BSBPMG522
Undertake project work

Release 1

Learner guide

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Aspire Version 1.1

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Address:	
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RTO contact name:	
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Before you begin

This learner guide is based on the unit of competency *BSBPMG522 Undertake project work*, 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.

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: www.aspirelr.com.au/help
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	• Organises, evaluates and critiques ideas and information from a range of complex texts
Writing	• Develops plans, reports and recommendations using vocabulary, structure and conventions appropriate to text • Establishes and maintains records according to organisational requirements
Numeracy	• Uses formal and some informal, oral and written mathematical language and representation to prepare and communicate budgetary and financial information
Oral communication	• Participates in verbal discussions using clear language and appropriate features to present or seek information • Using listening and questioning skills to seek information and confirm understanding
Navigate the world of work	• Recognises and responds to organisational and legislative/ regulatory requirements
Interact with others	• Selects and uses appropriate communication protocols and practices to ensure shared understanding of project roles and expectations • Uses collaborative techniques to engage stakeholders in consultations and negotiations
Get the work done	• Develops and implements plans to manage projects that involve diverse stakeholders with potentially competing demands • Systematically gathers and analyses all relevant information and evaluates options to make informed decisions • Evaluates outcomes of decisions to identify opportunities for improvement • Uses digital technologies and applications to access, organise and share information

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 Define the project	1A Access the project scope and documentation	❏ Confident ❏ Basic understanding ❏ Not confident
	1B Identify the project stakeholders	❏ Confident ❏ Basic understanding ❏ Not confident
	1C Clarify project issues and parameters	❏ Confident ❏ Basic understanding ❏ Not confident
	1D Identify your responsibilities	❏ Confident ❏ Basic understanding ❏ Not confident
	1E Relate the project to the organisation's objectives	❏ Confident ❏ Basic understanding ❏ Not confident
	1F Determine and access resources	❏ Confident ❏ Basic understanding ❏ Not confident
Topic 2 Develop the project plan	2A Detail the project plan	❏ Confident ❏ Basic understanding ❏ Not confident
	2B Identify and access project management tools	❏ Confident ❏ Basic understanding ❏ Not confident
	2C Formulate a risk management plan	❏ Confident ❏ Basic understanding ❏ Not confident
	2D Develop and approve the project budget	❏ Confident ❏ Basic understanding ❏ Not confident
	2E Consult team members	❏ Confident ❏ Basic understanding ❏ Not confident

... continued

Topic	Key outcome		Rate your confidence in each section
	2F	Gain approval for the project plan	❑ Confident ❑ Basic understanding ❑ Not confident
Topic 3 Administer and monitor the project	3A	Ensure team members understand their responsibilities	❑ Confident ❑ Basic understanding ❑ Not confident
	3B	Support the team to ensure quality results	❑ Confident ❑ Basic understanding ❑ Not confident
	3C	Establish and maintain records	❑ Confident ❑ Basic understanding ❑ Not confident
	3D	Implement and monitor finances and resources	❑ Confident ❑ Basic understanding ❑ Not confident
	3E	Complete project reports	❑ Confident ❑ Basic understanding ❑ Not confident
	3F	Undertake risk management	❑ Confident ❑ Basic understanding ❑ Not confident
	3G	Achieve project deliverables	❑ Confident ❑ Basic understanding ❑ Not confident
Topic 4 Finalise the project	4A	Complete accurate financial records	❑ Confident ❑ Basic understanding ❑ Not confident
	4B	Assign post-project roles to staff	❑ Confident ❑ Basic understanding ❑ Not confident
	4C	Complete project documentation and obtain approvals	❑ Confident ❑ Basic understanding ❑ Not confident

... continued

Topic	Key outcome		Rate your confidence in each section
Topic 5 Review the project	5A	Review outcomes and processes	❑ Confident ❑ Basic understanding ❑ Not confident
	5B	Involve team members in the review process	❑ Confident ❑ Basic understanding ❑ Not confident
	5C	Document and report on lessons learnt	❑ Confident ❑ Basic understanding ❑ Not confident

Topic 1
Define the project

Projects are clearly defined activities with a scheduled beginning and ending, stated goals and objectives, a budget and time lines. They can encompass all disciplines, all industries and all workplaces.

Project management can be defined in different ways. It can involve overseeing a series of activities that together result in the successful achievement of a set of goals. These activities include planning, scheduling and maintaining progress of all the tasks that comprise the project. Whatever role you play, you need to ensure you fully understand how the project is defined. This means knowing and understanding what you and your team have to do, by when, how and why you are doing it.

In this topic you will learn how to:

1A   Access the project scope and documentation
1B   Identify the project stakeholders
1C   Clarify project issues and parameters
1D   Identify your responsibilities
1E   Relate the project to the organisation's objectives
1F   Determine and access resources

1A Access the project scope and documentation

Project management is defining and achieving goals while making the most of available resources such as time, money, people and materials. The decision to undertake a project is made for many reasons; for example, to hire new staff, organise a seminar, conduct a feasibility study into opening an overseas office, adapt to a change in government policy, develop a new product or purchase new equipment. If you are given responsibility for managing part or all of a project, you may be directly involved in establishing the purpose of the project and its boundaries. Sometimes this will have already been established by management.

Project scope and documentation

As a project manager, you need to understand the interrelationship between your role and others involved in the project, and who is affected by its outcomes. You should also understand exactly what it is that you and your team are required to achieve and by when.

You need to have access to relevant project documentation, be in contact with project stakeholders and know when and to whom you need to give progress reports. You must have a complete understanding of what resources are available to you, how the project adds to your organisation's vision of itself and how it assists in achieving corporate goals.

You may be given the task of managing all or part of a project because of your knowledge or expertise, or because it is appropriate to your work responsibilities and those of your department. Whatever the reason, your first task is to identify the project scope and access any documentation prepared for it.

Types of documentation

Depending on your organisation, the type of project you are working on and how it evolved, the type of documentation available about the project can take many forms.

Document may include:

- a contract or agreement such as a memorandum of understanding (MOU), which describes the scope of the project and responsibilities of all parties
- a project brief, usually from the client or project sponsor
- a summary of project phases detailing what needs to be achieved and by when
- any other documents that outline the project's expected outcomes
- inclusions and exclusions from the project
- time frames for the project
- quality standards for the project
- project resources.

Understand the project scope

The project scope is the summation of all the deliverables required as part of the project including products, services and results (PMBOK® Guide, 2009). A project scope must be carried out to achieve the project's final aims. For this reason it is critical that all the relevant stakeholders, such as sponsors, managers, worker representatives, clients or government representatives, agree on the four major project constraints: time, cost, specifications and resources.

Developing a project brief

The manager and project team members should conduct scoping exercises to develop a project brief. This is a formal – though not legally binding – document that sets out in detail all the project requirements. Key sections of the brief include the purpose, objectives and outcomes as shown below. They form the basis for the project and define the subsequent actions to be taken.

> **Purpose**
>
> A broad rationale that encompasses all the subsequent objectives. For example, to develop promotional material.

> **Objectives**
>
> Clearly stated qualitative and quantitative aims of the project. For example, to design and develop a poster, brochure, catalogue and electronic newsletter to enhance the organisation's image in the marketplace; to raise awareness of the organisation to a wider customer base; and to increase sales by 10 per cent over a three-month period

> **Outcomes**
>
> Stated in terms of measurable organisational benefits. For example, promotional material is developed and is fulfilling its objectives with a five per cent increase in customer inquiries, anecdotal evidence of customer satisfaction and an eight per cent increase in sales over the three-month period immediately following the release of the material.

Components of a project brief

A project brief is crucial to the smooth running of a project, so spend time in the planning stages to ensure the brief is comprehensive and accurately describes what you and the team hope to accomplish. While it is not essential for all stakeholders to be involved in developing the project brief, they should be consulted at every stage of the development, be clear about their particular role and receive a copy of the final document.

The project brief should include the following sections:

- Stakeholders and their roles and responsibilities
- Resources allocated or available
- Milestones
- Standards expected
- Identified risks and contingency plans
- Copyright conditions/ownership of materials produced
- Payment schedule and conditions
- Schedule
- Indemnity and insurance

Contracts

Virtually all projects are governed by a legally binding contract, especially large-scale projects with substantial budgets that involve a number of stakeholders such as government contracts and private building projects. To formalise the contract, it must be signed and dated by both parties once the conditions are agreed.

A contract might include the following details:

- Responsibilities of all parties
- Lines of reporting and accountability
- Project goal or goals
- Fees, payment and budget
- Specific clauses outlining terms and conditions
- Milestones and time lines
- Required standards
- Specific clauses relating to the project

Memorandums of understanding

A memorandum of understanding (MOU) is a simplified form of contract that outlines the conditions and parameters of a project. An MOU generally defines the broad principles and guidelines for the working arrangement between parties, so everyone understands specific responsibilities. As with a contract, it is only signed when everyone concerned agrees with all the conditions.

Your organisation and others you deal with may have specific styles of MOUs and variations on the information required within them. It is important at the time of drawing up the agreement that both parties decide whether they wish the document to be legally binding or not. Unless stated otherwise, there is a strong presumption in commercial agreements that the parties intend it to be binding.

This is a simple example of a typical MOU.

Memorandum of understanding	
This memorandum of understanding, further referred to as the MOU, is made between Woodstock Advertising and Vienna Soups	
Purpose of this MOU	This MOU outlines the terms and conditions as agreed to by Woodstock Advertising and Vienna Soups for the advertising campaign of the new Vienna Parsnip and Chive Soup.
Interpretation	In this MOU, unless the contrary intention appears or the context otherwise requires: 'Agreement' means this contract and the attached Schedule 'Intellectual property rights' includes all copyright and rights in relation to trademarks, designs, confidential information, patents, trade, business or company names and all other proprietary rights resulting from the intellectual activity in the industrial, scientific, literary or artistic fields.
Duration of agreement	This agreement shall commence on 28/2/2016 and remain in force until 29/8/2016, at which time it will be reviewed by both parties.
Responsibilities of Woodstock Advertising	Woodstock Advertising undertakes to carry out the following: To prepare three advertising options for Vienna Soup's new product: Vienna Parsnip and Chive Soup To include advertising options in the print media; that is, including but not limited to magazines, newspapers and leaflets (Note: audio-visual advertising options are not included in this MOU; that is, including but not limited to television and radio). To present these advertising options to the Vienna Soup Board of Management no less than six months from the date of this MOU
Responsibilities of Vienna Soups	Vienna Soups undertakes to carry out the following: To provide Woodstock Advertising with adequate information about and access to the new Vienna Parsnip and Chive Soup, including product samples and existing market research To view and respond to three advertising options prepared by Woodstock Advertising on or within one week of 29/8/2016
Payment schedule	Payment will be made to Woodstock advertising within two weeks of presenting the three advertising options.
Termination	This agreement shall terminate upon any one of the following events: Woodstock Advertising does not fulfil its responsibilities as outlined above. Vienna Soups does not fulfil its responsibilities as outlined above.
Confidentiality	Vienna Soups holds all intellectual property rights to material developed as a result of this agreement. Woodstock Advertising respects the intellectual property and disclosure rights of Vienna Soups.
Signatures	Marketing manager, Vienna Soups / Project manager, Woodstock Advertising Date: / Date:

Terms of reference

Some projects are overseen by a steering committee or reference group that is responsible for advising and guiding the project administrators, project manager and team members. In such cases, an outline of the project's purpose, scope, conditions and time lines should be included in a 'terms of reference' document, which acts as a formal guide for the overseers to identify the support they need to give to the project manager and team.

Terms of reference include:

- the reason for the project
- the parties involved and their roles and responsibilities
- the scope of the project, including what it will and will not cover, and any specific or compulsory conditions such as WHS or equal opportunity
- the structure of the project, including stages, progress points, reports, milestones, outcomes and time lines
- a meeting schedule for the steering committee
- steering committee function, including required reporting, how reports will be received, actions required post report and treatment of feedback
- communication protocols between the steering committee and the project team
- how difficulties will be managed.

Understand legislation

When managing projects, you need to be sure you are aware of your role and personal responsibilities, including the limits of your position. Among your responsibilities is the requirement to follow any legislation or guidelines in place. You do not have to know every detail of the legislation, but you need to know the types of things you must comply with, as your organisation can be held liable for any difficulties that arise if you have not followed procedures correctly.

Your organisation should have embedded relevant legislation and other practices into their policies and procedures, so if you follow these, you both meet your workplace obligations and comply with the law. However, always ensure you consider what is required of your position when managing a project.

Legislation that you are required to know about is shown here.

Anti-discrimination legislation

Anti-discrimination legislation is contained in a series of Commonwealth, state and territory Acts that require workers and employers to treat everyone the same regardless of age, gender or background; Commonwealth Acts include the:

- *Age Discrimination Act 2004*
- *Australian Human Rights Commission Act 1986*
- *Disability Discrimination Act 1992*
- *Racial Discrimination Act 1975*
- *Sex Discrimination Act 1984*

Code of practice and ethical principles

Code of practice and ethical principles can be workplace-based or applied by a professional association; for example, the Australian Institute of Project Management's RegPM Assessor Code of Practice

Privacy laws

Privacy laws are contained in the *Privacy Act 1988* (Cth) and described in 13 privacy principles; for example, make sure you store confidential information appropriately

Workplace health and safety (WHS) laws

WHS laws impose requirements on all employers and workers to keep workplaces safe; for example, make sure you follow safety directions when using equipment

Environmental legislation

Environmental legislation may apply depending on the nature of the project you are working on.

Other useful documentation

Be familiar with any other documentation prepared for the project, such as planning charts created using project management software. Plan your approach to gathering the information you need prior to commencing the next phase of the project. A project planning checklist is an example of a checklist you could use before commencing a project to help you define what the project is about, who is involved, what its objectives are and what will be involved once the project is underway.
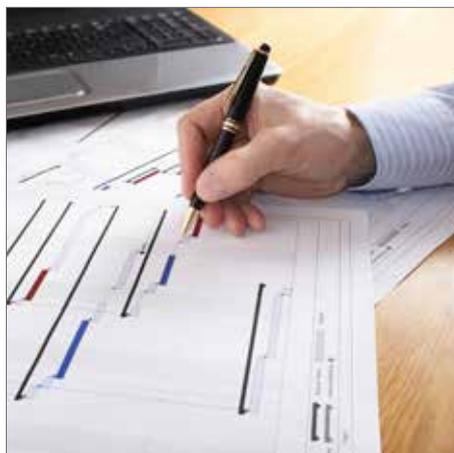
Example: project planning checklist

The following is an example of a checklist you could use before commencing a project to help you define what the project is about, who is involved, what its objectives are and what will be involved once the project is underway.

Project planning checklist

❑ Collect all available project information and documentation, including its purpose, how the need for it arose, who was involved in scoping the project and so on.

❑ Explain the link between the organisation's goals and the reason for the project – why are you doing this?

❑ Create some quick-reference pages that include a contact table, a time line showing key dates and other important information such as budget details.

❑ Find out who you can ask questions of, both prior to the project's start and during the project.

❑ Establish who you report to and how the relationship will work on a day-to-day basis.

❑ Clarify what is expected of you as project manager and what specific responsibilities you have during the course of the project.

❑ Understand the decisions you are authorised to make and the level of expenditure you can approve.

❑ Find out what processes to follow when you need to refer decisions or budgetary sign-offs to others.

❑ Create a list of all project stakeholders as well as people you think would benefit from receiving project updates.

❑ Investigate stakeholders' expectations regarding information and regular reports; that is, expected level of detail, format, frequency and delivery.

❑ Use reporting templates or copy the style and format of reports that meet with the approval of stakeholders – use the same format and delivery method for regular reports.

❑ Match available resources with your estimation of necessary resources – address any discrepancies as early as possible.

❑ Determine whether other current or planned projects will affect your own project and investigate how your work may influence or be influenced by other projects.

❑ Determine whether you can share resources, ideas, tools or templates with other projects.

❑ Understand how to access available resources.

❑ Check that you have considered, and are complying with, any relevant legislation.

Practice task 1

Read the scenario, then answer the questions that follow.

Case study

You are assigned as the project manager for your organisation's newest client, a waste recycling company. You report directly to your CEO and the client's representative. At this stage, you are required to gather information and create a project brief, contract or MOU with the client. Some of the details passed on to you include the following:

- The client collects and recycles biodegradable household waste.
- Their goal is to create a door-to-door marketing pamphlet that encourages householders to leave their green waste in biodegradable plastic bags next to their council bins each week.
- Householders have to purchase the bags for $2 per bag. The waste will be collected each week as part of the service.
- They want the pamphlet (including design, printing and delivery) to cost no more than $20,000.
- They want 50,000 pamphlets distributed within five weeks from today.
- Your current postage delivery contract charges you $80 per 1,000 deliveries.
- Your team comprises a graphic designer, an account manager (who deals with the client regularly) and anyone else you see fit.
- Your designer costs $1,800 per week with an estimated one-week delivery of the first draft of the pamphlet.

1. What sections or details should be included within a project brief?

2. How will you ensure the project brief relates to the organisation's overall mission, goals, objectives and operations?

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3. List the purpose, objective and responsibilities of the organisation for the case study.

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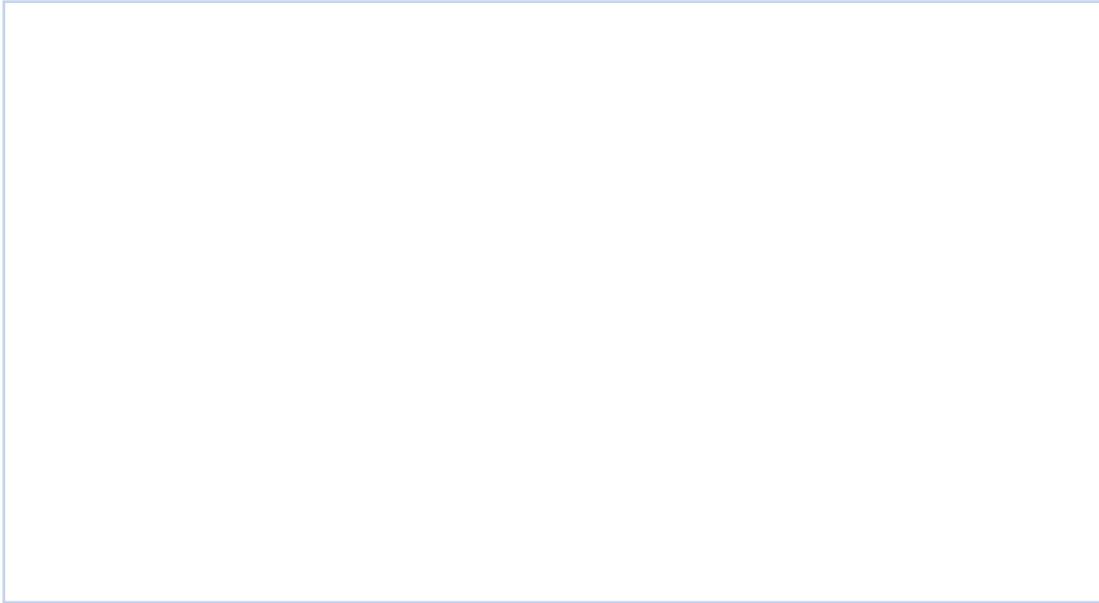
1B   Identify the project stakeholders

Project stakeholders are people or groups who have an interest or a stake in a project and its outcomes. Stakeholders can represent extremely diverse needs and interests. They may have different concerns, priorities and expectations, which you and your team must understand and consider if you are to meet these various requirements. Balancing these needs is a key element of a project manager's role.

