

# **BSBRSK401**

# **Identify risk and apply risk management processes**

Release 1

**Learner guide**

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Aspire Version 1.1

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# Contents

<b>Before you begin</b>	<b>vii</b>
<b>Topic 1: Identify risks</b>	<b>1</b>
1A Identify the context for risk management	2
1B Use tools to identify risks	22
1C Document identified risks	26
Summary	30
Learning checkpoint 1: Identify risks	31
<b>Topic 2: Analyse and evaluate risks</b>	<b>33</b>
2A Analyse and document risks	34
2B Categorise and determine the level of risk	40
2C Document analysis processes and outcomes	57
Summary	59
Learning checkpoint 2: Analyse and evaluate risks	60
<b>Topic 3: Treat risks</b>	<b>63</b>
3A Determine and assess appropriate risk control measures	64
3B Identify measures to control risks	70
3C Refer risks to relevant personnel	74
3D Choose and implement control measures for your area of responsibility	76
3E Prepare and implement risk treatment plans	77
Summary	83
Learning checkpoint 3: Treat risks	84
<b>Topic 4: Monitor and review the effectiveness of the risk treatment</b>	<b>87</b>
4A Review the risk treatment against measures of success	88
4B Use review results to improve the risk treatment	94
4C Provide assistance with risk treatment audits	96
4D Monitor and review risk management in your area of operation	98
Summary	100
Learning checkpoint 4: Monitor and review the effectiveness of the risk treatment	101



# Before you begin

This learner guide is based on the unit of competency *BSBRSK401 Identify risk and apply risk management processes*, Release 1. Your trainer or training organisation must give you information about this unit of competency as part of your training program. You can access the unit of competency and assessment requirements at: [www.training.gov.au](http://www.training.gov.au).

## How to work through this learner guide

This learner guide contains a number of features that will assist you in your learning. Your trainer will advise which parts of the learner guide you need to read, and which practice tasks and learning checkpoints you need to complete. The features of this learner guide are detailed in the following table.

Feature of the learner guide	How you can use each feature
Learning content	Read each topic in this learner guide. If you come across content that is confusing, make a note and discuss it with your trainer. Your trainer is in the best position to offer assistance. It is very important that you take on some of the responsibility for the learning you will undertake.
Examples and case studies	Examples of completed documents that may be used in a workplace are included in this learner guide. You can use these examples as models to help you complete practice tasks and learning checkpoints. Case studies highlight learning points and provide realistic examples of workplace situations.
Practice tasks	Practice tasks give you the opportunity to put your skills and knowledge into action. Your trainer will tell you which practice tasks to complete.
Video clips	Where QR codes appear, learners can use smartphones and other devices to access video clips relating to the content. For information about how to download a QR reader app or accessing video on your device, please visit our website: <a href="http://www.aspirelr.com.au/help">www.aspirelr.com.au/help</a>
Summary	Key learning points are provided at the end of each topic.
Learning checkpoints	There is a learning checkpoint at the end of each topic. Your trainer will tell you which learning checkpoints to complete. These checkpoints give you an opportunity to check your progress and apply the skills and knowledge you have learnt.



## Foundation skills

As you complete learning using this guide, you will be developing the foundation skills relevant for this unit. Foundation skills are the language, literacy and numeracy (LLN) skills and the employability skills required for participation in modern workplaces and contemporary life.

The following table outlines specific foundation skills noted for your learning in this learner guide.

Foundation skill area	Foundation skill description
Reading	<ul style="list-style-type: none"> <li>Comprehends documents and texts of varying complexity to extract and analyse relevant information</li> </ul>
Writing	<ul style="list-style-type: none"> <li>Uses specific, industry related terminology and logical organisational structure in workplace documents that identify and analyse risk and report management process outcomes</li> </ul>
Oral communication	<ul style="list-style-type: none"> <li>Participates effectively in interactions with stakeholders by using questioning and listening to elicit opinions and clarify understanding</li> </ul>
Numeracy	<ul style="list-style-type: none"> <li>Uses numerical tools to assess risk and uses numerical data to review plans</li> </ul>
Navigate the world of work	<ul style="list-style-type: none"> <li>Complies with organisational and legislative requirements</li> <li>Takes responsibility for identification and management of risk within own work context and refers matters to others as required</li> </ul>
Interact with others	<ul style="list-style-type: none"> <li>Selects appropriate communication protocols and conventions when conferring with others to establish risk management requirements</li> </ul>
Get the work done	<ul style="list-style-type: none"> <li>Determines job sequence and works logically and systematically to undertake defined tasks</li> <li>Uses analysis and consultative processes to inform decisions about selection and implementation of risk control measures</li> <li>Evaluates effectiveness of plans and results to inform improvement decisions</li> <li>Uses familiar digital technologies and systems to access information, prepare plans and communicate with others</li> </ul>

## What do you already know?

Use the following table to identify what you may already know. This may assist you to work out what to focus on in your learning.

Topic	Key outcome	Rate your confidence in each section
Topic 1 Identify risks	1A Identify the context for risk management	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	1B Use tools to identify risks	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	1C Document identified risks	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
Topic 2 Analyse and evaluate risks	2A Analyse and document risks	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	2B Categorise and determine the level of risk	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	2C Document analysis processes and outcomes	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
Topic 3 Treat risks	3A Determine and assess appropriate risk control measures	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	3B Identify measures to control risks	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	3C Refer risks to relevant personnel	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	3D Choose and implement control measures for your area of responsibility	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	3E Prepare and implement risk treatment plans	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident

Topic	Key outcome	Rate your confidence in each section
Topic 4 Monitor and review the effectiveness of the risk treatment	4A Review the risk treatment against measures of success	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	4B Use review results to improve the risk treatment	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	4C Provide assistance with risk treatment audits	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	4D Monitor and review risk management in your area of operation	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident

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# Topic 1

## Identify risks

To implement a risk management process, you must be aware of all the risks you might encounter within your area of responsibility. Use a systematic process that ensures all potential risks are identified and documented. Relying on ad-hoc methods is a risk in itself.

Identifying risks involves understanding the types of risks that can occur, establishing how and why they could happen and determining the impact they could have on the outcome of your activities.

The approach you use will depend on the nature of the activity, the types of risks you are dealing with and the context in which the activity is taking place. Your approach may include a range of techniques, including brainstorming and using checklists, systems analysis and flow charts.

In this topic you will learn how to:

- 1A Identify the context for risk management
- 1B Use tools to identify risks
- 1C Document identified risks

# 1A

## Identify the context for risk management

A risk is defined as the chance of something happening that will affect objectives. A risk is often measured in terms of the likelihood of it occurring and the positive or negative impact that might result if it did occur.

Risk management is the development of a system of policies, processes and procedures that assess and manage all the risks that might occur within a workplace. It provides practical, hands-on solutions to managing staff, clients, the general public and the organisation's exposure to risk.

There are a number of commonly used terms and phrases that you should be familiar with, such as those shown here.

### **Risk identification**

The process of establishing the things that can affect an objective, and how and why they affect the objective.

### **Risk analysis**

The process of understanding and evaluating the nature of the risk and its potential to affect the objective.

### **Risk treatment**

The process of developing and implementing strategies to modify the effect of the risk.

### **Risk management**

The systematic processes that are applied to increase the likelihood of meeting objectives.

### **Risk inventory**

The documented results of risk management processes (also called a risk log or risk registry).

## Effective risk management

Being an effective risk manager requires you to develop a sound understanding of what risk management is; the benefits an organisation can gain by implementing a risk management system; the steps undertaken in a risk management process; and the various documents that are prepared to develop, implement, monitor and review the process.

Everyone faces and manages risk every day. By crossing a road, driving a car, purchasing products or taking a holiday, you could be injured, inflict injury on others, incur a financial loss or become ill. In a business environment people are responsible for managing projects, purchasing equipment, making decisions, hiring staff and dealing with large amounts of money – all situations that contain elements of risk. Risks can have serious consequences for an organisation that does not have effective processes in place to anticipate and successfully manage the risks inherent in business activities.

Risks can also have a positive impact – investing money wisely can result in a financial gain, your lottery ticket might win a prize and hiring a new staff member could prove beneficial in terms of the expertise, experience and network opportunities that person brings to the position.

## Organisational risk management

An organisation's financial viability, reputation and success depend on the way it reduces its exposure to risk, analyses potential risks, successfully manages unforeseen risks and implements a continuous process to monitor and review its performance in managing risks.

In recent years, a number of high-profile organisations have experienced spectacular collapses and incidents, due in part to mismanagement and the inability, or reluctance, to foresee and treat situations that were potentially high-risk ventures.

Risk management is increasingly seen as a sensible, prudent and practical way to safeguard an organisation's legal, moral and financial accountability.

People's roles and responsibilities in a risk management process vary depending on the size and nature of their organisation and their particular function. For example, an employee might be part of a risk management team in a large corporate environment and be responsible for overseeing the identification, analysis and treatment of risks. Another employee might be a team leader responsible for applying risk management strategies within their team. Another might work for a small organisation where everyone contributes to the process.

Whatever their responsibilities, team leaders, supervisors and frontline managers in particular need to be familiar with all the components of a risk management process and be able to apply the principles of risk management as advocated by the accepted Australian industry standard.



## The history of risk management

Risk management was traditionally associated with the shipping and insurance sectors. The process centred around deciding the amount of capital to be invested into a shipping venture depending on what level of return could be expected. This approach grew from a trading policy developed in Venice in the Middle Ages. Good business practice then was to share the risk of loss between multiple merchants in return for sharing the profits gained from successful trading. Risk management focused on the likely consequences of the loss rather than the statistical likelihood of the loss occurring.



Over the last 20 years, risk management has become a tightly defined discipline. It now focuses on the assessment and control of risks associated with major identifiable hazards. Hazards are identified and the likelihood of the hazard affecting operations (that is, the risk occurring) is analysed. Risk management focuses on reducing the loss that could occur. More recently, the benefits of taking a risk have been emphasised so that potential gains as well as potential losses are identified and assessed.

Perhaps the most important aspect of risk management practices is the increased awareness and emphasis on ensuring that the processes are holistic and incorporated into an organisation's overall operational planning and culture. This involves a degree of consultation, communication and responsibility within organisations that has traditionally been the domain of managers and project managers – the approach has been fragmented rather than strategic.

## Enterprise-wide risk management

Enterprise-wide or organisation-based risk management addresses the problem of risk across a whole organisation in a structured and integrated way and should involve all employees. Enterprise-wide risk management looks at all facets of an organisation, from strategic planning to everyday operations. A balanced risk approach in all areas is needed to achieve the highest positive outcomes possible. Organisations now strive to find a balance between taking a risk and minimising the risk.

By adopting an organisation-wide, systematic approach to risk management, an organisation ensures that employees take the management of risks seriously, that risk processes are embedded into all work practices and that the process and structure of management is continuously reviewed.

Risk management is not done in isolation. Rather, it should apply across all areas of an organisation's operations.

### Areas of an organisation's operations where risk management should apply

- The strategic level involving the whole organisation (management)
- The operational level (teams) and specific activities (projects)
- Specific risk areas (emergencies) and individual activities

## Risk management culture

Risk management should be a part of workplace culture and all tasks undertaken should be assessed for their risk potential.

A risk management process should be applied any time a decision needs to be made. This includes major decisions that have important financial or strategic implications for the organisation, such as policy changes, relocating, new directions, purchasing new technology, developing a new product, changing suppliers and hiring new staff, as well as basic day-to-day decision-making such as changing a roster or changing the way work is done.

All decision-making involves an element of risk. To stay ahead in a competitive market, organisations need to be prepared to take calculated risks. Risks are inherent in all business decisions. Understanding these risks and managing them effectively is an important ingredient of successful management. A risk management plan allows an organisation to control uncertainties and lessen constraints.

Risk management is particularly relevant in the following areas of an organisation's operations.

### Property-centred risks

- Buildings
- Assets
- Products

### Personnel-centred risks

- Human resources; for example, staff cutbacks or recruitment
- Work health and safety

### Organisational-centred risks

- Strategic operations and business planning; for example, mergers
- Change; for example, new procedures or technology
- Resource planning; for example, purchasing new equipment

### Market-centred risks

- Feasibility studies
- Product development
- Project management

### Legislation-centred risks

- Public risk and liability; for example, marketing activities

### Governance-centred risks

- Ethical decisions
- Security
- Directors' and officers' liability

## The impacts of not managing risk

Most people do not like significant disruption to their lives. They tend to see major disruptions as negative and remember them for a sustained period of time. Consider the 1998 gas disaster in Victoria, nationwide water restrictions, the blue-green algae water crisis in New South Wales or the 'I Love You' computer virus.

These events all contributed to high levels of customer dissatisfaction, financial losses and negative public relations for the organisations concerned.

People asked a variety of questions:

- Why was this event not foreseen?
- Why were there no contingency plans?
- Why were the public allowed to suffer for such a prolonged period of time without compensation?
- Will the organisation learn from this event so it does not happen again?



## Risk management process

Many organisations know there are risks involved in their operations but do not create a plan to proactively manage such risks, due to lack of knowledge, time or a real understanding of the possible consequences.

Having a sound risk management process brings many benefits to an organisation. Risk management improves the efficiency and effectiveness of an organisation's business operations – it enables the organisation to protect its assets, allocate resources wisely, reduce the chance of mistakes and help minimise financial losses.

Identification and analysis of potential risks help an organisation take advantage of opportunities and plan more effectively.

A risk management process is an essential element of good governance. Clients, shareholders, government bodies and agencies have greater confidence in organisations that demonstrate sound business practices. A risk management process helps minimise the threat of possible negligence claims and other disputes that commonly arise after major disruptions or disasters occur.

When an organisation establishes a risk management strategy, the difficulty is not so much in identifying the potential risks, evaluating them and deciding how to manage them, but rather in ensuring that the strategies can be effectively implemented. If applied appropriately, risk management saves an organisation time, resources, energy and money.

## Standards for risk management

In Australia, organisations generally follow the international risk management standard AS/NZS ISO 31000:2009 Risk Management – Principles and Guidelines. The Standard provides practical advice on how organisations can develop, implement and improve the way they manage risk. The Standard is designed to help organisations identify and treat risks effectively, improve risk controls, comply with relevant legal and regulatory requirements, and improve overall operational effectiveness and efficiency. Organisations can use the Standard as a benchmark to compare their own risk management practices against.

Check that your organisation has a copy of this Standard. Make sure you stay up to date with any changes to the Standard or supplementary material produced.

### Useful publications that support the Standard

- ISO/TR 31004:2013 Risk management – Guidance for the implementation of ISO 31000
- ISO/IEC 31010:2009 Risk management – Risk assessment techniques
- ISO Guide 73:2009 Risk management – Vocabulary

## Steps in a risk management process

There are seven significant steps in a risk management process. An understanding of each of these steps is crucial for all employees, so they can see where and how they can be integrated into existing practices and to ensure all procedures they follow are consistent with set standards.

Here is an outline of the rationale for each step.

### Steps of a risk management process

1

#### Communicate and consult

Consult with internal and external stakeholders at every step of the risk management process. This way, you can be sure that everyone understands why a procedure has been put in place and takes the identification and management of risks seriously.

2

#### Establish the context

Establish the current conditions in which the organisation operates in an internal, external and risk management context. Define the criteria used to evaluate risk and establish a risk analysis framework.

3

#### Identify the risks

Identify and document factors that affect the organisation's goals, either positively or negatively. Determine how and why these factors exist.

**4****Analyse the risks**

Analyse existing controls. Assess the likelihood of risks occurring and their consequences within these controls. Combine the consequence and likelihood to produce an estimated level of risk.

**5****Evaluate the risks**

Compare estimated levels of risk with the context established in Step 2. Rank and prioritise risks with the contextual framework.

**6****Treat the risk**

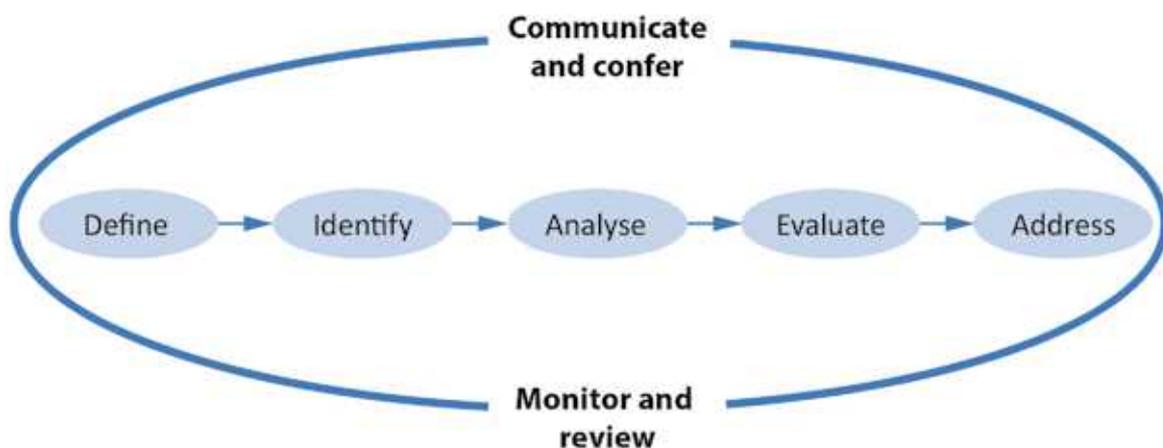
Develop and implement strategies and management plans to prioritise and treat/control risks, particularly addressing high-priority risks. Lower priority risks may be accepted and monitored.

