BSBRES401
Analyse and present research information

Release 1

Learner guide

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learning resources

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Learner guide

Aspire Version 1.1

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Contents

Before you begin

This learner guide is based on the unit of competency *BSBRES401 Analyse and present research information*, 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	• Analyses and evaluates textual information to develop research strategies, integrate facts and ideas and meet organisational requirements
Writing	• Gathers, evaluates and integrates information from a range of sources • Presents findings, recommendations and issues in required format using language, structure and style appropriate to audience.
Oral communication	• Presents recommendations and issues using language appropriate to audience and according to organisational requirements
Numeracy	• Extracts and evaluates meaning from data and interprets numerical information to apply within the context of requirements
Navigate the world of work	• Recognises and follows organisational policies and procedures and meets expectations associated with own role
Interact with others	• Selects and uses appropriate communication practices when seeking or sharing information
Get the work done	• Plans, organises and implements tasks to meet organisational requirements • Takes responsibility for the outcomes of routine decisions related directly to own role • Uses the main features and functions of digital technologies and tools to complete work tasks • Recognises and takes responsibility for addressing predictable and some less predictable problems in familiar work contexts

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 Gather and organise information	1A	Gather and organise information in a suitable format	❑ Confident ❑ Basic understanding ❑ Not confident
	1B	Access and assess information held by the organisation	❑ Confident ❑ Basic understanding ❑ Not confident
	1C	Collect information efficiently and reliably	❑ Confident ❑ Basic understanding ❑ Not confident
	1D	Identify requirements for combining online and non-electronic research	❑ Confident ❑ Basic understanding ❑ Not confident
	1E	Use business technology to gather information	❑ Confident ❑ Basic understanding ❑ Not confident
	1F	Update, modify, maintain and store information	❑ Confident ❑ Basic understanding ❑ Not confident
Topic 2 Research and analyse information	2A	Define research objectives	❑ Confident ❑ Basic understanding ❑ Not confident
	2B	Use valid and relevant data and research strategies	❑ Confident ❑ Basic understanding ❑ Not confident
	2C	Use search tools as part of an online search strategy	❑ Confident ❑ Basic understanding ❑ Not confident
	2D	Use reliable methods to analyse data	❑ Confident ❑ Basic understanding ❑ Not confident
	2E	Make suitable assumptions and conclusions	❑ Confident ❑ Basic understanding ❑ Not confident

Topic	Key outcome		Rate your confidence in each section
Topic 3 Present information	3A	Present recommendations using suitable business technology	❑ Confident ❑ Basic understanding ❑ Not confident
	3B	Present reports using an appropriate structure and format	❑ Confident ❑ Basic understanding ❑ Not confident
	3C	Distribute research findings	❑ Confident ❑ Basic understanding ❑ Not confident
	3D	Obtain feedback on the suitability of findings	❑ Confident ❑ Basic understanding ❑ Not confident

Topic 1
Gather and organise information

Organisations rely on a wide range of information to assist decision-making. Decisions directly affect the operations or structure of a team or department; the goals and objectives of an organisation and its success or failure. It is vital that businesses and their staff have access to the information they need in order to make sound decisions.

To make informed decisions, it is essential that businesses have access to information that is relevant, accurate and current. The first step in this process is identifying the required information, and then gathering and organising the information.

In this topic you will learn how to:

1A   Gather and organise information in a suitable format
1B   Access and assess information held by the organisation
1C   Collect information efficiently and reliably
1D   Identify requirements for combining online and non-electronic research
1E   Use business technology to gather information
1F   Update, modify, maintain and store information

1A | Gather and organise information in a suitable format

Depending on the type of information you are collecting and the purpose of that information, you need to gather and organise the information in a suitable format to analyse, interpret and disseminate the information efficiently, and in accordance with organisational requirements.

Information types

Before you can analyse and present information, you first need to find the information. The type of information you are looking for depends on your organisation and its particular research requirement. Your role – especially its level and focus – may also influence the kind of information you need to collect.

Here are examples of the types of information required for different areas of an organisation.

Administrative support

Paula provides administrative support to a team of sales people. One of the sales people has asked her to gather contact details of her clients, and then assemble the information into a database so clients can be easily contacted with news of product updates.

Factory supervisor

Mick is the supervisor of a team that works on a section of a production line. He has been asked to prepare a schedule for management that will show how his team, who make steel furniture in a factory, will be able to meet the production schedule for the December–January period, when many people are keen to take holidays.