In summary, you need to:

- ensure the project delivers outcomes that meet stakeholder needs
- report on project progress in ways that suit the stakeholders' requirements
- address any issues or concerns that stakeholders raise throughout the course of the project.

Identify the project stakeholders

Stakeholders can include one or a combination of the following individuals or groups as shown below.

Steering committees	Steering committees and reference groups are people with expertise and experience who guide and support the project manager in achieving the project's goals. Committee members may come from within the organisation and/or from a number of different organisations. Acting as consultants to the project, they need to be kept thoroughly informed at every stage. You may need to arrange meetings with them, provide them with project documentation and act as a key contact between them and your team.
Project sponsors	Project sponsors are the owners or clients of the project. They are responsible for confirming the business need for the work and are usually responsible for the financial backing of the project. In addition, the sponsor's role is to provide a single point of authority for the project manager regarding supervisory decisions. In practice, the project manager usually reports to the project sponsor, and the project sponsor reports to other senior stakeholders such as a board of directors or government minister. To establish an effective relationship with the project sponsor, you need to confirm their expectations of you and your team, including reporting periods, preferred communication methods and any other relevant milestone reports.

Program managers	Multiple, interrelated projects are managed by a program manager. You may be required to act as a program manager in the event that the project is split into different functional area projects or additional projects are added to your portfolio. Program managers collate and feed information between sponsors or senior managers and the project managers who report to them, and they are usually responsible for budget and resource allocation between projects.
Managers and employees	Depending on the project's scope, you will probably find that the project impacts on other departments, teams, managers and staff within your organisation. You need to analyse the effects the project may have on these stakeholders to formulate a communication plan and risk management plan for these interactions. The extent and breadth of these interactions will determine the amount of collaboration you may need to enter into. Seek feedback and input from specialist managers whose knowledge and experience can benefit the project. This may include other project managers, specialist managers in fields or representatives of staff or employee groups. Ensure you meet or speak with these experts who can provide you with more information as to how your project may impact on other areas.
Clients	The scoping phase of a project should include an assessment of the impact it will have on clients or customers (internal and external). Some projects will be instigated with a view to changing product or service deliverables or the way the organisation communicates with clients. In these situations, the impact on clients is both deliberate and significant. Clients must be made aware of changes that require them to interact with your organisation differently or that impact on them negatively, even if only for a short period of time.
Funding bodies	Funding bodies are groups or individuals who provide money to fund project operations. They may be: • internal, such as departments or managers within your organisation who have allocated money from departmental budgets for the project • external groups, such as industry bodies, banks, government departments, shareholders, other businesses or private investors. Funding bodies are similar to investors and need to see evidence of a return on their investment. This means you need to inform representatives of the project's progress, goals reached and benefits being realised as a result of the project. This may involve providing a copy of regular reports or creating special reports that address the specific interests and needs of the funding bodies.

Project managers	Your role as project manager or coordinator is the key to a successful project. This role requires you to plan, communicate regularly with relevant stakeholders, monitor the project's progress, handle any difficulties that arise and prepare reports as required. You also need to ensure that all project team members work cooperatively and that their skills are used for the benefit of the project.
Project team members	Members of the project team can be drawn from an existing team or from a number of different areas according to their expertise, experience, skills and knowledge. All members need to feel they are part of a close working unit, so teamwork and communication are very important factors. Team members may be immediate (working within the project office) and extended (working on-site or away from a central location).

Cultural issues and social diversity

What some people think of as 'normal' communication may be quite different and even offensive to people from another cultural group. How body language is interpreted depends on cultural nuances; for example, shaking your head may mean 'no' to you, but in Turkey it means, 'I don't understand'. In some cultures, it is not accepted practice to look someone in the eye when conversing; and people often have different ideas about how close someone should stand to them during a discussion.

Your workplace may have people from a range of social groups, as determined by their socioeconomic background, gender, sexuality, beliefs or way of life. Avoid creating 'us' and 'them' divisions in your organisation by catering to differences in all your communication. Work to eliminate hostile environments or avenues for any form of harassment. Respect each person as an individual and try not to make assumptions when you communicate with them. Prejudice and stereotyping are almost always unhelpful, whether they relate to gender, age, race, physical appearance or any other form of diversity. Take a person's cultural background into account when communicating.

Here are some things to consider:
- Be alert to the way a person interacts with you and to any signs of discomfort.
- Take note of any major differences within your workplace or circle of contacts.
- Be aware of any cultural sensitivities that might be attached to the subject you are communicating.
- Consider others feelings and, if you accidentally cause offence, be prepared to apologise.

People with disabilities and special needs

The term disability refers to conditions that interfere with the usual way of doing things. This can include physical, psychiatric and intellectual disabilities and impairment, whether permanent or temporary. When communicating in the workplace, ensure that people with disabilities have information presented to them in an appropriate format and that assistive technology is available where necessary. This may include providing supportive communication devices such as telephone typewriters for those with hearing impairments or placing noticeboards in a position where they can be read by a person in a wheelchair. You may also need to cater for a person's ability to comprehend and process information that is presented to them.

Practice task 2

Refer to the scenario from Practice task 1, then answer the question that follows.

List the stakeholders for the scenario outlined in Practice task 1, and explain the responsibilities for each.

1C Clarify project issues and parameters

The project plan must be as complete and accurate as possible. This means you must seek clarification on any of the project specifications where doubt still remains, particularly issues involving time lines, resources and costs. Projects fail (at least in some part) when these constraints are breached. If the breach is due to a lack of clear information, the author of the project plan, usually the project manager, is at fault.

There are key questions that will help you determine what information you need so you can understand what a project is about. You may find some of these questions are unanswerable in early stages of the project. However, endeavour to source as much data as you can, as early as possible, so you can develop what is known as a scope statement. The scope statement includes the answers to these questions in a concise document that defines the overall project.

Questions about the project that need to be answered:

- What outcomes are expected of this project?
- How do the expected outcomes relate/link in with our organisation's broader goals?
- How does my team relate to the project? What skills, experiences and knowledge does my team have that will help the project be a success?
- Who is the project sponsor?
- What is the scope of the project?
- Who has approved this project and allocated funds to it?
- Do I have a copy of the business case or other proposal that was presented to this individual or these people that shows the basis for their decision to approve and fund the project?
- Why has this project been chosen in comparison to other possible ways of meeting the need that was identified?
- Has a project plan been developed? If not, have phases or key deliverables been identified?
- What is the time frame within which the project must be completed?
- What resources have been allocated to the project?
- Have I been provided with a contract for the position of project manager? If not, what are the terms of my responsibilities?
- Will I have certain time allocated to spending on the project; am I completing the project as part of my usual duties; is the project something I will work exclusively on instead of my usual duties?
- Does the project have to meet any specified quality standards? If so, what are they?
- What are the project sponsor's and/or my own manager's expectations in relation to reporting on project outcomes and deliverables?
- Does other documentation exist that will help me understand the project and my role? How do I access this documentation?

Source information

Creating a table of contact details helps to quickly identify those you can refer to in different situations. Complete the table by considering all the possible issues and questions you have and then filling in contact details as you identify who can help you when you need it. Your contacts may assist you during the entire project or may only be available prior to the project's commencement. Find out the protocols for communicating with these groups and the times they will be available to you throughout the project.

Various people or groups you can include in the contact table:

- the project sponsor
- an appropriate manager or management representative
- the funding body
- your organisation's customers or clients
- specialists and experts.

Clarify the project

One way to clarify the scope of any project is to look at its expected outcomes and work backwards. Once each element has been analysed, document what the project will not include so everyone is clear about the task parameters. There are many project parameters and information that most managers will need to understand before the project commences.

Project parameters and information
• Legislative requirements
• Quality standards
• Critical time lines
• Available budget
• Human and physical resources
• Procurement requirements
• Project integration
• The risks involved with the project

Legislative requirements

Ensuring you have adequate understanding of legislative requirements is vital, particularly if your organisation operates within an industry that is subject to any kind of regulation, is accredited with any recognised quality standards or is dealing with government contracts.

It is a good idea to look at previous projects where legislative requirements have had an impact, and apply the experience to the planning and implementation of new projects.

Although some industries are more heavily regulated than others (for example, airlines, financial service providers or construction firms), there are laws and guidelines that affect all businesses in some way. Work health and safety, equal opportunity, environment protection, industrial relations and anti-discrimination laws, guidelines and policies need to be understood and addressed by all companies. This may mean allocating additional resources for the project to ensure compliance.

Quality standards

Complex projects or those requiring government funding often include definitions of the standard the project is expected to meet or the qualifications and experience required by project participants in their scoping. For example, production may need to meet International Organization for Standardization (ISO) quality assurance standards; personnel may need to have specific credentials; only specific permitted materials must be used.

Quality standards should be outlined in the project plan's specifications section. Additionally, client requests for tender generally outline the quality specifications that can be clarified during the negotiation and contract process.

Time lines

A project is defined by a set of activities and outcomes that need to be realised within a certain period of time. As project manager, one of the first things you need to know is how quickly the work needs to be completed. The time in which you are expected to deliver a completed project will have a major impact on the resources (people, budget, etc.) you need to complete it.

Project time lines relate to more than start and finish dates. They include dates for major activities to be completed (referred to as project milestones), key reporting dates (for instance, at the end of each month the project runs) or dates the project enters a new phase (such as planning, implementation and review). These are all important in the project time line.

Documents are drawn up at the start of a project to provide a summary of these dates in the form of a project time line. Project management software can make this task particularly efficient.

Budget

Ensuring sufficient funding is one of the most important roles of a project manager. Knowing the budget constraints of the project you are working on and how funding has been allocated (raw materials, human resources, office supplies, etc.) is crucial. Just as important is tracking the spending of assigned budgets through the project's lifetime, and reporting on how money has been spent at the project's conclusion.

It is good practice to allocate funding for contingencies. Known as a contingency fund, most project managers seek to establish a percentage of total funding for the purposes of dealing with possible risks.

You may need to consult with financial experts to ensure funds are allocated effectively and efficiently throughout the project's life cycle.

Procurement requirements

As with other operational activities, your project is likely to need materials, computer software and hardware, services provided by external groups and other items usually sourced through your organisation's purchasing or procurement team. You need to determine the procurement protocols that apply during the project. Discuss these issues and work out a suitable process with those within your organisation who are usually responsible for procurement to ensure your project has the required resources.

If your responsibilities include purchasing and procurement, seek clarification that existing protocols, forms and approvals apply to your project.

Resources

Whether your project has funding for the purchase of additional resources or you must use resources currently available, you must be absolutely clear what resources will be needed to complete the agreed goals.

Resources have the potential to affect a project's success or failure. Effectively controlling resources requires the integration of systems between the project office team, suppliers and the workers carrying out the project. Potential issues such as late delivery, insufficient stock or equipment, equipment failure and inappropriate equipment can best be dealt with when the systems allow for a quick response.

Project integration

Everyone associated with the project should be clear about why it is being undertaken and what organisational goals and objectives the project will contribute to.

Issues to seek advice on may relate to:

- human resources; for example, managing staff moving into project roles and then back to their regular duties
- processes; for example, ascertaining whether procedures and processes used in the wider organisation apply within the context of the project or whether project-specific processes and supporting tools need to be developed and implemented
- reporting lines; this means checking whether existing reporting lines apply or new lines of authority are to be created with specific formats, frequency, level of detail and methods of delivery
- finances; for example, finding out whether items used as part of the organisation's usual operations should be assigned as costs to the project.

Risks

Risk assessments occur continually throughout the project's life cycle. An initial evaluation should be carried out based on the project's agreed outcomes and included in the scope documentation. Once identified, you need to develop a risk control plan to monitor and manage risks throughout the project.

Risks that project managers need to research and seek clarification about are shown here.

Risks that project managers need to identify
• Work health and safety
• Exceeding allocated funds
• Impact on customers, staff or suppliers
• Not delivering on time

Example: project briefing form

Louisa manages a team of writers at a large company. Her team is responsible for writing material for a diverse internal customer base, including teams from human resources, marketing, finance and sales.

Every project they work on is different. One week they may get a request from finance to write a management update on new expense claim procedures; the next, human resources want them to write an induction kit for new staff. These requests come in many forms. Sometimes they get a phone call, sometimes they receive an email containing the basics, and sometimes they have to attend a meeting with the customer for a project briefing. This creates a lot of problems as the team often receives either too much information, not enough information or the wrong type of information.

To help them successfully manage each project, Louisa develops a way of understanding exactly what each project is about; what is required from her team and what information is necessary to complete the project. She now has a project briefing form that staff must complete when they have a project request for her team. This form outlines:

- exactly who the project sponsor is
- the purpose of the project and where it fits within organisational goals
- what the desired outcomes are
- the time frames involved
- budget allocations
- key points to be covered
- all relevant stakeholders.

It also requests that existing information be attached to the brief.

Since implementing this system, Louisa finds that not only is the team's understanding of each project much clearer, but also they are able to deliver much better service and results because they work to clearly defined goals. The team is able to complete all projects to deadline, as they don't waste time chasing information.

Practice task 3

1. Who can you source information or seeking clarification from when clarifying project issues?

2. At what stage did you seek advice?

3. What is a scope statement?

1D | Identify your responsibilities

At the outset of the project, you should review and gather information from a variety of stakeholders about your role as project manager, the limits of your responsibilities, your level of authority in this position and the reporting requirements they have of you and other participants in the project. Who you contact and how many of these people you need to consult with depends on the complexity and nature of the project. Clarify any conflicting information with your direct supervisor (such as the project sponsor, program manager, client or owner).

People that you are likely to consult with may include:

- the project sponsor
- your own supervisor
- other project stakeholders
- specialist managers within the organisation.

Your management responsibilities

Some questions you can ask yourself when clarifying your management responsibilities within the project, are shown below.

Reporting

- Who do I report to?
- Do project staff report to me if they are on secondment from their usual jobs?

Decision-making

- What decision-making authority do I have?
- What types of decisions do I need to pass on to others or get approval from others for?

Responsibilities

- Am I solely responsible for delivering on all project outcomes, on time and on budget?
- Are others responsible? If so, who are they?

Resources

- What resources are available for me to use as the project is executed?
- What resources can I freely use?
- What resources do I need approval to use?
- What resources can I not use?
- How do I go about accessing resources?

Problem-solving

- What should I do when I encounter a problem that I cannot resolve myself?

Operating procedures

- Do standard operating procedures and protocols exist in the context of this project?

Your reporting responsibilities

When clarifying your reporting responsibilities, ask yourself and others the questions shown below.

Questions to consider:

- Who requires information regarding the progress of the project?
- What are each person's or team's expectations regarding information?
- Do some people want different types of reports at different times? For instance, milestone reports may be required.
- Can I put these people's expectations into logical groups?
- Are there some managers who only want summary information on a monthly basis?
- Do others want detailed information on project financials every fortnight?
- Does the project sponsor want a detailed report every week?
- Are there existing templates or reports I can access or adapt for these different types of reports?
- Do stakeholders have templates or styles of reports they would like me to use?
- What information should I share with and report on to project team members?
- Does my organisation have any project management procedures or policies I need to work within?

Practice task 4

1. If you were not the chief project manager of a project, but are managing a section of the project, list some questions you would need to ask.

2. What do you need to consider when clarifying your reporting requirements?

1E | Relate the project to the organisation's objectives

Any activity to which an organisation devotes its resources, including projects, should make a positive contribution to at least one of its business objectives. The project sponsor and other stakeholders must clearly explain how the project fits in with organisational objectives and aligns with the organisation's overall operations.

As project manager, you need to understand this in some detail to ensure the project is executed with these broader objectives in mind. You also need to communicate the benefits, importance and relevance of the project to the staff involved, external customers and other groups contributing to the project so common goals are understood.

Identify interrelated projects

Knowing how your project fits within the larger scheme of activities helps you gain perspective when negotiating for resources or funding. Rarely do projects stand alone. They are usually interrelated with other tasks within an organisation or with external projects that have dependent outcomes. Gather information about interrelated projects and contact key managers within other projects to open a two-way communication with that person. This may include sharing data, resource information and milestone achievement, or even sitting on other steering committees or boards.

When identifying your project's relationship to other projects in your organisation, you should ask yourself certain questions. Please note, if you answer 'yes' to any of these following questions, you need to investigate further to clarify each situation with your sponsor or other managers.

Project relationship questions:

- Will other projects take the focus or resources from my own project?
- Is there a sense of one project being more urgent, critical or important than another?
- Can I meet with other project managers to share information?
- Are there any cultural differences I need to consider regarding the way I communicate with other managers?
- Is my own project dependent in any way on the successful completion of another project?
- Are there tools, procedures or systems used by other projects that I could adapt for use in my own project?

Example: installation of software

A retail company is installing a new retail management system and point-of-sale software. This project coincides with the pre-Christmas marketing period, but is seen as an essential upgrade that can't be put off. The pre-Christmas period includes the production of a catalogue, posters to hang in-store and seasonal ticketing for the product displays. The two projects will overlap in-store when staff will need to put up displays and attend training on the new software. There will also be potential disruptions to customer service during a peak period.

The two project managers, Alan (IT) and Susan (Marketing), meet prior to the two projects' implementation to work through these potential issues. The starting point is to review the organisation's corporate objectives. By understanding the real intent of the company (why it is in existence) the two can prioritise tasks objectively to maintain the company's operational momentum.

They then move on to the time lines each has and the decisions behind each of the time lines. This also helps to prioritise work. The decision is made to postpone certain elements of the IT roll-out to best achieve sales during the seasonal promotion. These elements will be caught up in early January where no project or corporate objectives will be in conflict.

The outcome of the meeting is reported to the CEO and management team who agree on the project managers' decision.

Practice task 5

What are five questions you can ask when identifying interrelated projects within an organisation?

1F | Determine and access resources

Many project managers find they can develop an idea of the resources needed as they read the project brief. The first step in determining the level of resources needed is to decide which type of allocation option you will use. These are as follows.

Resource-limited	Time-limited
Where you know there is a limit to the amount of resources that can be allocated over the project period.	Where the project must be completed by a certain time.

Determine resources

Work is a measure of the time the resources require to complete a task, and the duration is the elapsed time. A resource unit is simply the work required divided by the time you have to complete it.

These terms are commonly used in popular software packages and may also be known as fixed work, fixed duration and fixed units. Think of it as a way of choosing your baseline from which other resource decisions can be made. For instance, if you choose a fixed duration approach, then you are adopting a time-limited allocation method where all resources and work tasks need to be configured to deliver the project by the 'fixed time'. By determining your position, you can consider the variables of work, duration and resources.

You can measure units of work in the following manner:

- Work = duration x resource allocation
- Duration = work ÷ resource units
- Resource units = work ÷ duration

Example: time-limited resources

Before commencing a project to build a pergola for a council park, the project manager Suri is told that it has to be finished within two weeks as the mayor is scheduled to open the park and the media have already been notified. She seeks a quote from Kumar, the contractor, to complete this project on time and within the allocated budget.

This presents Kumar with a time-limited situation where resources and work must be planned around this constraint.