**7****Monitor and review the system**

Monitor the risk management system at all stages to ascertain its effectiveness and track any changes that affect it. Revise the system to accommodate necessary changes identified during the monitoring.

## Risk management process diagram

This diagram shows the various stages in the risk management processes and those areas – ‘communicate and confer’ and ‘monitor and review’ – that should be managed concurrently.



## Example: understand the AS/NZS Standard's risk management processes

This table shows the risk management process as described in the AS/NZS ISO 31000:2009.

Communication and consultation (determining stakeholders, roles/responsibilities)			
Establish context	Identify risk	Analyse and evaluate risks	Treat risks
<ul style="list-style-type: none"> <li>• Strategic plan</li> <li>• Corporate plan</li> <li>• Projects</li> <li>• Policies</li> <li>• Programs</li> <li>• Business unit</li> <li>• Disaster/emergency</li> </ul>	<ul style="list-style-type: none"> <li>• Financial</li> <li>• Legal</li> <li>• Operational</li> <li>• Market</li> <li>• Construction</li> <li>• Reputational</li> </ul>	<ul style="list-style-type: none"> <li>• Likelihood</li> <li>• Consequence</li> <li>• Adequacy of control measures</li> <li>• Risk tolerance</li> <li>• Action</li> </ul>	<ul style="list-style-type: none"> <li>• Strategic realignment</li> <li>• Administrative actions</li> <li>• Budget review</li> <li>• Safety review</li> <li>• Continuity planning</li> <li>• Emergency planning</li> <li>• Insurances</li> </ul>

## Key challenges to implementing risk management

Implementing an organisational risk management system involves meeting some key challenges. Often these challenges are largely the province of directors or senior managers, although employees at all levels may be faced with challenges that underlie organisational risk assessment.

The key challenges are outlined in here.

### Learning the language of risk management

Risk management terminology needs to be understood by everyone associated with the process. Without a common understanding of risk management language, misunderstandings may occur.

### Linking risk management to strategic planning

The organisation's strategic business plan must be linked to and supported by the organisation's risk management plan.

### Gaining support for implementing risk management

Relevant and associated stakeholders need to support risk management plans. They also need to take responsibility for their role in the risk management process. To do this they must understand the benefits and advantages of implementing the plan. Employees, including senior managers, may need to be encouraged and supported while adapting to change brought on by implementing risk management.

### Establishing criteria

Risk management criteria are organisation-specific and can only be identified within the context of the organisation. Stakeholders need to agree on relevant standards or benchmarks that risk levels can be compared to.

## Types of risks

The types of risks an organisation encounters will depend on the industry that it operates in, the kinds of products and services it provides, its size and the nature of its business operations.

Broad areas of risk relate to:

- commercial and legal relationships; for example, developing a new product
- economic circumstances; for example, interest rates, public spending, budgets
- human behaviour; for example, staff leaving, theft, injury
- natural events; for example, floods, fire
- political circumstances; for example, change of government, new policies
- technology; for example, introducing new technology, purchasing new equipment
- management activities; for example, change of leadership
- positive risk; for example, a project that will generate benefits for the organisation
- individual activities; for example, fraud, human error.

## Categorise risks

There are a number of ways that organisations categorise types of risks. Different systems use different criteria for categorisation, as shown in the following examples.

You need to be familiar with the particular approach taken by your organisation and understand how its risk management plan was initially developed. If your workplace does not have a risk management plan, consider the categories that would be best suited to the organisation. For instance, can you pick suitable examples from the table that describe the most prevalent risks to your organisation?

Criteria	Examples
<b>Effect</b>	Physical, legal, ethical, financial
<b>Centre of impact</b>	Property, personnel, market, operations, legislation, governance
<b>Nature of impact</b>	Economic, human, political, technological, natural
<b>Size of impact</b>	Community, organisation, department, project, individual

## Example: identify, analyse and manage risk

A medium-sized corporate organisation used a 'centre of impact' model to produce a comprehensive plan by which risks could be identified, analysed and managed.

The categories of property, personnel, market, operation, legislation and governance help the organisation to identify risks and organise them into clearly identifiable areas. When the organisation developed its plan, first it identified the areas of risk. The next step was to identify the issues that arose from these areas of risk, as show in this table.

The business manager said: 'We used this approach because it is more comprehensive and structured than other methods of classifying risks. It's also quite easy to use. It addresses where the risk can occur and everyone can see where and how this affects their team. This model can be applied at an individual, team, department or organisational level.'

Category	Areas of risk
Property-centred risks	<ul style="list-style-type: none"> <li>• Theft</li> <li>• Poor asset management</li> <li>• Building risks</li> </ul>
Personnel-centred risks	<ul style="list-style-type: none"> <li>• Personnel safety</li> <li>• Travel/vehicle accidents</li> <li>• Loss of personnel</li> <li>• Costs of recruitment</li> <li>• Professional development</li> <li>• Inappropriate termination</li> <li>• Professional indemnity</li> <li>• Public liability</li> </ul>
Market-centred risks	<ul style="list-style-type: none"> <li>• Product liability</li> <li>• Falling product demand</li> <li>• Lack of diversity in products and services</li> <li>• Changing economic conditions</li> <li>• Sales and marketing management</li> <li>• Competition</li> </ul>
Operation-centred risks	<ul style="list-style-type: none"> <li>• Suppliers</li> <li>• Information technology</li> <li>• Financial management</li> </ul>
Legislation-centred risks	<ul style="list-style-type: none"> <li>• Occupational health and safety</li> <li>• Taxation/GST</li> <li>• Equal opportunity</li> </ul>
Governance-centred risks	<ul style="list-style-type: none"> <li>• Poor risk management</li> <li>• Failure to take opportunities</li> <li>• Failure to provide policies and procedures</li> <li>• Failure to provide strategic directions</li> </ul>

## Understand the context of risks

Before identifying the risks in an activity you are undertaking, you should be confident that you understand the specific context in which the risk management is being conducted. For example, is the risk related to a specific project, particular resources, key operational elements or the design of the organisation? Risk management strategies will depend on the context and type of risk identified. You will also need to consider your own role in relation to the overall project and understand what your responsibilities are.

Establishing the context means that you understand the following aspects, which must be considered before you start the process of identifying risks. Prepare an outline using headings such as the aspects listed here, and document the relevant information. In this way you will be prepared when it is time to identify the risks that you will need to treat and manage.

### Operational elements

#### The key operational elements and services of your organisation

How is your organisation structured? How does it operate? What is the likelihood of risks occurring on a day-to-day basis?

### Area of risk

#### The area your risk management applies to

Is your risk identification plan for a project, your office area, your department, your team, yourself or the whole organisation? What area does it relate to; for example, property, personnel, market, operations, legislation or governance? Are there currently any related projects?

### Activity purpose

#### The purpose and objectives of the activity

If you are clear about the goal or objectives you are hoping to achieve, you can more easily see all the things that could jeopardise your success.

### Impact

#### The place of the activity within the organisation's operations and goals

You need to understand how the activity will affect your organisation's operations and reduce the risks it has identified in its risk management plan.

### **Task breakdown**

#### **The distinct tasks that make up the whole activity**

By breaking down the activity into a number of discrete steps, including the types of decisions that have to be made, you will get a clearer idea of where risks may occur, avoiding the likelihood of missing any.

### **People involved**

#### **The people involved and their roles and responsibilities**

This helps identify who will be affected by any risks that occur. It helps identify how you will communicate to ensure everyone is aware of and accepts the processes in place to reduce the likelihood of risks occurring.

### **Identify risks**

#### **The way you will identify and manage risks**

Determine the elements or aspects of your activity that you will use to identify where risks are likely to occur (such as time, budget, personnel, resources), identify possible consequences and determine the methods you will use to analyse the risks.

## Example: the risk context of a new software system

A team leader who needs to introduce a customer management software program to their team has determined the risk context in this table.

Area	Context
The purpose and objectives of the activity	<ul style="list-style-type: none"> <li>The purpose is to introduce a new customer management procedure to the team.</li> <li>The goal is to implement the change successfully.</li> <li>This affects the areas of technology, personnel, finance and operations.</li> </ul>
The place of the activity within the organisation's operations and goals	<ul style="list-style-type: none"> <li>The activity matches the organisation's goal to streamline its business support activities. The change will enable customer service operations to be more efficient in terms of time and the number of staff involved. It will be more cost-efficient, as less time will be taken to enter customer details.</li> </ul>
The distinct tasks that make up the whole activity	<ul style="list-style-type: none"> <li>Communicate the change, the reason for the change and the benefits to be gained.</li> <li>Explain how the change will be implemented.</li> <li>Provide training in the new software.</li> <li>Implement the change.</li> <li>Monitor the new system.</li> </ul>
The people involved and their roles and responsibilities	<ul style="list-style-type: none"> <li>The whole team will be involved in learning and implementing the new system.</li> </ul>
The way risks will be identified and managed	<ul style="list-style-type: none"> <li>Develop a set of elements to identify risks against; for example, time lines, budget, personnel, resources, training and implementation.</li> <li>Brainstorm potential risks with the team and develop a checklist to identify the severity of the risks, their consequences and the likelihood of them occurring.</li> <li>Develop a contingency plan to control risks.</li> </ul>

## Understand the elements of risk

Understanding the various elements of risk improves your ability to shape the questions you need to ask about them. Be aware that risks do not always have a negative impact, but can bring benefits and a positive outcome.

The key components of risk are outlined here.

### **The source**

The source is the thing that can affect the achievement of goals. Many things can be a source of risk, including:

- the weather
- competitors
- toxic chemicals
- employees
- equipment
- legislation
- the economy.

### **The event**

An event is when the source of a risk does affect the achievement of goals; for example:

- the weather is unfavourable
- competitors poach clients
- toxic chemicals are spilt
- employees perform better than expected (a positive risk)
- equipment breaks down
- laws change
- the economy changes.

### **The consequences**

The consequences are the results of the impact; for example:

- unfavourable weather means business cannot be conducted
- competitor poaching means the organisation's client base is reduced
- toxic spills mean the environment is endangered
- better performances mean the organisation has more resources
- equipment failure means equipment cannot be used
- changes in legislation mean that new laws affect business operations
- changes in the economy affect the business the organisation expects to receive.

**The causes**

The causes are the reasons the risks occur; for example:

- weather is unpredictable
- competitors release superior products
- environmental procedures are not followed
- employee skills are unknown
- equipment is not maintained adequately
- laws are revised
- world events trigger economic change.

**The frequency**

The frequency is how often the risk could occur and what factors might lead to this occurrence.

**The location**

The location describes where the risk could occur and what areas of the organisation might be affected.

**The controls**

The controls are the procedures that are implemented to reduce the likelihood of the event occurring. They may include:

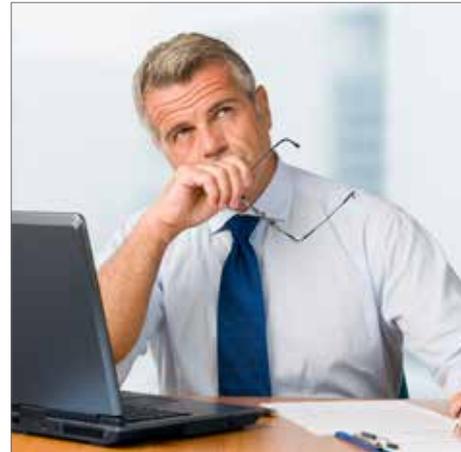
- preparing indoor alternatives
- monitoring competitor initiatives
- implementing environmental checks
- conducting regular employee skills audits
- implementing equipment maintenance procedures
- monitoring legal projects
- researching economic drivers.

## Ask the right questions

The aim of identifying risks is to prepare a comprehensive list of potential risks that are likely to affect an activity's success. Systematically approaching this procedure enables you to be confident that all aspects have been covered and that there is little likelihood of a potential risk being ignored.

By now you should have developed:

- a clear context plan for an activity so that you and your team understand how the activity fits into the organisation's overall operations
- an understanding of the scope of the activity you are undertaking and the time, money and personnel involved
- a plan for the way you are going to identify and apply your risk management process to the activity.



## Questions to establish the risk context

Take each element of the activity, subject it to the following questions and document the responses. Make sure you consult with all those involved in the activity.

After you have asked these questions of yourself and your team, review and evaluate your list to make sure the information you have documented is accurate, reliable and as comprehensive as possible. Have you found any gaps in your information that indicate further research is needed? Are you confident that the appropriate people have had the opportunity to contribute?

**Risk source****What is the source of the risk?**

Take the elements you have identified in your context plan. The elements will vary depending on the nature, complexity and scope of your activity. For example, a simple low-level activity you are responsible for will include elements such as:

- time
- budget
- personnel
- resources.

A complicated or high-level activity involving a risk management team can include elements such as:

- government policies
- fiscal management
- consultants
- external agencies
- suppliers
- security and confidentiality
- time lines.

Your organisation's business plan, strategic objectives or risk management plan will have identified areas of potential risk. So too will reports of previous activities. Reports should highlight what went wrong and why, or how unforeseen risks were successfully managed. Experienced personnel can also make valuable contributions. Use as many avenues as you can to ensure you have identified all possible sources of risk.

**Risk nature****What is the nature of the risk that might occur?**

Identify everything that could happen that might have a positive or negative impact on the outcome of your activity. For example, using personnel as the element of potential risk, you might list that:

- key staff might become absent through illness
- a member of the group may have relevant expertise you are unaware of (a potentially positive risk)
- staff may not have sufficient knowledge or skills to complete their assigned tasks
- key staff may resign during the activity.

Using fiscal management as the element, you might list that:

- the budget may blow out
- the person who prepared the budget might miscalculate the amount of funds available
- funds that are promised by partners might not eventuate
- finances may be inadequate for the task
- finances might be managed very successfully and bring in a profit (another potentially positive risk).

**Risk effect**

**What will be the effect on the activity's objectives?**

Define what the likely consequences are if the risk happens. For example, if any of the personnel risks occur:

- the time lines for the activity might increase and the activity may not be completed on time
- the activity might be undertaken and completed to a higher level of competence than originally planned
- the activity might not meet quality assurance standards.

**Risk triggers**

**Why is the risk likely to occur?**

List the reasons why the risk may occur. For example, staff are not trained sufficiently, the activity is not planned accurately or unforeseen circumstances such as a natural disaster might eventuate.

- When is it likely to occur? Determine when the risks you have identified are likely to occur; for example, personnel risks might occur at any time throughout the activity.
- Where is it likely to occur? List the areas where the risk is likely to occur; for example, within the team as a whole or with an external body.
- How is it likely to occur? Think about how the risk might happen; for example, it might occur suddenly without warning, as in a natural disaster or a staff member becoming ill.
- Who might be involved? List the people involved in the activity, those responsible for the risk and for managing it, and all others who will be affected by the risk.
- What control measures are already in place? List the existing controls across all areas such as checklists, policies and procedures, alarm systems, insurance cover, market research, anti-virus protection and legal requirements.
- What might cause the measures to be ineffective? Check the control measures that are in place to confirm they are still effective. Existing measures might have been developed for a different set of circumstances. For example, the organisation may have grown since the measures were developed or new technology may have rendered old control measures obsolete.

## Example: risk management processes

Gavin Coates, business administrator at a small publishing company called Waverley Books, says: 'The hardest part of identifying risks is to make sure you're not missing anything. You must be clear about the process and about everyone involved – both internal and external stakeholders. I like to map the risks as high risk, medium risk and low risk. Even though I'm experienced, I like to have a checklist I can refer to, to jog my memory – I can then work systematically, consistently and efficiently through the questions.'

'I think the most important thing to understand is how your team's risks interact with those of the organisation and the wider business environment. This allows you to see all the risks everyone has to deal with, the organisation's strategies for managing risks and the external factors that can have an impact.'

'I then consult with the rest of the team to see whether they can think of anything I've missed. Understanding risks is not just the job of the manager. Sharing the knowledge is a two-way process. In our company we display the risk management strategies and actions in the office so everyone is aware of them. Involve as many people as you can. This way you'll get people at different levels of expertise with different perspectives.'

'Look at how you controlled the risk before in a similar project. I find that experience is invaluable. If you haven't had specific experience yourself, ask someone who has.'

'Don't forget benchmarking. Looking at how others compile a risk inventory can give you good ideas. Use the internet and view examples from other businesses around the world. You might find criteria your organisation can use.'



## Practice task 1

List the categories that an organisation could use to identify risks. Include examples of the types of risks likely to be encountered in these categories.

## 1B

## Use tools to identify risks

There are a range of approaches and tools you can use to identify risks, depending on the complexity of the activity, the amount of time you have and the availability of other resources. Identifying risks should be the responsibility of the whole team and all other personnel who may be involved, such as management, consultants, suppliers, government agencies and clients. It is important that all reasonable steps are taken to identify all possible risks.

Tools may include:

- documentation
- standard and customised instruments
- systems to identify and rate risks.



Consider the following methods to ensure you have included all possible avenues of information. A combination of these methods should ensure that you gather the most relevant information available and cover every possible angle.

## Existing documentation

Your organisation will have documentation that you should access to place your activity in context and help identify risks.

### Existing documentation



#### Business and operational plans

These highlight the organisation's goals and the policies and procedures to follow, and will provide you with specific objectives you and your team need to meet.



#### Risk management plans

These identify the sorts of risks that are likely to occur and prioritise the risks according to their impact and the likelihood of them happening.



### Reports

These document past activities and identify the risks that were faced, how they were analysed and acted upon, what succeeded and what failed, and recommendations for future activities.



### Audits

These identify the possible risks attached to specific areas and the likelihood of those risks occurring. For example, an audit may highlight how the storage of dangerous chemicals is being handled.



