

Risk Management



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\$\$\$ loss

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health &
safety issue

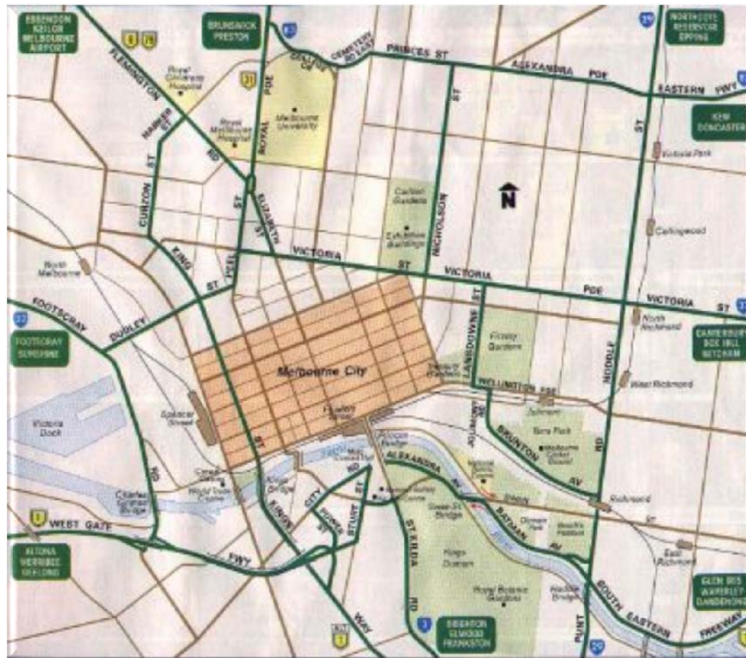
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Do I still have
my job?

Risk Analysis Assignment 2017

Assignment Overview



Students are required to identify a project within the Melbourne metropolitan area that contains a wide range of technical and/or commercial risks.

Assignment Overview



The chosen project and situation shall then be assessed using qualitative risk analysis techniques and a report prepared:

- *To describe the project & the risk context,*
- *To describe the risk analysis tasks undertaken*
- and*
- *To report the outcome of the assessment.*

Assignment Methodology

The assignment shall be undertaken by teams of four (4) students.



ID	Task Name	Start	Finish	Duration	1992				1993				1994				1995				1996				1997			
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1	Foundations	1/09/1992	1/09/1994	104.9w	1																							
2	Towers	1/09/1993	3/03/1994	43.4w					1																			
3	Temporary Footbridge	2/09/1994	3/09/1994	8.8w												1												
4	Wire Manufacture	1/9/1992	1/5/4/1994	78.4w	1																							
5	Cable Spinning	1/7/1994	1/5/3/1995	36.8w											1													
6	Steelwork Fabrication	1/3/1993	1/4/4/1995	111.1w					1																			
7	Deck Assembly	2/0/9/1993	2/9/1/1995	123.2w											1													
8	Deck Erection, Suspended Spans	1/5/9/1995	1/2/3/1996	43.4w															1									
9	Deck Erection, Taiang Yi Approach	1/5/1/1994	1/5/1/1995	52.4w															1									
10	Deck Erection, Ma Wan Approach	2/0/1/1995	1/5/2/1996	58.8w															1									
11	Railway Works	1/0/1/1996	1/3/9/1996	37w																1								
12	Surfacing & Finishes	1/1/1/1996	2/8/3/1997	25.8w																						1		

The first action will be to prepare and agree on a work plan working back from the submission date.

Assignment Methodology

CHOOSING A PROJECT & PROJECT SITUATION



An existing physical project & situation should be chosen to enable photographs and diagrams to be included in the assignment report.

Assignment Methodology

CHOOSING A PROJECT & PROJECT SITUATION



A project where it is possible to obtain information from actual project stakeholders would provide a big advantage for the task force but is not essential.

No hypothetical or generic projects or events can be used.