On a project planning spreadsheet, he enters the fixed duration of 14 days (he intends to work through the weekends). He estimates it will take 120 hours to build (this is his work figure determined by experience). This gives him a resource figure of just over 8.5. This equates to one full-time tradesperson working an 8.5-hour workday.

He is then able to provide an accurate quote to Suri for the project to be completed on time.

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Types of resources required

The following details the resource categories typically used in workplace projects.

Human resources

- Personnel may be full-time, part-time, contract-based, casual, assigned to the project from other roles within the organisation, hired only to work on the project, or working on the project in addition to their usual duties.

Technology and information

- Technological issues involve data and systems integration, security, storage and input/output devices. Reporting requirements and support functions fall under this category

Raw materials

- Raw materials are used when working on a project that involves developing, testing or otherwise working with products your organisation produces. Knowing the quantity to order for a project is crucial.

Working capital

- The cost of all individual resources should be calculated to estimate the costs of the entire project. Many people forget to factor in people's time.

Types of resources required

Plant and equipment

- Equipment, machinery, power sources, plant, buildings and transport may be key factors when assessing a project's resource allocation.

Estimate resources

What you immediately know about the resources for your project varies depending on the type of project you are working on. Information supplied can be based on many different workplace resources. As a project manager, you may be involved in calculating resources. In doing so, your aim is to avoid over-allocating, which adds to higher costs, or under-allocating, which leads to longer time frames.

Information about workplace resources can include:

- how much the organisation wants to allocate to the project
- what the project goals and time frames suggest
- the total budget estimate and your resource allocation responsibilities within this budget.

Access resources

Understanding how to properly and efficiently access the resources needed to execute a project is another key responsibility of the project manager.

Accessing resources may require taking the following actions:

- Following existing standard operating procedures, processes and systems to obtain approval for resource purchasing.
- Working with specialist teams such as human resources to hire staff (whether they are existing internal employees or new external staff).
- Working with other managers to negotiate borrowing equipment, using facilities or using other resources for specific times during the project.
- Developing new processes and systems that allow you to access resources.
- Finding out the availability of resources as well as any potential delays in accessing resources from other teams, managers or external organisations.
- Researching the cost of individual resources and keeping a record of anticipated costs and the assumptions or information used to estimate them.

Develop supporting documentation

As project manager, you need to ensure you and your team thoroughly understand processes, systems and risks related to accessing every resource. This means asking questions of your project sponsor, stakeholders and specialists both internal and external to the organisation. You need to record these processes and risks and communicate the information to your project team.

You may develop supporting documentation to facilitate this process, such as process step sheets that advise project staff of when and how they need to seek resource allocation approval. You may be able to create and store process templates that can be used throughout your entire organisation.

Example: implement a new phone system

Julia is overseeing a new project at her company. The Board asks her to implement a new phone system in the 12-person office to allow them to more easily transfer calls internally and to external smartphones. As the project manager, she needs to establish the project scope and gather the appropriate information and documentation. She asks for a nominal budget and whether or not she has total discretion over the budget as long as it returns the result that the Board requires. They agree to a sum of $5000, which is to include training for staff.

Julia identifies that each staff member has an interest in the system and that the receptionist will be most affected. Stakeholders also included the Board, the eventual phone system supplier and anyone calling the office.

Julia begins to plan the project and decides that she needs to seek input from everyone in the office prior to seeking assistance from potential suppliers. Her responsibilities within the office are to take priority over the phone system project, so she establishes that the project will be resource-limited (not time-limited), although clarity from the Board needs to be obtained regarding their intended timing. Julia schedules a meeting with the Board to gain clarity on the timing issue, and how the system fits into organisational objectives. She knows she can use this information when talking with staff so they understand why the change is necessary and what benefits it will create.

She finds, in addition to a two-month time frame, that the system will allow sales staff more freedom from the office and that client-to-representative communication will be considerably enhanced.

Julia creates a checklist of criteria required from the phone system and sends out a basic tender to three local companies. Two respond quickly with similar quotes and features. She chooses the supplier based on the addition of free training.

Practice task 6

1. List the considerations you have to keep in mind when making resource allocation decisions.

2. What are three actions that may be required when accessing resources?

Summary

1. Whatever your role in managing a project, you need to ensure you understand how the project is defined in terms of what you and your team have to do, by when, how and why you are doing it.

2. As a project manager, you must have access to relevant project documentation to understand the project's scope, what resources are available to you and how the project adds value to the organisation.

3. The type of documentation you need to access can include the project brief, contracts, memorandums of understanding and terms of reference.

4. Define and identify project stakeholders from within and outside the organisation. These may include steering committees, reference groups, project sponsors, managers and other relevant key personnel, clients or customers, funding bodies and project team members.

5. The project's parameters and any issues must be clarified by asking questions such as:
   - What is the project about?
   - Who can provide the information?
   - What is the scope of the project?
   - What are the legislative requirements and quality standards?
   - What time lines have been set?
   - What finances have been allocated?
   - What resources are available or required?

6. When beginning a project, you need to identify the limits of your own responsibility as a project manager and the reporting requirements you must meet by consulting the project sponsor, your supervisor and other project stakeholders.

7. Clarify the relationship of the project to the organisation in terms of how it contributes to achieving organisational goals and relates to other key projects in the organisation.

8. Resources required for the project include people, equipment, time, raw materials and money. The required level of each of these resources must be estimated and accessed accordingly.Learning checkpoint 1
Define the project

Learning checkpoint 1
Define the project

This learning checkpoint allows you to review your skills and knowledge in defining the project.

Part A

1. List and describe at least five features that must be included in a project scope document.

2. What are the four project constraints, and why are they considered constraints?

3. In basic terms, describe your organisational structure and the lines of authority and communication that currently exist. You may use an illustration for assessment purposes.

4. Provide relevant work examples of stakeholders and explain their role in a project.

5. Explain when you may need to seek clarification from your delegating authority regarding project parameters. Provide examples.

6. Imagine you were assigned to a project as the project manager. Explain how you would identify the limits of your responsibility. Provide examples of the types of questions you may need to ask and to whom you would direct them.

7. Projects often overlap, co-exist or coincide within an organisation. Describe the approach you would take to clarify the relationship between a project you were managing and other projects that may be occurring within your organisation.

8. Explain the importance of aligning your project with the organisation's goals, objectives and overall operations.

9. List and describe the five basic categories of resources required during a straightforward project.

Part B

Read the case study, and then answer the questions that follow.

Case study

Alexis is the production manager at Red, a magazine publishing company. Red publishes 10 different magazines, some quarterly, and some monthly. The publications are undertaken on a contract basis for large organisations, government departments and associations. The company has 36 permanent employees including production staff, editors and writers, marketing, sales, advertising and support staff. Alexis's production team of eight includes graphic designers, production coordinators and support staff who also work as proofreaders. She has been the Production Manager at Red for six years. Alexis, Meg, Byron, Sandra, Bob and Stella all report to the Managing Director, Nick.

Other key employees include:

- Meg, company accountant: Meg has a team of three accounts staff reporting to her and who also look after procurement.

- Byron, sales manager: Byron's team includes three advertising sales staff, two marketing coordinators and three account managers. All contact with clients is managed via Byron's team, which also handles any customer service queries.

- Sandra, editorial manager: Sandra's team of six includes three editors and two staff writers. Sandra and another of her team also manage the company's quality program, which is an internationally recognised quality accreditation. She also uses a large number of freelance writing staff.

- Bob, IT Manager: Bob and his assistant manage the company's IT needs.

- Stella, office manager: Stella is also Nick's personal assistant and supervises two staff who share general office support and reception duties. Stella and her team look after any compliance-related issues, such as workplace safety procedures, and they also manage the content of the company's intranet site.

Alexis attends a meeting with Nick, who informs her that Red has outgrown its original offices and is moving to a new location, close by but larger, newer and more appropriate to the company's needs. He tells Alexis he would like her to be the project manager for the move and wants her to ensure the move occurs with minimal disruption to employees, suppliers and customers. The only other person who knows about the move at this stage is Meg, the company accountant.

Nick gives Alexis the address of the new office, a floor plan and a draft budget Meg has prepared. Meg has made a few notes and sourced a few prices for items she believes will be the most expensive, such as the office fit-out. Nick says the lease on the current premises ends in two months and that the new office is available next week. He asks Alexis to consider the information and let him know the next day if she would like to do it. He says Alexis would take on the project in addition to her regular duties, but some of her duties could be assigned to other senior members of her team. Alexis thinks about it that night, and decides to take on the project. The work will be good experience and may lead to other interesting projects within Red.

Meg's budget and project notes reveal that Alexis will be the only staff member assigned to the project, and that she has a budget of $120,000 to cover moving costs, office fit-out, additional IT hardware, new stationery and the costs of communicating Red's new address via a mail-out to clients and suppliers. Alexis notes that some of Meg's indicative costs are very rough and need to be researched thoroughly before the project budget can be finalised. Alexis tells Nick she will take on the role of project manager. He says, 'Congratulations – I'm sure you'll do a great job. I'll send an email to all staff this morning letting them know we're moving to better premises soon and you will be managing the project. I'll ask everyone to keep it to themselves for the time being, but it's up to you to manage the rest'.

1. Explain how Alexis will identify and understand the scope of the project she has been assigned. What documentation do you think she will need to source?

2. For each of the stakeholder groups in the following list, identify who within the organisation fits into these categories and why they are important in the context of the project. Provide your response in table format.

   a) Project sponsor

   b) Managers, employees and relevant key personnel

   c) Any other staff members who have special responsibilities

   d) Customers

   e) Funding bodies

Stakeholder group	Their importance within project development

3. Construct a contact table similar to the following in Microsoft Word or Excel. Fill it out with as much detail as possible, explaining who the various authorities are, why and when Alexis should contact them and how to contact them.

Delegating authority	Why/when to contact	How to contact

4. Reproduce the following table in Microsoft Word or Excel to help you identify whether Alexis has the information she needs to begin work on the project. Indicate whether the information she needs is available in the 'Information available?' column with a Yes or No. Then, complete the table by indicating whether she has gained this information or whether it is still required.

Project parameter	Information available?	Information gained or needed?
Scope of project		
Project outcomes		
Legislative requirements		
Quality standards affected		
Time lines		

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Project parameter	Information available?	Information gained or needed?
Finances		
Integration with organisational goals		
Risks		
Stakeholders' reporting requirements		
Resources required		
Organisational procurement processes		
Resources available		
Resources that must be obtained		

5. Explain the issues Alexis should raise, and who she should speak to, to clarify the limits of her responsibilities as project manager.

6. Explain how Alexis will understand what resources are available to her during this project and how she will access them. Who should she consult to help gather this information and answer her queries?

7. In the context of this project, explain why it is important to understand stakeholders' expectations with regard to reporting and information flow throughout the project. What should Alexis do to ensure the reports she produces meet the needs of stakeholders?

8. List the project outcomes, against which Alexis will later measure the results of the project.

9. Explain how Alexis can investigate whether the project is linked to other projects and how it reflects the organisation's objectives. How can Alexis clarify any further questions she has?

Topic 2
Develop the project plan

A project plan is a tool that aids project managers as they delegate tasks, estimate resources and time frames, follow up on activities that are being completed and report on the project's progress. Project plans assimilate all this information and help project managers monitor progress across all facets of the project.

Developing a project plan may take some time, but it is time well spent. The project plan should be reviewed or checked by key stakeholders to ensure it includes appropriate time lines, task breakdowns, roles and responsibilities of project team members, a risk-management plan, a project budget and dates of key deliverables.

The plan then needs to be approved or signed off by stakeholders and participants before the project commences.

In this topic you will learn how to:

2A   Detail the project plan
2B   Identify and access project management tools
2C   Formulate a risk management plan
2D   Develop and approve the project budget
2E   Consult team members
2F   Gain approval for the project plan

2A | Detail the project plan

Developing an accurate, workable project plan is a fundamental and critical step in managing any project. A project plan allows managers, stakeholders and other participants in the project to understand exactly what needs to be done and what resources are required to do it. It also highlights risks that could affect the implementation or outcomes of the project.

Depending on the scale of the project, plans can range from extremely detailed, lengthy documents to simple lists that are quickly produced. Whatever form a project plan takes, and regardless of its complexity, it must provide a detailed explanation of how the project will be executed.

Benefits of the planning process

Some project managers baulk at the thought of spending time planning rather than immediately commencing the project's operational work. While it does require time and energy, project managers reap the benefits of planning.

The benefits an effective plan can bring to any project:

- It obliges people to consider the activities and tasks involved in the project and what dependencies exist for each of these.
- It enables scarce resources to be shared, scheduled and allocated.
- Any deviation from goals can be identified and addressed before they present problems.
- It can provide a solid argument for unreasonable requests or deadlines that simply cannot be achieved.
- It can enable you to delegate tasks more effectively and simplify the work involved.
- It keeps project team members focused on their activities and helps them remain motivated and dedicated to the project goals.
- It communicates detailed information to your sponsor, customers, team members, suppliers and other stakeholders.
- It provides the contextual and background information needed when deadlines are issued, tasks are assigned or requests are made.

What to include in a project plan

A properly developed project plan allows you, your team members and project stakeholders to clearly understand the dimensions of all the work that must be undertaken to achieve project goals.

Your project plan should include:

- a breakdown of the tasks that need to be completed for the project's goals to be achieved
- the length of time allowed for each activity, including designated milestones and deadlines by which key deliverables are due
- a budget for materials and labour

- a project scope that details what needs to be done and how it should be done
- who is responsible for completing each task
- a risk analysis
- the resources required to complete project tasks
- the standard (or quality) of work required for each task
- the list of assumptions made prior to starting the project
- a revision history and sign-off section
- relevant legislative requirements
- the relationship between tasks.

Break down the costs

A work breakdown schedule is the format used to display a breakdown of a project's individual tasks. It usually takes the form of a table that lists every task required to complete the project, the resource (person) responsible for completing the task, and the timing for the completion (start, finish and/or duration). Each task is assigned a number for reference throughout the project. For complex, large projects, this numbering system can involve specific codes, sub-category numbering and number trees (for example, 1, 1.1, 1.1.1 and so on).

For simple projects, tasks are usually just numbered in order from 1 to the final numbered task. The relationship between tasks must be considered so a logical order of work can be planned.

If other teams, individuals or specialists are going to provide services to the project, you need to consult with them so your estimates of time and resource needs are accurate. You need to confirm how long a task will take, the resources required and what needs to occur for the task to begin; that is, what dependencies exist between resources and timing.

Establish realistic time lines

Once you have identified in detail what needs to be done, you need to assign realistic time lines to each task. This enables you to determine how long the major activities will take. You may need to base some time lines on estimates or previous experience. Below are some items you may need to consider when planning your time.

Consider lag time

Always add a little extra time to the plan to allow for delays or lag time. Lag time is the time from the end of one activity before the next one can be started; for example, you need to allow paint to dry before applying the next coat. Delays are caused by problems such as a supplier unexpectedly closing their store for a day, equipment breakdown, sickness or other factors.

Most project managers add time routinely to allow for contingencies and inconsistencies in the supply of resources and work ability. The amount added should be minimal; however, and not unduly affect the costs or project plan as a whole. It should also be relative to the time estimates being made.

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Consider progress and final reports

Progress or milestone reports are required in most projects that continue over a specified time (usually more than one week). Reporting times need to be included in the project plan to ensure these documents are completed.

In addition to progress reports, a final report indicating the level of accomplishment of the agreed deliverables must be prepared and signed off by the project authorities (such as the client, owner/sponsor and project manager). Prior to sign-off, consult team members and revise your report with their extra contributions and/or feedback. This must also be included as a necessary phase of the project schedule.

Use project software

Project management software is particularly useful when calculating and drawing up your time schedule. The program automatically prepares time charts according to the information you enter, adding lag and lead time, creating task charts such as PERT or Gantt charts, and making adjustments easy.

Assign roles and responsibilities

Factoring roles and responsibilities into the plan allows you to allocate tasks to appropriate project team members more efficiently and see who is responsible for doing what during the course of the project.

Before assigning roles and responsibilities, you need to:
- define each task and sub-task
- determine the skills and capabilities of each team member
- ascertain the availability of personnel, especially part-time, casual and contract workers
- know current and future workloads of project team members
- decide what would be a fair and appropriate allocation of duties for each team member.

Capture information to assign roles

There are many different ways to gather information about roles and responsibilities.

Methods to gather information on roles and responsibilities include:
- writing job descriptions or similar documents for various positions that exist during the span of the project.
- creating a column in the task breakdown detailing who is responsible for completing the work (classified by individual or role)
- preparing a project plan using software that allows you to select resources from a resource list (this includes human and non-human resources)
- preparing a Responsibility Assignment Matrix (RAM) or similar tool.

Responsibility Assignment Matrix

A Responsibility Assignment Matrix (RAM) is a table that includes detailed information about the people in your project team and external people who work on the project.

A RAM tool identifies:

- who is responsible for completing the activity
- the names of specialists who need to be consulted at various stages
- managers who need to be involved to give approvals
- clients who need to be notified when certain phases of the project are complete.

Format your project plan

Project plans and the level of detail required reflect the type of project being undertaken. Some managers prepare an overview plan showing the project's stages, followed by a team project plan detailing tasks, deadlines and resources. Using project management software for this task is an effective and efficient way of organising the work.

Example: use a RAM

Dina uses a RAM as she works on a project to get new storage cabinets for the office she works in. She includes in the matrix all those who have different responsibilities, including herself, her team member Bill, her manager Mei Ling and Frank, a specialist manager within their business. She also includes the supplier in this group because the supplier is responsible for preparing quotes and, ultimately, for the provision of the cabinets themselves.

Source new storage cabinets	Project team members		Other stakeholders		
	Dina	Bill	Mei Ling	Frank	External
1. Make list of storage needs	A	R	C	C	
2. Prepare brief for quotes	A	R			
3. Research and identify suppliers		R			
4. Request quotes from three suppliers		R			R
5. Receive quotes		R			R
6. Evaluate quotes	R	S			
7. Appoint provider	R		A		
8. Provider builds and installs cabinets	A	S			R
9. Pay provider	S	R			

Key: R = Responsible, S = Support required, C = Must be consulted, N = Must be notified,
A = Approval required

Practice task 7

1. Why is developing a project plan critical in managing a project?

2. What are five benefits of developing a project plan?

3. What do you need to do before assigning roles and responsibilities?

2B | Identify and access project management tools

Project managers use a wide range of tools to assist them in the project planning and management process. Having a variety of tools to choose from, and selecting the appropriate ones to use, can make the project management experience a more organised, satisfying and successful one for everyone involved.

Project management tools can include:

- project management software
- Gantt and bar charts
- critical path method
- PERT charts
- cost schedule control system
- life cycle cost analysis
- logistics support analysis
- spreadsheets
- technical resources.

Project management software

Project management software can greatly assist project managers to plan, communicate and report on aspects of a project, as well as provide a common point of reference for team members. Programs can store immense amounts of data and are capable of a wide range of functions. While project management software is a convenient way to track project-related information, it is not absolutely necessary for your project to run and be completed effectively.

If you are going to use software tools to plan and implement your project, ensure that:

- you and your team are trained in using the software, or that reference books are available to enable you to access and use the software effectively
- you can install project management software onto your computer system at work
- you have the appropriate support and approval to use the software from your IT support team
- you have factored the cost of software into the expenses for your project.