### SWOT analyses

These identify the strengths and weaknesses, opportunities and threats of the internal and external environments. Risks associated with these areas can be easily identified. For example, if an opportunity was identified to develop a new product for a niche market, the risks of developing the new product might include lack of sales due to poor marketing, financial blow-out due to poor budgeting, or increased sales due to correctly identifying the target market.

## Brainstorming

Ensuring that everyone involved in the activity is consulted and has an opportunity to provide input is essential when identifying risks. The term ‘to have ownership’ acknowledges that the more involved people are with their work, the more enthusiastic and productive they will be.

Brainstorming is an ideal medium for encouraging ownership. As long as the team understands the context of the activity and you have a structured plan to conduct the brainstorming session, you should be able to elicit a range of potential risks from the group. Encourage people to use their imagination, expertise and experiences and to look at the elements of the activity from different perspectives. There should be no restrictions when brainstorming and all ideas and suggestions should be welcomed without any judgment being made. Spend as much time as possible on each question until ideas are exhausted.

A hazard and operability study is a type of brainstorming that brings people of varying backgrounds and expertise together to identify and analyse risks task by task. They identify worst-case scenarios, suggest safeguards and make recommendations. This type of study is usually used to identify health and safety hazards.

## Focus group discussions

The aim of a focus group session is to test the hypothesis of an issue that you and your team have identified as being a potential risk. The session brings together people who have expert information to offer and who can help you determine whether the risk will have a negative impact or if it might produce a positive outcome. A focus group session is structured in that specific questions are asked to assess the market.

For example, an organisation might be considering developing a new product and identifies its time line as a possible risk source. The risk identification process would ask: 'What if something happened to delay the release of the new product? Would this matter to the market? Is it a risk?' The focus group of industry representatives might conclude that time was not an issue because the targeted market was a niche group and there were no competitors' products available. Other questions for the group might relate to the proposed cost of the product; for example: 'Do you think the cost we have proposed will have a negative effect on the market?'

The focus group might consist of all section or department heads if you want to test a risk you have identified, such as: 'Do you think the training required for the introduction of the new technology will have a negative impact on the budget?' or 'Will it matter if there is downtime in production while staff learn?'



## Questionnaires and surveys

Questionnaires and surveys can provide useful information as long as they are constructed to elicit specific information, are easy to analyse and the analysis is completed accurately and quickly. Well-designed forms can be an efficient way of gathering data from a large number of people. Simply asking the questions in the risk identification process should provide you with sufficient information to enable you to move forward with the process.



## Interviews

Face-to-face or telephone interviews can be helpful because they are more personal than questionnaires. Interviewees might explain things in more depth or offer examples. Be prepared with your questions so that you don't waste anyone's time and be very clear about the type of information you are seeking from the person.

## Structured techniques

For complex projects that have multiple risks with potentially serious consequences, you could use a formal structure of instruments and systems such as flow charts, operational modelling or a systems analysis to help identify risks. Structured techniques condense complex information into a manageable form. These techniques will give you information to help you analyse and prioritise the risks.

## Checklists

Checklists are useful tools for systematically noting whether all aspects of the process have been covered. They are a valuable guide to the scope of an activity and all the tasks and responsibilities involved. Using a checklist will show you what has been covered in the risk identification process and whether there are any gaps.

### Example: checklist

A typical checklist might look like the following.

Risk identification checklist	
Aspect identified	Check
1. The source of the risk	
2. The nature of the risk that might occur	
3. The effect of the risk on the activity's objectives	
4. Why the risk is likely to occur	
5. When the risk is likely to occur	
6. Where the risk could occur	
7. How the risk could occur	
8. Who is involved	
9. Existing control measures	
10. Reasons that the measures might be ineffective	

## Benchmarking

Another way to identify risks and how they are managed is to see what other organisations do. Compare your organisation with a similar one and determine the types of risks it encounters and the methods it uses to avoid or control them. Identify the best practice for recognising risks in your industry and apply it to your organisation.

### Practice task 2

Imagine that your team has been asked to purchase a new photocopier for the office. Describe the techniques you would use to identify potential risks.

# 1C

## Document identified risks

Once the risks have been identified, they should be documented in an appropriate format suitable for analysis. Follow any established policies, procedures or guidelines set by your organisation.

Enter all details accurately. Depending on the nature and complexity of the activity, you might also prepare a brief report stating the methods used to identify the risks, the scope of the activity, the names of those who participated in the risk identification process, and any other sources of information used.

The documentation is often in the form of a risk inventory, which details:

- the date and the name of the person compiling the information
- the activity
- the identified risks
- how the risk might become an event
- the consequences of the risk
- the existing measures in place to control the risk
- the effectiveness of these measures.

## Example: risk inventory

Here is an example of a risk inventory.

Risk inventory								
Activity: Launching a new product		Department/team: Marketing		Department/team responsibility: To prepare for and conduct a marketing campaign for the new product				
Compiled by: Adrian Johnson		Date: 5 October						
Risk	How it could happen	Consequence	Existing controls	Likelihood	Impact	Level of risk	Priority	Action
Promotional material may not be ready in time	Supplier fails to deliver	Launch delayed	Firm contract with suppliers Intermediate progress checklists Preferred suppliers					
Poor quality of publication	Poor design Unskilled staff Inappropriate software	Reputation damaged	Proofs need to be approved and signed for Preferred suppliers					
Technology breakdown	System fails Equipment not serviced	Fall behind time	Backup hardware Regular servicing					
Key staff leave just prior to launch	Unexpected family event New job offer	Fall behind time Lose experience and knowledge	Have backup staff so we don't rely on one person Job sharing					
Team members not available	Fall ill On annual leave	Fall behind time Other members have to take on additional work	Have backup staff so we don't rely on one person Job sharing					
Can't deliver the launch	Media partner pulls out of contract	No media support	Have firm contract Organise backup media					
Idea stolen by competitor	Poor security Lack of confidentiality among staff Poor market research	Impact of launch decreased Sales affected negatively	Confidentiality clause in staff contracts Conduct consistent market research					
Project goes over budget	Poor planning Poor cost control	Reduction in the scope and impact of the launch	Milestone progress checks Obtain multiple quotes; select best value for price/quality					

continued ...

... continued

Risk	How it could happen	Consequence	Existing controls	Likelihood	Impact	Level of risk	Priority	Action
Project goes over time	Poor planning Poor quality work that needs to be redone	Poor quality product The project becomes rushed	Prepare project brief Prepare project management plan Prepare contingency plans					
Marketing tools no longer appropriate	Electronic mail-outs considered spam	Need to quickly redesign and find alternative delivery methods May not meet some of the target audience	Have a range of distribution channels					

### Practice task 3

Imagine that your team has been asked to purchase a new photocopier for the office. Complete this risk inventory to include at least two potential risks.

Risk inventory									
Activity: Purchasing a new photocopier	Department/team:		Department/team responsibility: To research and purchase a new photocopier for the office						
	Date:		Existing controls	Consequence	Likelihood	Impact	Level of risk	Priority	Action
Compiled by:	How it could happen	Risk							

## Summary

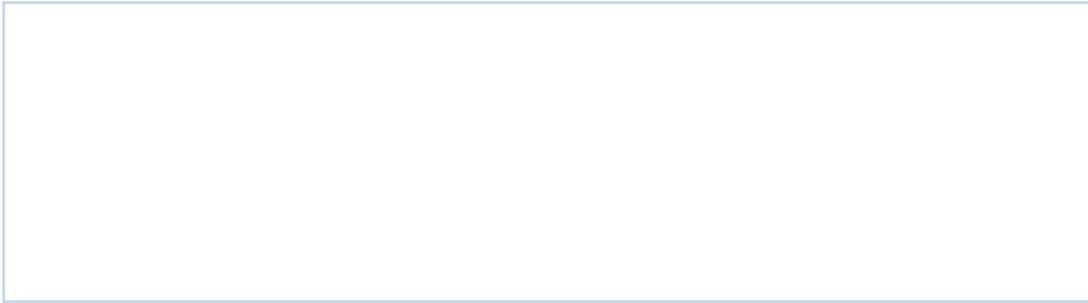
1. To implement a risk management plan, you must be able to identify all of the risks that may be encountered within your area of responsibility.
2. A systematic process must be used to identify and document all potential risks, rather than relying on ad hoc or informal arrangements.
3. The types of risks faced by organisations are many and depend on the nature of the organisation, its products and services and the industry it operates in. In general, risks relate to commercial and legal relationships, economic factors, human behaviour, natural events, political circumstances, technology, management activities and individual activities.
4. Understanding the various elements of risk improves your ability to respond to them. The key elements of risk are the:
  - source of the risk
  - event
  - consequences
  - causes
  - frequency
  - location
  - controls.
5. There is a range of tools that can be used to identify risks, including existing documentation within the organisation, brainstorming, focus group discussions, questionnaires and surveys, interviews, checklists and benchmarking.
6. Once risks have been identified, they should be documented in an appropriate format suitable for analysis.

## Learning checkpoint 1 Identify risks

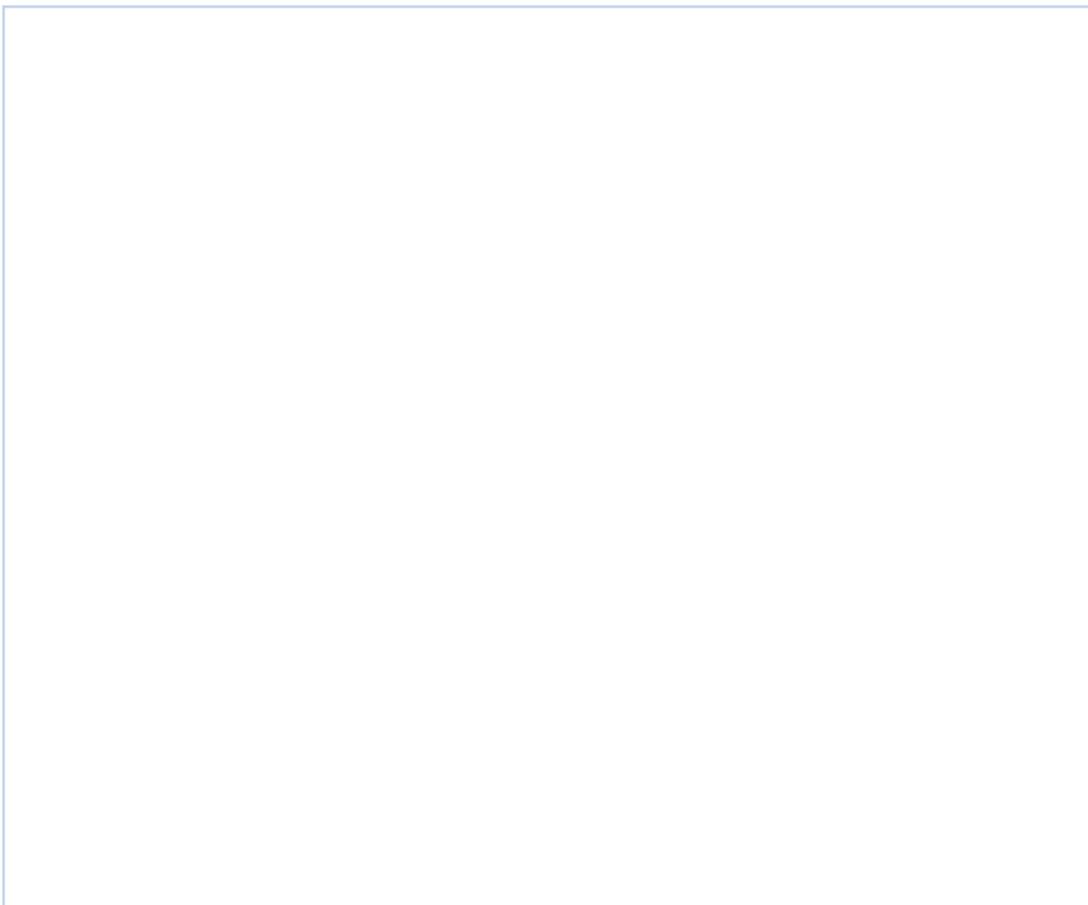
This learning checkpoint allows you to review your skills and knowledge in identifying risks.

For your organisation or an organisation you are familiar with, complete the following tasks.

1. Identify all of the potential risks confronted by the organisation.



2. What tools or systems could be implemented to ensure these risks are monitored and identified on a continual basis? Explain how each of these will help.



3. For three of the risks you have identified in Question 1, document the elements of the risks by completing a risk inventory analysis. Only complete the sections listed in the table below.

<b>Risk</b>	<b>How it could happen</b>	<b>Consequence for the business</b>	<b>Existing controls in place to minimise the impact</b>
Risk 1			
Risk 2			
Risk 3			

4. What organisational policies and procedures should be implemented to ensure risks are documented continually and accurately?

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## Topic 2

# Analyse and evaluate risks

Once you have identified the risks associated with an activity, the next step is to analyse them. This involves determining how likely they are to occur and how severe the impact will be if they do occur. Analysis should be undertaken in a systematic way using data and information from past records, previous experience, market research and other relevant sources.

Regardless of the nature and complexity of the activity, risk analysis should be undertaken using measurement and rating scales to quantify the data so the information is accurate, is clearly documented and can be effectively used in the next stage – treating risks.

After quantifying the data, you need to evaluate the risk and categorise it in terms of its severity, determining which risks should be treated as priorities and which can be accepted as low-level or unlikely to happen.

In this topic you will learn how to:

- 2A Analyse and document risks
- 2B Categorise and determine the level of risk
- 2C Document analysis processes and outcomes

# 2A

## Analyse and document risks

You need to be familiar with the processes used in risk analysis and the systems you can use to identify, evaluate, prioritise and document risks. The following example gives a summary of the steps in risk analysis and the types of qualitative scaling systems you can use.

### Risk analysis steps

**1****Analyse the cause of the risk**

Determine whether the cause of the risk is internal or external. Determine what factors contribute to the cause of the risk. Use existing records and research information to pinpoint causes and determine their nature.

**2****Determine the potential consequence of the risk**

A risk's potential consequence can be set in terms of:

- high/medium/low
- major/moderate/minor.

**3****Determine the frequency of exposure to the risk**

How often is the organisation exposed to the identified risk? Qualitatively, this means making determinations in the context of whether exposure is expected, probable, possible, unexpected or rare.

The organisation's past records should be examined for signs of exposure. Research can determine similar likely circumstances in the future.

**4****Determine the likelihood of the risk occurring**

Express the likelihood of occurrence in qualitative terms of:

- probable/possible/improbable/nearly impossible
- likely/possible/unlikely.

**5****Categorise the risk**

Combine the qualitative information from the preceding steps. Place the risk into a high/medium/low category, based on its possible consequence and likelihood.

**6****Prioritise the risk**

Assign the risk a qualitative priority value such as high, medium or low.

**7**

**Evaluate the risk**

Based on the organisation’s criteria, the risk may be evaluated as negligible/ tolerable/acceptable (in that its advantages may balance its disadvantages)/ unacceptable/intolerable.

**8**

**Document results of the risk analysis**

Record all the information gathered and the determinations resulting from each step of the risk analysis. Include data sources and information on existing controls.

## Analyse the cause of the risk

What causes the risks you identify in the first stage of the risk management process? These causes will be as varied as the activities undertaken and will include obvious causes such as not enough time being allocated to a project, as well as unforeseen circumstances such as unexpected staff illness, fire or an opportunity for merger.

Some causes of risk are illustrated in this table.

Risk	Cause
Poor-quality work	Inadequate employee skills
Theft of property	Poor security
Customers seek other options	Increase in competitors in the market
Inexperienced employees	High staff turnover
Legal requirements are not met	Changes in government policy
Deadlines are missed	Poor planning controls
Demand is low	Economic downturn
Staff do not perform well	Mismanagement

You can analyse these causes by identifying which ones you can reasonably expect to happen, which ones you have control over and those that are generally beyond your control. Analysing causes helps you to minimise risks. If you can identify and understand the cause you may be able to control it, treat it or even eliminate it, thereby helping to control, treat or eliminate the risk.

## Note existing control measures

A good starting place in analysing causes is to see what measures are already in place to control the risk. Do previous or existing procedures manage or eliminate causes? For example, if the cause of property theft was poor security, how has the issue of poor security been addressed? Are the security measures still adequate or does the organisation remain in danger of being exposed to a risk?

The organisation's risk management plan should list the types of potential risks and their causes, the existing measures used to ensure causes of negative risks are prevented or minimised, and the causes of positive risks and how they are treated to maximise benefits, as illustrated in this example.

Risk	Cause	Risk prevention strategies	Control measures
Staff injury	Staff do not understand safety policies	<ul style="list-style-type: none"> <li>OHS policies implemented and monitored</li> <li>Staff training</li> <li>Regular building maintenance</li> </ul>	<ul style="list-style-type: none"> <li>Review OHS policies and staff training</li> <li>Amend and update policies and training as required</li> </ul>

The control and treatment strategies must comply with organisational policies and procedures and federal or state legislation. Ensure you are familiar with existing documentation outlining relevant processes and follow them accordingly.

## Use past records

Records of projects and activities that were previously conducted, whether by your organisation or by another organisation, are useful to see what causes were identified before the project or activity began, what risks occurred and how these causes were dealt with. You may recognise similarities with your own project and be able to learn from this previous experience. For example, an activity that runs over budget (the risk that occurred) may have failed to include a budget for incidentals (the cause of the risk). Being aware of this might ensure that you don't make the same mistake again.

Similarly, you might read about a situation in which suppliers did not deliver on time. Knowing that this caused the activity to run over deadline should alert you to the potential for the same thing to happen to your project, particularly if you are using the same suppliers.



