contingency actions;
- The person allocated responsibility for managing the mitigation strategy;
- The current status of each mitigation strategy.

A template for the Risk Management Plan can be found at the ITS Project Office website:

http://www.its.monash.edu.au/projects/project_management/managing_risk.html

3.2 Risk Identification

Project risks are usually identified and analysed by involving a wide cross section of project stakeholders and are best done at a single purpose meeting or RAP (Rapid Planning) session led by a skilled facilitator. For a small project, however, it may be sufficient for the risk identification and analysis to be performed jointly by the Project Sponsor and Project Manager.

To aid in the risk identification process, a number of tools, checklists and templates are available at the ITS Project Office website:

http://www.its.monash.edu.au/projects/project_management/managing_risk.html

3.3 Risk Analysis

The analysis process involves discussion and agreement on the potential risks to the project. As this process is subjective, different people have different views on what constitutes a risk. The process should record all views democratically with the majority view being accepted as the guide. Should a split decision result from the democratic process then the higher risk factor should be used.

For each risk identified, the following needs to be established:

- the probable cause of the risk
- the likelihood that the risk will occur
- the impact of the risk occurring in terms of its financial and non-financial impact.

(See Appendix A for guidelines on likelihood and impact ratings).

Risks are rated (in terms of Critical, High, Medium, Low) according to their potential impact and likelihood of occurrence. This is done by multiplying the Likelihood Rating with the Impact Rating and checking the Overall Risk Rating Matrix.

(See Appendix B for the Risk Rating Matrix).

3.4 Risk Management

The next step is the development of risk mitigation strategies to cost effectively reduce, contain or control project risk. There are two broad types of risk mitigation strategies:

- Preventative: planned actions to reduce the likelihood a risk will occur and its associated impact
- Contingency: planned actions to reduce the seriousness of the risk, if it does occur.

Often decisions need to be made regarding the acceptance of certain risks as opposed to the costs of mitigation, i.e. some risks may require an expensive mitigation strategy, but the risk itself may have a low likelihood of occurrence or low impact on the business. In this case it may be acceptable to just wear the risk.

Risk management is not a one-off activity, as risks can change as a project progresses or new risks may emerge. It is possible for a project initially assessed as low risk to quickly escalate into a high-risk project. Therefore project risks and mitigation strategies should be monitored and reviewed by the Project Manager on an ongoing basis.

Communication of changes to project risk with all key stakeholders should also be an ongoing process. The Risk Management Plan should be updated as risk factors change. As the Plan forms part of the Project Charter, all significant changes should be signed-off by the Project Sponsor.

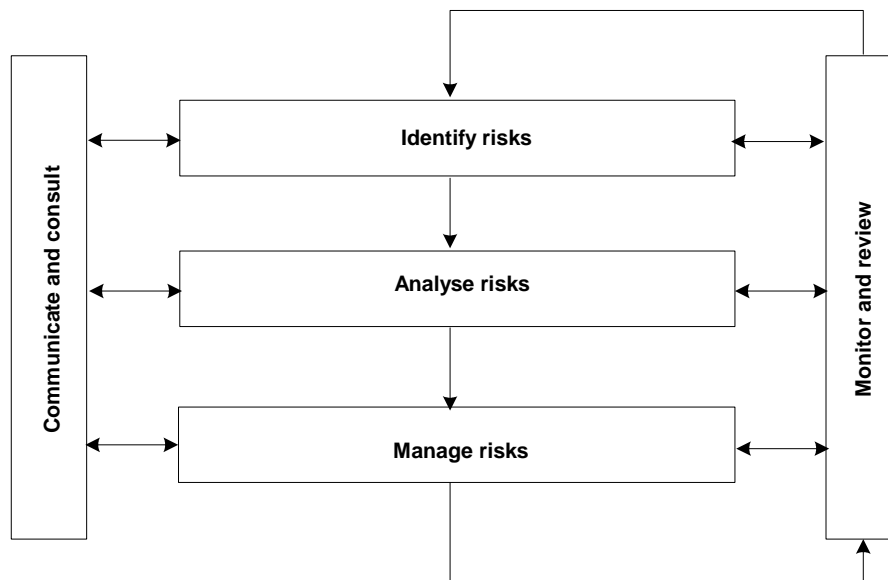


Figure 1: Main elements of the risk management process

4. Responsibilities

The primary responsibility for managing project risks lies with the Project Manager. However, many people involved in a project will have some responsibility for project risk management, including the development team, Steering Committee, Project Sponsor and stakeholders. It is important that project team members report potential risks (or changes to existing risks) to the Project Manager as they become aware of them.

Risk management key roles and responsibilities are as follows:

Project Manager:

- Monitors and manages all aspects of the risk management process, including:
 - The development and maintenance of the Risk Management Plan
 - The ongoing monitoring of the project to identify any new, changed or eliminated risks
 - Reporting on status of risks to the Project Sponsor, Steering Committee and ITS Directors.