Project management software

Software functions can be met by a combination of word processing and spreadsheet software, with some time spent at the outset of a project generating forms and templates that help you and your team manage information during the project. Project management software includes applications such as Artemis, Microsoft Project, FileMaker Pro and Primavera. Microsoft Project is the most commonly used software for small- to mid-sized projects.

Facilities now exist to manage projects remotely using Microsoft Project Server or Office Live workspace. Internet-based storage, input and access removes the need for centrally based offices or servers to store all the relevant project information.

Gantt and bar charts

A Gantt chart (named after its developer Henry Gantt) is developed as a horizontal graph or chart. On the 'y' axis (vertical) you list each task in order. On the 'x' axis (horizontal) you list the time frame for the project; for example, Day 1, Day 2, Day 3. Depending on the project, you can list the time in daily, weekly or monthly blocks. You then plot the start and finish time for each task in the appropriate position on the chart. This gives you an illustrated project plan that can be used for reviewing your progress and tracking your performance.

This technique illustrates actions against time and the interaction (or dependencies) between tasks. It involves identifying all tasks to be completed, noting when they can start and determining when they should be finished to complete the project on time.

Critical path method

The critical path method (CPM) is a way of ordering tasks according to dependencies and time taken. The CPM shows you the critical tasks, or key activities, in terms of their impact on the whole project time frame. Developing a critical path analysis also shows you the best way to schedule tasks within the time frame.

To use the CPM, simply arrange all critical tasks in the order they must be completed. You will note that some tasks need to be completed before other tasks can be started (that is, they have dependencies). Once you have identified all the tasks with dependencies, draw a line connecting these tasks. This is your critical pathway – the minimum time the project needs for completion, as shown below.

Sequences	Disruptions
By identifying your critical path, you can identify: • the sequence of tasks and timing that is vital to successfully complete the project on time	By identifying your critical path, you can identify: • the activities or tasks that, if disrupted, will have the most impact on your ability to meet the project time frame.

Program Evaluation Review Technique charts

A Program Evaluation Review Technique (PERT chart) is used to schedule, organise and coordinate tasks within a project, similar to the critical path method (CPM). They are more time consuming and complicated to produce than those reviewed so far, and are therefore more suited to long or complex projects.

A PERT chart is a diagram consisting of numbered rectangles that represent events or milestones in the project. These are linked by labelled directional lines (called vectors), which represent tasks in the project. The direction of the arrows on the lines indicates the sequence of tasks, showing the dependencies and highlighting the intended schedule or critical pathway.

Tasks that are not joined by vectors are not dependent on the completion of one to start the other and can be undertaken simultaneously. Tasks that must be completed in sequence but do not require resources or deadlines are represented by dotted lines with arrows and are called dummy activities. Numbers noted on the opposite sides of the vectors indicate the time allocated for the task.
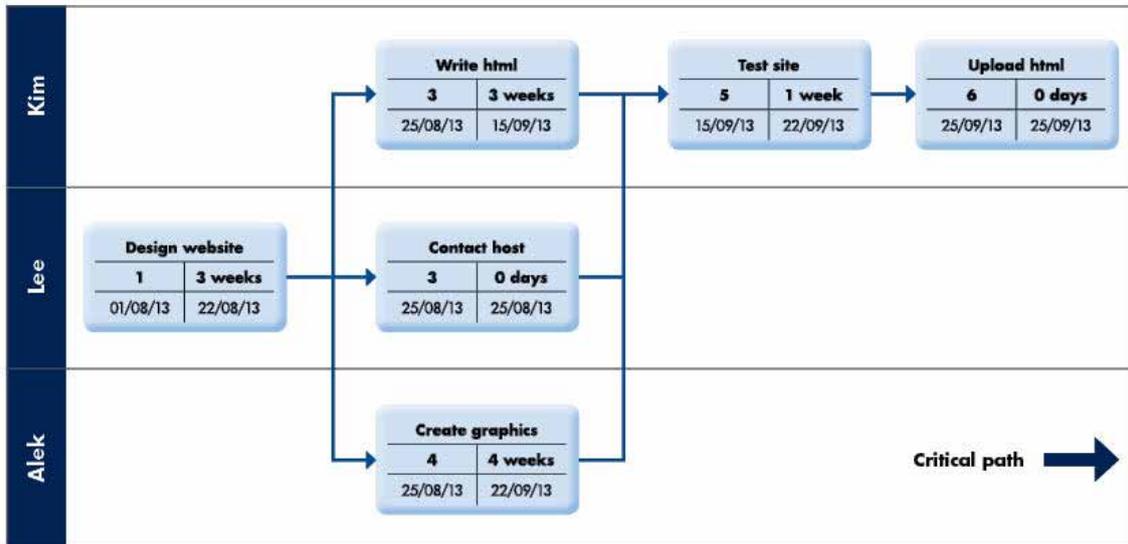
Cost schedule control system

A cost schedule control system is simply any planning and control reporting system you use to determine and monitor your project costs. It helps you maintain financial control of the project through evaluating, estimating, budgeting, monitoring, analysing, forecasting and reporting all the cost information for the project at every stage.

Life cycle cost analysis

A life cycle cost analysis is a method of project evaluation where all costs over the life of a project are considered to be important. It involves capturing, recording and computing all expenses associated with the project. The life cycle cost is the total cost of owning, operating, maintaining and eventually disposing of the project over its lifetime, with all costs adjusted or discounted to reflect interest rates throughout this period.

The process involves the project manager working closely with finance specialists who can help monitor the costs of the project and ensure all costs (expected and unexpected, interest on borrowed funds and direct and indirect expenses) are assigned to the project. This way, the true and complete cost of completing the project is known.
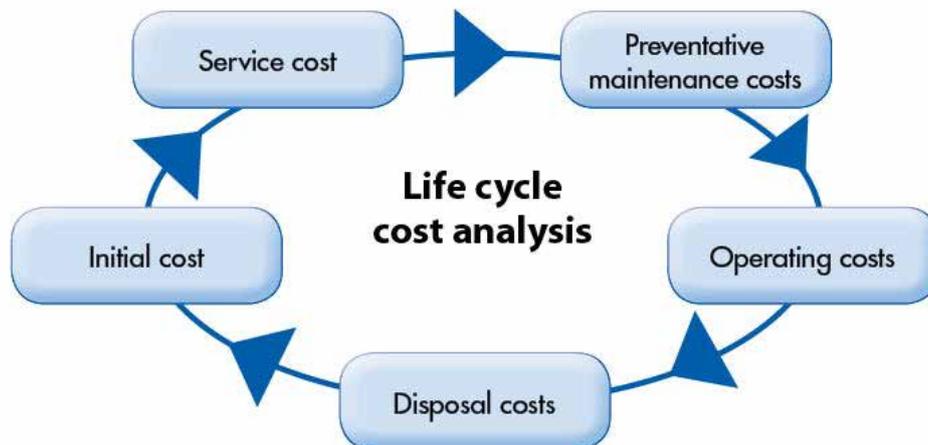
Logistics support analysis

To develop a logistics support analysis (LSA), you need to note all areas of the project in which you may require support such as resource acquisition, budget, technology and approvals. This analysis helps you as project requirements, tasks or plans change by ensuring the support implications of those changes are considered and addressed. An LSA is a set of activities and contacts designed to help you identify and use support systems (such as the project sponsor or IT helpdesk).

What logistical support analysis supports
• Personnel
• The IT help desk
• Workplace facilities
• Maintenance
• Equipment
• Technical documentation

Spreadsheets

Spreadsheets are an invaluable tool in project management. A simple spreadsheet program can help you with almost every aspect of the project, including allocating resources and budget, tracking performance, measuring progress and charting schedules.

In comparison, project management software is a more sophisticated application that allows you to comprehensively plan and track the progress of a project, make adjustments when necessary and prepare reports at any stage of the project.

Technical resources

Depending on the nature of your project, you may need to consult and use existing specialised resources or tools. This may include technical or safety manuals that detail how to use necessary equipment, and guidelines to adhere to in the event of an incident (such as equipment breakdown or accident).

Technical resources may also help you manage work health and safety processes within your project. WHS management system tools including risk analysis templates, (WHS) policy templates, safety induction materials and legal compliance registers. Note that these often require specialist input to ensure regulatory conformity.

Practice task 8

Give a brief explanation of each of the following project management tools.

1. Project management software

2. Gantt and bar charts

3. Critical path method

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4. PERT charts
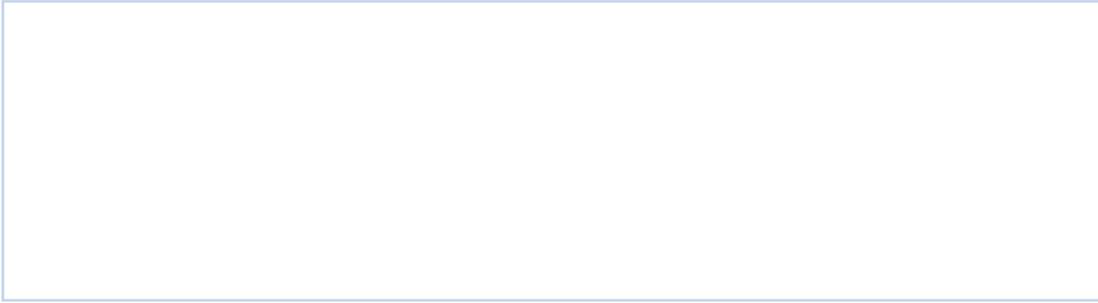
5. Cost schedule control system
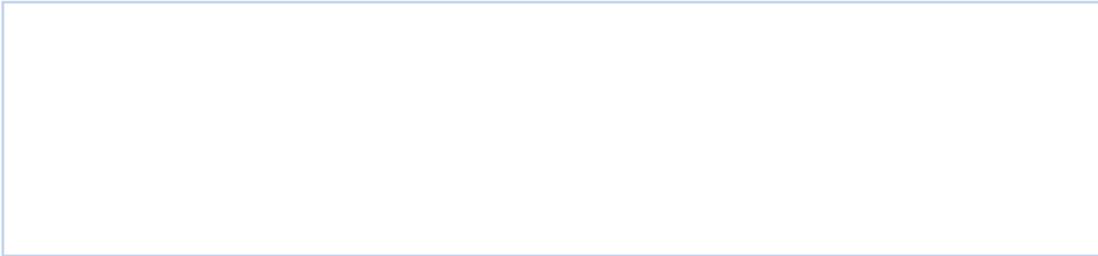
2C Formulate a risk management plan

A risk management plan is an essential part of project planning. Risk management increases the likelihood of the project's success and insures against exceeding project budgets or missing deadlines. Here are some stages associated with formulating a risk management plan.

Identify risks	**Define risks**
Identifying possible risks to the project's success	Defining risks in terms of potential impact (consequence) and likelihood (probability)

Contingency plans	**Actions and monitoring**
Developing contingency plans that detail how each risk will be prevented and/or controlled	Acting on plans and monitoring outcomes
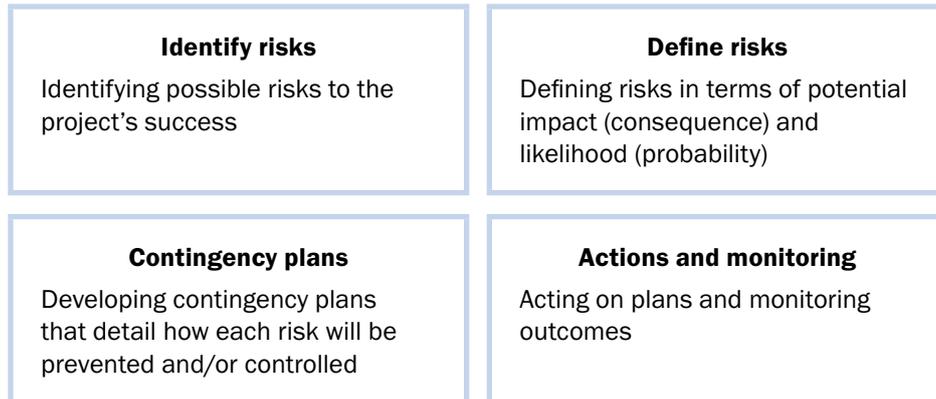
Identify risks

A hazard is any situation or object that may present a risk to the project – either the people working on the project or the successful completion of the project. Identifying risks begins with identifying hazards, then assessing the likelihood and effect of each risk the hazard may present.

To illustrate this concept, think of a chair in the middle of a room. It does not present any risks to staff unless someone needs to use the room or cross the floor to complete a task. At that point, it presents a risk of tripping or falling that can affect the outcome of the task. The level of the risk is determined by experience and analysis of the likelihood and extent of possible injury caused by someone tripping over the chair.

One way of managing the challenge of identifying risks is by sorting risks into four groups, outlined below.

Organisational risks
Organisational risks are events that affect the organisation as a whole and may therefore impact on the project. Changes to the environment the organisation operates in can result in the project being less effective or less relevant than hoped. For example, market needs may vary, new regulations may be enforced or new competitors may emerge. Many of these issues are beyond the project manager's scope, but the project can be adapted in response to these risks occurring if they are identified early.

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Project risks

Project risks are possible problems that can affect the whole project. These include external parties failing to provide services on time or to standard; funding issues; inefficient resource allocation; and the level of sponsor support.

Task risks

Task risks are problems that may arise within the context of one project task. For example, if one task within a project is to proofread a document, the risks associated with this task could be that the proofreader does not identify all errors.

WHS risks

One major area of risk all project managers should be alert to is the work health and safety requirements of project team members, stakeholders and external groups such as suppliers and contractors.

There are strict regulations governing safety in work environments. These include:

- a duty of care to ensure a safe and healthy environment for all workers and visitors
- making sure people are adequately trained in the equipment they operate or use.

It is the manager's responsibility to foster an environment of safety and to ensure workers are aware of their responsibility to report unsafe work practices or hazards.

Identify the possible impact of risks

To identify the impact of risks, develop a ranking system that allows you to categorise the risks you have identified into meaningful groups based on the likelihood of them happening. For instance, you may determine that three levels of risk exist, as shown in the following table.

Degree	Level	Likelihood
High	1	Very likely to happen
Medium	2	May happen
Low	3	Unlikely to happen

Rank the possible impact of risks

Similarly, you can use the same system to rank the consequences or impact of the risk occurring, as shown here.

Degree	Level	Impact of risk
High	1	Major problems and possible failure of the project
Medium	2	Problems that would put the project behind schedule
Low	3	Problems that are easily overcome

Example: a risk matrix

A risk matrix shows the supplier not providing the cabinets on time would constitute a major problem. The chances of this happening are fairly high, so Dina should plan for an extra day or so to cover any possible delay in delivery.

A standard risk management strategy is to include a penalty clause in the contract that places financial accountability on suppliers to deliver on time.

The following is a risk matrix for the example about installing new cabinets in Dina's office.

Risk	Likelihood of occurring	The impact
Supplier does not provide goods on time	2	1
Quotations are not detailed enough	2	2
Project staff member does not have skills to execute tasks effectively	3	1
Sign-off not given by manager on chosen supplier	3	3

Manage risks

Managing risks means providing a method of monitoring and controlling each identified risk. If you find that by the time you reach step five you still cannot accept the possibility of the risk occurring, you may have to change your plans so the project is not exposed to this risk. Try to ensure your project management plans include more than one of these elements for each risk you identify.

Here are five steps you can take to control risk.

Five steps to controlling risks
1. Prevent the risk from occurring in the first place.
2. Reduce the probability of the risk occurring.

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3. Transfer the impact of the risk to a third party (for instance: include penalty clauses in contracts so financial losses resulting from substandard work are not incurred).

4. Have contingency plans in place so that if the risk occurs you can deal with it immediately.

5. Accept that some risks will exist no matter what plans you and your team have in place, and that these will need to be monitored throughout the project.

Work health and safety risks

All project managers must be alert to the health and safety requirements of project team members, stakeholders and external groups.

Work health and safety (WHS) issues require special attention, particularly during projects, as new processes, equipment and operational practices may be established that workers are unfamiliar with.

You may find that, as project manager, you are solely responsible for ensuring a workplace safety plan is in place. This includes identifying safety risks and establishing plans to prevent injury to workers and others.

Consult the designated safety personnel or health and safety committee (HSC) to find out exactly what your responsibilities and obligations are during the project's duration. Talk to team members about risks they have identified and ask them whether they have ideas concerning the prevention of workplace injuries.

ComCare

The degree to which WHS is managed in your project depends to a large extent on the type of work you are doing. For example, a project involving construction, equipment, hazardous materials, travel, a large number of people or an outdoor venue require a greater emphasis on health and safety aspects than an office-based project. You may need to arrange for insurance, special clothing or footwear, specific training or specialist services. However, even a simple project such as developing a marketing brochure involves WHS elements such as ensuring people are working safely at their workstations and that equipment is used properly. It is also important that suppliers and other contractors comply with WHS legislation.

The Australian Government's ComCare website (www.comcare.gov.au) provides valuable information concerning safe work practices for persons conducting a business or undertaking (PCBU) and workers. ComCare is responsible for workplace safety, rehabilitation and compensation in the Commonwealth jurisdiction. The ComCare website contains factsheets, ideas and risk-management strategies covering a wide variety of workplace safety risks, as well as links to state, territory and international workplace safety sites. ComCare has also produced a Leadership and Accountability Kit that is useful for managers.

Practice task 9

1. Explain what organisational risks are.

2. Explain what project risks are.

3. Explain what task risks are.

4. Explain what WHS risks are.

5. Describe how you plan to minimise the impact of the risks occurring.

2D | Develop and approve the project budget

Project managers need to work with their teams and specialists to develop a project budget. Creating an effective budget involves researching and accounting for the total costs associated with every task and activity identified in the project work breakdown to be completed on time and to an appropriate standard.

Develop the budget

Most organisations have standard figures or calculations for estimating costs. Research the direct and indirect costs of completing each task effectively, and forecast an accurate figure you can aim to meet as you execute the plan.

Organisations differ in the way they identify and handle these costs. Some organisations may treat outgoings as direct costs to the project, while others may portion the indirect costs across the whole organisation as a percentage of total expenditure. There are many ways of presenting this information, so find out how your organisation attributes and documents direct and indirect costs.

Direct costs

Direct costs are those related to completing a project task. Direct costs usually fall into one of many categories shown below.

Labour

The cost of the people undertaking the work; for example, you pay a bricklayer a set amount per hour for their labour; a designer would be paid a set fee for producing a design for an advertising poster.

Materials

The cost of items used to execute the project; for example, bricks are needed to build a wall; paper is needed to create hard-copy documents.

Supplies and equipment

The cost of items or tools needed for your team to perform their tasks effectively; for example, a bricklayer will need a trowel and cement mixer; a designer may need a computer and software.

Facilities

These costs are only included if facilities are purchased or built solely for the project you are working on; for example, portable toilets may be rented for a building site; a meeting room may be hired to discuss new designs.

Training

The cost of any training that staff, customers or other stakeholders require to achieve the project goals that would not be undertaken otherwise.

Travel

The costs of any travel conducted for the project.

Miscellaneous

Any other project costs incurred. These may be quite specific to your workplace or the project itself; for example, lunches for team members.