Assignment Methodology

CHOOSING A PROJECT & PROJECT SITUATION

- A qualitative risk analysis is commonly used in all industries & technical disciplines.
- It is also used for all aspects of project management:
 - Planning;
 - Procurement;
 - Design;
 - Construction;
 - Maintenance;
 - Operations;



Assignment Methodology

CHOOSING A PROJECT & PROJECT SITUATION

Risk analysis is used to manage:

- commercial risks,
- technical risks and
- reputational risks.



Assignment Methodology

CHOOSING A PROJECT & PROJECT SITUATION

The project could be identified in the following business sectors:

- Transport;
- Buildings;
- Manufacturing;
- Recreation/hospitality;
- Municipal;
- Utilities



Assignment Methodology

CHOOSING A PROJECT & PROJECT SITUATION

The project could be identified in the following business sectors:

Transport:

- Railway station operations & maintenance;
- Railway infrastructure operations & maintenance;
- Railway infrastructure new works;
- Tram operations & maintenance;
- Tram new works;
- Road operations & maintenance;
- Road new works;
- River ferry operations;

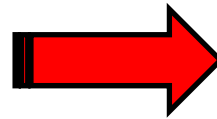


Assignment Methodology

CHOOSING A PROJECT & PROJECT SITUATION

Transport:

Railway infrastructure new works: Level crossing removal



Assignment Methodology

CHOOSING A PROJECT & PROJECT SITUATION

The project could be identified in the following business sectors:

Buildings:

- Commercial, retail or residential;
- Operation scenario (normal, emergency, maintenance)
- New works scenario (construction “green field” or “brown field”)

Manufacturing Facilities:

- Operational scenario;
- Environmental compliance;
- Loss of production;
- Return on investment;



Assignment Methodology

CHOOSING A PROJECT & PROJECT SITUATION

The project could be identified in the following business sectors:

Recreation/Hospitality:

- Night club operations and maintenance;
- Restaurant operations and maintenance;
- Theatre operations and maintenance;
- Sporting event operation (city marathon);
- Venue emergency management situation;



Assignment Methodology

CHOOSING A PROJECT & PROJECT SITUATION

The project could be identified in the following business sectors:

Municipal:

- Major events operation (city parade);
- Waste collection & disposal operations;
- Traffic and parking operations;
- Road & footpath maintenance;
- Public gardens operation;