Engineer
Mayuri is an engineer at a company that designs and builds car parts. She has been asked to design a part that is strong, yet lighter than the part used in previous models, and within the set budget.

Primary information

Information can be broadly divided into two types – primary and secondary information. Primary information provides factual reporting or accounts of the issue you are researching. The key identifying feature of primary data is original material that has not yet been analysed or changed in any way.

Some items, such as emails or memos, may be both secondary and primary information sources, depending on their content and purpose. How an item of information is categorised is less important than whether you understand the context in which it was written and the circumstances under which it was created.

Sources of primary information include:

- records of conversations
- invoices, statements, signed contracts
- census data
- minutes from meetings
- emails, faxes or letters
- diaries or diary notes.

Secondary information

Secondary sources of information provide reflection, review and interpretation of information. Secondary information is based on primary sources and other sources of information. It is important to remember that the value of all kinds of information depends on its content. For example, the writer of an eyewitness account, report or record of conversation, may have limited knowledge or understanding of the issue they are recording, or have a particular point of view or perspective they are keen to get across. This may influence the way they present the facts of an event.

Sources of secondary information include:

- correspondence; for example, faxes, memos, letters or emails that report on events or actions
- computer databases; for example, library catalogues, subscription databases, customer records or reports using information from these sources
- computer files; for example, emails, memos and other documents
- sales records; for example, monthly forecasts, targets achieved
- forms; for example, insurance forms, membership forms
- personnel records; for example, personal details, salary rates
- information on training needs
- results from focus groups, product trials, sampling and piloting
- marketing reports, plans, budgets and financial figures
- production targets.

Context

Context is important to remember when using any kind of information. Always ask yourself about the objectivity of the original information and whether it could have been changed or influenced, and bear this in mind when you use it.

Quantitative versus qualitative information

Information or data can be classified as being either qualitative or quantitative, as shown below. Your choice of research strategies may depend on the type of data you require.

Quantitative data

Quantitative data is information that can be analysed numerically such as sales figures, dollar amounts or numbers of people. For example, if you want to find out how well a new product is selling, you could obtain sales figures for that product and research the number of sales compared to other products or sales over time.

Qualitative data

Qualitative data is information that is observed or described. For example, if you want to find out why people are buying a new product, you could conduct a small number of interviews or send out some questionnaires to customers and attempt to find out more about their purchasing decisions. You may not be able to analyse their answers in a numerical way, but you can analyse their responses in order to make educated suppositions about what is occurring.

Information sources

With a clear understanding of the purpose and scope of the task, the next step is to determine where to find the information. In many work-related instances, the information you need will be found within your organisation. Before commencing your research, it is important to check the type of information your organisation keeps on hand. Here is an overview of internal sources of information.

Files

Files can be either paper-based (hardcopy) or computer-based (electronic) in format. They can include data files, reports based on information in databases, collections of information on a subject, product, customer, supplier, team or an individual.

Other staff

Other members of staff can often provide you with the best answers to the questions you are asking. Think about:

- what you are trying to find out
- what the person can and cannot provide
- what their perspective might be.

Reports and/or surveys

Reports and/or surveys undertaken by the organisation may provide insights into the status, opinions or positions of the people or organisations consulted.

Libraries

Some organisations have their own library of periodicals, journals, newspapers, reports, books and other reference material, which will focus on issues and topics of particular interest to the organisation.

Intranet

An organisation's intranet may contain statistical data, summaries of reports, expertise or technical skills of staff. The intranet may provide you with data or may guide you to where you can find further information.

Business plan, financials, statements

Financial and other business papers may be located in a variety of places such as the intranet or the library. They may also be available in hardcopy.

Specialist material

There may be specialist material available to support your investigation into a certain area of the organisation's operation; for instance, sales or engineering. Understanding this information may require you to work closely with specialists in each area.

External sources of information

Often, it is necessary to go beyond your own organisation's sources to gather the information you need. External information can come from a variety of sources, as shown here.

Some examples of external sources of information include:

- government departments or agencies
- employer bodies, institutes, unions and associates
- major corporations
- newspapers and industry magazines (especially industry-specific publications)
- television and radio programs (industry or subject specific programs)
- internet
- local and specialist libraries.