Indirect costs

It is just as important to identify and quantify indirect costs as direct costs. Indirect costs are not associated with a specific project or department, but are general costs the whole organisation regularly incurs, such as rent, maintenance, depreciation of furniture, bank charges and fringe benefits. From an organisational perspective, a portion of these costs can be attributed to projects. Indirect costs usually fall under the categories shown below.

Marketing and sales

The costs associated with publicity, promotion and advertising

General costs

The cost of management and support services such as accounting and human resources; rent, postage, couriers, telephone, staff amenities and insurance

Depreciation

The costs associated with the maintenance of facilities; for example, buildings, furniture, computers and other equipment

Record costs

An effective tool for recording costs is a simple spreadsheet or project software tool that enables you to identify costs at different levels of detail, for each task, by category. This requires only basic computing skills. However, you may find that other project managers within your organisation have already developed such tools or that your accounts department has suggestions or ideas that can help you create a workable tool. Follow your organisation's procedures to record project costs.

Example: write a budget

This example shows the project manager's budget where costs have been determined and allocated for personnel, materials, production and distribution.

Budget					
Personnel	**Cost per hour ($)**	**Number of hours**	**Total $**	**Actual $**	**Variance $**
Project manager	60	100	6,000		
Marketing officer	35	20	700		
Admin assistant	30	30	900		
Designer/artwork	80	10	800		
Writer	45	24	1,080		
Desktop formatter	30	21	630		
Editor/proofreader	45	8	360		
Manager	80	2	160		
			10,630		
Materials	**Cost per item**	**Number of items**	**Total $**		
Envelopes	0.50	4000	2,000		
Paper	0.04	4000	160		
Overheads			300		
			2,460		
Production			Total $		
Copying			1,800		
Courier			25		
			1,825		
Distribution			Total $		
Postage	0.50	4000	2,000		
			2,000		
		Total budget			
		Personnel	10,630		
		Materials	2,460		
		Production	1,825		
		Distribution	2,000		
		Total	**16,915**		

Approve the budget

Budget approval may be gained via the project sponsor, senior management, client representative or an internal authority such as the project manager (usually for small projects). To present information for approval, ensure you have all the relevant costs laid out in a logical and readable form, along with a completed copy of the rest of your project plan. This allows the approving authority to make an educated decision.

Practice task 10

1. What does creating an effective budget involve?

2. Explain how two organisations may handle the costs of a project differently.

2E | Consult team members

Project plans will only be effective if consultation with key project team members is conducted and the benefits of their knowledge, opinions and experiences are sought and used in the planning phase. Establishing a culture of cooperation is especially important. Consider, negotiate or debate the ideas of team members and address any concerns as they arise. Fostering a collaborative approach to the planning phase improves the likelihood of cooperation and project success.

Manage consultation with your team

A project manager needs to develop skills in team building, handling difficult situations, showing leadership and preparing and implementing contingency plans. As a starting point, consider the areas and questions in the following table. Make sure each project team member is confident they can answer each of the questions shown in the following.

Purpose of the project

- How is it aligned with overall business objectives?
- What specific outcomes are expected?
- What will the team need to address and successfully execute to achieve these outcomes?

Time frames/resources

- Discuss the resources available to the team – people, budget, access to specialist help, etc.
- Gather information from team members regarding their resource needs.

Team members

- What experience and skills do they offer?
- How can you best use these skills during the planning and implementation phases of the project?
- What can each individual contribute to the team?

Working together

- Will you develop project groups?
- Will individuals be responsible for specific tasks?
- How will tasks be delegated?

Protocols/standards

- What standards of group behaviour or ground rules will be appropriate?

Communication

- How can the project manager be sure everyone gets an equal chance to participate and be involved?

Arrangements

- How will team input into the planning phase be captured and included?

Cultural awareness

- What measures must you instigate to ensure language and other cultural barriers are managed?

Example: choose a project team

Michael is a manager at a large warehouse for a national chain of supermarkets and variety stores. From time to time he is assigned to different projects, which means he is in charge of different groups of people, some of whom he has never worked with before.

He says: 'Once I get an idea of what the project is all about, I need to choose my project team. This means nominating people I think would be good for the project. However, HR also assigns people to the project who I don't know anything about.'

'The first thing I do is talk to each person individually after reviewing their file, which is supplied by HR. I find out what they've done before and what they're good at. Afterwards, I allocate each person a role or tasks. When I'm working out the project plan, I might consult with anyone who can help shed some light on different aspects of the plan, based on what I now know about each person's experience.'

'Every time I have held a meeting like this, someone in the team raises a good point, asks a question that gets me thinking or shows me a better way of doing something. These meetings are always worth having, even if they take a bit of time, because they give people an opportunity to ask questions and get the team together to think about the work that needs to be done. This always ends up making the plan better, which results in a better project'.

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Practice task 11

List three questions you might ask to capitalise on a colleague's experience, skills and ideas during the project planning phase.

2F | Gain approval for the project plan

Gaining approval for the plan to go ahead may be a quick, one-step process or a lengthy and complex affair, depending on the nature of the project and the protocols and structure that exist within your organisation. As you complete your project plan, ensure that what you have created meets stakeholder needs.

Questions that may be posed might include:

- Who is responsible for granting approval to the project plan?
- What processes need to be followed for the plan to be approved?
- Have I prepared the plan in accordance with stakeholder expectations, organisational standards and relevant industry regulations?
- Is the plan in a format that is accessible to stakeholders?
- Are information sources documented and assumptions made in the plan supported by facts?
- Does the plan contain all the information needed for those responsible to sign off on it?
- Is the plan a document that, once approved, will help me communicate to project team members what needs to be done and why?

Follow organisational procedures

Your team must follow your organisation's policies and procedures in every step of the planning process. You may find that you and those team members who have assisted in creating the plan need to take one or more of the actions that are shown below.

Actions that may be required for your project
• Prepare and make a presentation to stakeholders, which may result in reworking or adding detail to sections that stakeholders require.
• Consult specialists within your organisation about project-planning procedures including risk management and resource allocation.
• Attend a panel interview where stakeholders ask you questions about your plan and how it was created.
• Submit completed documents to your sponsor, who then circulates them for approval.
• Attend meetings with individual stakeholders to discuss different aspects of the plan in detail.
• Make yourself available to answer stakeholder queries by telephone, email or in person.
• Provide supporting evidence that shows how you arrived at decisions, assumptions or data outlined in the plan.

Practice task 12

What do you need to know before gaining approval for a project?
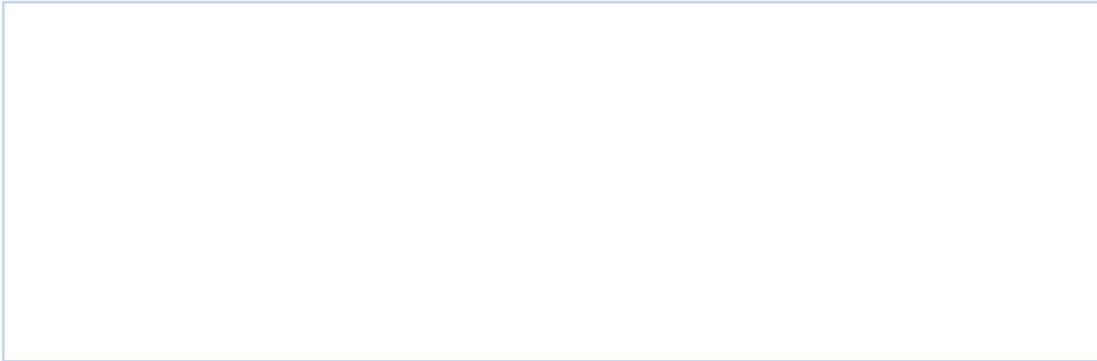
Summary

1. A project plan assists project managers to delegate tasks, estimate resources and time frames follow up on activities that are being completed and report on the project's progress.

2. Without a plan, projects run the risk of being poorly organised, reactive and losing focus of the project's major objectives.

3. Project managers can use a wide range of project planning and management tools such as project management software, Gantt and bar charts, critical path method, PERT charts, life cycle cost analysis and spreadsheets.

4. A risk management plan must be developed for the project that identifies organisational, project and task risks; assesses their likelihood and impact; and provides steps for managing the risks posed.

5. A project budget must be developed that estimates all direct (for example, labour, materials, training) and indirect (for example, marketing, administration) costs of the project.

6. Project plans are only effective if project team members are consulted and their views, opinions and experiences are sought and used in the planning phase. The project manager must facilitate consultation with the project team.

7. Before the project commences, approval must be gained through the appropriate channels and from the required people in the organisation.

8. Gaining approval could be a simple, one-step process or it may require you to provide decision-makers with extensive information and documentation on the details of the project before approval is granted.

Learning checkpoint 2
Develop the project plan

This learning checkpoint allows you to review your skills and knowledge in developing the project plan.

Part A

1. Provide a description and/or explanation of each of the following elements of a project plan:
   - Work breakdown schedule
   - Key designated milestones and deadlines
   - Budget and costs (direct and indirect)
   - Project scope
   - Risk analysis
   - Standard (or quality) of work
   - List of assumptions
   - Relationship between tasks
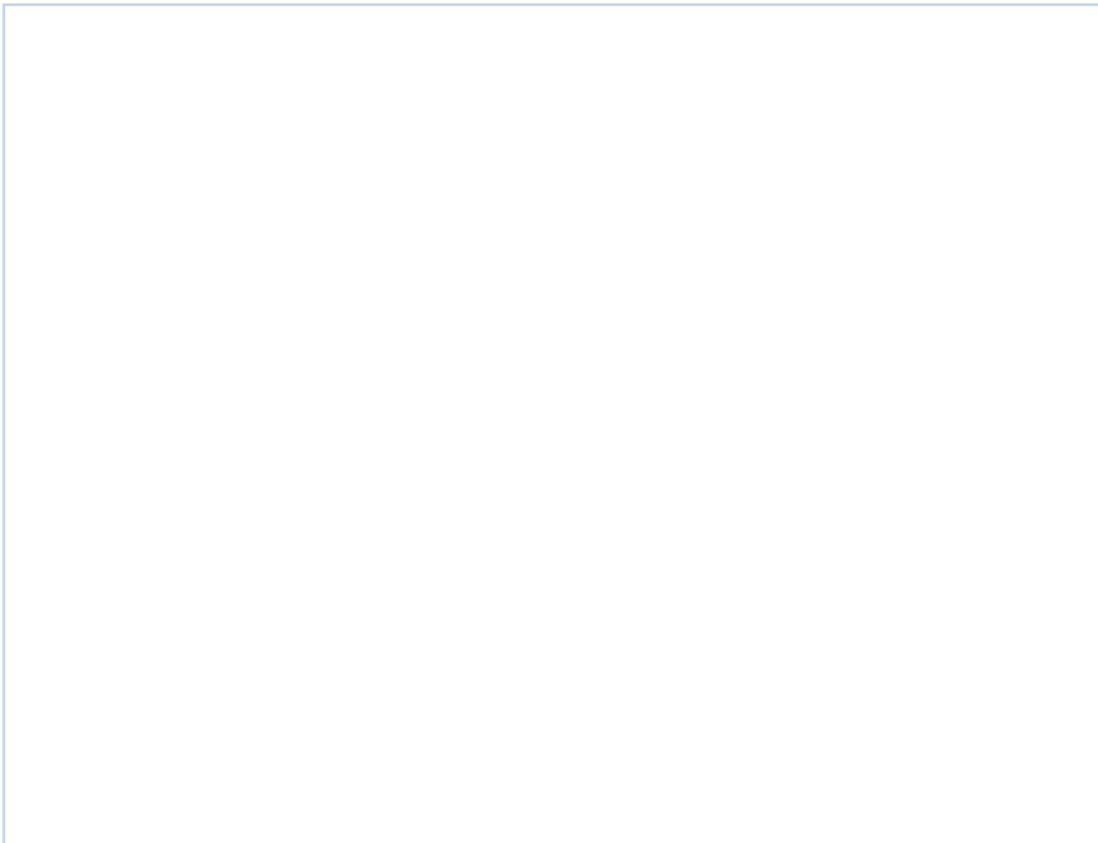
2. Explain the use of each of the following project management tools:
    - Logistics support analysis
    - Life cycle cost analysis
    - Cost schedule control system
    - Critical path method
    - Gantt and bar charts
    - PERT charts

3. List and describe the three categories of risk that may be addressed in a project plan.

4. Describe the difference between direct and indirect costs. Give at least three examples of each.

5. What process is required to gain budgetary approval? Who might you gain approval from?

6. Explain why it is important to consult team members when preparing a project plan. Provide at least four examples of areas for consultation.

7. In your organisation, who would you gain final project plan approval from? Describe the procedure that is followed for project plan approval.

Part B

Read the case study that follows and complete the tasks that follow.

Case study

Alexis has gathered all the information she needs to fully understand her role as project manager for Red's impending move to new premises. Nick has asked Alexis to present a completed project plan to him for review at the end of the week and to present the final plan to the management team the following week. Alexis needs to collect some information. She meets with other managers, talks with staff in other organisations, researches on the Internet and talks with colleagues and friends who she knows have moved offices recently. The following is a summary of the information she gathers:

- Red has project software that can be used.

- Meg created her own tools and forms to help her with a project she managed last year. She offers them to Alexis.

- Byron is very concerned about customers needing clear information on where Red is moving; he and his team would like to work through some of these issues with Alexis and devise some risk management plans to help avoid problems.

- Sandra has a problem in that her editorial work cannot be disrupted; Alexis knows her own team of designers are in the same situation, so her plan will need to manage the fact that staff in these two departments in particular can't lose any time. Byron has confirmed that his team can work from home using their laptops for a day or two if necessary. Phone lines will need to be uninterrupted as well.

- Bob provides a list of what needs to happen in the IT area before anyone can get their computers up and running. It reads like this:
  - Rewire and network new offices (three days)
  - Backup data (overnight)
  - Pack up server, phones and computers (half day)
  - Move computers, phones and server to new location (half day)
  - Set up computer and phone access for all staff (one day)

continued ...

... continued

- The new hardware required for the new offices will cost $10,000–$20,000, but will require quotes (two days)
- Fitting out a space the size of the new offices will take two days of installation and about two weeks of construction. They will need three hours to measure up and can provide a design concept and quotes within five days. Rough quotes provided over the phone are between $40,000 and $70,000

- Nick has confirmed that it is okay to plan some work involved in the move over weekends; any staff (such as IT staff) that are called in on these days can have time off in lieu.
- Stella has agreed that one of her staff members can provide limited ad hoc assistance throughout the project, on her approval.
- Meg has provided hourly rates for employees for budgeting purposes:
  - Alexis: $60
  - Office support staff: $30
  - Bob: $65
  - Bob's assistant: $55
- She has also provided other rates:
  - Fringe benefits: 10 per cent of hourly rates
  - Indirect costs: $100 per day
- Alexis also notes a list of things in no particular order but that will need to be re-prioritised as some activities are dependent on others:
  - Employees need to be given a schedule of the move, tasks involved and dates
  - Employees need to be told what they need to do
  - Customers need to be informed of the move ahead of time and again afterwards, on multiple occasions
  - New stationery needs to be printed
  - Banks, suppliers, yellow pages and white pages all need to be advised
  - Employees need to be shown their new desks
  - Office supplies and other items need to be boxed and moved
  - A removals company needs to be contracted
  - Employees need to pack up their supplies so they can locate items after the move
  - A notice must be put in the window of the old offices with the new address
  - Employees need to be told where to park in the new location.

1. List the major tasks involved in the project in the order they will be carried out.

2. Develop a task breakdown for each major activity, including dependencies and actual or estimated time lines using a table similar to the following.

Major task	Timeframe	Dependencies
1. Sub-task		
2. Sub-task		
3. Sub-task		
4. Sub-task		
5. Sub-task		

3. How should Alexis assign tasks to team members and others within the organisation? Indicate what tasks will be assigned to whom and why. List the tools she may use to do this.

4. Describe what project management tools Alexis should use for the plan and why. Explain how she can plan to develop tools herself.

5. Using a project management tool, create a project time line and identify a critical path for the project that shows major milestones as well as key activities.

6. Develop a comprehensive risk-management plan, identifying all possible risks and ways those risks will be avoided or minimised.

7. Develop a project budget based on the example given in this chapter or one from your organisation.

8. Discuss how Alexis can consult with and seek the feedback and opinions of team members and other stakeholders during this planning phase. Explain the benefits of this consultation.

9. What should be done to increase the likelihood of the project plan being approved by the management team?

10. Prepare and present to your trainer the final project plan for approval. Answer questions that arise following your presentation.

Topic 3
Administer and monitor the project

During the administering and monitoring phases of a project, you can expect to call on your experience and skills as a people manager to provide support and assistance to your team members.

Implementation is the critical stage of the project when the plans you have made are put into action. Be ready to meet this challenge with plans that anticipate the needs of the project. Regularly report on project activities and liaise with senior members of staff within your organisation. Coordinate all the activities team members and others undertake as the project progresses. Be on the alert for potential problems that may impact on your project, and check that recordkeeping systems you have implemented are working effectively.

In this topic you will learn how to:

3A   Ensure team members understand their responsibilities

3B   Support the team to ensure quality results

3C   Establish and maintain records

3D   Implement and monitor finances and resources

3E   Complete project reports

3F   Undertake risk management

3G   Achieve project deliverables

3A | Ensure team members understand their responsibilities

As a project manager, it is your responsibility to ensure team members have a thorough understanding of the project scope, what is expected of them and how the team will operate.

It is important that your team is kept informed about issues that affect them. An effective communication plan enables you to keep team members abreast of their roles and responsibilities. You will need to have tools and methods to maintain this plan, some of which are shown below.

Communication tools

Create an organisation chart for the project that clearly shows who is fulfilling which roles, who reports to whom and what responsibilities fall under these roles. This can be communicated to all stakeholders electronically or via a centrally located noticeboard. After an initial consultation with stakeholders, plan what methods of communication are to be used for each function within the project and assign these to members of the project team and other key stakeholders.

Plan to conduct regular team meetings and set up other communication tools such as team newsletters to facilitate communication and information flow throughout the life of the project.

Job descriptions and instructions

Develop a job description for each role within the project team. These must list the key tasks and responsibilities of the role, identify key performance areas (indicators against which performance is measured) and clearly state who the team member reports to and is expected to liaise with. Ensure each team member is clear about what to expect and the context they are to work within. Discuss the job description with them in detail and ensure each team member is clear on their duties.

Some team members may require training if new processes or different resources are allocated to a job. Consider induction and job training in your planning to minimise the risk of task failure.

Talk team members through the final version of the plan. The project plan should be something they are familiar with as, ideally, you should have consulted with them and sought their feedback and commitment during the planning phase.

Make sure a detailed copy of the project plan is available for project team members to review and check throughout the project's duration. Provide copies of any reports or updates that are issued.

Commit to the project

Setting behavioural, safety and work standards with all parties will assist you in attaining commitment to the project. Ensure that all team members are clear about the project before it begins by checking that everyone understands the items shown below.

- Why is the project being conducted in the context of the organisation's goals and objectives?

- Why have I been assigned to the project?

- My responsibilities, how I am expected to work with other team members and what I must do to make a commitment to the success of the project

- What resources are available to do the tasks that have been assigned?

- How do my responsibilities relate to the project as a whole?

- What standards are expected to be upheld?

- What will happen at the conclusion of the project?