Assignment Methodology

CHOOSING A PROJECT & PROJECT SITUATION

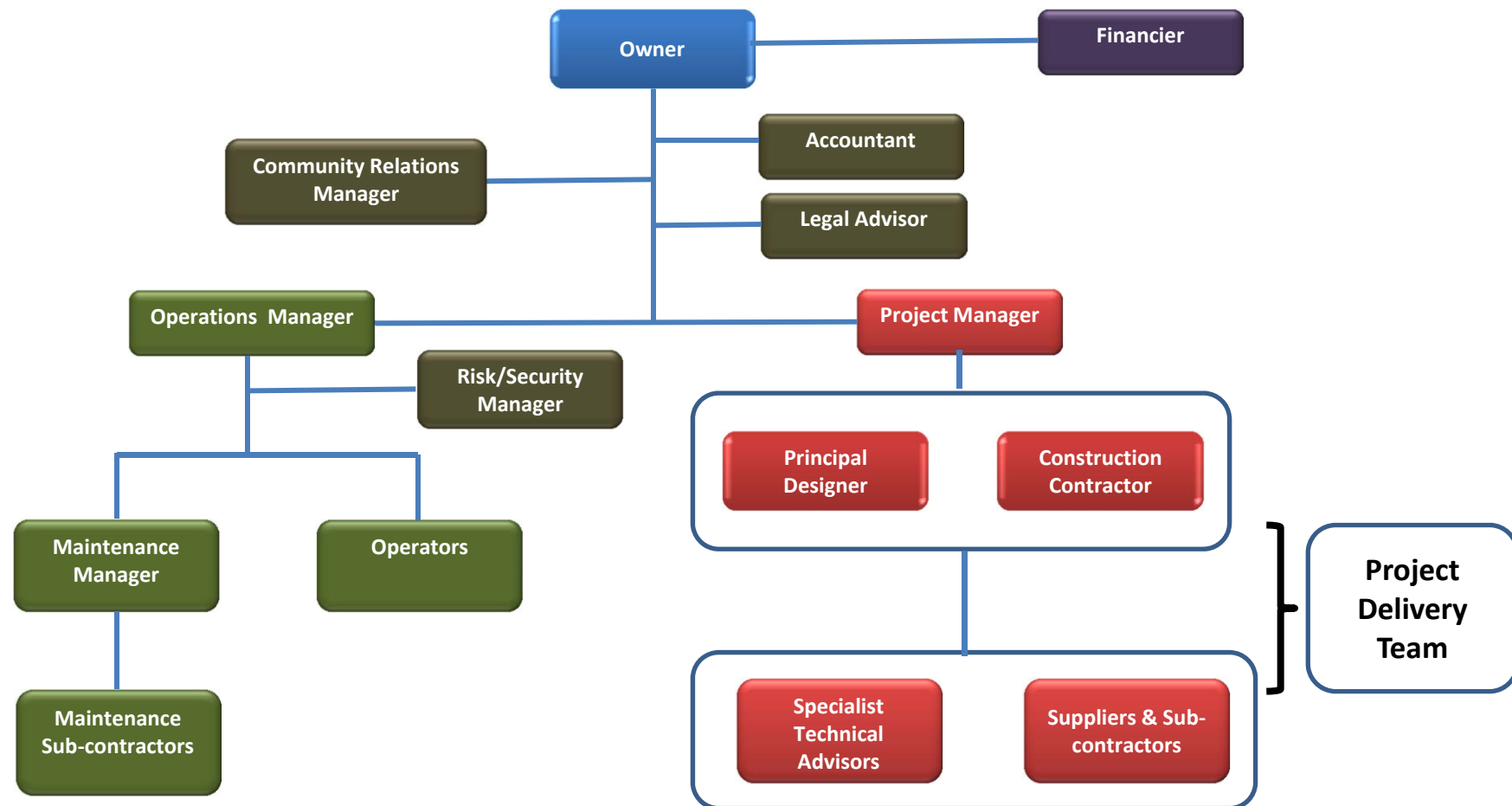
Within these sectors, the project risks could be assessed for one of the following situations:

- Owners management of financial, corporate & reputational risks;
- Operation during normal and emergency situations;
- Maintenance of existing assets;
- Design & construction of new works;