Gather information

Each organisation will have different requirements relating to the collection of information held by the organisation. There may be particular security and confidentiality guidelines you need to follow when accessing certain types of information; for example, personal details about employees; products in development; plans for business mergers or takeovers or department restructuring.

Other requirements or guidelines may relate to:

- legal obligations
- reporting guidelines
- updating records
- goals, plans, systems and processes
- information protocols
- management and accountability channels
- quality assurance
- security and confidentiality
- available resources and equipment
- work health and safety
- anti-discrimination policies
- ethical standards.

Methods of collecting information

Before commencing your research, find out what restrictions may have been placed on the information you are collecting and the guidelines you are expected to follow. Once you have identified likely sources of information needed for your task, the next step is to collect and organise this information for your correspondence or report. Researchers usually use a combination of methods to collect information. The methods you select will depend upon the purpose of the research, the amount of research to be undertaken and the time lines involved.

Common methods used by organisations to collect and gather information
• Interviewing colleagues/customers
• Accessing recruitment applications and other forms
• Observing and listening
• Accessing file records
• Obtaining information from other organisations
• Questioning (in person or by indirect means)
• Checking written material, including referrals and client files
• Undertaking individual research
• Checking research provided by others
• Researching the internet

Research

Research is the process of collecting, organising, analysing and presenting information (data) in order to learn more about a particular topic or situation. The skills required to carry out successful research may have been learnt at work or at school. These skills are not exclusive to research but can be used when undertaking a variety of work or study tasks.

To undertake research, you need to be able to:

- read and critically evaluate different types of texts, documents and other information
- listen to what others have to say and extract relevant information from conversations
- watch others and use your observations to add to your data
- question what you read and what people say, and why they are saying it
- select relevant pieces of information from a variety of options
- summarise what you have discovered, leaving out unnecessary information, keeping important information and highlighting information where necessary
- organise your information so it is meaningful for others and easy to understand
- write up your conclusions in an appropriate format
- present your research in person or in writing.

Purpose of research

The amount and type of research you conduct depends upon the roles and responsibilities of your job. Some research may form part of your normal duties; for example, regularly investigating and comparing the services and costs of suppliers to your organisation.

In other instances, your supervisor or manager may ask you to undertake research as part of a report or project on which they are working. As a member of a committee or team, you may also be required to conduct research to meet team objectives such as surveying customers' satisfaction with the organisation's products and services to work out how complaints can be reduced.

Everyday research

Research is used to support various types of objectives the organisation may be focused on, at any one time.

Here are examples of various types of objectives.

A business case

A business case is a report prepared to investigate a particular issue such as a new idea or proposal for change. The report presents evidence to justify or support the idea or proposal. For example, you may want to change your internet service provider (ISP) because your current provider is slow, expensive and has been experiencing too many system drop-outs. The type of information you would include in your business case to support your proposal for a new ISP would be statistics on the number of system drop-outs, comparative costings and both quantitative and qualitative data on performance.

A tender

Many projects undertaken for government departments are usually the result of a tender process that requires an organisation to submit a project proposal addressing specific key selection criteria. A tender document usually includes a profile of the applicant's organisation; a description of how the project will be undertaken; a budget and examples of previous relevant projects the organisation has undertaken. Tender documents vary in layout so make sure you present the information according to the requirements.

Oral presentation

Information is often presented to a project group, steering committee or board as a formal presentation. It may be extracted from research undertaken for a report or business case, which is then summarised and presented formally. Formal presentations often include a visual component using electronic software such as Microsoft PowerPoint.

The specific purpose of a report is important in determining both the level of investigation or research required and the format or style for presentation. Your workplace may have established formats for presentation. If not, you may be responsible for deciding how to structure the information.

Everyday research

Understand research requirements

You may be asked verbally to prepare a report or other document or you may be given instructions in writing; for example, via an email message or memo. When the instructions are provided verbally, note the key tasks you are required to perform. This will help you to establish the purpose of the research; the parameters of the task; the format and time lines. It may be appropriate to ask for written confirmation of the request to ensure it is properly documented and to reduce the chance of any confusion or misunderstanding about what has to be done.

Things to know about research requirements:

- the purpose
- the content area
- the form of response required (letter, short report, briefing)
- the level of detail needed (general or specific)
- the layout
- the date of request
- the intended audience
- the deadline for completion.