## Take advantage of experience

Speak with experienced colleagues and discuss how the causes you have identified could be foreseen and controlled. They may be able to mentor you or show you how to predict the cause and minimise its impact, especially if they have been at the organisation longer than you.

For example, an experienced colleague may tell you that certain equipment is unreliable for sustained periods of use. You might have identified equipment breakdown as a possible cause of bringing in a project behind the deadline. This information will help you ensure the equipment is well-serviced prior to beginning your project.



## Consult stakeholders

It is crucial that everyone involved in the project, program or organisation is consulted at all stages. This will help you determine how you could address a cause that is part of a circumstance outside your control.

By using everyone's knowledge and skills, you can generate a range of innovative ideas and receive suggestions you had not considered before. For example, an unforeseen cause of risk might be staff absence due to stress; therefore, a team member might suggest that time is allocated for employees to address health concerns during work hours, or relaxation or exercise programs be put in place, thus minimising the risk of stress.

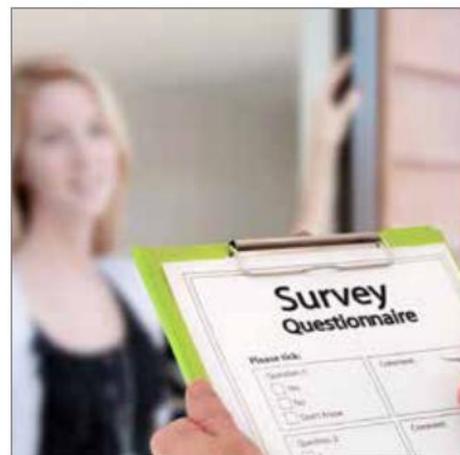
Stakeholders might include:

- managers
- contractors
- service providers
- suppliers
- employees
- financial managers
- insurance agents
- members of the public
- unions
- volunteers.

## Survey

Use a questionnaire to survey experts to see what they have done in the past or what they would recommend for specific causes. For example, you can ask others why they think sales are falling. A customer survey might identify a number of causes such as more competitors, poor customer service, faulty or obsolete products, or delivery difficulties.

You can then analyse these causes to see whether you can treat them. Increased competition is a cause that is largely beyond your control, and results in the need to address the risk it causes. The other causes listed, however, are ones you could do something about.



## Example: analyse the cause of risk

Here are some examples of how to analyse the cause of risks.

Risk	Cause	Analysis
Project may not meet the deadline	Insufficient time allocated (expect to happen)	<ul style="list-style-type: none"> <li>By looking at similar projects conducted in the past, you might reasonably expect this to happen.</li> <li>People involved in past activities might warn you that this is likely to happen.</li> <li>Your team might have ideas on how to deal with this.</li> </ul>
Equipment is stolen	Security alarm system insufficient or malfunctions (you have control over)	<ul style="list-style-type: none"> <li>Your organisation's risk management plan should indicate the security measures in place.</li> <li>Measures may need to be reviewed.</li> </ul>
Key project members leave	Staff member becomes ill and resigns (beyond your control)	<ul style="list-style-type: none"> <li>See who can act as backup.</li> <li>Look at measures in place for reducing the likelihood of illness among staff.</li> <li>Seek advice from experts.</li> </ul>

## Multiple causes of risk

Remember that for each risk you have identified, you may have found a number of causes that should be analysed. In the project example, other possible causes for a project not meeting its deadline might have been:

- staff are not sufficiently skilled
- equipment breakdowns
- a contractor falls behind schedule
- key staff are absent
- suppliers do not deliver on time.



## Practice task 4

1. A business is analysing its environmental risks on waste minimisation. List a risk and identify its causes.

2. Describe how you would analyse these causes.

## 2B

## Categorise and determine the level of risk

Once you have analysed the cause of the risk, there are a number of things you need to do next. You need to determine:

- the potential impact of the risk
- the frequency of exposure to the risk
- the likelihood of the risk occurring.

### Determine the potential impact of the risk

The next step in evaluating risks is to determine the potential impact of the risk. You will also need to apply a ranking to the impact of the risk. This might be expressed as high, medium or low, or as insignificant, minor, moderate, major or catastrophic. Sometimes a grade is also applied. This can help when documenting the impact so the ranking can be seen and understood quickly and easily.

As you read the following list of examples, think about which consequences have a severe or minor impact.

If the risk occurs, will the risk:

- have a detrimental impact on the budget?
- cause the activity to go well over the set deadline?
- mean that time lines have to be adjusted?
- mean that the outcomes of the project are not met?
- result in a legal matter?
- severely damage the organisation's reputation?
- put the project back a few days?
- result in injury?

### Example: causes, consequences and impact of risk

Here are some examples of risks, their consequences and their level of impact.

Grade	Level of impact	Example
1.	Insignificant	The photocopier needs servicing and this puts the project back a day.
2.	Minor	A staff member is unexpectedly away for a week, calling for modification of time lines.
3.	Moderate	Bad customer service severely damages the organisation's reputation.
4.	Major	Greatly increased production costs result in lower profit and lead to staff redundancies.
5.	Catastrophic	Poor financial management causes a company to go bankrupt.

## Determine the frequency of exposure to the risk

How likely is it that the organisation, team, individual, project or activity will be exposed to the risk? Frequency of exposure is usually expressed in terms ranging from whether you are certain an area will be exposed to the risk or whether you believe it is unexpected, to whether it would be a rare occurrence if it did happen. To be able to assign an accurate ranking, you need to complete the following requirements.

### Requirements for assigning a risk ranking

Look at past records, including reports and the organisation's risk management plan, to see how often the organisation has experienced the risk and whether it is prepared for it.

Question relevant people who have had similar experiences to see what ranking they would give the risk.

Analyse market research that may predict future circumstances.

Conduct research into the relevant industry using the internet, industry journals and trade magazines, government policies and competitors' experiences to understand the nature of the risk and the likelihood of the organisation's exposure to it.

## Refinement of risk assessment

Your initial assessment of exposure to the risk could change if circumstances change. For example, identifying the frequency of accidents happening to members of the sales team in the past can help you determine how often accidents might happen in the future. However, the organisation may employ more sales people in the future, the staff might spend more time telephoning clients instead of travelling, the team may widen its geographic base, road conditions could worsen or the condition of the company car could deteriorate. These changes will all affect the sales team's frequency of exposure to accidents.

When evaluating the frequency of exposure to risks, ask the following questions:

- How often do people encounter the risk?
- Has it ever happened before?
- How often has the risk occurred?
- Has the risk caused any near misses?
- Is there any level of training required to perform the activity to ensure exposure to the risk is minimised?
- Have people been adequately trained to lessen their exposure to the risk?
- Have people not been trained because the training is expensive or time consuming?

## Example: risk exposure

A typical grading system of possible risk exposure might look like the following chart. An alphabetical grade is often given as an easily identifiable marker that helps when documenting the potential frequency of exposure to a risk.

Grade	Ranking	Example	Potential frequency of exposure
A	Expected (will occur regularly)	Costs increase	Every project or activity
B	Probable (will occur at some stage)	Deadlines are exceeded	A number of activities
C	Possible (could occur)	Staff are injured	A couple of times in a year
D	Unexpected (could occur but unlikely)	Property is stolen	Once in five years
E	Rare (may occur but in limited situations)	A human-made disaster	Once in 10 years

## Determine the likelihood of the risk occurring

The likelihood of a risk occurring can be expressed as possible, probable (likely) or improbable (unlikely). An alphabetical grade is often applied to the level of likelihood.

This type of ranking is suitable for projects or activities that have a fixed time component.

The following example shows risk rankings.

Grade	Level of likelihood	Example
A	Expected (will occur regularly)	Staff take sick or holiday leave during the activity
B	Probable (will occur at some stage)	Technology breakdown
C	Possible (could occur)	Suppliers do not deliver on time
D	Improbable (could occur but unlikely)	Security system fails
E	Rare (may occur but in limited situations)	A staff member dies on the job

## Example: how risk rankings are used

For organisation-wide risk management, some organisations use the same ranking that they use for frequency of exposure to the risk. Here is what one organisation does.

Gavin Coates of Waverley Books says:

'The first thing I do is look at what's happened before in our organisation to see the likelihood of it happening again. For example, we already have reliable data on staff absences and movement, technology breakdowns and occupational health and safety accidents.

'I then look to see what's happening in the organisation's business environment. For example, we're getting a new computer system that will be backed up by our old system. At the moment a breakdown is a possible risk. After we get the new system, the risk will be greatly decreased so we'll downgrade the likelihood to improbable or unlikely.'



## Categorise the risk

Categorising risks involves perhaps the most crucial steps because you need to draw a connection between all the analyses you have so far conducted to determine the actual level of the risk. You need to analyse and differentiate the risks into categories – such as low, medium, high or extreme – according to the impact or consequence they will have if they occur, as well as the likelihood of them occurring.

## Example: categorise risk based on level of impact

You identified a team member being away for one or two days during an activity as a potential risk. You then looked at the consequence or level of impact this would have on the activity. You labelled the consequence as insignificant, meaning that an absence of one or two days would not disrupt the conduct of the activity.

Potential risk	Level of impact	Grade
A team member is away for one or two days during the activity	Insignificant	1

However, if a team member was away for an extended period of time, the categories would be different.

Potential risk	Level of impact	Grade
A team member is away for an extended period during the activity	Major	4

## Example: categorise risk based on likelihood

You then looked at the likelihood of a team member being away for one or two days during an activity. You labelled the likelihood of this risk occurring as expected, meaning that it could be expected to happen.

Potential risk	Likelihood	Grade
A team member is away for one or two days during the activity	Expected	A

However, if the team member was away for an extended period of time, you would have labelled the likelihood of this risk occurring as improbable, meaning that although situations like this do happen, you don't expect them to.

Potential risk	Likelihood	Grade
A team member is away for an extended period during the activity	Improbable	D

## Prioritise the risk

You need to prioritise risks by assigning them a value using specific priority measurement scales such as high, medium or low. This means that you combine the two tables you have prepared – the level of impact and the level of likelihood – to determine the level of risk.

### Extreme

Risks that have the potential to be devastating to the organisation or project. Require immediate action.

### High

Risks assessed as likely to occur and severely impacting (either positively or negatively) on specific aspects of the organisation such as finance, property, personnel or governance. Require immediate action.

### Medium

Risks assessed as being probable and needing treatment. Require monitoring and response procedures.

### Low

Risks assessed as having a minimal likelihood of occurring and a corresponding low impact level if they do occur. Treated with routine procedures.

## Risk matrix

You can use a matrix for determining the level of risk. For this type of matrix, you need to understand the alphabetical and numerical ranking system you have applied. Study the matrix so you are familiar with the way the ranking levels are used.

Level of likelihood	Level of impact				
	1 (insignificant)	2 (minor)	3 (moderate)	4 (major)	5 (catastrophic)
A (expected)	Medium	Medium	High	Extreme	Extreme
B (probable)	Medium	Medium	Medium	High	Extreme
C (possible)	Low	Medium	Medium	High	High
D (improbable)	Low	Low	Medium	Medium	High
E (rare)	Low	Low	Low	Medium	Medium

### Example: use a risk matrix

A risk that has been identified as having a major impact on an activity (4) if it occurs and may possibly occur (C) will have a high level of risk. This is because if it does happen, it would need to be managed at a senior level. An example would be a member of the public being injured during an activity run by an organisation.

This example has been highlighted in the following matrix.

Level of likelihood	Level of impact				
	1 (insignificant)	2 (minor)	3 (moderate)	4 (major)	5 (catastrophic)
A (expected)	Medium	Medium	High	Extreme	Extreme
B (probable)	Medium	Medium	Medium	High	Extreme
<b>C (possible)</b>	Low	Medium	Medium	<b>High</b>	High
D (improbable)	Low	Low	Medium	Medium	High
E (rare)	Low	Low	Low	Medium	Medium

## Example: categorise and prioritise the level of risk

The marketing team at Vita Sports Drinks, an organisation specialising in energy drinks, is beginning a major campaign that will involve all five team members. The team leader prepares a risk analysis for all aspects of the project, including personnel, finance, resources, operations and legal-centred risks.

Here is the level of impact table that the team leader prepares for risks associated with personnel, using the descriptors insignificant, minor, moderate, major and catastrophic.



Risk	Level of impact	Grade
Team member: <ul style="list-style-type: none"> <li>is away for a short time</li> <li>disagrees with a decision.</li> </ul>	Insignificant	1
Team member: <ul style="list-style-type: none"> <li>performs poorly</li> <li>is regularly late to meetings</li> <li>is difficult to motivate.</li> </ul>	Minor	2
Team member: <ul style="list-style-type: none"> <li>goes on extended leave</li> <li>refuses training</li> <li>disregards instructions</li> <li>delivers excellent customer service (a positive risk)</li> <li>performs well (a positive risk).</li> </ul>	Moderate	3
Team leader: <ul style="list-style-type: none"> <li>resigns with minimal warning</li> <li>completes the campaign well under budget (a positive risk)</li> <li>completes the campaign well within the time line (a positive risk)</li> <li>does not follow directives of senior management.</li> </ul>	Major	4
Team member: <ul style="list-style-type: none"> <li>causes major injury to other members</li> <li>becomes critically ill</li> <li>causes campaign to be cancelled.</li> </ul>	Catastrophic	5

## Example: categorise the level of likelihood

Here is the level of likelihood table the team leader prepares for the personnel-centred risks he has identified. Because this is a three-month project, the leader opts to use the expected/possible/probable/improbable/rare ranking scale.

Risk	Level of likelihood	Grade
Team member is away for a short time.	Expected	A
Team member goes on extended leave.	Probable	B
Team member delivers excellent customer service.	Probable	B
Team member performs well.	Probable	B
Team leader completes the campaign well within the time line.	Probable	B
Team leader completes the campaign well under budget.	Probable	B
Team member disagrees with a decision.	Possible	C
Team member performs poorly.	Possible	C
Team member is regularly late to meetings.	Possible	C
Team member is difficult to motivate.	Possible	C
Team member refuses training.	Possible	C
Team member disregards instructions.	Possible	C
Team leader resigns with minimal warning.	Possible	C
Team member becomes critically ill.	Possible	C
Team member causes campaign to be cancelled.	Improbable	D
Team member causes major injury to other members.	Improbable	D
Team leader does not follow directives of senior management.	Improbable	D

## Example: determine the level of risk

The team leader can now combine the two tables to determine the level of risk, which he categorises as low, medium, high or extreme, using this matrix.

Level of likelihood	Level of impact				
	1 (insignificant)	2 (minor)	3 (moderate)	4 (major)	5 (catastrophic)
A (expected)	Medium	Medium	High	Extreme	Extreme
B (probable)	Medium	Medium	Medium	High	Extreme
C (possible)	Low	Medium	Medium	High	High
D (improbable)	Low	Low	Medium	Medium	High
E (rare)	Low	Low	Low	Medium	Medium

Using this matrix, the team leader identifies the level of risk using a risk categorisation table.

Risk	Likelihood	Impact	Level of risk
Team member is away for a short time.	Expected	Insignificant	Medium
Team member goes on extended leave.	Probable	Moderate	Medium
Team member delivers excellent customer service.	Probable	Moderate	Medium
Team member performs well.	Probable	Moderate	Medium
Team leader completes the campaign well within the time line.	Probable	Major	High
Team leader completes the campaign well under budget.	Probable	Major	High
Team member disagrees with a decision.	Possible	Insignificant	Low
Team member performs poorly.	Possible	Minor	Medium
Team member is regularly late to meetings.	Possible	Minor	Medium
Team member is difficult to motivate.	Possible	Minor	Medium
Team member refuses training.	Possible	Moderate	Medium
Team member disregards instructions.	Possible	Moderate	Medium
Team leader resigns with minimal warning.	Possible	Major	High
Team member becomes critically ill.	Possible	Catastrophic	High
Team member causes campaign to be cancelled.	Improbable	Catastrophic	High
Team member causes major injury to other members.	Improbable	Catastrophic	High
Team leader does not follow directives of senior management.	Improbable	Major	Medium

## Example: risk analysis

From his analysis, the team leader can see that the risks are mostly medium or high. A list such as this, relying as it does on a subjective view of the risk, shows how important it is to consult with everyone involved to ensure the risks are viewed from a similar perspective and common understanding. For example, a risk one person sees as high level may seem low level to another.

Some risks may not be as high or as low as originally thought. For example, a team member who refuses training might seem like a medium-level risk before the project starts, but the quality of their work and their innovative thinking during the project may counteract the problem.

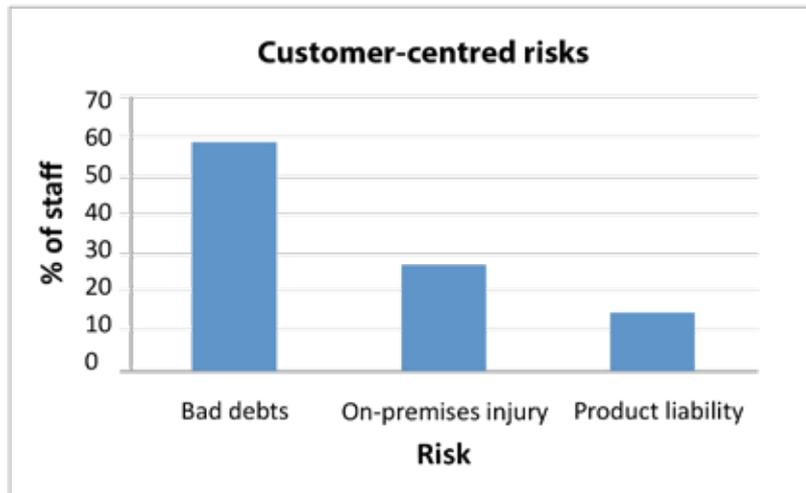
A more objective way to rank risks is to use a numerical priority ranking system that ranks likelihood and impact as a number from 1–10, with 10 being the highest level. The numbers are then multiplied together to give a score that ranks the level of the risk.