Project Sponsor:

- Provides input into the Risk Management Plan, especially assessment of potential risks and risk mitigation actions
- Ensures that there are adequate resources for managing the project's risks
- Ensures that there is adequate active participation in the risk management process by a wide cross-section of stakeholders.

Stakeholder:

- Provides input into the Risk Management Plan
- May also be responsible for some risk mitigation actions.

Development Team Member:

- Assists with the identification and analysis of risks
- Assists in the development of the Risk Management Plan
- May be responsible for some risk mitigation actions

Steering Committee:

- Oversees the Risk Management Plan and its periodic review
- Ensures an effective risk management plan is in place throughout the life of the project.

5. Glossary

Impact

The consequence and seriousness of a risk event occurring.

Likelihood

A subjective estimate of the chance that a risk event will occur.

Risk

Refers to any factor that may adversely affect the successful completion of the project in terms of achievement of its outcomes, delivery of its outputs, or adverse effects upon resourcing, time, cost or quality. The higher the risk of the project, the higher the probability that it will fail.

Risk Analysis

A process to assess identified threats to the success of the project, which results in working papers of the current assessment for each threat (both likelihood and seriousness), a risk rating and strategies for mitigating the risks. The results of this analysis are documented in the Risk Management Plan.

Risk Management

Risk Management is defined in the Risk Management Standard AS/NZS 4360:1999 as the culture, processes and structures that are directed towards the effective management of potential opportunities and adverse effects.

Risk Management Plan

A formal plan of the strategies for containing and managing project risk. It includes a description of the risk, the impact of the risk on the project, the actions that can be taken to reduce the risk and, if necessary, a contingency plan.

Risk Mitigation

A strategy to prevent, minimise or eliminate a risk in order to reduce uncertainty on the project.

Risk Rating

The degree of risk determined by multiplying the likelihood rating and impact rating.

6. References

- Monash University, Audit & Risk Management, *Risk Management Policy & Guidelines*
- <http://thomsett.com.au>

Appendix A: Likelihood and Impact Rating Guidelines

Likelihood Rating Guidelines	
RATING	DESCRIPTION
Almost Certain (5)	There is little doubt that the event will occur History of regular occurrence at the University and/or similar projects
Likely (4)	There is a strong possibility that the event will occur History of frequent occurrence at the University and/or similar projects
Possible (3)	There is a possibility that the event will occur History of casual occurrence at the University and/or similar projects
Unlikely (2)	There is a slight possibility that the event will occur History of casual occurrence in similar projects
Rare (1)	It is highly unlikely that the event will occur

Impact Rating Guidelines	
RATING	EXAMPLES
Catastrophic (5)	<ul style="list-style-type: none"> • Demand for government enquiry • Long-term cessation of core activities • Impacts on a majority of staff and students • Has a large financial impact (loss of revenue or unexpected cost)
Major (4)	<ul style="list-style-type: none"> • Significant unfavourable public/media attention • Short-term cessation of core activities • Impacts on a significant number of staff and students • Impact is felt across multiple faculties and departments • Has a significant financial impact (loss of revenue or unexpected cost)
Moderate (3)	<ul style="list-style-type: none"> • Some unfavourable external media coverage • Significant long term disruption of non-core activities • Impacts a limited number of departments, staff or students • Has some financial impact (loss of revenue or unexpected cost)
Minor (2)	<ul style="list-style-type: none"> • Probable limited unfavourable media coverage • Significant short-term disruption of non-core activities • Has a small financial impact (loss of revenue or unexpected cost)
Insignificant (1)	<ul style="list-style-type: none"> • Unlikely to have impact on corporate image • Minimal impact on operations • Insignificant financial loss

Appendix B: Overall Risk Rating Matrix

Likelihood	Impact				
Almost Certain (5)	Medium (5)	High (10)	High (15)	Critical (20)	Critical (25)
Likely (4)	Low (4)	Medium (8)	High (12)	High (16)	Critical (20)
Possible (3)	Low (3)	Medium (6)	Medium (9)	High (12)	High (15)
Unlikely (2)	Low (2)	Low (4)	Medium (6)	Medium (8)	High (10)
Rare (1)	Low (1)	Low (2)	Low (3)	Low (4)	Medium (5)
	Insignificant (1)	Minor (2)	Moderate (3)	Major (4)	Catastrophic (5)

Action Required

Critical & High:	Management Strategies to be developed, implemented and reported to Project Sponsor and ITS Project Office. The ITS Project Office will report all risks at this level to the ITS Directorate.
Medium:	Management Strategies to be developed and implemented by Project Manager
Low:	Acceptable risk level - managed by normal control procedures