Practice task 13

1. Describe what actions you would take to address these questions and concerns from team members.
   - Why are we doing this project?
   - Why have I been assigned to the project?
   - What will my role be?
   - What benefit will I get from working on the project?
   - What specific skills and knowledge do I need? Do I need any training?
   - How am I expected to work within the team?
   - What resources and time do I have?
   - Who can I consult for expert advice if I need it?
   - Will there be regular team meetings? What is expected of me with regard to team behaviour that is different from what applies currently?
   - What problems, issues or difficulties am I likely to encounter? How should I deal with them?
   - How long will the project run for?
   - What will happen to me and my role after the project is finished?
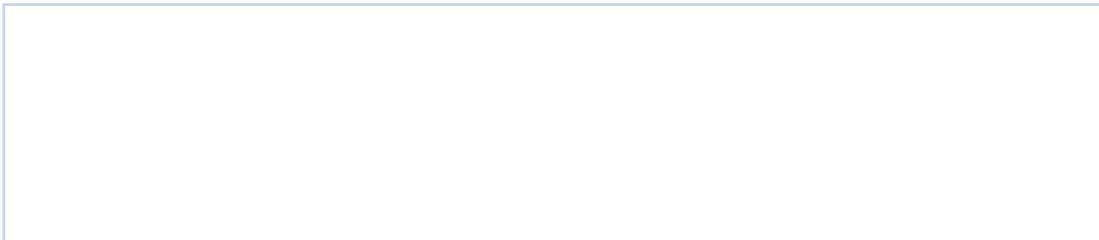
... continued

2. What problems can you foresee in a project team in which members do not completely understand their roles? Discuss how you think this would impact on factors such as team cohesion and satisfactory completion of tasks.

... continued

3B Support the team to ensure quality results

The success of a project depends on the ability of team members to complete their tasks and responsibilities effectively. A large part of a project manager's role is to ensure the team is supported as they execute tasks assigned to them throughout the project.

Support is all the more critical if a team member has a physical or other impairment. They may need special tools, training, assistance or equipment to enable them to complete their tasks and effectively operate as members of the team.

The Australian Network on Disability has created a series of fact sheets designed to assist employers to meet their obligations under the *Disability Discrimination Act 1992* (Cth). These can be found at: www.and.org.au.

Support team members

Project managers have many support mechanisms they can use as they lead their project teams. Many of the following mechanisms are of particular value during time critical projects, when gaining commitment quickly from team members is especially important.

Supervision	Supervisory techniques involve holding informal or formal discussions with team members on a regular basis to discuss problems, monitoring the output of individuals or groups within the team and tracking individual or group progress against set goals and objectives.
Mentoring	Mentoring involves gaining an understanding of team members' aspirations and goals, and assigning tasks and challenges that help them achieve these objectives. You may appoint a more experienced person to provide guidance to another team member on an ongoing basis.
Coaching	Coaching team members means working with each individual to help them reach their full potential, which is of benefit to the project as well as the team member. This involves determining areas of weakness or skill gaps, helping to improve skills and supporting team member efforts to learn new techniques and work practices.
Feedback	Providing feedback to team members reinforces the value of their contribution, provides them with an opportunity to revise or improve on unsatisfactory work and encourages them to continuously improve their processes. Feedback may be given formally or informally, and on a regular basis.

Encouragement	Providing encouragement means acknowledging the team's efforts and motivating, directing and reinforcing positive team behaviour. Positive encouragement can provide a huge morale boost when deadlines are looming, things are going wrong or if team members feel their efforts are not achieving the desired result.
Additional resources	Sometimes you may need to source and allocate additional physical, human or technical resources. Consult with team members during the planning phase to help anticipate any additional or special resources the team will need, such as appointing extra personnel who can assist at critical times during the project.
Team meetings	Team meetings provide an opportunity to communicate important information and raise any issues with the project. Therefore regular meetings are essential to facilitate communication within the project team and provide support to team members. Ensure you plan and communicate meetings effectively to allow time for team members to make a considered contribution.
Development opportunities	Project team members should be chosen to work on a project because they possess specific and relevant skills, knowledge, experience and networks. However, team members may still need to undertake skills training for them to fulfil their responsibilities.
	Complete a skills audit of your team members when you first meet with the individuals assigned to the project. You can determine their capabilities and discuss any relevant experience they have that is particularly useful for the project. You can then arrange development opportunities for the identified gaps between required and possessed skills and knowledge.
Tracking progress	Comparing progress against planned results is an important part of managing a project. Track how team members are performing to ensure they are delivering results that meet quality standards and time lines.

Example: support team members

John is the manager of two staff members who are working on a special project for their company, an airline with Australian and international operations.

He keeps up to date with his team members' progress and provides them with support in practical ways. His desk is located next to his team members' desks, so he is aware of any issues and problems they tackle as they go about their work. He lets his staff know he is always available if they need guidance or help. He spends time with each employee, building up their skills and knowledge in different areas so their work is consistent and of a high standard.

The opportunity to provide his staff with specialist training was not available because of time and budget constraints, so he sources a range of tools for them to refer to so they can learn new skills and apply information in practical ways. These tools include coaching, IT support from the IT department and instruction sheets for unfamiliar processes.

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Practice task 14

Using this table, explain the five types of support you will provide to your team as you undertake your project. For each strategy you suggest, explain the reason for the support. The first one has been done for you.

Support mechanism	Why it is important	Examples
Supervision	Provides the opportunity to discuss problems, monitor the output of individuals or groups within the team and tracking individual or group progress against set goals and objectives.	Hold informal or formal discussions with team members on a regular basis.

3C Establish and maintain records

Before the project commences, you need to establish how you and your team are going to manage the project information. Several types of information are commonly required during a project. Keeping adequate records and having an effective system for accessing the records is vital to successfully execute projects.

An effective information system requires

- accessibility
- adequate speed of input of and access to information
- a common format throughout the organisation
- secure storage of information.

Types of record-keeping systems

As methods differ according to the nature of the organisation and the project, all team members must be aware of their individual record-keeping responsibilities. Required record-keeping systems are outlined below.

Correspondence

Email archives, scanning and saving paper documentation are common strategies in today's communication environment.

Financial data

Centralised data storage, which may be entered by line managers, purchase officers, accounts staff and financial controllers.

Project outcomes

Records of outcomes are often required for board papers, company lodgements and funding proposals. Therefore, storage should be accessible but secure

Quality data

Regulatory data such as test results may need specialised records management. Check with your regulator or organisation.

Records of time

    As with project outcomes, secure off-site storage is recommended. This can be electronic or paper storage depending on organisational requirements

Samples, prototypes, models

    Archival of product prototypes varies between organisations.

Maintain records

Maintaining records and keeping track of the project's progress includes making sure all decisions are clearly documented. Keeping a paper trail of decisions and outcomes is good practice. This means storing correspondence and results before and during the project execution.

Maintaining records also refers to ensuring that however the records are being stored (electronically or in paper form), they are kept in good condition and are an accurate record of business activities.

Example: maintain project records

Jacinta, the sales and marketing manager for a wholesale nursery, is conducting a sales project. She prepares a series of forms to track customer satisfaction and find out what additional services customers would value.

All staff are asked to complete the forms with customers so the nursery can build a database of new product ideas and track their performance against previously agreed benchmarks.

Jacinta creates a folder on the nursery's computer where these forms can be saved once they are completed. She issues all staff with simple instructions for when to complete surveys and how to save them in the right place on the computer system. Additionally, she asks them to save the data on a daily back-up system for added safety (in this case, a portable hard drive).

At the end of each week, Jacinta is able to download the completed surveys and add the results to her evolving database.

Practice task 15

1. What are the consequences of ineffective record-keeping?
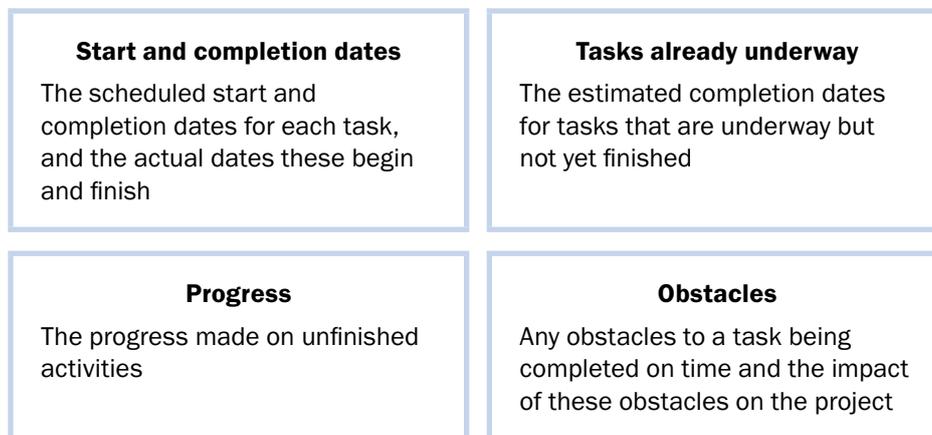
2. Why should records be maintained throughout a project?

3D | Implement and monitor finances and resources

The plans you created at the beginning of your project must now be implemented and monitored throughout the project's duration. Essentially, implementation and monitoring are about maintaining control over the project, ensuring it is moving toward the milestones and ultimately achieving the goals that define its success. A major task in the implementation and monitoring phase is to collect information from team members that give you a clear understanding of how individual tasks are tracking against project targets.

Track time

To effectively track time, you need a variety of workplace information to assist in the management of the daily operations of the business and your role within that process. Here are some of the types of workplace information you may require.

Start and completion dates The scheduled start and completion dates for each task, and the actual dates these begin and finish	**Tasks already underway** The estimated completion dates for tasks that are underway but not yet finished
Progress The progress made on unfinished activities	**Obstacles** Any obstacles to a task being completed on time and the impact of these obstacles on the project

Monitor finances

Tracking spending against budgets through the project's lifetime and reporting on how money has been spent at the conclusion of the project is a key responsibility. Many projects require that regular financial reports be presented to the person or committee responsible for overseeing the project. You need to ensure all financial records, such as invoices, financial statements, purchase orders, cab vouchers and petty cash slips, are obtained when required, checked for accuracy and filed appropriately.

To monitor finances, you need information about:

- the estimated and actual expenditure (or number of labour hours) for each task
- the amount spent to date against the total project costs as well as against budget breakdowns
- the estimated remaining costs to complete the project both in total and by budget
- issues that are causing the project to cost more (if applicable) and what is being done to contain expenditure.

Monitor quality

When monitoring project quality, look for any gaps between what was planned in the project specifications and what is being delivered. An important responsibility in monitoring a project's progress is to check the risk management strategies and the project's contingency plans if quality strays too far from expectations.

To effectively monitor quality, you need information about:

- original estimates of the standard of work required
- the standard of work actually being achieved
- what is causing the standard to fall below requirements (if applicable).

Check other resources

Human, physical and technical resources require continual monitoring and control to maintain the project's focus, as indicated below.

Human

Consider team and individual motivation, training, capabilities, sickness, leave requirements, workplace safety, worker rights and compensation rates.

Physical

Consider changes in the geographic location of resources, transport and logistics, wear and tear, ongoing suitability and monitoring lease or purchase contracts.

Technical

Consider whether the resources are meeting current trends and industry knowledge, whether they are relevant and appropriate to each task and how costs are monitored.

Capture the information

Capturing and sharing information can be achieved by:

- interacting with team members on a formal and informal basis every day of the project
- conducting regular team meetings where team members are asked to provide updates on their progress
- developing and using systems, instructions and processes that are consistent throughout the whole team
- helping team members work effectively and gather information in a consistent manner
- actively participating in the team's work and taking time to understand how team members are working to meet challenges.

Report the information

Disseminating reports that are concise, well-written, targeted to the recipient and consistently presented reflects positively on you and your project team and may help you justify any need for additional resources or time. Reports can be of interest and value to team members, the project sponsor or other relevant stakeholders.

Example: monitor schedule

Ben's project involves selecting, purchasing and installing new desks and chairs in a 30-station office in outer Sydney. After gathering quotes, Ben gains approval from the office manager to purchase furniture (including installation) to the value of $40,000.

To ensure the supplier and their contractors follow the specifications of the contract, he implements a monitoring schedule for each installation. Four desks are installed at once, and office staff are given a checklist to monitor how long the installation takes, the quality of the installation and to mark off how many contractors are involved (the contract stated it should be no more than two). This information is gathered daily to allow Ben to confer with the supplier to ensure timing, resources, quality and costs are on track to meet contract requirements. If Ben notices additional time spent on any resource, he raises it directly with the supplier with input from the staff member to ensure the delay can be explained sufficiently and additional time will not be needed overall.

Practice task 16

1. Describe how you will monitor project finances and resources in your project.

2. List the four pieces of information you need to effectively monitor the finances of a project.

3E | Complete project reports

Project reports allow you to let others know how the project is progressing. Reporting means sharing information, notifying others of achievements, problems and issues you experience, letting them know how you have managed or intend to manage these challenges and confirming when key milestones are met.

Forms of reporting can include:

- regular, formal reporting of milestones and expenditure to senior management, steering committees, stakeholder groups and so on
- updates or briefings provided to the project team on the project's progress
- bulletins issued to share good news or notify stakeholders of the successful completion of milestones or major phases in the project
- informal discussions with organisation employees, stakeholders and others throughout the project duration.

Example: report plan

The following is a model that can be used to design your formal reporting plan and the report templates you use in your project.

Report plan			
Name of project:			
Project manager:			
From	**To**	**How often**	**Type of report**
Project manager	Project sponsor	Weekly	An informal progress note that provides updates on: progress against the plan achievements problems actions work underway
Project manager	Project team members	Weekly	A brief overview of activities to date including: successes work underway recognition received externally of the project or team's results to date progress against the plan areas or risks to be aware of reminders of new practices or systems.
Project manager	Stakeholder	Weekly or monthly (depending on how long the project runs for and stakeholder preferences)	Status report including: progress against the plan revised cost and time projections
Project manager	Project sponsor	On completion of major milestones or agreed review points	Project review report including: snapshot or brief overview of project activities to date rationale for project decisions that have been made analysis of key project events learning from these recommendations issues arising

Develop report templates

During the early stages of the project, spend time with your staff to develop reporting templates and standards that allows them to deliver good-quality information to you. Then, make templates and supporting documentation available to all relevant team members.

Reporting templates vary dramatically depending on the information needs of stakeholders, your own preferences and those of your team. You may have existing reporting templates that can be adapted or you may see a template another person has developed that you may use or adapt to suit your needs.

Example: weekly report template

You can create your own template based on the following example of a weekly report template.

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Weekly report template

Name of project:

Project manager:

Report provided to:

Date submitted:

Report for dates (start date and end date):

Achievements this week:

Summary of work underway:

Expected progress by (end date):

Actual progress by (end date):

Issues experienced this week and accountabilities:

How they were managed:

Potential problems and accountabilities:

Management plan:

</div>

Practice task 17

Create your own template for a weekly report for project team members.

3F | Undertake risk management

The major risks that project managers need to avoid are ones that impact on the team's ability to deliver expected project outcomes on time, on budget, or at all. Throughout the course of the project, you and your team need to be alert to both risks you have anticipated and risks you have not planned for. This is mainly undertaken during routine monitoring, review and reporting processes.

Whether risks are planned for and anticipated in your comprehensive risk management plan or whether they arise unexpectedly, risk management during the project essentially consists of interventions that, as much as possible, stop the problem from impacting on the project outcomes.

Risk management strategies

You may be required to use strategies to manage risks effectively. Some examples of how this can be done are presented in the list that follows.

Examples of risk management strategies:

- Seek further resources that enable you and your team to meet deadlines.
- Negotiate an extension of a deadline or redefine completion requirements, quantities or quality of outcomes.
- Reduce costs so budgets are not exceeded, especially if budgets have been revised down.
- Research and apply more-efficient methods of completing project tasks so they may be finished within time frames or budgets.
- Share ideas within the project team and with external groups to improve the way project tasks are undertaken.
- Outsource some aspects of the project originally allocated to project team members.
- Change roles and responsibilities within the project team to promote more effective work structures.
- Assign work to those who are able to complete it at a lower cost, more quickly than others or to a higher standard.

When plans are not enough

While it is true that a project manager's approach to risk management should be 'prevention rather than cure', there are times when unforeseen risks emerge that have the potential to threaten the outcomes of your project. You and your team may need to develop new and innovative ways to complete tasks so they are finished within revised budgets, or you may need to outsource some of the project tasks to external groups.

To facilitate this process, it is valuable to have plans and systems in place for a quick team response when new risks emerge. Such a framework allows you and your team to be proactive in situations where your best attempts to anticipate and plan for problems are simply not enough.

You and your team should have:

- a backup person nominated to take over tasks if a team member is unexpectedly away
- a list of appropriate external consultants who are available to be contracted on short notice.

Practice task 18

Case study

Kyle puts the provision of a new server for a hospital out to tender. From the responses he receives, he appoints a provider and agrees on a date the server will be delivered and set up. He asks the provider to sign a contract, and assumes this will be sufficient and binding in terms of managing their risks with this project. Kyle plans to upgrade some software that is badly needed once the server is installed. He fulfils all obligations at his end.

The day before the server is due to be installed, he gets a phone call from the provider saying the server will not be delivered for two weeks because they have mistakenly ordered a server that is much too small for the hospital's needs. Kyle is furious, but has to do something quickly as he has everything ready to go. Staff have backed up their data and he has the software ready to be installed.

He calls another provider who had responded to the tender and asks them if they can help. Although their quote is higher, it is outweighed by the cost of a two-week waiting period from the original. It turns out the second provider has a server in stock and can deliver it the next day.

What Kyle does not expect is the added costs he needs to include in the plan like the extra hours he spends organising the new provider and the time the legal and accounts departments spend cancelling the original contract and setting up a new contract for the other company they end up using.

Suggest a risk management approach that could have prevented the last-minute problems experienced by Kyle.

3G | Achieve project deliverables

During the project, on-going monitoring processes should help you and your team anticipate whether project deliverables will be finished on time and on budget, and help you identify risks that may arise and prevent you from achieving the project's goals and objectives.

As individual tasks, milestones or project phases are completed, it may be useful to develop and use a checklist to confirm all project deliverables are achieved. Think of deliverables not only as the actual items, processes, products or services your team develops during the project, but also as the outcome in relation to your organisation's goals and objectives. This outcome needs to be measured as well as the tangible outcomes you and your team produce.

Your checklist can include responses to the following

- What are the key deliverables of this project?
- Which groups will benefit from the project?
- How will project outcomes help our organisation achieve its operational goals?
- What measurements can we use to determine whether the project's outcomes have been achieved satisfactorily?
- What measurements can we use to determine whether the project's outcomes have had the impact they were meant to?
- If a performance gap exists and the outcomes have not been achieved, what can we do to address it before the project's final deliverables are due?
- How can we demonstrate that each task has been completed on time and on budget and has met any quality, quantity or other standards in place?

Achieving deliverables

It should be easy to check most of the deliverables against the project plan. Also check other project documentation; for example, that all items on the contract were adhered to or the steering committee successfully completed their responsibilities.

However, it may not be possible to know whether some of the deliverables have been achieved for some time. Useful questions that may be relevant to your project follow.

Time and budget	New products
Was the project completed within the time frame and budget?	Was a new product to be developed and has this happened?