In this table, the cost of new technology is deemed to be a possible likelihood (3) and a moderate impact (2). This indicates a combined risk ranking of 6 (3 x 2), which is in the moderate risk range.

Issue	Risk identification							Risk control			
	Area of impact				Level of impact			Rank	Initial response	Done since last review	
Profits	Quality products	Business continuity	Delivery	WHS	Legal	Liability	Likelihood: Almost certain Likely Possible Unlikely				Consequence: Catastrophic Major Moderate Minor
Over-capitalisation in IT	1						1	2	2	IT strategy in line with company strategy	Identified non-capital solutions for website update
Cost of new technology	1						3	2	6		Changed the digital printing and distribution mix
IT skilled staff		1	1		1		3	3	9	Training provided in Excel, graphic design	Regular training on IT issues to all staff

## Example: risk survey analysis

Another way of identifying a ranking is to conduct a survey of relevant people and display the risk priority as a percentage, as in the following chart. In this example, staff within an organisation are asked to rank three risks in order of priority, according to their personal opinion. The results show that nearly 60 per cent of staff believe bad debts are the highest priority risk.



## Evaluate the risk

Once you have prioritised the risks, you need to study your analysis and decide how you are going to treat the risks according to the ranking you have assigned them. Risk evaluation is about deciding whether particular risks are acceptable or not.

The outcome from this is a list of risks with an agreed priorities rating. From this list, decisions can be made about acceptable levels of tolerance for particular risks and where greater effort to control the risks needs to be focused.

If you determine that the level of risk is extremely high, you will need to put strict measures in place to treat the risk. On the other hand, you may find that the level of risk is negligible and as long as you are alert to it, there is no need for action. Sometimes, you might find that the expected benefits of a high-level risk outweigh possible negatives. Alternatively, you might find that the risks are too great and that you should abandon the project altogether.

For instance, how do you distinguish between a risk that has a low probability of occurring but a high impact if it does occur, and one that has a high probability of occurring but a low impact?

When evaluating risk, you need to take into account:

- the controls already in place
- the cost consequences of managing risks or leaving them untreated (in terms of resources as well as health and safety)
- the benefits and opportunities presented by the risks
- the risks to be borne by stakeholders.

## Organisational policies and procedures

To make appropriate decisions, be aware of your organisation's policies and procedures for handling risks, as well as your own role and responsibilities. You may be responsible for making your own decisions about a specific risk or you may need advice or guidance from a more experienced person. Make sure you check your organisation's risk management plan or other processes before making any decisions in relation to evaluating and treating risks.



Most organisations are limited in the extent to which they can deal with risks that could negatively impact them. Conversely, they are also limited in the extent to which they can take advantage of opportunities that may or may not prove beneficial in the long term. Resources may be limited, the organisation may be overseen by a board that manages conservatively or the organisation might be so small that only projects with very manageable risks can be tolerated.

## Tolerable risk

The concept of tolerable risk is used when deciding what to do with a risk. For example, an organisation may decide that the profits to be gained from a project are too small when balanced against the cost of undertaking the project.

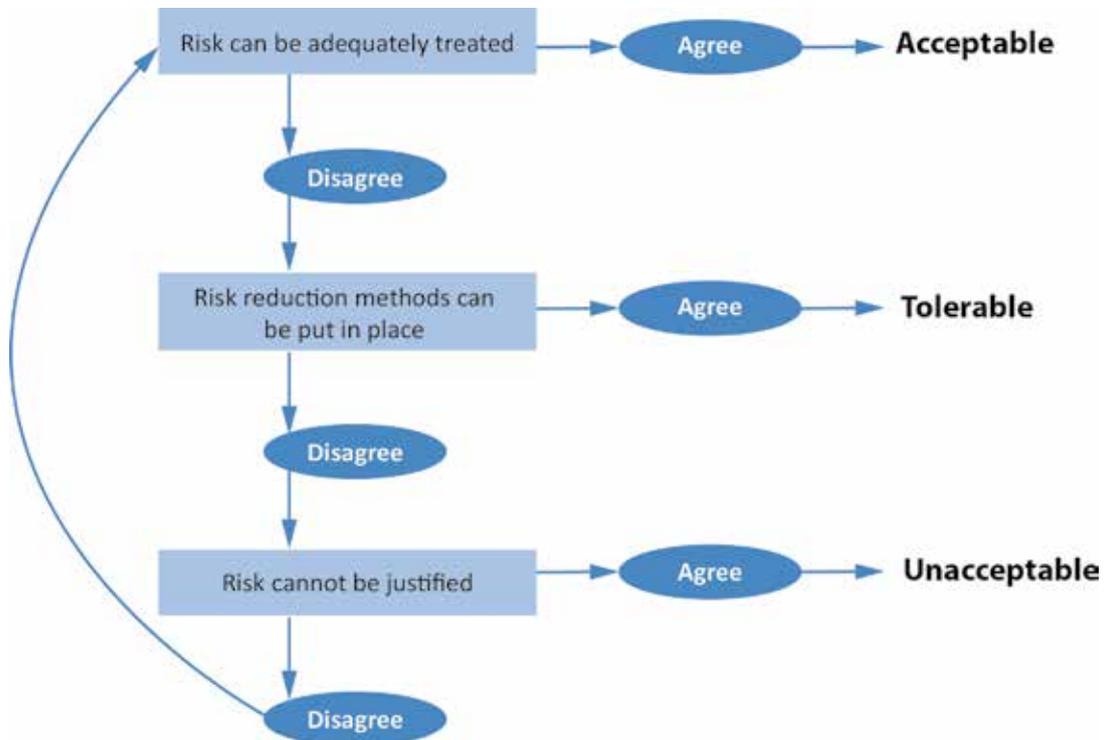
However, the project could generate enormous benefits in relation to the organisation's reputation or in the networks it might establish. Weighing these positive outcomes against the financial risk might show that the risk for taking on the project is acceptable or tolerable.

Criteria for evaluating the tolerability of the risk may be documented in the organisation's risk management plan or a set of criteria may be developed prior to commencing a particular activity.

Organisations use criteria or benchmarks to indicate levels of tolerability within the specific context of the organisation. Very often, risks involving personal safety have a very low tolerability, meaning that everything within the power of the organisation must be done to treat the risk or minimise its potential impact. Highly tolerable risks can include small losses of time, so that the organisation might choose not to expend much effort in treating them.

## Example: tolerability criteria

Here is an example of an organisation's tolerability criteria. The flow chart provides statements about an identified risk that must be agreed or disagreed with. The risk's tolerability level is determined according to whether the statement is acceptable or not. If you disagree with the last statement, you need to rethink your risk evaluation.



The risk evaluation process ranks identified risks against set criteria to assess their tolerability – to determine whether the risk is acceptable or unacceptable. In addition to set criteria, experience from similar projects undertaken by an organisation is often a guiding factor in deciding whether the risk posed by a project is tolerable or not.

### Typically unacceptable risks

Risks that might typically be deemed unacceptable by organisations include:

- technology failure
- no financial return on investment
- injuries resulting in hospitalisation
- bad publicity
- legal action
- large losses of skilled staff
- lack of firm contract
- an industrial spill.

## Changing risk factors

Risks deemed acceptable by one organisation or industry may be unacceptable in another. For example, a sporting organisation that participates in high-level risk activities such as abseiling or rock climbing may have a greater tolerance level for minor injuries than an organisation in an office environment.

The dynamics of change should be kept in mind. For example:

- your organisation may have recently introduced stricter control measures, so a high risk that was tolerable or acceptable last year may not be tolerable now
- there may have been special circumstances in the past, such as a change of government, that severely impacted on the outcome of a project but that have no effect now
- a risk in one project may not be a risk in another.



## Reach objective decisions about acceptable risks

Various and changing factors mean that you need to look at your risk analysis objectively and make decisions based purely on the data and information you have gathered for the specific activity you are planning. As with the analysis of risk levels, results can be relative. What seems a risk to one person may not seem such a risk to another. Your evaluation rests on your opinion, experience and knowledge as well as your integrity and credibility.

The only way you can be sure that you produce an objective outcome is to study documentation about previous activities; make sure you understand the nature, scope and parameters of the activity; and ensure that everyone involved in the proposed activity is consulted. Consultation is important. Make sure a number of people review the results and objectively assess each of the risks.

## Example: perform a risk analysis

A small financial and taxation advisory firm has been growing steadily over the year because it introduced a retirement planning service that is proving extremely popular. It currently carries out its business in an up-market shopping centre in an affluent suburb; however, senior management believes moving the business to a three-storey office would enhance the firm's image.

The task of overseeing the feasibility study to determine whether the move would be beneficial has been given to Majeeda, a frontline manager with the firm. She conducts research to identify possible new premises and then prepares a risk analysis chart to identify potential risks in moving offices. She needs to establish how likely it is that these risks will occur and what can be done to neutralise them. Two other staff members are helping her gather data.



Some of the results are interesting. For example, the analysis shows that the cost of relocating – identified as high probability/high impact – plus the new rent – also identified as high probability/high impact – does not compare favourably with the risk of a possible rent increase at their current location, identified as medium probability/medium impact. Moreover, market research indicates that relocating away from their customer base would have a high likelihood/high impact risk level.

A business associate of Majeeda's moved offices in similar circumstances last year and tells her that although the move was initially seen as positive, the hidden costs involved have shown the move to be a poor financial decision. He advises Majeeda to think carefully before making recommendations to senior management.

## Accept and monitor the risk

If you decide to accept a risk, you need to do so based on informed and reasoned data. If the risk has a higher impact or more severe consequences than you first thought, you may be asked why the risk was deemed acceptable. Be aware of the potential consequences and monitor and reassess the risk regularly. As an activity evolves, you may decide that circumstances surrounding a risk you initially considered acceptable have changed and the risk has become unacceptable.

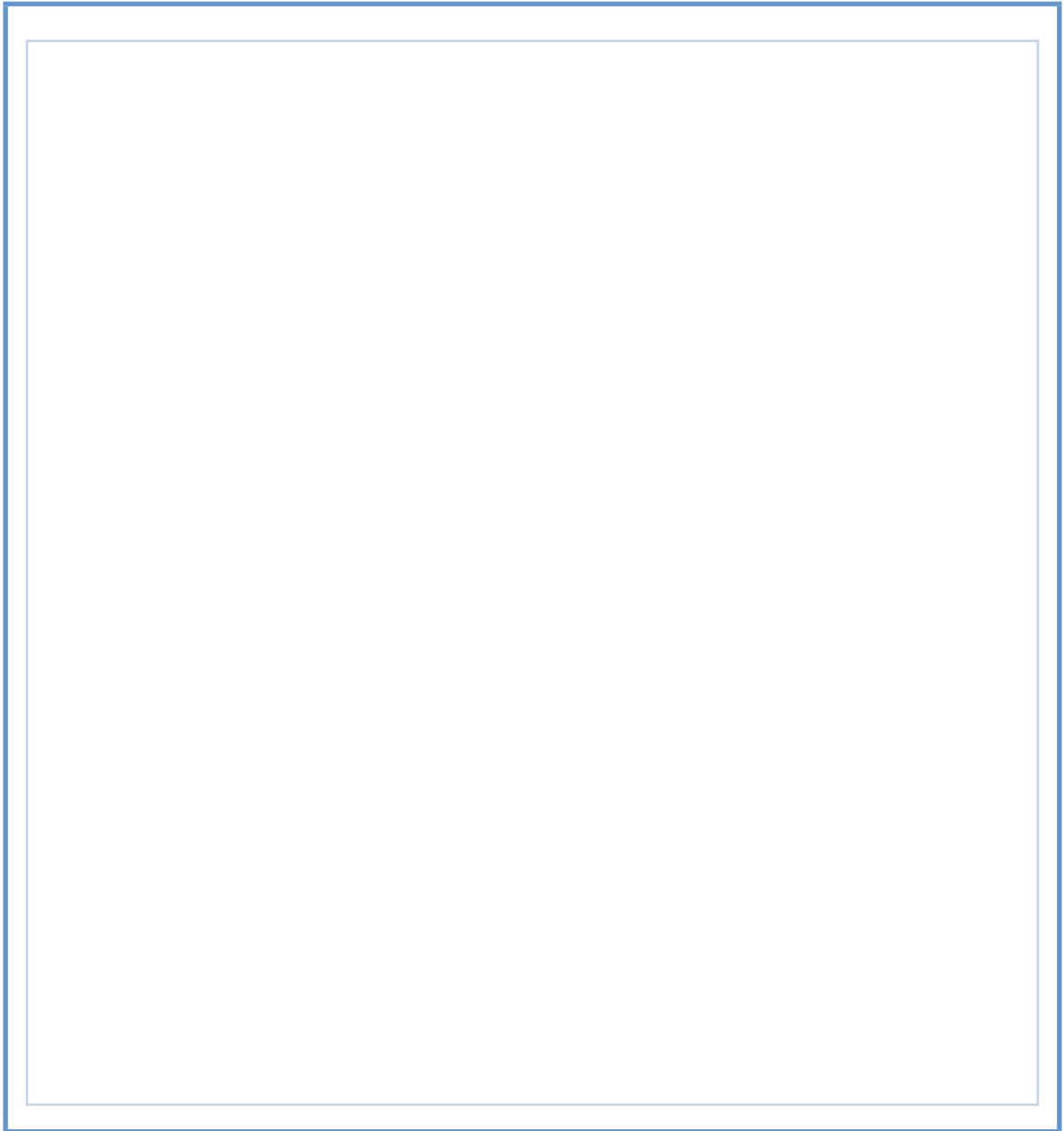
## Practice task 5

1. Produce two tables for three organisational risks you have identified. The first table should rank the impact or consequences of the risk. The second table should rank the likelihood of the risk.
2. Use these tables to develop a level of risk table based on the level of risk matrix provided previously. You can construct your table in the same way as the team leader constructed his risk categorisation table in the Vita Sports Drinks example.
3. Evaluate the level of risk you have identified for each organisational risk and discuss:
  - which risks would be acceptable for the organisation
  - which risks are tolerable but need strategies to contain them
  - which risks indicate that the activity should be abandoned.



*continued...*

*... continued*



# 2C

## Document analysis processes and outcomes

You must keep a record of all analyses and research undertaken, including sources of information, correspondence, existing controls, measurement charts and evaluation results. Keep both a paper-based copy and an electronic file of your material. There may be occasions when you need to show your results to senior management, other people involved in the proposed activity or as evidence in an external investigation. The material can prove useful when planning future activities, just as you may have drawn on existing material in your current analysis.

### Example: risk assessment documentation

Here is an example of risk assessment documentation.

Risk inventory								
Activity: Launching a new product		Department/team: Marketing			Department/team responsibility: To prepare for and conduct a marketing campaign for the new product			
Compiled by: Adrian Johnson		Date: 5 October						
Risk	How it could happen	Consequence	Existing controls	Likelihood	Impact	Level of risk	Priority	Action
Promotional material may not be ready in time	Supplier fails to deliver	Launch delayed	Firm contract with suppliers Intermediate progress checklists Preferred suppliers	C (possible)	3 (moderate)	Medium	1	

## Practice task 6

Collate the information from the three organisational risks you identified in Practice task 5 into this risk inventory form.

<b>Risk inventory</b>									
Activity:	Department/team:	Department/team responsibility:							
Compiled by:	Date:								
<b>Risk</b>	<b>How it could happen</b>	<b>Consequence</b>	<b>Existing controls</b>	<b>Likelihood</b>	<b>Impact</b>	<b>Level of risk</b>	<b>Priority</b>	<b>Action</b>	

## Summary

1. Once the risks associated with an activity have been identified, the organisation must analyse and assess these risks to determine how likely they are to occur and how severely they will impact on the business should they occur.
2. Regardless of the nature of the business activity, risk analysis should be performed using measurement and rating scales to quantify the data to ensure its accuracy and usefulness for decision-making.
3. After risk analysis data has been quantified, you need to evaluate each risk based on your analysis as to the likelihood of it occurring and its impact.
4. The evaluation of risks should enable the organisation to categorise and prioritise risks to determine which should be treated and addressed with the highest priority and which can be accepted as low level or unlikely to occur.
5. The process of risk analysis and evaluation should be systematic in nature rather than ad hoc. A systematic approach to risk analysis involves the following steps:
  - Analyse the cause of the risk
  - Determine the potential impact of the risk
  - Determine the frequency of exposure to the risk
  - Determine the likelihood of the risk occurring
  - Categorise the risk
  - Prioritise the risk
  - Evaluate the risk
  - Document the results of the risk analysis

## Learning checkpoint 2

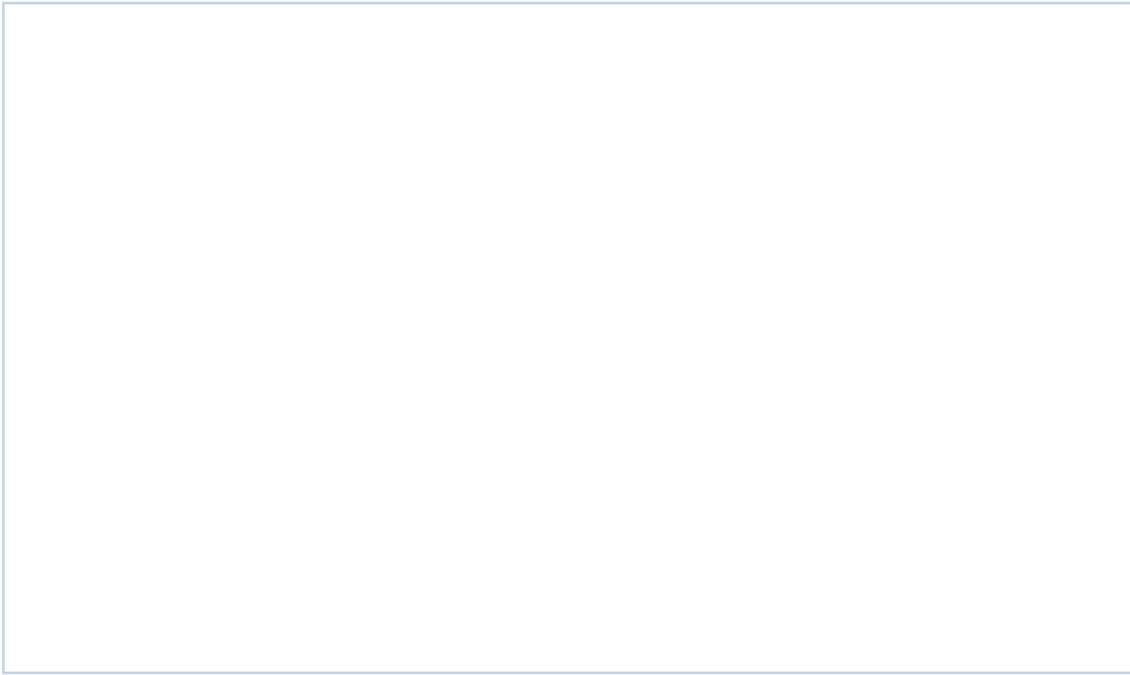
### Analyse and evaluate risks

This learning checkpoint allows you to review your skills and knowledge in analysing and evaluating risks.