Stakeholders for New Works Scenario

CHOOSING A RISK “OWNER” FOR YOUR CONTEXT

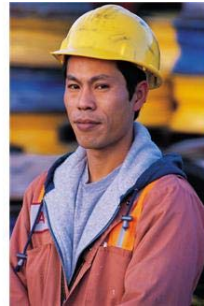


Stakeholders for New Works Scenario

CHOOSING A RISK “OWNER” FOR YOUR CONTEXT



Project Owner



Contractor



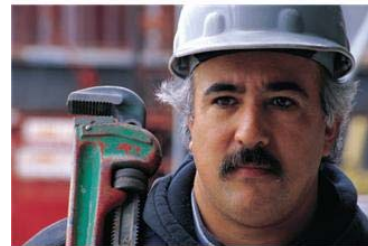
Project Manager



Facility Operator



Legal Advisor



Subcontractor

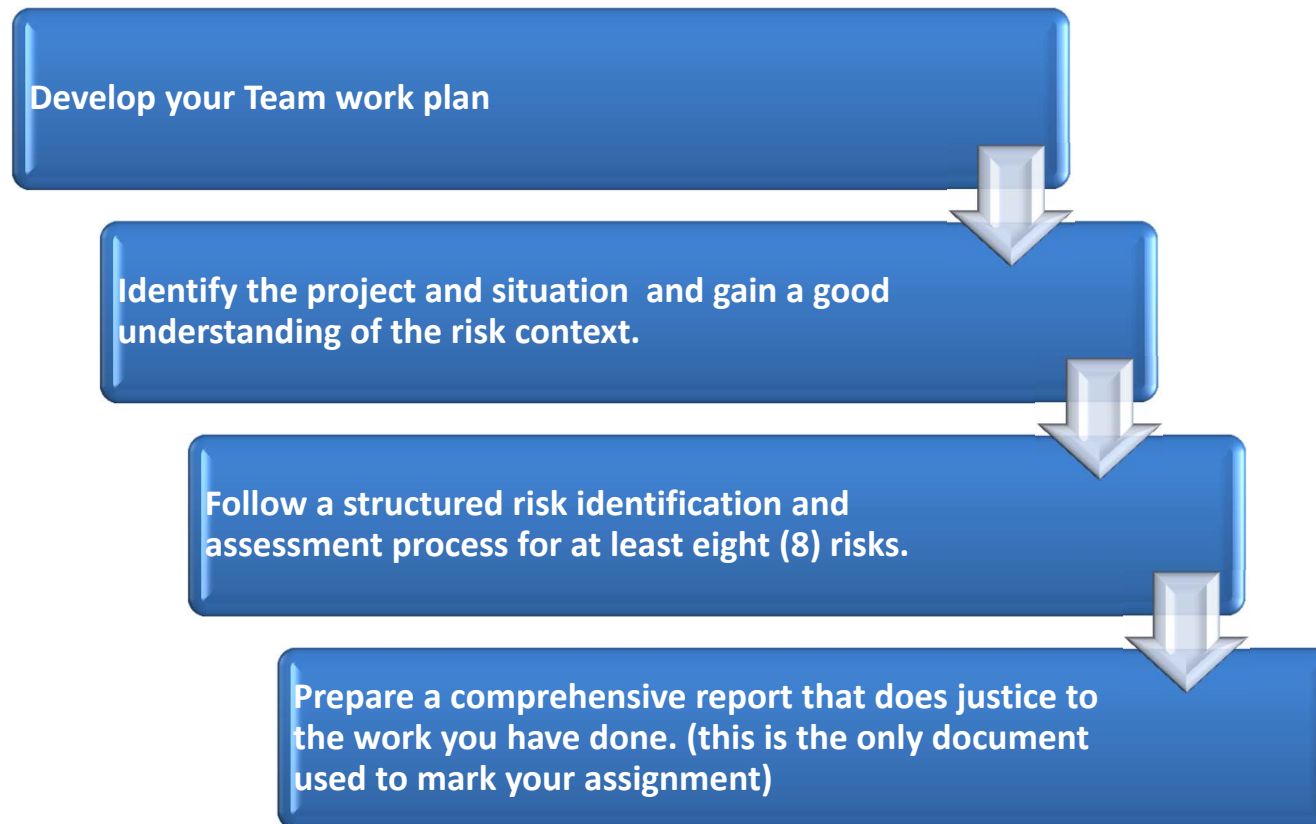


Project Cost Manager



Principal Designer

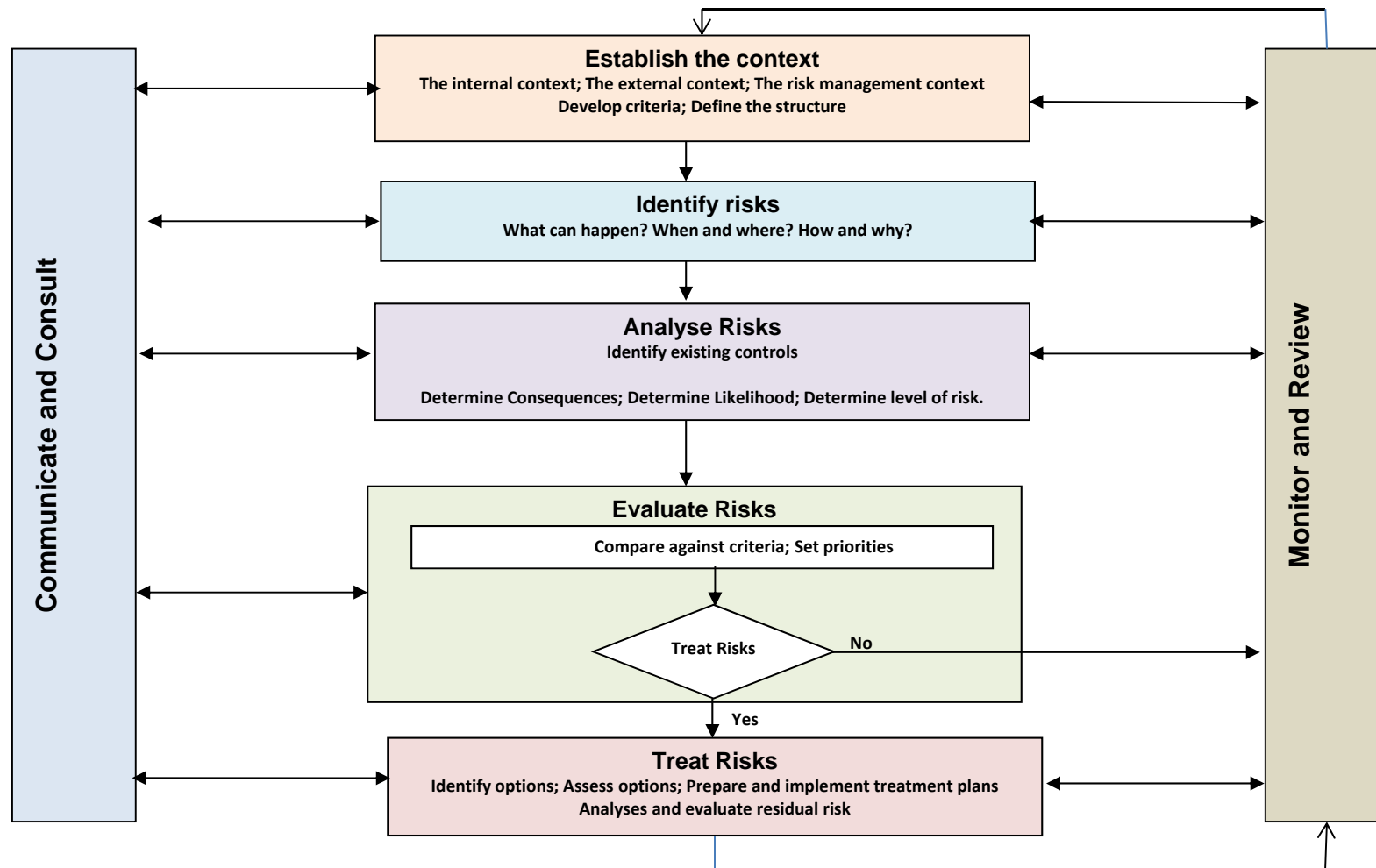
Assessment Methodology



Assignment Methodology

- Use the assessment methodology described in **AS/NZS ISO 31000:2009 Risk Management – Principles and Guidelines.**
- Prepare a report that:
 - Describes your project & its risk context
 - Describes your assessment process,
 - Describes your findings,
 - Describes your conclusions and recommendations.

Assessment Methodology



Assessment Methodology

1. To document your risk analysis process you can use a **“Risk Register”** format within your report.
2. Using a workshop methodology, populate the risk register in stages:
 - Identify hazards and associated eight risks;
 - Identify current risk controls & assess their effectiveness;
 - Assess likelihood & consequence ratings;
 - Nominate the risk priorities;
 - Develop further control measures, as necessary & assess their effectiveness;
 - Evaluate any remaining (residual) risks after control measures have been implemented and describe management, monitoring and review schedules required to maintain an acceptable risk profile;

Assessment Methodology

“Risk Register” format:

Business Risk No	Date Risk Updated	Context / Hazard	Business Risk	Team	Responsible Name	Corporate Risks	Control Measure	Control Effectiveness	Likelihood (A)	Consequences (B)			Total Consequence (B)	Risk Rating (A+B)	Risk Rating Matrix Classification	Risk Management Classification
										Social	Environmental	Financial				
A001	27/3/13	Manual Handling	Back Injury	MelbUni	Student A	Risk of inadequate health, safety and security of people, property and environment	<ul style="list-style-type: none"> - Manual handling training - Standard operating Procedures - Task Risk Assessments 	3	?	?	?	?	?	?	?	?