Respond to the research request

Assess the scope of the work involved when the research request is received. Factors such as whether the request is part of your regular workload or is a new initiative will affect how you respond. Your other work requirements need to be taken into account. If you are unfamiliar with the subject matter, you may need extra time and this must be factored into the project time lines.

Plan your research

Planning research involves identifying possible sources of information, collecting the information and analysing it to select the relevant parts.

The starting point for every research task is determining what you are trying to find out or what problem you are trying to solve. You may find you have one main question you are trying to answer as well as a number of other related questions.

For example, if your question is, 'How did my team perform in terms of sales over the last six months?' you may find you need to first look at information month by month. You may also need to investigate how other teams performed against your team or look at data from the last 12 months to see whether there were any changes.

Your questions may look like this:

Main question	Sub-questions
How did my team perform in terms of sales over the last six months?	What were the sales targets for the last six months?
	Did my team meet sale targets?
	Did other teams meet their sales targets over the last six months?
	How does my team's performance over the last six months compare to the previous six months?
	What were the critical factors that had an impact on sales?
	What marketing and promotional activities occurred in the last six months?
	Is there a link between sales and marketing activities?

Example: collect information

At a company that designs and builds new homes, Clare, who works in the marketing department, has been asked to write a report for her manager to use when planning new marketing campaigns for the next year. Her first step is to identify data that she can then analyse and include in the report.

She decides to search for two sets of information:

- Data on population growth in specific areas.
- Information on how other companies are conducting their marketing campaigns including:
  - the Australian Bureau of Statistics (ABS), which can provide up-to-date population trend data from the last census
  - the Australian Housing and Urban Research Institute (AHURI)
  - local councils and state governments, which can provide localised data on population growth and demographic profiles in their area
  - the library at her local university, where she can search for articles and books on population trends and housing requirements
  - websites and hardcopy information packs from competitors to gauge their approach.

Using the data she collected from these sources, Clare was able to write a comprehensive report and make some good recommendations that helped her organisation develop effective marketing plans.

Practice task 1

1. What are three different examples of primary information you might regularly deal with?

2. What are three different examples of secondary information that you regularly deal with?

1B | Access and assess information held by the organisation

Information is accessed in different ways. Sometimes you may have difficulty gaining immediate access to the information or people you need to complete your research. If your deadlines impose a tight time limit for this phase, you may need to redefine the boundaries of your research. Note such changes in your final draft. At other times, you may be denied access to information because it is confidential. Some information may be inaccessible or impossible to use because of commercial or other sensitivities.

Here are several information considerations.

Information considerations
• The policies and procedures within your organisation regarding gaining access to selected information.
• The relevance of the material to your task requirements.
• Observance of copyright, including appropriate documentation when you photocopy copyright information sources.

Critical thinking

You need to make judgments about whether particular information is relevant to your research task. Thorough research requires you to think critically about the information you collect, evaluate its worth and determine how to present it to others. Critical thinking is about taking charge of your own mind, thinking for yourself and reflecting on why you accept or reject information.

Everyone has reasons or motivations that influence everything they do, although these motivations are not always examined to see whether they are rationally justified. For example, how often have you bought something because it was on sale or everyone else had one, only to discover later that you could not afford it, did not need it and wished you had not bought it?

When you are evaluating whether information is appropriate to use, you should think about where it has come from.

Here are strategies that can be deployed to ensure that critical thinking is used when assessing information.

Reliability

Is the source reliable? Do you trust it?

Agenda

What are the motives behind the information?

Do you understand why they are saying what they are saying?

Referencing

Do you need to explain the source or reference the information's origins in your report?

Varying perspectives

Look for different types of information, perspectives and viewpoints so you are well informed about the whole situation.

Here are examples of questions to ask to establish varying perspectives.

Questions
• Are there other sources that may have different views?
• Will information from different sources present a different picture of the situation?
• Will you accept one view as the most likely or summarise all views and rate them in order of relevance and reliability?

Essential qualities of information

Regardless of the type of information you gather, always give it a quality test to see whether it is useful for decision-making. The results you get, and the decisions made, are only as good as the information used to get these results. Ultimately, poor information will likely result in a poor decision. While this applies to all information you gather, it is particularly true for anecdotal data that is gathered.

Here is an outline of three essential quality measures that need to be addressed when establishing the quality of the information.