#### Part A

1. In one sentence, explain why it is important to understand the cause of a risk.

2. In Learning checkpoint 1, you were required to identify three risks faced by your organisation and perform the initial steps of a risk inventory assessment. Using the three risks you identified, list the methods, techniques and sources of information you could use to determine and analyse the causes of each risk.



## Part B

Using the same three risks from the previous question, perform the remaining steps of the risk inventory assessment using the following table. Use the information provided in this topic to complete each section of the table.

<b>Priority</b> (Rank the risks 1-3 in terms of which should be addressed first)			
<b>Overall level of risk posed</b>			
<b>Likelihood</b>			
<b>Frequency</b>			
<b>Impact</b>			
<b>Risk</b>			

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## Topic 3

### Treat risks

Risk treatment involves another series of steps. First, you need to identify the range of measures that can be used to control risks. You then need to assess these options in terms of their strengths and weaknesses in relation to treating the risks. When this is done, you need to prepare a plan demonstrating how the risks are going to be treated and who will be responsible for each task.

Sometimes, risks may be beyond your area of responsibility and you will need to refer them to an appropriate person. You can then implement your risk treatment plan for the activity you are undertaking. Finally, you must ensure that the risks are continuously monitored as your activity progresses.

In this topic you will learn how to:

- 3A Determine and assess appropriate risk control measures
- 3B Identify measures to control risks
- 3C Refer risks to relevant personnel
- 3D Choose and implement control measures for your area of responsibility
- 3E Prepare and implement risk treatment plans

# 3A

## Determine and assess appropriate risk control measures

Risk treatment aims to convert the analysis and evaluation you have conducted into actions that will minimise negative risks and capitalise on opportunities that are likely to have positive outcomes.

A range of available measures help you do this. Some are more suited to major projects while others are appropriate for smaller-scale activities. Many organisations have a number of control options they use regularly. These may have been identified as appropriate for the organisation's business activities and be documented within their policies, procedures or risk management strategies. For example, an organisation may have decided that any project involving a time frame of less than three months for a specific outcome is too risky for the available resources and will never be considered. Other control measures are set down in legislation; for example, environmental and work health and safety measures.

You need to look separately at options for treating risks that have been identified as having a high risk impact and probability.



### Options if positive outcomes have been identified

Here is a description of the options if positive outcomes have been identified.

#### Actively seek the opportunity

This option involves accepting any risks you have identified and making a decision to begin or continue with the activity. You would choose this option if the risks you had identified were low impact/low probability or if the moderate or even high-level risks were deemed acceptable. For example, if you identified that there was minimal risk and positive outcomes attached to hiring a new staff member, you would accept the risks (for example, the risk that they would not fit into the organisation) and continue with the appointment. If the organisation considers that the benefits of investing money outweigh the risks of possible losses involved, then it will go ahead with the investment opportunity.

### **Change the likelihood or consequences of the opportunity**

This option means that you change or control the likelihood or the consequences of the opportunity to increase the chance of a positive outcome.

Changing the likelihood can help maximise the outcome. For example, if you identified that the activity would result in a financial gain, you might provide further training for staff to ensure the result is even higher quality than was initially planned, thereby increasing the likelihood of making a profit.

Changing the impact or consequences of the opportunity means that you identify ways to increase the extent of the proposed gains. For example, if an organisation has identified their market growth as steady but wants to increase consumer awareness, they might decide to expand into a new market or conduct a comprehensive marketing campaign to increase sales growth.

### **Share the opportunity**

Sharing the opportunity you have identified means that you enter into a partnership, alliance or joint venture with other parties to improve the chances of having a positive outcome. For example:

- to improve the opportunity of making a financial gain
- to capitalise on the opportunity to enter a new market
- to demonstrate the skills and expertise of your organisation.

Joining with others combines the available expertise and resources and can ensure a project is completed within a set time frame. For example, an organisation might decide to be part of a consortium to tender for a major project. By entering into a partnership with experts, the opportunity to make a profit is increased. Measures to control associated risks with ventures of this type include contracts, royalties and regular monitoring.

### **Retain the opportunity**

Retaining the opportunity is related to an opportunity that has been shared in the form of a partnership or joint venture. It means that even after the opportunities have been shared with other parties, there remain extra opportunities for the organisation that require no action. For example, being a member of an alliance may increase an organisation's networks or improve its reputation – results that may not have been forecast in the contract.

## Options if negative outcomes have been identified

Here are the options if negative outcomes have been identified.

### Avoid the risk

This option entails avoiding the risks you have identified by cancelling the activity. Such a decision needs careful consideration – some assessors may be overly conservative in their approach to risks and reluctant to pursue any activity that does not have a low-impact/high-gain outcome. Risk aversion can result in making decisions to avoid risks regardless of a positive evaluation and identified benefits and opportunities.

A decision to avoid an activity can be made if the outcome is identified as high impact/high likelihood and low gain.

### Reduce or change the likelihood of the risk occurring

Changing the likelihood of the risk occurring means that you put measures in place to reduce the chance of the risk becoming an event, although this doesn't necessarily mean the risk will disappear. For example, if you have identified suppliers not delivering on time as a risk, you can reduce the chance of this happening by ordering well in advance, maintaining an oversupply or changing suppliers. On an organisational level, the risk of a virus infecting the computer system could be reduced by updating the virus protection software.

Measures to reduce the likelihood of a risk occurring might include:

- conducting further research into the risk
- ensuring project management strategies are in place
- ensuring time lines are realistic
- using inspection controls and quality assurance measures
- implementing tighter control of contract conditions
- monitoring the preventive maintenance system
- ensuring staff are adequately trained.

### **Reduce or change the impact or consequences of the risk occurring**

Changing the impact or consequences of the risk if it occurs means that you are prepared with a contingency plan to avoid events that can seriously impact on the activity. Sometimes you can reduce the expected impact before the activity begins; at other times you may need to make adjustments during the course of the activity. Having a contingency plan means that an organisation can react quickly and calmly to anything that threatens the activity's progress and ensure disruptions are limited.

For example, if you expect a team member to be away during the activity, you can ensure that other team members have the skills needed to take over uncompleted tasks.

Measures to reduce the impact of a risk occurring might include contingency planning such as:

- disaster recovery planning
- fraud control planning
- pricing controls
- public relations
- minimising exposure to risks.

### **Share the risk**

Sharing or transferring the risk to other parties is an option that organisations take up when the risks are deemed too great for them to handle on their own. Taking out insurance is a typical example of sharing risk. Organisations also subcontract, enter into partnerships or alliances, or take part in joint ventures to reduce the amount of risk they will carry. However, additional risks may be incurred if the subcontractor or partner does not meet the required standard.

### **Retain the risk**

Despite changing or sharing the impact of a risk, there will still be some risk attached to the activity. Being aware of the risk and carefully monitoring it during the course of the activity will ensure that you retain control.

## The strengths and weaknesses of options

The options you choose for treating risks or opportunities will largely depend on the nature and context of the activity.

Keep in mind the strengths and weaknesses of each option. For example, entering into partnerships or alliances brings its own risks, such as a partner failing to meet deadlines or producing inferior work. Avoiding a risk because the negatives seem to outweigh the benefits can result in lost opportunities. Conversely, accepting a risk without seriously investigating potential negative outcomes is in itself a risky thing to do. Reducing or changing the likelihood of a risk before an activity begins is usually a more effective option than attempting to reduce its impact after the risk has occurred. However, having a number of options in place to help reduce the negative impact of a risk is essential if you need to control a risk during an activity.

When looking at the strengths and weaknesses of a particular option, consider how cost-effective it is. When choosing options, you need to balance how much it will cost to use an option against what can be gained from it. While reducing a risk might incur considerable cost, the benefits gained may make this a worthwhile option. On the other hand, pursuing an option may not be worth the cost involved. Consider any legal implications of one option over another.

## Continually monitor risks

Identifying and treating risks is a continual process. Even after you have identified a set of risks and selected appropriate options to manage them, other risks can appear. In addition, risks you have already identified may become worse, or risks that you have not thought of before may emerge. Therefore, it is essential that the types of risks encountered are continuously monitored.

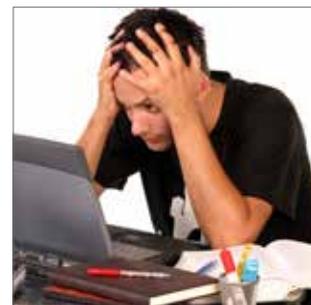
For example, suppose you decided to change the company that supplies your organisation with office paper as a treatment to control cost. The suppliers you used previously were always increasing their prices, so you did some research and discovered an organisation that supplied cheaper paper that was also environmentally sound. You changed suppliers, but after a few months realised that you had swapped one risk (cost) for another (delivery delays).

### Example: the importance of being aware of all risks

Serendipity Graphics was awarded the contract to design and produce all stationery and publicity material for a large multinational company. The time lines were very tight and because staff already had a number of projects underway that were taking up most of their resources, they decided to subcontract part of the project to an organisation recommended to them. Their risk analysis and prevention strategies covered cost blow-outs, personnel-centred risks and risks associated with the time line, but failed to predict other risks that could occur.

After a few weeks they found that the work was not meeting the design criteria, drafts were coming in late and the product was not meeting quality assurance standards.

The project manager at Serendipity Graphics realised that he should have done a more comprehensive risk analysis before taking on the subcontractors.



## Changing circumstances change the risks

Changing circumstances are one of the most common causes of a change in the types of risks encountered. For example, an organisation that experiences rapid growth will be exposed to a number of different types of risks it didn't encounter before. These might centre upon security, confidentiality, personnel, finances and business operations such as marketing, investment and sales.

Changes in legislation and government policies may increase an organisation's risks; for example, new work health and safety measures may mean an organisation needs to put stricter controls and more comprehensive policies and procedures in place to comply with the new legislation.

Ever-changing technology is a prime example of the need to continuously monitor risks. With more viruses, complex programs and the threat of hackers, the need to identify new risks is constant. Measures must be put in place to protect an organisation's information, safeguard against breakdowns and ensure staff are sufficiently trained and understand IT policies and procedures.

### Practice task 7

1. Describe a risk that has changed in some way over the last six months and that would affect an organisation.

2. How would the change in this risk affect the way it was treated and managed by an organisation?

# 3B

## Identify measures to control risks

You need to look at the risks you have identified and see which control measures are the most suitable. Most organisations apply a combination of options depending on the costs, benefits, effectiveness, social and legal implications and sustainability of controls. For example, you might decide to provide training for staff to ensure their skills match those required for the activity (reducing the likelihood of the task not being performed adequately) and prepare a contract for external personnel involved (sharing the risk). If you find that the measures you select are too costly, you will need to prioritise the controls by implementing those you can afford first.



### How does the activity fit into the organisation's plans?

When considering what measures to apply to control risks or enhance opportunities, look at the activity as a whole and see how it fits into the organisation's strategic plans. The bigger picture may influence your decision about what measures to adopt. For example, it might be wise to pursue an activity despite its potential for a negative outcome – as long as you put plans in place to control the risks. The activity might be crucial to your organisation's continuing relationship with another organisation, or it may be essential if your organisation is to expand into a new market or increase its profit. Considering the context of the activity is essential when allocating controls.

### Is a reassessment needed?

To be really sure you are choosing the right control measures, you should go back to the risks you have identified and look more closely at their causes. The control measures you implement should treat the cause, not the result of the cause.

The following table provides some examples. In the first example, there are a number of controls that could be put in place to reduce the risk of a chemical being spilt. The measures listed in the third column will help reduce the likelihood of a chemical being spilt. However, if a chemical is spilt, additional measures must be listed to lessen the result of the cause. You need to be sure that your control measures address the causes and are not additional measures that treat the impact of the risk.

Risk incident	Cause	Control measure	Additional measures
Chemical is spilt	Inadequate storage controls	<ul style="list-style-type: none"> <li>Rewrite policies and procedures for storing chemicals</li> <li>Improve storage facilities</li> <li>Train staff</li> </ul>	<ul style="list-style-type: none"> <li>Implement warning signals</li> <li>Supply appropriate clean-up clothing</li> <li>Notify relevant OHS personnel</li> <li>Insure against a spill (transfers some of the risk to another body)</li> </ul>
Sales are down	Low consumer interest	<ul style="list-style-type: none"> <li>Improve the product or service</li> <li>Research the market</li> <li>Increase product awareness through a marketing campaign</li> <li>Employ more sales staff to contact consumers</li> </ul>	<ul style="list-style-type: none"> <li>Contact lapsed clients</li> <li>Launch new product</li> <li>Cut costs elsewhere</li> </ul>

## What has been the effectiveness of previous and current controls?

Examine previous activities similar to the one you are doing and note the control measures used. Were they successful? If not, why not? Were they cost-effective? Were the measures easy to sustain?

Ask how effectively the risks are controlled by existing measures. Does anything need to be adjusted, modified or changed? For example, is the security system performing well? Are there checklists in place to help you select appropriate suppliers? Are your contracts working well for you?

Use this list of questions to approach decision-making in a systematic way.

Questions for a systematic approach to risk control:

- Is the treatment option feasible?
- What is the cost of implementing the control measure? Is it more cost-effective not to treat the risk?
- Are there any benefits to be gained by not reducing the risk?
- What resources are needed to control the risk?
- Do the risk treatments comply with legal requirements and organisational and government policies?
- Will the treatment mean more risks are identified or will it lead to additional benefits?
- Will the control measure be sustainable or is it only a short-term fix?
- Are the costs of the measures selected too great? Is a cost-benefit analysis needed?
- Are there rare but severe risks that need to be treated regardless of cost?

## Example: risk treatment plan

The marketing manager at Vita Sports Drinks selects the control measures for the personnel-related risks he has identified in their new marketing campaign. He still needs to allocate responsibilities for particular risks and prepare a timetable for implementation. But for now, he is confident that the team has selected appropriate measures to control the risks.

Here is an extract from the risk treatment plan the team has prepared.

Risk	Preferred treatment option
Team member is away for a short time	<ul style="list-style-type: none"> <li>Ensure other members are trained as backups</li> <li>Make sure everyone understands the scope of the activity and is familiar with others' tasks and duties</li> </ul>
Team member is difficult to motivate	<ul style="list-style-type: none"> <li>Assign a mentor</li> </ul>
Team member does not have sufficient skills required for the task	<ul style="list-style-type: none"> <li>Arrange training</li> </ul>
Team member performs well (potential opportunity)	<ul style="list-style-type: none"> <li>Encourage team members to perform to the best of their ability</li> <li>Instigate a bonus for good performance</li> <li>Make arrangements to celebrate and to reward the team member</li> </ul>
Campaign is completed over budget	<ul style="list-style-type: none"> <li>Seek quotes for outsourced items</li> <li>Prepare detailed budget</li> <li>Identify which items can be omitted</li> </ul>
Activity causes major injury to members of the public	<ul style="list-style-type: none"> <li>Ensure activities in the public domain comply with work health and safety legislation</li> <li>Take out public liability insurance</li> <li>Have damage control/media control in place to maintain the organisation's reputation</li> </ul>

## Who should be consulted?

Making a decision on what controls to use is another step that should not be taken in isolation. Consult with your team, other colleagues, specialists, stakeholders and any other person or group involved. Using other people's ideas, suggestions, expertise and experience results in an informed decision based on knowledge and understanding.

Consulting others also reinforces the notion of ownership and encourages continuing support from others in your organisation. Record all the ideas and suggestions they offer and consider them carefully before making a decision.



## Practice task 8

Consider the following points when answering the three questions below:

- The options available for treating the risks you have identified
- When and why some options are better than others
- How to select the most appropriate options
- Appropriate options to control the risks you have identified

1. Describe a particular risk faced by an organisation when undertaking an activity.

2. Determine the appropriate measures for controlling the risks of this activity. Why would these measures be effective?

3. List some control measures that you believe would not be effective in managing the risk of this activity. Why would these measures not be effective?