Conferences	Job creation
Was a conference planned as part of the project, did this happen and was it successful?	Was there a need for a new staff member to be appointed to work on the project, and has this happened?

Example: delay in deliverables

It may not be possible to know whether some of the deliverables have been achieved for some time. For example:

1. A marketing brochure has been developed to increase awareness of the organisation, widen the organisation's market base and produce a five per cent increase in sales within the following three months. While achievement of the deliverable (the brochure) can be measured immediately, knowing how effective the brochure has been requires the marketing team to regularly monitor sales figures and customer feedback over a period of time.

2. A project was undertaken to improve the way a sales team interacts with its customers. The end results of the project (a new customer database and a new set of customer communication tools) may need to be tested once they have been created and set up to ensure they have the desired results. If, during the testing phase, customers report that the way they are communicated with has not greatly improved, the project team may need to make further changes or additions to the database and communication tools for deliverables to be achieved.

Practice task 19

What could you develop to confirm that all projects deliverables will be achieved?

Summary

1. As project manager, you must ensure the people undertaking the project tasks are aware of their responsibilities, know what is expected of them, understand the project's scope and are clear on how the team will operate.

2. Team members must be fully supported by the project manager as they perform their duties. This can be done through supervision, coaching, mentoring, feedback, regular meetings and through providing learning and development opportunities.

3. Establish record-keeping and data-collection systems that record all project information so you can develop a holistic view of the project's progress, report to relevant stakeholders, monitor project costs and justify additional requests for resources.

4. Monitor project finances and resource consumption to provide a clear understanding of how the project and its individual tasks are progressing against the project's budget and targets.

5. Reports are the project manager's primary means of notifying others on progress. Reports can range from formal reports to senior management through to informal discussions with relevant stakeholders.

6. Complete and issue reports that outline relevant project information, successes, problems, issues and how you intend to manage the project going forward.

7. Once risk management plans have been developed, be prepared to implement these plans quickly once risks occur that affect the team's ability to complete the project on time, on budget or at all.

8. Risk management plans may include seeking further resources, negotiating a deadline extension, reducing costs or changing team roles and responsibilities.

9. As the project enters its final stages, ensure all project deliverables have been achieved. Continual monitoring during the implementation process should facilitate this process.

Learning checkpoint 3
Administer and monitor the project

This learning checkpoint allows you to review your skills and knowledge in adjusting and monitoring the project.

Part A

1. Describe three methods of providing information to project team members to ensure they are clear about their roles and responsibilities.

2. Explain or demonstrate to your trainer as indicated how the following can be used to effectively support a project team:
   • Encouragement (demonstrate)
   • Feedback (demonstrate)
   • Learning and development
   • Regular meetings
   • Supervision, mentoring and coaching

3. What resources could you provide and what strategies could you use to support your project team to complete their tasks on time and within budget?

4. What methods of record keeping could you establish for regular project correspondence? Why would you need to do this?

5. Consider the resources listed below. Complete a table similar to the following with strategies to monitor these and their necessary considerations. An example has been provided.

Resource	Monitoring strategy	Considerations
Human resources	Tracking completion of assigned tasks against project schedule	Skills of team members
Physical resources		
Financial resources		

6. To whom and why would you need to report project achievements?

7. What steps could you take to reduce the risk of exceeding the project budget? Explain how these steps would successfully reduce this risk.

8. How could you maximise your chances of achieving all project deliverables? Suggest at least four strategies.

Part B

To complete the following tasks, use a project you are responsible for in your organisation or the following case study. The case study follows on from the one in Learning checkpoints 1 and 2.

> **Case study**
>
> Alexis's project plan has been signed off and approved by the management team. It was quite detailed and she spent a lot of time on it, so she is very glad her hard work paid off. Now it is time to actually move offices. She is relying on Red employees (who are included in the project team) to pack up their own desks and complete other tasks as the move happens. Two employees will need assistance to pack their desks up. One person is away on leave and is not returning until two weeks after the move; another has a broken arm and, although they are at work, can't do all their usual tasks. Alexis's manager Nick wants her to keep a record of everything that happens as the move takes place.

1. What should Alexis do to ensure all team members know their responsibilities and are able to effectively complete the tasks assigned to them?

2. How can Alexis work around the problem of staff being on leave? What issues will she need to consider if team members have impairments or disabilities?

3. What systems/strategies should Alexis use to record information about:
   - costs
   - resources used
   - project time lines
   - information issued to staff
   - information issued to customers
   - records of project reports
   - contracts issued to suppliers.

4. Explain the systems Alexis should use to monitor project progress by answering the following key questions:
    •   Who should Alexis consult with to help design the system?
    •   Who will be responsible for monitoring activities?
    •   What will be measured?
    •   As project manager, what should Alexis expect to gain from implementing a monitoring system?

5. Create project reporting templates using appropriate computer software for the following:
    •   Weekly staff updates
    •   Monthly reports to the management team (or stakeholders)
    •   Weekly reports to Alexis's manager
    •   Milestone or monthly reports to stakeholders

6. Write a page explaining risk management methodology. In your response, include answers to the following:
    •   Why is ongoing risk management important?
    •   How can Alexis ensure she (and the team) is prepared to implement risk management plans?
    •   How can Alexis meet the challenge of unforeseen risks arising?

7. In the context of the project, what are the project deliverables Alexis can use as a measure of her success? How can she test whether they have been achieved?
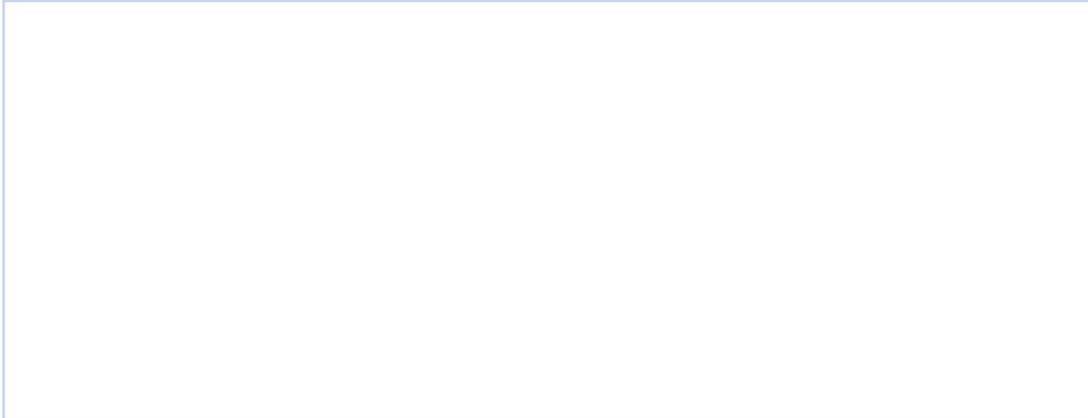
Topic 4
Finalise the project

As your project nears completion, you may find staff are no longer required and are assigned to new positions. The interest and commitment levels of your staff may begin to wane as they start thinking about their next roles. You may also find you and your team are saddened at the prospect of the project finishing, particularly if team spirit and pride had grown among members during the project. This is also a time when judgments are made regarding your ability to manage projects.

Despite these challenges and concerns, this is not a time to become distracted. As project manager, you are responsible for delivering a completed project and following the project plan to the end. You must ensure all loose ends are tied up and final tasks are completed.

In this topic you will learn how to:

4A   Complete accurate financial records

4B   Assign post-project roles to staff

4C   Complete project documentation and obtain approvals

4A Complete accurate financial records

Projects are about achieving certain goals using limited resources within a set period of time. Finalising projects involves a number of steps and checks as shown below, which will clearly indicate whether all the project requirements have been met.

Finalise financial records at end of project

Financial data has been maintained in accordance with your project plans and any guidelines or standards you have been asked to follow.

The data is in a state that will make it possible to accurately compare planned and actual expenditure.

The data is accurate and supported by evidence such as invoices, remittance advice or log sheets of hours worked.

Documents can be easily transferred or copied to departments within your organisation, in formats that are easily accessible, for auditing and checking as per your organisation's usual financial processes.

All financial records are prepared and presented in accordance with legislative requirements.

Check actual expenditure

Checking actual expenditure against the original or revised budget is an essential part of the project. This procedure identifies how effective the project manager was in keeping within the budget by showing where costs were met, where they came under budget and where they went over the budget. Spreadsheets and project management software can provide a means to calculate and present variances between actual and budgeted costs.

Example: actual expenditure

An organisation decides to undertake all the tasks associated with recruiting rather than hiring the services of a recruitment agency. Most expenses are for staff time (preparing the advertisement, sorting through the applications, conducting interviews, etc.). Some of the tasks are undertaken by the project manager, others by administrative assistants. An external selection panel incurs some costs, including gifts for panel members, morning tea, lunch and afternoon tea.

A number of factors cause the project to go over budget by $240. While most of the activities are within budget, placing the advertisement costs more than they budgeted for because the organisation decides at the last moment to extend the dates for placement in the newspaper. The organisation also receives far more applications than they expected, so the time allocated to reading the applications is increased.

Recruit staff member	Budget ($)	Actual ($)	Variance ($)
Approval process for recruitment	150	100	-50
Preparing and confirming job description	342	342	0
Preparing advertisement	135	90	-45
Placing advertisement	500	750	+250
Sorting through applications and handling inquiries	360	450	+90
Arranging interviews	25	20	-5
Convening and using selection panel	100	100	0
Catering	95	95	0
Conducting interviews	450	450	0
Checking references	45	45	0
Advising applicants	70	70	0
Induction	290	290	0
Total	2,562	2,802	+240

Budget control charts

Budget control charts can help highlight where the variances occurred and the extent of these variances. The following diagram is an example of a budget control chart.
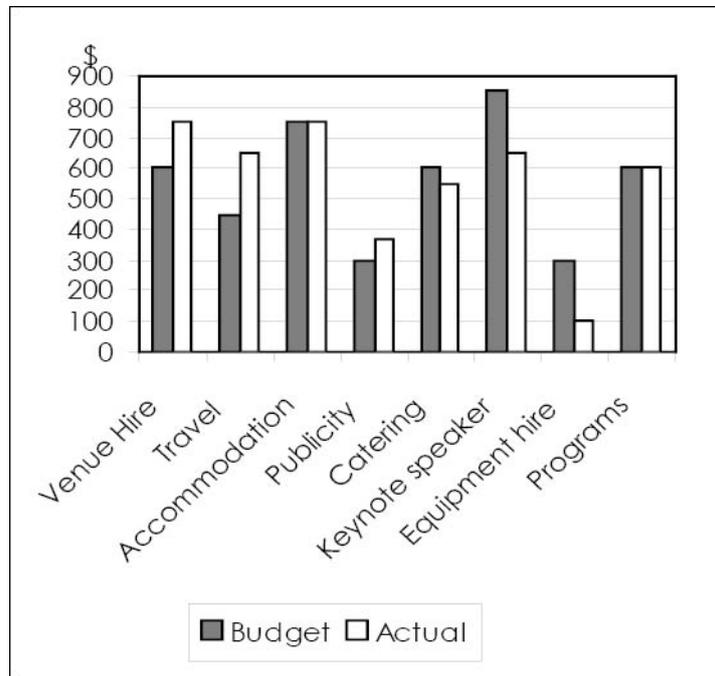
Arrange an audit

Audits may be internal or external. Here is a description of each type of audit, which explains what is involved in each instance.

Internal audits	External audit
Internal audits, whether conducted by yourself or your organisation's accountant, are a means of verifying the accuracy and validity of financial records and ensuring records match actual expenditure. They are also used to ensure legislative/regulatory requirements have been addressed, such as Commonwealth taxation legislation (for example: payroll, capital, corporate and goods and services taxes) and superannuation legislation.	In some circumstances, such as finalising government-funded or tendered projects, or if the organisation is managed by a board or has shareholders, it is mandatory that financial records are audited by a certified public accountant external to the organisation.
Organisations usually have policies and procedures in place that dictate how the financial aspect of the project is to be handled. It may be your responsibility to ensure all documentation is accurate and relevant to the project before forwarding it to the financial specialists.	Their role is to determine whether the records and reports are accurate and valid, comply with any relevant legislation and fairly represent the project's operation and financial position. Their signature of approval is crucial to the project sign-off. Typically, the major items an authorised body checks are whether:
If you or your team find anomalies, discrepancies or problems, or if you suspect any of the financial data is incorrect, you need to determine what errors have been made and correct the records you have (or seek assistance to do so).	• salaries are reconciled; for example, taxes, superannuation and leave entitlements were paid • bank records are reconciled • invoices show that expenses were incurred as stated, and for the reason stated.
	Make sure you have gathered all the documentation involved and have it ready to hand over to the delegated person. These include invoices, petty cash records, remittance advice slips, records of payment made by EFTPOS and credit card, bank statements and time sheets. As you are relying on someone external to the organisation, and as an audit is often a time-consuming process, schedule the time this takes into the project plan.

Practice task 20

1. What might the impact be of not keeping proper financial records? Should this be in your risk assessment? Why?

2. How will you and your team check the accuracy of the financial records at the conclusion of the project?

3. What would you do if you found an error or discrepancy?

4B Assign post-project roles to staff

At the start of your project, you will have been assigned a project team or will have participated in selecting team members. Here are some ways that staff members change their roles to accommodate new projects.

Taking on a whole new role

Existing full- or part-time employees of your organisation who have been seconded or assigned to the team, vacating their regular positions for the duration of the project

Taking on additional tasks

Existing full- or part-time employees of your organisation who have been assigned to the team for a percentage of the time they usually work, managing their regular positions as well as their responsibilities to the project

Taking on advisory roles

Specialists from within the organisation who continue to work in their usual roles and fulfil their regular responsibilities, yet have been available as consultants to the project team and who offer advice and knowledge on an ad hoc or as-requested basis

New staff

Temporary, contract or casual staff who have been employed from external sources especially for the project.

Communicate with staff

As the project winds up, it is your responsibility as project manager to ensure the employment of all staff who have participated in the project is concluded appropriately, within legislative requirements and in a professional and respectful manner. Here are some of the ways that you can ensure each staff member concludes their project role correctly.

Deal with contractors

Australia has a large sector of workers who are employed on a contract basis. While these workers may be used to the uncertainty the end of a project brings, it is important to remember that the end of their contract should be managed professionally and sensitively.

Provide appropriate feedback to them, prepare references or testimonials if necessary and ensure payment is made promptly. It is also useful to note for future reference those contractors/consultants whose work quality was and was not up to the required standard, with reasons why.

Deal with employee expectations

If staff are reassigned to their previous roles, or if you and your own team members are moving away from project activities and back to your regular responsibilities, you may find this a difficult time to manage. The project may have been more exciting, interesting, high profile or challenging to work on than the usual responsibilities that now await staff.

Often, people who participate in projects see project roles as stepping stones to new and more challenging positions, a way of demonstrating their capabilities to the organisation and a way of acquiring skills that would not be available in their regular roles. It is understandable then, that project team members may express a wish to be assigned to a more senior role or work on another project rather than returning to their old duties.

Deal with other support people

Another point to bear in mind as a project winds down is the contribution non-staff team members have made to the project. These team members may include suppliers, customers, industry specialists, managers within your organisation, and other people or groups.

These people may have provided their time, cooperation, resources, knowledge or support either free of charge or as part of their regular duties. Although these groups or people may not have been permanent team members, their contribution should be acknowledged properly.

In such situations, a phone call to thank these parties followed up by a letter or short report that explains the impact their contribution had on the project and its outcomes are ways of recognising their efforts.

Conclude staff involvement in the project

You may need to undertake a number of activities to ensure everyone's work on the project is concluded effectively, as shown below.

Steps to concluding project involvement for staff members

1

Review

Review individual performance. Highlight outstanding performances. Note how the skills and knowledge of each person were used. Prepare reports for future reference.

2

Assess

Assess whether goals, KPIs and other objectives set by you and individual team members were met, and acknowledge the team's effort.

3

Conduct exit interviews

Conduct project exit interviews with staff. As part of an organisation's continuous improvement process, an exit interview can highlight what parts of the project worked well, which parts did not and where things could be improved in the future.

4

Provide references

Provide team members with references or letters of appreciation.

5

Confirm payment

Consult with specialists within your organisation (including payroll, accounts and human resources advisers) regarding any organisational standard operating procedures, legislation or guidelines that need to be followed.

6 **Celebrate**

If the project ended successfully, organise an end-of-project team function to recognise everyone's contribution and celebrate achievements.

7 **Re-deploy staff**

Help staff participate in any formal programs, or session, that is being conducted with a view to redeploying them to other positions within the organisation.

Practice task 21

1. Describe why you think it is important to manage the end of a project carefully.

2. For each of the following groups, list the activities you would undertake to properly conclude their input into your project.
   • Permanent staff who were seconded to the project
   • Staff who were recruited specifically for the project
   • A client who participated in your project's outcomes
   • An accounts team member who offered ad-hoc advice on financial issues and helped set up spread sheets used within the project

4C Complete project documentation and obtain approvals

Once all remaining activities have been completed, you are confident all project outcomes and deliverables have been achieved and the financial data associated with the project has been checked for accuracy, it is time for the project to be signed off and formally concluded. It will then be reviewed and analysed for future learning and continuous improvement purposes.

Prepare a final project report

Common practice is for the project manager to prepare a written report on completion of the project and submit it to the relevant people for sign off. A report is often mandatory for government-funded projects and those overseen by steering committees or boards of management. Good business practice is to document each stage, record the project's financial performance, state the outcomes that were achieved, discuss any issues that arose during the project and provide recommendations (if appropriate). Here are some ways of presenting information – in a report format or as a presentation.

Report format

The format of the report may vary according to requirements such as using templates or addressing certain project aspects. Otherwise, a final report should cover the following five sections:

1. Title page incorporating the project title, author and date

2. Table of contents

3. Executive summary providing an overview of the project and its outcomes

4. Contents including:

   •   introduction

   •   background/history of the project

   •   scope, purpose and intended outcomes of the project

   •   personnel involved in the project, including its administrative structure; for example, the steering committee

   •   project time lines, including milestones

   •   stages of the project

   •   project budget

   •   outcomes of the project

   •   issues or difficulties that arose and explanations of how they affected project goals, how they were resolved, which problems were the result of identified risks, whether the contingency plan was implemented, whether it worked and whether there were any unplanned events.

5. Relevant documentation attached as appendices; for example, financial reports, samples, project brief.

Presentation requirements
When you are confident the report is complete, follow any directions you have been given to present the report such as the number of copies and distribution list, or method of presentation. Make sure you have incorporated the time this takes into your project plan.

Obtain approvals

Depending on the project's nature and scope, you may need to obtain sign-off for the project from numerous individuals or groups. You should have identified the sign-off protocols and requirements during the planning phase, so you can refer to the original project scope for further information. If the organisation received funds for the project, you will have to submit a financial acquittal statement to show where the money was spent. This may require specific forms and procedures you need to follow such as having the finances independently audited.

For your project, you may discover that sign-offs are required from a number of people:

- The project sponsor
- One or more managers of a certain level of seniority, or a management group such as a board or steering committee
- The funding body (or bodies) who approved and funded the project in the first instance
- The clients, customers or suppliers for whom you have completed the project

Complete other tasks

You may have to do a number of other tasks when finalising a project, depending on its size and complexity. Here are some examples of tasks that may need attention at the close of a project.