Accuracy

Any information you use in your research needs to be precise, truly reflect what has actually happened and be generally accurate in what it says about a particular subject, event or issue.

Relevancy

Data needs to be directly related to the topic you are researching. Sometimes when researching an obscure issue or one that has not been given a great deal of attention by others, finding information can be difficult. Padding out a report with general information will not make the report better. For every item of data collected, ask yourself how and why it is relevant to your topic.

Reliability

Reliability is one of the biggest issues to consider as you collect information. Information can be presented to appear reliable but may not be supported by any solid data. Always get some background information on the data you assemble and determine whether it is reliable enough to base decisions upon.

Example: critical thinking

The study of history is an area where critical thinking is necessary every step of the way in order to make sense of the past. In many ways, it is similar to common business situations in which you may find yourself. For example, information sources need to be properly understood so the context in which they were created is taken into account when assessing them.

For instance, posters, old newspapers or newsreels dating from the early 1940s in Australia, encouraged women to work outside the home and join organisations such as the Women's Land Army. At first glance these may appear to be evidence of early efforts at gender equality in the workplace. However, it was actually because many men were away at war and labour was in short supply, so women were being encouraged to join the labour force.

Accepting information at face value may mean the true understanding of an issue is missed.

Practice task 2

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

Case study

Mitchell has been asked by his manager to write a report on why last year's sales conference was not a great success among staff, and what could be done to improve it. However, Mitchell has a problem: he has only just joined the company and was not at last year's conference.

1. What information do you think Mitchell needs to gather?

2. What internal sources could he use to start this process?

1C Collect information efficiently and reliably

You should collect information with care, extracting only the material specific and relevant to your objective. It is often easy to be side-tracked by other issues and topics.

An important part of efficient information gathering is to look at the resources and equipment you need to use, and plan when and how you will access and/or use them.

Example: efficient time management

Priya needs to scan numerous journal articles that will provide evidence to support her research report. The scanner is combined with the main photocopier in the office, so she plans to scan the journals during the quietest time of the day – first thing in the morning before most people arrive for work. That way she hopes she will not be disturbed, interrupted or distracted.

As part of gathering information for her report, Priya is also interviewing staff to get their feedback to provide anecdotal evidence for the report. To utilise her time more effectively, she schedules all the interviews on the same day so she can use the small meeting room, voice recorder and other resources all at once.

Practice task 3

Read the case study and then answer the two questions.

Case study

José has been asked by his manager to provide a report on the benefits of using standing desks in the office at the staff meeting, scheduled for tomorrow morning. He has several articles he needs to download and print from the internet to make a comparison and to provide information on the different types of desks, their cost and availability. Jose works in an open office environment with 20 other people. There is one large photocopier/printer/scanner, which is shared by all staff.

Aside from doing his photocopying late in the day, what other technique could José use?

1D Identify requirements for combining online and non-electronic research

Sometimes you will need to combine information you have gathered from online sources with hardcopy material from magazines and reference books, or information collected from interviews and surveys. Some examples of when you may be required to combine or collate information follow.

Information to combine could include:

- sales figures from the sales department with sales trends from the internet
- information that new clients have sent on a survey sheet with the database of new clients
- statistics from an annual report with material from the organisation's website
- information from an email with additional data from the internet.

Define information required

Before you begin your research, be clear about what you need to find. Make a list of the areas you need to research, the information you are seeking and the sources of information; identify what material you will be able to gather online and what information needs to be obtained from non-electronic sources such as journal articles, interviews, surveys, staff members, government departments and other organisations.

Identify what information can be obtained internally; for example, from the intranet, colleagues or the organisation's filing system, and what needs to be accessed externally; for example, from the internet, libraries and magazines.

Identify how much online information is required to balance the information you have accessed by using other sources. For example, if you are trying to find out industry trends and you already have some relevant information from experts, see if their opinions match data on industry websites.

Keep a file where you can place the related pieces of information, and always record the source. This is important if you need to go back to the source to check something. As with all your research, check both online and non-electronic material is reliable, current and accurate.

Example: refine information

A medical centre receives results of patients' medical tests in the post or via electronic means. Every day the administrative staff enters the test results into the computer and assign them to the doctor who ordered the tests so they can be viewed by that practitioner; they are then kept as an active file for a period of three years and digitally archived after that time.

Results in the form of x-rays or CAT scans are given to patients after the doctor has reviewed them with the patient, and the reports accompanying these are entered into the system along with other test results.