Risk Analysis Report

Your report should follow the typical structure used in all industries:

- *Document Status*
- 1. Introduction and Purpose
- 2. Executive summary
- 3. Context of Analysis (organisation, project, stage, key objectives)
- 4. Methodology used & key stakeholders involved
- 5. Identified risks: description and existing controls
- 6. Risk assessment: likelihood & consequence
- 7. Risk treatments and proposed implementation
- 8. Findings & recommendations
- 9. References

Your report can contain narrative, diagrams, charts, tables and photos.

Risk Analysis Report

Your report should include the following typical information on “page 1”:

Document Status:

Full names of each student who prepared the report + a legible “Team Photo” + document status table

- Student A: *(Printed name +signature)*
- Student B: *(Printed name +signature)*
- Student C: *(Printed name +signature)*
- Student D: *(Printed name +signature)*



Document Status	Prepared by:	Date	Reviewed by	Date
Draft 1				
Draft 2				
Final Draft				
Final for Issue				

Risk Analysis Report

Your report should include at least the following information:

1. Introduction and Purpose

- Description of the assignment;
- Objectives of the assignment;

2. Executive summary

- Purpose;
- Context;
- Methodology;
- Identified risks and current controls;
- Risk assessment & evaluation;
- Further controls and evaluation;
- Implementation plan for control measures;
- Management of any remaining risks after risk controls are implemented;
- Recommendations

Your report can contain narrative, diagrams, charts, tables and photos.

Risk Analysis Report

Your report should include at least the following information:

1. Introduction and Purpose
2. Executive summary
3. **Context of Analysis**
 - Project and situation description;
 - Project organisation and contract arrangements & nominated risk owner;
 - Risk owner's objectives and risk focus;
4. **Methodology used & key stakeholders involved**
 - Method of identifying risks (participants, case studies, references);
 - Method of evaluating risks (participants, case studies & references)
5. **Identified risks: description and existing controls**
 - A narrative describing hazards & eight (8) risks plus photos & diagrams as necessary;
6. **Risk assessment: likelihood & consequence**
 - A narrative describing development of each rating with reasons;

Your report can contain narrative, diagrams, charts, tables and photos.

Risk Analysis Report

Your report should include at least the following information:

1. Introduction and Purpose
2. Executive summary
3. Context of Analysis (organisation, project, stage, key objectives)
4. Methodology used & key stakeholders involved
5. Identified risks: description and existing controls
6. Risk assessment: likelihood & consequence
7. **Risk treatments and proposed implementation**
 - Narrative describing treatments with photos & diagrams as necessary;
 - Narrative describing effectiveness treatments and highlighting priority risks for management;
 - Narrative describing implementation plan for treatments;
 - Narrative describing any remaining risks plus monitoring & review actions required to manage the risk profile to an acceptable level, including timing;

Your report can contain narrative, diagrams, charts, tables and photos.

Risk Analysis Report

Your report should include at least the following information:

1. Introduction and Purpose
2. Executive summary
3. Context of Analysis (organisation, project, stage, key objectives)
4. Methodology used & key stakeholders involved
5. Identified risks: description and existing controls
6. Risk assessment: likelihood & consequence
7. Risk treatments and proposed implementation
- 8. Findings & recommendations**
 - Risk register goes here showing all the above in summary;
 - Recommended implementation of priority risk treatment measures;
 - Timetable to implement recommendations including ongoing actions;
- 9. References**
 - Organisations & key people consulted;
 - Reports, studies and other documents used;

Your report can contain narrative, diagrams, charts, tables and photos.

Risk Analysis Assignment

**Good luck with your assignment.
It is worth 15% of your subject result.**



Risk Analysis Assignment

Some suggested contacts:

- City of Melbourne:
- City wide Service Solutions:
- SERCO
- Yarra Trams:
- Metro Trains (PTV):
- V/line Trains:
- Melbourne Port Corporation:
- Master Builders Association (Builders):
- City West Water:
- Melbourne Ferry Services:
- Melbourne Olympic Park Trust:
- Zoos Victoria:
- Metropolitan Fire Brigade:
- Melbourne Museum (Museums Victoria):
- Flemington Racecourse (Racing Victoria):
- Metro Rail Authority:
- Melbourne Level Crossing Removal Authority