Tasks to finalise a project

1

Finalise files

Finalise files and store or archive all important information relating to the project in both hard and soft formats.

2

Destroy redundant information

Destroy any confidential information or information that is no longer needed; for example, recycling or shredding paper-based information.

3

Return borrowed equipment

Return any equipment that was leased or borrowed from external bodies for the duration of the project.

Return or move to appropriate locations any resources used in the project that are re-usable or on loan from other areas within your organisation; for example, computers, desks, office space or equipment.

4

Complete paperwork

Complete all correspondence and other documentation.

Finalise the project

When finalising a project it is paramount that you have ensured all aspects of the project have been completed not only in full, but to the required organisational standards.

To ensure you have covered all aspects of finalising the project, you might need to carry out the tasks below.

Review financial plans

Review your plans for how financial records were to be kept throughout the project. Are they still relevant? If deviations have been made from the original plan, make sure you understand why this has happened.

Maintain financial data

Work with your team members responsible for keeping financial data to ensure it is easy to access, accurate, supported by evidence (such as quotes, invoices, time sheets) and summarised effectively so stakeholders and others can quickly grasp the financial activities that occurred.

Prepare a written report

Develop a brief plan including the headings you will use. Make sure you leave plenty of time for this. Once the report is written and edited, check it to ensure you haven't left anything out.

Plan project sign-off

Plan for the process of project sign-off. Ensure you and your team are completely aware of stakeholder expectations and other requirements.

Prepare documentation

Prepare documentation for submission to these groups at sign-off time that clearly and concisely addresses questions they may have, and fully discloses all project activities and outcomes that are relevant.

Give appropriate information and support

Make a list of all the groups, and individuals within these groups, who need to be given appropriate information and support at the conclusion of the project with regard to their employment status.

Seek the advice and assistance

Seek the advice and assistance of those within your organisation who can help you with post-project employment such as payroll and human resources team members.

Example: final project report

Clarence is the project manager for a roundabout redevelopment in a regional town. The project takes eight weeks and produces a roundabout with new, sturdier concrete edging and a landscaped interior (including a few palm trees and rocks). The final cost of the project is $2,000 over budget at $122,338, due primarily to the increased cost of equipment hire and the additional delays caused by rain.

Clarence details all expenses, both budgeted and actual in his final report for the sponsor, which will be filed for tabling at the next council meeting. The report includes a graphical presentation of budgeted expenses to allow council members to quickly analyse the outcome and make future recommendations.

The six construction workers employed on the work are immediately reassigned to the next council project. Clarence merely needs to ensure paperwork for the time they spent on the project is submitted to council.

He organises a casual wrap-up function at the local hotel for the workers to thank them for their commitment to finishing the project on time despite the weather delays.

Clarence's final report includes photos of the site and a brief explanation concerning all project deliverables (including timing, resources, specifications and costs).

The report is submitted through internal council mail to the director of works for sign-off and filing.

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Practice task 22

1. What is the process involved in finalising a project?

2. Describe why you think it is important to follow agreed protocols during the finalising phase.

Summary

1. As project manager, you are responsible for delivering a completed project and following the project plan through to completion.

2. Finalising the project involves completing accurate financial records, assigning staff to new roles and completing required project documentation.

3. At the conclusion of the project, financial records must be finalised to ensure they have been maintained to the required standards, are accurate, and facilitate comparison between budgeted and actual expenditure.

4. Internal and external audits can be used to ensure financial record keeping is complete and accurate.

5. As the project is finalised, you must ensure the employment of all staff who have participated in the project is concluded appropriately, professionally and respectfully.

6. The manner in which staff are assigned to roles post-project will differ depending on whether the team member was a contractor or consultant employed on a contractual basis or a permanent full- or part-time staff member.

7. A final project report must be prepared, which includes details on:
   - background/history of the project
   - scope, purpose and intended outcomes of the project
   - personnel involved in the project
   - project time lines including milestones
   - stages of the project
   - project budget
   - outcomes of the project
   - issues or difficulties that arose
   - recommendations

8. It is important that sign-off protocols are followed at the conclusion of the project.

9. Depending on the nature of the organisation and project, sign-off may be required from the project sponsor, senior management, funding bodies, clients or suppliers.

Learning checkpoint 4
Finalise the project

This learning checkpoint allows you to review your skills and knowledge in finalising the project.

Part A

1. List five reasons why financial records must be finalised at the end of a project.

2. Explain why a project manager must handle the completion of a project in a sensitive manner.

3. Describe how you would manage the reassignment of a full-time staff member who has been seconded to your project for the last month. Assume the person has an existing role to return to. Demonstrate to your trainer how you would communicate decisions to the staff member.

4. List the individuals and/or groups who may need to provide final sign-off on a project.

Part B

Complete the following seven tasks in the context of your own project or the Red office case study found in Learning checkpoints 1, 2 and 3.

1. What financial records are associated with the project? Provide at least five examples.

2. Explain in half a page how you would collate and check financial records for accuracy.

3. Describe the process you would follow for checking and reviewing the financial records to ensure all costs, invoices and internal charges incurred during the project's lifetime have been processed appropriately and all project accounts have been closed off. Include an example of a regulatory/legislative requirement that applies.

4. Describe the process you would follow to assign/reassign staff after the project was completed.
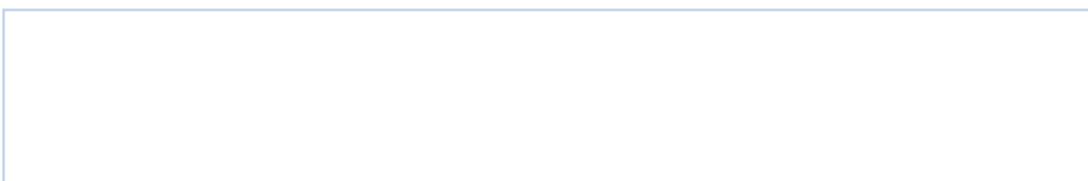
5. Prepare a final project report with clearly defined sections using a word processing package. Include relevant documents as attachments.

6. Describe the procedures you would follow to obtain sign-offs from appropriate personnel.
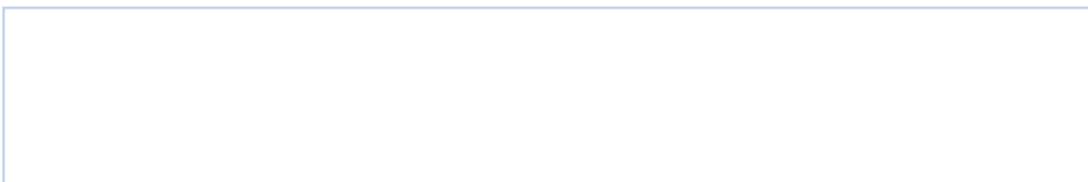
7. What information do you need to have signed off? Explain.

Topic 5
Review the project

Reviewing your project after its conclusion is an important final phase in the management of any project. Important lessons can be learnt from the way the project was conducted, the effectiveness of the administrative and support tasks undertaken, and whether the project ultimately achieved its goals.

You can also evaluate performance in various stages of the project to determine whether the planning, execution and conclusion phases of the project were effective. The review can then be used in subsequent projects and other activities undertaken by the organisation with a view to continuously improving the operation of the organisation's future projects.

In this topic you will learn how to:

5A   Review outcomes and processes
5B   Involve team members in the review process
5C   Document and report on lessons learnt

5A | Review outcomes and processes

A project evaluation or review is a quality assurance mechanism that is conducted at the end of a project. The type of review undertaken depends on the nature of the project. For example, it may be formal or informal, qualitative or quantitative, lengthy or brief. Generally, the level of detail and evaluation in the review increases with the complexity of the project.

The first task is to conduct a review of the project outcomes. Next, evaluate the way the project was conducted, taking into consideration time management, personnel performance, work quality, communication, financial administration and employment of resources.

Map project outcomes

When undertaking your review, return to the original project brief or contract and compare these documents to the project outcomes. This step can be quite difficult because it involves returning to the big picture view of the project you had at the start, as opposed to the task-orientated view you may have taken while your project plan was being implemented.

The project brief articulates the original starting point of the project – its purpose, scope, objectives, stakeholders, responsibilities, terms and conditions, required standards, progress points, budget and time lines. Using the project brief, assess and summarise the final outcomes and deliverables of the project. Remember, an outcome must have a benefit attached to it. This is why it often takes a period of time to identify whether the benefits have been achieved.

Once you have confirmed the proposed outcome of the project from the project brief and project plan, map it against what you have actually achieved.

Project results

Look at all results in relation to the original brief. You may find there are some areas in which the outcomes are better or worse than expected. These should be highlighted and presented with a brief discussion as to why this happened.

Look at qualitative and quantitative data when reviewing proposed outcomes against the actual outcome; for example, look at sales figures or the number of customer complaints, as well as analysing qualitative feedback you have received.

If, during your gap analysis, you find that any outcomes of the original project brief have not been delivered, note these with any corrective actions you have taken or will need to take. Whatever the reasons for any deviation from the original brief, you need to provide a full explanation if the difference was intentional, or implement a corrective strategy if the difference was accidental.

Map project processes

Each project process can be compared and analysed against previously agreed expectations. The following are areas you could examine to determine whether the project was managed effectively.

Time management	- How was time managed during the project? - What issues arose to either advance or hinder the completion of the project? - How did you, as project manager, meet the challenge of assisting team members to meet deadlines? - What methods, tools and systems did you use to set and maintain time lines? - Which scheduling tools worked and which did not? Which ones would you use in the future and why? - Were you and your team confident in using time-management tools or is more training needed to use them effectively? - Did you rely on project management software or use other tools such as keeping a log of activities and tasks to be completed each day or week? - Did you and your team use different methods of time management for small tasks versus larger tasks? - What strategies did you employ when a task appeared likely to go over time? Did they work? If they didn't work, why not? - What lessons did you learn from this project about setting time lines and making sure they were met?

Personal performance	• How was the performance of project personnel measured?
	• What criteria were established for evaluating staff performance? Were staff evaluated based on continuous improvement principles?
	• How did you monitor whether team members were achieving the standard set for work quality?
	• How did you manage under-performing staff?
	• How was communication managed?
	• What training could be given to staff to ensure success in the next project they work on?

Work quality	• Did the project achieve the required quality?
	• How did you know team members understood their obligations regarding the delivery of quality work?
	• Did you use any pre-existing quality standards?
	• Were quality checks built into systems and processes used during the project?
	• How did you and your team members respond when quality standards were not met?
	• What happened when project outputs were not met with regard to quality?

Communication	• Were the lines of communication clear for all parties throughout the project's duration?
	• Ask all parties whether they felt they were properly informed and consulted as the project progressed.
	• What type of communication worked well and what did not?
	• If communication during the project was not as effective as it could have been, how could it be improved?
	• Could a process be implemented to improve communication flow?
	• Would tools such as progress reports, weekly meetings and brainstorming sessions encourage more open and effective communication?

Finance	• How efficiently and effectively were the finances planned and managed?
	• How did you and your team monitor the way money was spent?
	• Were you able to reconcile your budget against the actual expenditure?
	• Did your system rely on the use of computer-based records? How was it kept up to date?
	• How would direct and indirect costs estimated, be tracked and managed?
	• Did you have a thorough understanding of the project's finances throughout its duration?
	• Did you call on the assistance of financial specialists?
	• How would you manage project finances next time? What changes would you make?

Resource use	• How well were resources used?
	• Did you have a system to help you determine the way resources were allocated?
	• How effective were the systems you used for planning and monitoring resource use?
	• How did you decide on the resources needed?
	• Were the resources allocated sufficient?
	• How useful or effective was each resource used?
	• Were the systems you used the same for all resources – staff, services, raw materials, support materials? If not, why not?
	• How could your resource allocation systems be improved?

Risk management	• How effective were the plans?
	• Did any of the potential risks occur? If so, were the contingency plans appropriate and adequate?
	• Were all project team members familiar with the risk management strategies and plans?
	• What might you do next time to reduce or manage the project risks?

Personal assessment

A final item you should consider in your review is your own work on the project. Analyse your performance against client expectations or a checklist of performance criteria developed for the role.

Practice task 23

Prepare a checklist to help you revise project processes. Include five points for each area listed below:

- Time management
- Personnel performance
- Work quality
- Communication
- Financial administration
- Resource employment
- Risk management

5B | Involve team members in the review process

Depending on the size of the project team, there are a number of ways you can gain input from the team. You may conduct a one-on-one interview with each team member, hold a team meeting or distribute questionnaires for team members to complete. This helps you gain vital feedback for the project review and also gives you an opportunity to thank each team member for his or her contribution and achievements.

Team review meetings

Conducting a review in a team environment can be very productive. It allows stakeholders from various elements of the project to have their say and contribute to the overall knowledge of sponsors and managers. The key to running a successful team review meeting is to establish guidelines and facilitate the process so everyone who wants to provide input has that chance.

Once the meeting is over, collect all the information and record it in your project review documentation. Identify the techniques everyone agreed would be effective to make use of in future.

Some questions that may stimulate discussion and input
• How well did tasks run to time lines?
• What did we learn about scheduling tasks that could help us in our next project?
• Were the resources allocated to the project sufficient? If not, why not? How could we allocate resources better next time?
• Was staffing sufficient? Were skills appropriate and used well? What did we learn about staffing issues?
• Did our stakeholders, senior managers, customers and sponsor/s participate effectively? If not, how could we improve their participation?
• Are you proud of our project outcome? If yes, why? If not, why not?
• Which methods or processes worked particularly well?
• If you could change anything about the project, what would you change? What might we do differently next time?

Example: team review meeting

After the completion of a five-kilometre section of a major freeway in Melbourne, the group program manager asks key staff and government stakeholders to attend a review meeting. This process ensures those involved at every level of the project are able to provide input into the company's continuous improvement system, as well as share the successes and failures of this four-year project.

Given the scale of the project, the meeting is held in a small auditorium with microphones made available for participants. The meeting is run by a professional facilitator who assigns roles to various members of the team to take notes, record observations and create a draft report presentation at the end of the one-hour meeting.

The types of issues raised include task-specific issues (which may seem small in proportion to the overall project, but are significant to the team members who raise them); through to government concerns about delays and budget overruns.

The input is summarised by members of the team at the end, and an agreement is made to submit a final report to the CEO and government minister within a month of the meeting.

Practice task 24

1. What are the main advantages of involving the project team in the final review process?

2. What should you do to ensure a successful team review meeting?

3. What should you do after the meeting has taken place?

5C Document and report on lessons learnt

The more experience you have in project management, the easier it is to have control over your work and manage the problems that arise. Every time you undertake a project you learn something new. By recording these lessons and sharing them with others, you build your knowledge and abilities and help other project managers do the same.

Enhance your learning

Make learning a part of the project process. At each team meeting, set an agenda item for discussion of experiences and learning opportunities. You may find this encourages your team to generate innovative ways of working and addressing issues.

Lessons can also be learnt from using your networks to give you the benefit of their experiences. This may include using professional web communities (such as LinkedIn and Wiki sites) to ask questions or read about previous experiences. Additionally, you can talk to experienced team members or managers whose input could greatly improve future projects.

Document your learning

Your final critical task is to document these lessons so they are available to all. Your document should be a brief overview of what you have learnt. You may choose to attach more-detailed information about what you have learnt as an appendix to your main report. It could contain any recommendations, enhancements or modifications to the process discussed.

Sometimes, review reports contain confidential information that should not be made available to the wider organisation. For example, there may be information about a person's performance, contract details, financial data, supplier information or feedback that is considered appropriate only for management. Use your discretion and knowledge of the organisation and its policies to decide what information is disseminated to staff.

- What are the key learning points from this project?

- What could be done differently?

- What recommendations do you have for future projects?

- Which management and quality processes went well, went badly or were lacking?

- How much effort was required to complete the project (was it more, the same or less than anticipated) and why?

Recognise the team's effort

After putting in a great deal of effort to successfully complete a project, celebrating the team's work helps consolidate the project and recognise everyone's effort. An end-of-project celebration recognises the demands made on people's time, energy and commitment.

By acknowledging team members' personal contributions and the work the team has done as a whole, you help consolidate team spirit and rapport, which is invaluable for future projects. Recognising a project's completion is especially important if the project has been long or if there were a number of issues during the project's life cycle that needed to be resolved.

A celebration is used to:

- thank everyone for their contributions
- recognise the team's achievement
- let others know what the team has achieved.

Example: review of project lessons learnt

After completing a shop refurbishment, coffee retailer (and part-time project manager) Roberto, sits with his staff and contract builders to discuss and review the process.

The project encountered a few hitches, including a longer-than-expected disruption to customers, who had to be served via a side window while the building was occurring, and two safety issues involving staff working in the construction area. Overall, however, Roberto is full of praise for his team and the contractors who completed the job within budget and to a very high standard.

In comparing the original objectives and the final outcomes, Roberto notes several that near miss events occurred that could have resulted in injuries. He believes that all cases of a near miss must be filed and taken seriously, and learnt from to avoid future incidents.

Roberto notes all the suggestions. He then reviews the outcome of the meeting with a fellow coffee shop owner. They agree to use some of the input in his colleague's upcoming refurbishment project to ensure that project's costs remain more stable and predictable.

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Practice task 25

1. What are five questions that should be asked when documenting lessons learned from a project?

2. How does documenting lessons that have been learnt from a project, benefit the organisation as a whole?

Summary

1. Reviewing the project after its conclusion is an important final phase in project management to assess the project's achievement of its goals and to identify important lessons to apply in future projects.

2. The project's outcomes must be reviewed against the original project brief and contract to identify gaps and note corrective actions.

3. The project's processes must also be reviewed to determine how the project performed in terms of time management, personnel performance, work quality, communication, employment of resources and risk management.

4. When reviewing the project, all team members who contributed towards or impacted on the project should be involved and consulted. This can be done through one-on-one interviews, team meetings or questionnaires.

5. At the project's completion, document what you have learnt so it can be applied to future projects.

6. Documenting learning requires processes to be implemented to record observations, successful procedures, unsuccessful procedures, problems faced and how they were overcome.

Learning checkpoint 5
Review the project

This learning checkpoint allows you to review your skills and knowledge in reviewing the project.

Part A

1. Discuss, in several paragraphs, why a project review is important. What would you hope to learn from a comprehensive review of a project you have just completed?

2. Explain the benefits of conducting a project review.

3. What tools/strategies would you use to compare your actual progress and achievement throughout the project against those you and your team planned?

4. Why is it important to involve team members in a project review? Demonstrate to your trainer the communication strategies you would use as part of this process.

5. What type of reporting requirements do you have within your organisation (or one you are familiar with) to report on the final review of a project? What benefits does having a reporting system provide?

Part B

1. Explain in at least half a page how you would manage and participate in the review phase, either for a project in your own workplace or as the project manager in the Red case study, outlined in Learning checkpoints 1, 2, 3 and 4. Focus on how you would involve your team members and how lessons would be documented and reported.

2. Using a project in your own workplace or the Red case study, design a survey that asks staff for their feedback on how the project was conducted, to evaluate how well you performed and gather data for future organisational projects. Make sure that you detail the steps you would use to implement and process the survey. Include questions that ask staff about:

- your own performance
- the quality of communications
- the impact of the project on their roles
- the likelihood the organisation will encounter problems in the medium- to long-term as a result of the project.