Practice task 4

Read the case study and answer the following question.

Case study

Rebecca has to organise a professional development day for the staff and is looking for a provider who can run some team building exercises. She remembers getting a brochure in the mail from a training provider claiming they were the most popular trainer specialising in team building. Rebecca's first thoughts are that they are known to be popular; people must like them for a reason and she wants to go with the most popular provider.

1. What other investigations should Rebecca do before making a final decision about the provider?

2. What sources of information could Rebecca use to assist her to analyse the best provider option?

1E   Use business technology to gather information

Information technology can put data about nearly any topic literally at your fingertips. Computers can be used to access information in various ways. Here are some examples of how you can use business technology to gather information.

Email

- Email is designed mainly for one-to-one communication, it may also be used via list server software to develop human networking both inside and outside your organisation. Email can be a very efficient way to contact individuals in any location quickly.

Internet

- The internet provides flexible access to a wide range of general and specific information, newsgroups, documents, databases and software collections.

Bulletin boards, discussion groups and newsgroups

- These are the electronic equivalent of a noticeboard. Users log in and may leave messages for others, upload or download files or use the bulletin board as a gateway to another online service.

Electronic data storage devices

- These are useful for storing information, including bibliographic or citation databases, which index journal articles, conference papers, reports, theses, chapters from books, as well as compilations of statistical or scientific data, dictionaries, directories, encyclopaedia's, books and journals.

Additional business technology

- These help you access organise and monitor information and may include a photocopier, answering machine, fax machine or phone.

Internet research

The internet has increased our expectations because we expect to find detailed information on any given topic within a short period of time. Almost all organisations have some sort of presence on the internet, allowing easy access to information on a huge range of products, services, policies, preferences, issues and other information.

The gateways to the internet for research purposes are search engines. You can use search engines to locate online information, and everyone has their own preferences about which search engine gets them the best results, for example, Google (www.google.com.au) and About.com (www.about.com).

This information is already organised into categories and presented to you, so much of the research has already been done. This may save you time, but may also be restrictive on your own search needs, and means carefully analysing and assessing what is being presented.

Here is an outline around the use of search engines when conducting online information searches.

Using search engines

To search for data using a search engine, you need to type in keywords and phrases for the search program. Be specific with your keywords and phrases. You may have to try different combinations and spellings of words to get desired results. As with all information you collect, you have to evaluate the data by thinking critically about its value to your research aims and how current the site is.

Efficient online searches

Learn how to search efficiently for information on your topic. This might mean learning how to use the advanced search function on an internet search engine or using topic-specific or location-specific searches (for instance, for pages that are just Australian-based).

Think carefully about the search terms you are going to use. Some words or phrases may have dual meanings, others might be too specific, some may be too broad and bring back far too many results for you to properly search.

If one search brings up disappointing results, think of alternative words you could use.

Carefully assess any data you find online. Question the accuracy and reliability of any information you come across.

Remember to make a careful note of or bookmark the Uniform Resource Locator (URL) – an address that specifies the location of a file on the internet – so you can include it, where necessary, in any documentation you prepare later on.

Sources of online information

Online information can be accessed from a variety of sources including webpages, databases, electronic files, video conferencing, chat rooms, email messages, newsgroups and bulletin boards.

Wikipedia is one resource tool you can use to look up virtually anything you wish to know about. It is billed as the largest reference website on the internet and it is free of charge to use. The information is generally accurate – but be careful, because anyone can edit the information. Any information you gather from Wikipedia should be verified by another reliable source.

Places to look for information include:

- government websites
- market research company websites
- travel websites
- job search websites
- business networks
- online publications
- educational institutions and resources
- directories, reference and technical sources of information.

Bulletin boards, newsgroups and email discussion forums

Bulletin boards, newsgroups and email discussion lists are sources of information you can subscribe to. There are lists covering millions of topics, many of which are centred on particular research interests. You can find relevant lists by searching on the internet (university websites are good starting points) or through personal recommendations.

Each list will have particular instructions for you to follow to activate your subscription. Most also have rules to adhere to when participating in online discussion or posting messages. Such lists can be used to make your research process more efficient. You can float ideas with experts in the field, gain insights into current research on particular topics and obtain links to further sources of data.