## 3C

## Refer risks to relevant personnel

In cases where the risk relates to the whole organisation or is outside your area of expertise or responsibility, you will need to refer it to other personnel. This will depend on the policies and procedures of your organisation. Make sure you understand who you should be dealing with, their level of responsibility and how it supplements your responsibilities. Prepare a time line for the completion of the risk control in consultation with others.

## Example: refer a risk to another party

This example illustrates a range of situations that require referral of the risk to another party.

Risk	Treatment option	Refer to	Reason
Member of the public may sue	Take out public liability insurance to protect the organisation against damages	An insurance company	To arrange insurance
Activity is too costly for the organisation to undertake alone	Share the risk by forming a partnership or alliance	Consortium partners	To assist in carrying out the activity
Falling sales	Develop improved product	Management/ business development	To develop a new product
Office break-in	Increase security	Business administration department	To arrange more effective security measures
Lack of expertise and experience to complete activity	Recruit appropriate staff	Human resource department/ recruitment firm	To recruit people with appropriate skills
Lack of skills to complete activity	Ensure staff have appropriate skills	External trainers	To provide training to staff



## Practice task 9

Provide an example of a situation where there is a need refer risks to others in an organisation.

# 3D

## Choose and implement control measures for your area of responsibility

You have already looked at a range of control measures and selected those that need to be referred to other people to manage. Your next step is to choose the most appropriate control measures for the risks you are responsible for.

The types of control measures you might select include:

- arranging training or professional development
- conducting further research; for example, investigating alternative options, researching competitors, obtaining customer feedback
- reviewing or creating new policies, procedures or processes
- organising marketing activities
- arranging to sell assets
- reorganising rosters
- changing suppliers, contractors or consultants.

### Implementing control measures

Base your selection on the resources you have, the time it will take to implement the measure and the cost of implementation. These criteria will influence your decision. For example, a three-month-long activity will not allow a lot of time to be spent on research as a control measure. Similarly, if the training you require is prohibitive because of the cost, you will need to seek cheaper training or see whether there are other staff with the skills you need.

Be flexible and keep in mind the alternatives available to you if your first choice proves unsustainable. Seek advice from colleagues who have experienced a similar situation.

Once you are confident that the control measures you have selected are appropriate and cost-effective, draw up a plan to show how you are going to implement and manage them.

### Practice task 10

Describe a risk where arranging training or professional development may be an effective control measure.

## 3E

### Prepare and implement risk treatment plans

A risk treatment plan guides you in implementing the treatment options you have selected. It is a clearly articulated and documented plan of action that details:

- the activity
- the risk
- the preferred treatment
- the budget
- the resources required
- how the plan will be implemented
- the expected outcomes
- the personnel responsible for controlling the risk
- the time line for implementing the risk control strategy
- how the risk and the risk treatment will be controlled and monitored.



#### Risk treatment plan

By recording your plans in a systematic way, you can avoid losing track of your objectives. Everyone involved in the control plan can see what their responsibilities are and how the activity will be implemented. You are clear about the budget assigned to the activity and exactly what resources you need. Make sure your time line is realistic and feasible.

Your organisation may already have a risk treatment template it uses. If it does not, develop your own treatment plan to suit the nature of the activity. You might use a spreadsheet format that allows you to record multiple risks, although a vertical format might be more suitable for a small-scale activity. You might use a separate sheet for each risk.

Follow the plan carefully as you implement the treatment. While the plan is a valuable support tool, do not be afraid to change it if you discover that a treatment is not working.

## Example: risk treatment plans

Here are some examples of risk treatment plans. The first example has been completed for an activity in a small to medium-sized business. The second example is more typical of a larger organisation.

Risk treatment plan	
Prepared by: Teo W.      Date: 1 May	
Activity: Prepare marketing brochure for distribution to 10,000 customers	
<b>Risks</b>	<ul style="list-style-type: none"> <li>• Suppliers may not deliver on time</li> <li>• Team member may be absent for an extended period</li> <li>• Budget may be cut or cancelled</li> <li>• Technology malfunctions</li> <li>• Quality assurance suffers</li> <li>• Requirements of target audience not met</li> <li>• Work goes over deadline</li> </ul>
<b>Treatment</b>	<p><b>Suppliers</b> Give suppliers ample warning with firm deadlines and require written notification that they will deliver on time. Ask two days ahead of deadline for a progress check.</p> <p><b>Team members</b> Ensure a backup person is appropriately skilled to take over the tasks. Decide to alter time lines if possible.</p> <p><b>Budget</b> Reprioritise other projects or cancel the project (depends on what stage the budget crisis occurs).</p> <p><b>Technology</b> Have alternative suppliers for emergencies. Have backup copies of all documents.</p> <p><b>Quality assurance</b> Have a checklist of things to be done before printing is approved; for example, layout, content, edit, proof. Make sure job requirements for a quote are specified clearly, confirmed and approved.</p> <p><b>Target audience</b> Conduct market research. Make sure the brief for the brochure is clear on identifying the audience – show draft to sample audience for feedback.</p> <p><b>Deadline</b> Have work plan with time lines, responsibilities and time frame for actions and monitor throughout the project.</p>

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<b>Risk treatment plan</b>	
<b>Outcome</b>	Quality brochure developed on time, within budget and meets customer needs and the organisation's requirements.
<b>Budget</b>	Designer: \$350 Desktopper: \$30 per hr x 15 hours = \$450 Photographer: \$200 Copywriter (in-house) Editor/proofreader (in-house) Production: \$1.50 per brochure x 10,000 brochures = \$15,000
<b>Resources</b>	Access to technology
<b>Implementation strategies</b>	Prepare project brief Develop contracts and briefs for suppliers Prepare project plan Ensure team knows roles and responsibilities
<b>Personnel</b>	Jayne (copywriter) Ari (editor)
<b>Time line</b>	Two-month project: 8 May – 7 July
<b>Review</b>	Progress checks Team meetings Supplier reports

## Example: risk treatment plan

Steve Crance, communications manager for a city parks department, was responsible for coordinating the 100th anniversary of the city parks system. The activity chosen was an outdoor commemoration celebration, the highlight of which was 100 schoolchildren planting 100 trees and shrubs. The aim was to draw attention to the anniversary, present the Parks Department as progressive and forward-thinking and cement relations with the city administration.

In this table, Steve describes how he identified and analysed the potential risks.

Item	Potential risk	Treatment
Weather	We checked with the weather bureau and although they predicted a fine day, we knew it could rain or, worse, be very windy.	We had a marquee set up in case of rain and wind. As it turned out it was very hot, so it was a good move in terms of shade, though we were really only thinking about rain.
Children	It's always a risk to use children. They might not turn up because of illness. The school principal might cancel at the last minute. There were insurance concerns, the logistics of transport, we had to get permission from the parents for their children to participate, and of course their behaviour on the day. However, they were a key element and I deemed them essential.	I asked 10 staff members and arranged for their children to be available at short notice to back up part of the 100 children in case anything happened and we were stuck with no children, who were essential to the event.
Speeches	Both the mayor and the manager of the city parks were to speak. I had to make sure that their speeches were different and that they were in accordance with the Parks Department philosophy.	I coordinated with their speechwriters to ensure the speeches were not similar and that the messages were consistent with those of the Parks Department.
Music	We planned to have three musicians strolling around playing guitars. There was a risk that they mightn't show up. This was a minor risk because it wasn't integral to the ceremony or the outcome. We were confident the musicians would show up, as they were being paid and it was a morning event.	I didn't have a backup plan in place because the risk was insignificant and the impact if they didn't show up would have been very low.
Catering	I delegated this task. The risks were if the caterers didn't turn up because they had the wrong date, or if the food was poor quality or there was not enough for the number of people attending.	I made sure they had a contingency plan and checked regularly with them.
Media	This was a crucial aspect because it fitted in with the objective to draw attention to the anniversary and the Parks Department. We hoped for and expected the media to attend.	I had a backup in case not all the media showed up. I organised for a video company to film the event so we had a record of it and could make it available to the television stations if they wanted it.

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**How did it all turn out?**

'Everything went like clockwork. The only unfortunate thing was that nobody considered the date and it turned out it was the same day as the first anniversary of a disastrous fire, so the media covered that instead. But because of the video I had organised, we had a permanent record. And one of the television stations did take us up on the offer and used it in their bulletin the next day.'

**What tips would you give others?**

'Identify the key elements of your activity. Split the elements into two lists – essential and desirable. The desirables don't have high-level risks and you could live without them. You must have the essentials so make sure you have thought of everything that could go wrong, then plan to make sure it doesn't, then plan alternatives in case the unthinkable happens.

'I found that you need to give others a sense of responsibility, so when you delegate tasks, convey that you trust their judgment. But at the same time check with them repeatedly in a non-threatening way. Assign tasks early and make sure they understand them. Give them a degree of flexibility in managing the task – in other words, don't micro-manage.

'You need to be sure you have permission to recruit new staff during the activity if the opportunity arises to add another element. Be open to the idea that the project can be enhanced by the addition of other activities, but be sure the risks for the new activities are identified.'



## Practice task 11

Prepare a risk treatment plan to deal with the risk outlined in this risk inventory.

Risk inventory								
Activity: Launching a new product		Department/team: Marketing		Department/team responsibility: To prepare for and conduct a marketing campaign for the new product				
Compiled by: Adrian Johnson		Date: 5 October						
Risk	How it could happen	Consequence	Existing controls	Likelihood	Impact	Level of risk	Priority	Action
Promotional material may not be ready in time	Supplier fails to deliver	Launch delayed	Firm contract with suppliers Intermediate progress checklists Preferred suppliers	C (possible)	3 (moderate)	Medium	1	

## Summary

1. Risk treatment involves identifying the range of measures that can be used to control risk, assessing each option for its strengths and weaknesses, and preparing a plan outlining how the risk is going to be treated and who will be responsible for each task.
2. There are a range of risk control options available depending on whether the risk has been assessed as having positive or negative outcomes, such as actively seeking the opportunity, changing the likelihood or consequence of the opportunity, sharing the opportunity, avoiding the risk or retaining the risk.
3. Choosing which control measure to implement from the range you have identified depends on the estimated costs, benefits, effectiveness, social and legal implications, and sustainability of each measure.
4. A risk treatment plan must be developed to implement the treatment options you have selected. This plan should outline:
  - the activity
  - the risk
  - the preferred treatment
  - the budget
  - the resources required
  - how the plan will be implemented
  - the expected outcomes
  - the personnel responsible for controlling the risk
  - the time line for implementing the risk control strategy
  - how the risk and the risk treatment will be controlled and monitored.
5. There will be occasions where particular risks may be outside your area of responsibility and you will need to refer them to an appropriate person or department within the organisation.
6. Risks must be continuously monitored while you are treating them and the treatment adjusted accordingly should changes occur.

## Learning checkpoint 3

### Treat risks

This learning checkpoint allows you to review your skills and knowledge in treating risks.

Select an activity or project that your organisation, or one you are familiar with, could undertake that involves an element of risk. In the table below, prepare a risk treatment plan that outlines:

- the activity being undertaken
- the risk/s associated with the activity
- control measures that could be used to treat each of these risks, and the strengths and weaknesses of each control measure
- the impact of the risk/s on areas of the business outside your immediate work department and who you would refer these to
- the expected outcomes of the risk treatment plan.

<b>Activity:</b>			
<b>Risk/s:</b>			
<b>Control measures:</b>	<b>Control measure</b>	<b>Strengths</b>	<b>Weaknesses</b>

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Control measures:	Control measure	Strengths	Weaknesses
Impact of risk/s on areas outside your responsibility:			
Personnel involved:			
Expected outcomes of the risk treatment plan:			



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## Topic 4

# Monitor and review the effectiveness of the risk treatment

You need to constantly review your planning documents and processes at every stage. The foundation of the review process is the tracking of risk treatments to see how effective they are. Implementing a set of controls does not guarantee that the risk has been successfully treated. The control option selected may have been flawed; there may have been changes in the political, legal or social environment; or internal changes may have occurred to lessen the impact of the risk. Changing circumstances can also alter risk priorities.

Monitoring and reviewing risks ensures that control measures are either maintained or improved, and that new risks can be detected and managed. Using a set of criteria to measure effectiveness will help identify any gaps in the risk treatment, as well as highlight the actions that are working.

In this topic you will learn how to:

- 4A Review the risk treatment against measures of success
- 4B Use review results to improve the risk treatment
- 4C Provide assistance with risk treatment audits
- 4D Monitor and review risk management in your area of operation

## 4A

## Review the risk treatment against measures of success

During the course of an activity, your risk treatment options should be regularly monitored and reviewed. You need to ensure controls are effectively reducing or managing the identified risks, or increasing the identified opportunities. Circumstances can change quickly and render the treatment you have chosen ineffective, you might need to revise an inappropriate option, other risks can arise that need to be treated, or risk treatment priorities might change.

Reviewing the changing environment and the progress that has been made in treating risks is an essential part of a risk management strategy. In the monitor and review process, you need to include everyone involved in the activity. Team members and stakeholders will be able to report their findings from a perspective that may be very different to yours.

#### Some key questions to ask yourself and others

- Are the risk treatments effective in minimising the risks?
- Are the risk treatments cost-effective and time-efficient in minimising the risks?
- Do the performance outcomes address the key elements for risk treatment?
- Are the assumptions made about the organisation's environment, technology and resources still valid?
- Are the management and financial controls adequate?
- Do the risk treatments comply with legal requirements and government policies such as accountability, ethics, access and equity?
- How can improvements be made?

## Review methods

You can review risk treatments that have been implemented by observing and carrying out physical inspections; conducting an audit or arranging for one to be carried out by a third party; and reviewing policies, strategies and documentation on a regular basis.

You can also use a set of established criteria to provide a concrete measure of success against which you can judge the effectiveness of the treatments. Criteria help you compare the actual performance with the desired outcome.

Criteria include:

- costs
- reduction in impact
- reduction in likelihood
- reduction in occurrence.

For a thorough, consistent review, you need to go back to your risk identification chart, your risk analysis, the risk register and the risk treatment plan. You should also document your review.



## Is the treatment cost-effective?

You need to decide whether the benefits generated from your risk treatments are satisfactory in view of the costs involved. Consider the following examples.

### Examples of evaluating if the risk treatment is cost-effective

The avoidance of a risk has caused the organisation to actually lose money, because it decided not to pursue an opportunity that has subsequently proven successful.

Further research conducted to reduce the likelihood of a risk was cost-effective because the team joined forces with another department that needed similar information and therefore offset the costs.

The training specified to help staff learn new skills was more expensive than originally thought and carried out too late to have any real benefit for the activity.

Improved contracts have saved the organisation money because late suppliers now risk penalties due to an added clause in their contracts.

Quality control mechanisms were costly to implement but have resulted in improved products and subsequently increased sales and profits.

## Has the impact been reduced?

Look at the risk you identified, then look at each of the options you selected for reducing the risk. How effective have they been in reducing its impact? If the impact has been reduced significantly, you can be confident that the option you selected was an appropriate choice. On the other hand, if the risk has increased or remained the same, you will need to identify why the treatment is not working and what alternatives are available.

Consider the following scenarios and the issues arising from them.

### Contingency planning

A contingency plan was prepared in case an outdoor activity had to be moved indoors because of poor weather. The day of the activity was stormy, so the activity was moved to the pre-arranged location.

Has the contingency plan reduced the impact of the risk?  
Were the arrangements handled well to ensure the activity was successful? If the contingency plan didn't work, why not?  
Was there too little publicity about the alternative location?  
Should the activity not have been conducted during winter?

<b>Marketing campaign</b>	<p>A product awareness campaign was instigated to combat the negative impact of a competitor's intensive marketing campaign.</p> <p>Has the product awareness campaign improved public awareness of the organisation's products and services, reducing the impact of the competitor? If not, was the campaign long enough? Were enough resources assigned to it? Do products and services need to be improved before the impact can be reduced?</p>
<b>Feedback</b>	<p>Although administration processes were in place, customers complained that the processing and preparation of invoices was taking too long.</p> <p>Has the recruitment of staff helped reduce the negative impact of the feedback? If not, is the system itself to blame? Could a better system be run with fewer staff?</p>
<b>Training</b>	<p>Staff were trained as backups to relieve absences.</p> <p>When absences occurred, how did the backup plan work to reduce the impact of the absences? Did the training prove successful in that absences were successfully covered? If not, was the training inadequate? Perhaps more people were away than planned for. Perhaps not enough people were trained.</p>

## Has the likelihood reduced?

Look at the processes that were put in place to ensure the identified risks were not likely to happen. Have they been effective? Have other risks arisen that were not foreseen, or were some risks seen as insignificant and not planned for?

If the risk happens despite the precautions you put in place, you need to check where the failure occurred. Were the measures too superficial? Did unforeseen circumstances occur that rendered the risk reduction measures inadequate? Were new risks introduced that weren't covered by the measures?

Consider the following examples of risk treatments:

- A risk register and a risk treatment plan were prepared.
- Comprehensive contracts were drawn up.
- Supplies were ordered well in advance.
- Staff were trained to the standard required.
- Security measures were put in place.
- Quality assurance policies and procedures were reviewed and updated before the commencement of the activity.
- A comprehensive project management plan was developed with the help of everyone involved.
- Time lines were approved only after consultation, drawing on previous experience and ensuring they were realistic and fair.

## Is the risk occurring less often?

Another measure of effectiveness is if the risk occurs less often. Consider the following examples.

### **Contractor performance**

If contractors were not performing to the standard required or were delivering past the deadline and improved contracts were put in place, the risk of dealing with poor contractors should have disappeared or at least been substantially reduced.

### **New equipment**

Purchasing new equipment or improving the quality and frequency of servicing existing equipment can result in fewer breakdowns.

### **Increased security**

Increasing security measures can result in zero break-ins over an extended period.

### **Conducting research and managing finances**

Conducting wider research and managing finances more efficiently can mean that an organisation is more successful in forming partnerships, so that the risk of forming inappropriate partnerships is reduced.

### **Recruitment policies**

More comprehensive recruitment policies can result in more appropriate staffing appointments, so that the risk of having untrained staff is minimised.

## Document the review

It is useful to construct a risk treatment review table to document the effectiveness of the risks the organisation has identified and treated against defined measures of success. You can list all the risks on one table or use a separate table for each risk, as in the following example.

Risk treatment review	
<b>Risk:</b> Technology breakdown	
<b>Risk treatment:</b>	
<ul style="list-style-type: none"> <li>• Purchase high-quality equipment and consumables</li> <li>• Ensure equipment is regularly serviced</li> <li>• Train staff to ensure equipment is used in accordance with the manufacturer's instructions</li> </ul>	
Measures of success	Review
Cost-effectiveness	<ul style="list-style-type: none"> <li>• Servicing regularly has reduced the frequency of breakdowns</li> <li>• Investing in high-quality equipment has proven to be beneficial, as breakdowns are now rare</li> <li>• Spending money on training was worthwhile because the machines are used more efficiently</li> <li>• Purchasing high-quality paper has reduced the incidence of breakdowns</li> </ul>
Reduction in impact	<ul style="list-style-type: none"> <li>• Downtime caused by inefficient equipment has been greatly reduced</li> <li>• Staff are confident that the equipment is efficient and will not break down</li> </ul>
Reduction in likelihood	<ul style="list-style-type: none"> <li>• Policies and procedures have been amended in regard to purchasing and servicing</li> <li>• Staff have been trained in the correct use of the equipment</li> </ul>
Reduction in occurrence	<ul style="list-style-type: none"> <li>• By purchasing new equipment, the frequency of breakdowns is now almost zero</li> <li>• Skilled staff have contributed to fewer incidents of malfunction</li> </ul>

## Practice task 12

Consider this review of a risk treatment for technology breakdown using cost-effectiveness as a measure of success. Provide some additional review points that may cover the cost-benefit of the additional expenses incurred.

Risk treatment review	
<b>Risk:</b> Technology breakdown	
<b>Risk treatment:</b>	
<ul style="list-style-type: none"> <li>• Purchase high-quality equipment and consumables</li> <li>• Ensure equipment is regularly serviced</li> <li>• Train staff to ensure equipment is used in accordance with manufacturer's instructions</li> </ul>	
Measures of success	Review
Cost-effectiveness	<ul style="list-style-type: none"> <li>• Servicing regularly has reduced the frequency of breakdowns</li> <li>• Investing in high-quality equipment has proven to be beneficial, as breakdowns are now rare</li> <li>• Spending money on training was worthwhile because machines are used more efficiently</li> <li>• Purchasing high-quality paper has reduced the incidence of breakdowns</li> </ul>

# 4B

## Use review results to improve the risk treatment

The review of the risk treatments should have identified where improvements need to be made. Using these results, you need to identify what these improvements entail and how you can implement them. You may find that some problems, while significant to your activity and area of responsibility, have wider implications for the organisation as a whole. For example, a lack of comprehensive operational procedures in your team means that others in the organisation are unaware of what is required to complete tasks competently.

If a risk is not responding to a treatment, you might need to make improvements immediately so that the outcome of the activity is not compromised. Other improvements may be long-term measures relating to organisational policies and procedures and should be put in place over an extended period of time.

Risk management documents must be active. This means regularly updating the risk inventory and the risk treatment plan to record any new risks that have developed and any treatments that need to be adjusted or changed. Record the reasons and the action you are taking.

Keep in mind that any improvements you suggest must be within the allocated budget and comply with organisational, political and legal requirements.

Improvements may include:

- making contracts more watertight (if results showed that contractors were costing too much money in relation to the standard of their work)
- taking on new suppliers (if the existing suppliers were not performing well)
- increasing security for the building (if the value of the office contents had recently increased)
- building better storage facilities (if chemical spills were still occurring despite stricter controls)
- purchasing vehicles with more safety features (if there had been an increase in accidents involving staff)
- using an accountant to prepare the budget or conduct a cost-benefit analysis (if the budget was consistently being blown out despite controls)
- improving the quality of training (if the training was not proving adequate to staff needs)
- preparing a more detailed risk register and treatment plan (if some risks were being overlooked)
- consulting more widely (if lack of cooperation was causing risks to worsen).

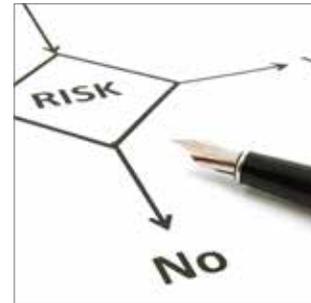
## Example: the importance of regularly reviewing risk management strategies

Gavin Coates of Waverley Books says:

'I use the priority ranking system that is recorded on the risk management plan and then see if the risk has reduced or – I hope this is never the case – increased. I'll then make sure the plan is altered to reflect the changed conditions and level of risk.'

'For example, before we purchased a new computer server, the risk of the system crashing was deemed to be moderate. I gave that a combined total of 6, resulting from multiplying the level of probability of the system crashing (2) with the level of impact if it crashed (3).

'Now we have a new server, I've looked at the risk and have downgraded it to a 2, resulting from the level of probability (1) and the level of impact (2).'



## Practice task 13

List five risk treatments that an organisation may use and identify improvements that could be made to each of them. An example is provided for one possible risk.

- Risk treatment: using signs to indicate that a floor is wet and that it is a hazard.
- Possible improvement: signs are only an administrative control and do not eliminate the risk. An improvement could be to barricade the wet area on the floor so that nobody can walk on it.

## 4C

## Provide assistance with risk treatment audits

Third-party audits provide an objective perspective to both risk management and quality assurance processes. Although some people conduct audits independently, ideally audits should be part of the risk management process. Everyone involved should be aware of when the audit is happening, why it is taking place, what it involves and what will happen as a result.



### The focus of an audit

An audit can focus on specific aspects, such as whether standards are being followed or legislation is being complied with. It can also concentrate on the treatments being implemented.

Because audits can be time-consuming and resource-heavy, they might highlight only the most pertinent aspects, such as the level of risk, the effectiveness of a particular treatment or the organisational environment.

An audit will generally identify any weaknesses in the processes that are being used to treat the risk. You may find that people have forgotten to continue the risk treatment after the initial control was put in place. Perhaps changes have caused the level of risk to increase but the treatment has remained the same. The results of audits are likely to assist the organisation with its overall policies and procedures, whereas continuous monitoring helps the person responsible for the ongoing treatment of risks.

Questions asked in an audit vary depending on the scope of the activity, the time available to conduct the audit and the resources available.

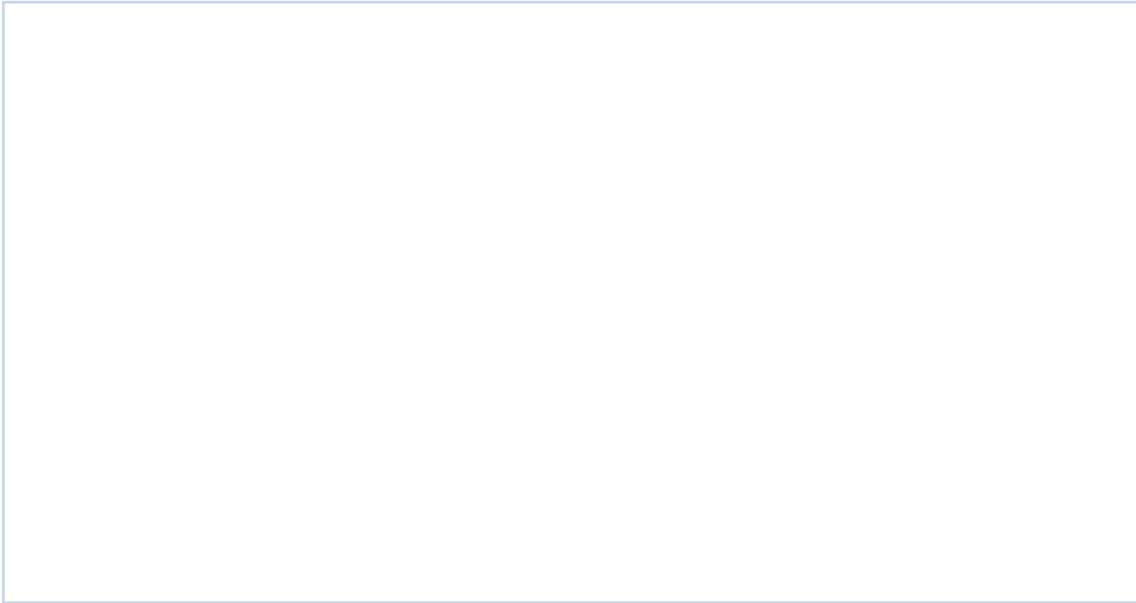


#### Examples of questions that can be used in an audit

- Has the organisational context or environment changed since the activity began?
- How do the treatments comply with legislative requirements?
- What organisational procedures are you following to treat this risk?
- How effective do you think the treatment has been?
- How are you measuring the success or otherwise of the treatment?
- Have you had to change your treatment because of a change in the risk level?

## Practice task 14

Prepare a list of some questions that would be appropriate to use in a risk audit.



## 4D

## Monitor and review risk management in your area of operation

You need to have an understanding of risk management as an organisation-wide process; you also need to review and monitor the processes you have established and over which you have control. If you have delegated some of the risk management to another team member, you need assurance that it is being handled effectively. Managing the process requires time, diligence and cooperation with all those involved.

Some treatments in your organisation can be monitored continuously, such as checking the quality of products, measuring the amount of energy used and noting the frequency of paper being purchased. Other treatments can be reviewed on an as-needs basis, such as reviewing the performance of a staff member after training.

**What knowledge do you need?**

To provide a comprehensive report discussing how your risk management strategy is working, you need to know whether:

- the original risk identification and analysis were accurate
- the suggested risk treatments were appropriate and, if not, where improvements could be made
- the strategies in place were realistic in terms of time, money and resources
- the risk treatments were successful and operated as intended
- any new risks have emerged that were not included on the risk inventory
- those responsible for treating risks in their area of responsibility are regularly monitoring and reviewing their progress
- anyone is experiencing any problems with either the activity or the risk treatment
- there is a process in place for making sure risk treatments are not repeated if they have failed
- there is a process in place for ensuring successful treatments are publicised and incorporated into the organisation's risk management strategy.

**What strategies could you use?**

Choose the strategies you will adopt. For example, will you:

- concentrate on one area at a time
- conduct small reviews periodically
- require reports from colleagues
- arrange for a third-party audit?

As a guide, consider the following suggestions:

- Give priority to high-level risks.
- Find out why risk treatments that should have worked failed to work.
- Prepare a checklist to help you monitor risks efficiently.
- Seek out people or equipment that will help you process information quickly and accurately.
- Ensure you consult with everyone involved.
- Plan how you will incorporate improvements into your risk management strategy.
- Plan how you will inform others of your findings so your information is integrated with the organisation's risk management strategy.

## Practice task 15

Provide a brief explanation of why it is important to have knowledge of the following areas of an organisation's risk management process as part of a review strategy:

- That the original risk identification and analysis were accurate
- That the suggested risk treatments were appropriate and, if not, where improvements could be made
- That the strategies in place were realistic in terms of time, money and resources
- That the risk treatments were successful and operated as intended
- That any new risks have emerged that were not included on the risk inventory
- That those responsible for treating risks in their area of responsibility are regularly monitoring and reviewing their progress
- That anyone is experiencing any problems with either the activity or the risk treatment
- That there is a process in place for making sure risk treatments are not repeated if they have failed
- That there is a process in place for ensuring successful treatments are publicised and incorporated into the organisation's risk management strategy



## Summary

1. The risk management process isn't static – you need to constantly review risk management planning documents and processes to track the progress of risk treatment plans that have been implemented.
2. Monitoring and reviewing the implementation of risk treatment plans ensures that risk control measures are either maintained or improved, and that new risks will be detected and managed.
3. Risk treatment plans need to be reviewed against identified measures of success or criteria that allow you to identify the effectiveness of a strategy and any gaps in the risk treatment process.
4. Criteria for reviewing the effectiveness of risk treatment plans include costs, a reduction in the risk's impact, a reduction in the risk's likelihood of occurring, and a reduction in instances of the risk actually occurring.
5. The review of risk treatment plans can be performed using observations; physical inspections; internal or external audits; and reviews of organisational policies, strategies and documentation on a regular basis.
6. The review of risk treatment plans will identify potential improvements to risk management practices, and where and how these can be implemented within the organisation.
7. You must ensure that people or teams auditing risk treatment plans in your area of the organisation are assisted and supported in obtaining all the information they require.

## Learning checkpoint 4

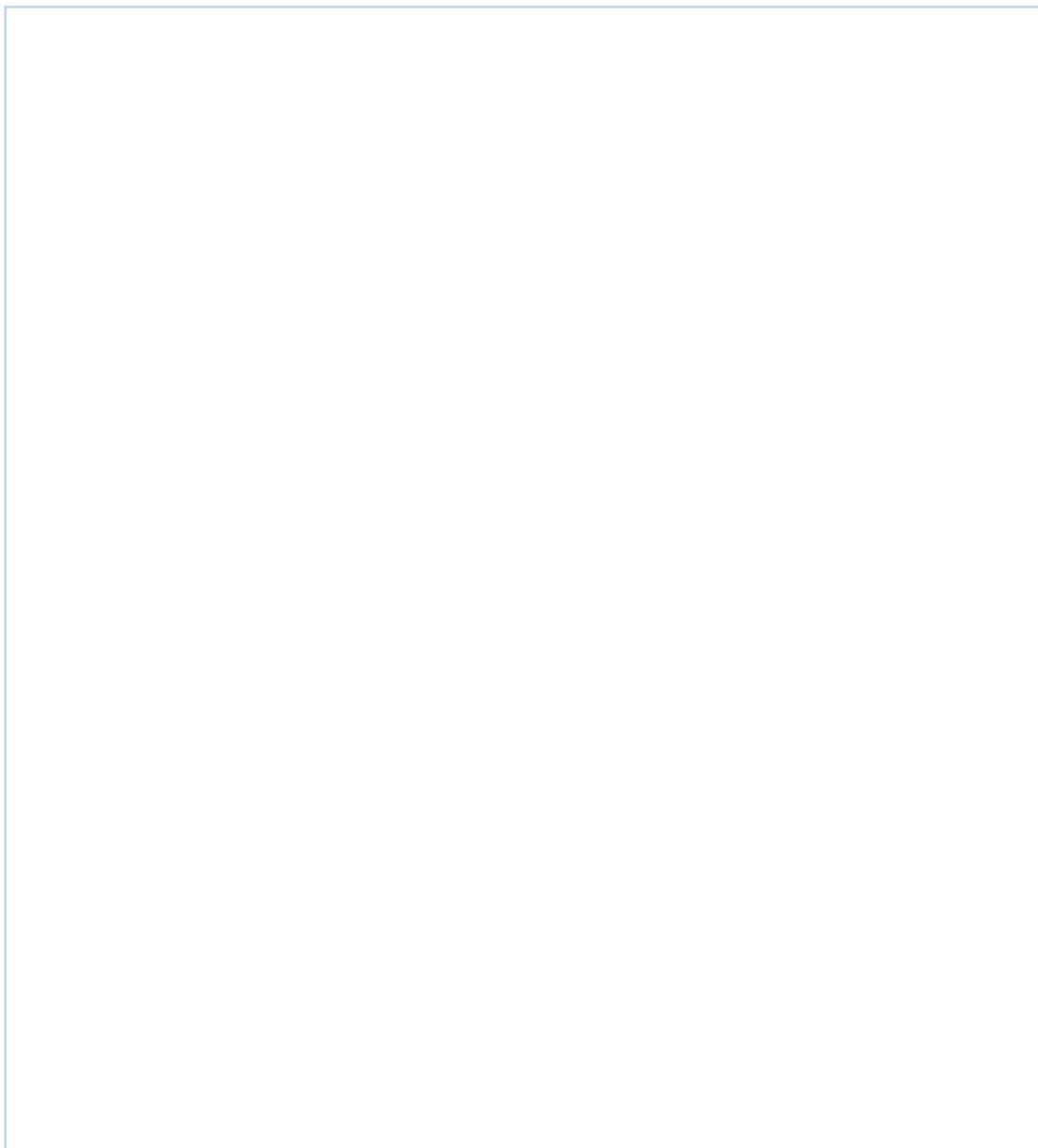
### Monitor and review the effectiveness of the risk treatment

This learning checkpoint allows you to review your skills and knowledge in monitoring and reviewing the effectiveness of the risk treatment.

Learning checkpoint 3 required you to select an activity or project that your organisation could undertake that involves an element of risk, and devise a risk treatment plan.

Explain how you could conduct a review of the implementation of this risk treatment plan to determine its effectiveness by completing the following tasks.

1. List the measures of success for the risk treatment plan.



2. List the sources of information or data that will indicate whether the measures of success have been achieved.

3. How could this information be used by the organisation to improve the management and treatment of risks on a continual basis?

4. What role can an audit play in monitoring and reviewing risk treatment plans, and how can this be conducted?