Example: business technology

Mark and Peyton, who had both trained as bakers, started a cafe within their local community. They soon discovered from their customers that there was a need for speciality breads to suit people who had specific food allergies. Because of their tight budget, neither could attend training to master new bread-making techniques. With the basic understanding of bread-making, they researched online for recipes and tutorials and for different types of products to make.

Their business grew and within a couple of years, they were recognised as a leader in the provision of speciality breads.

Practice task 5

1. Name four online methods for obtaining information.
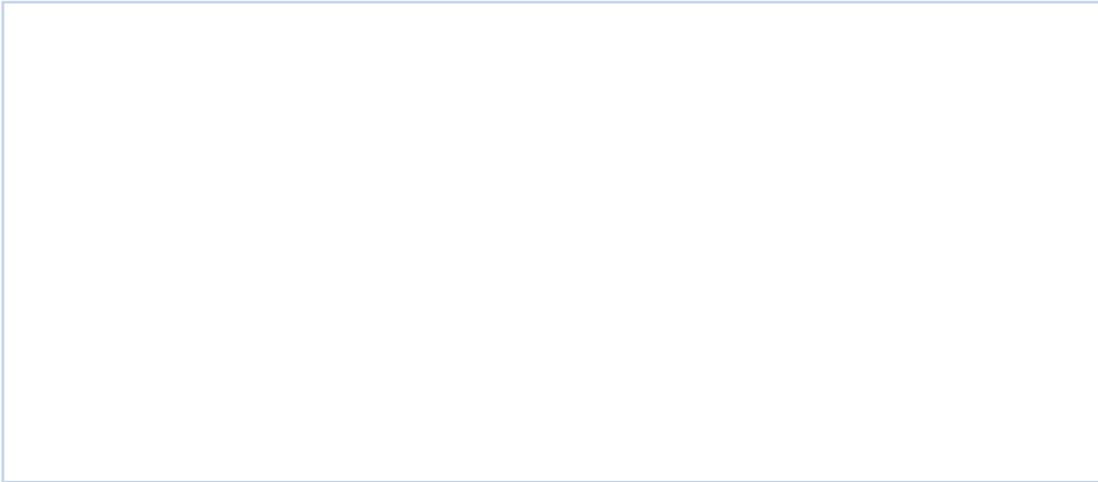
2. Name three different types of websites that could be useful for researching information.
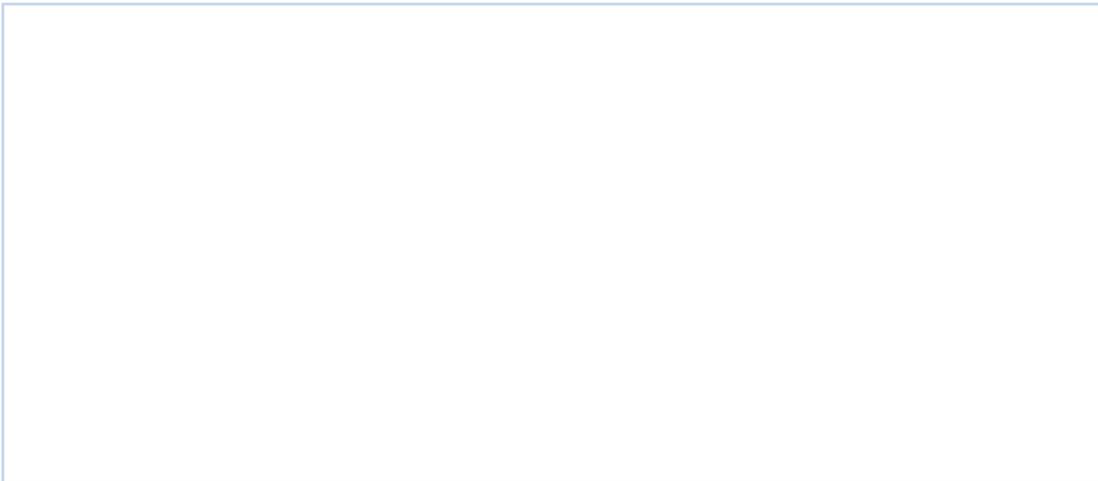
1F | Update, modify, maintain and store information

Once you have collected the information, you may need to organise it into a form that is easier to use and understand. When updating or modifying information, it might prove useful to set up a version control process to ensure only the most recent document is being accessed.

Here is a brief overview of the benefits that can come from updating and modifying organisational information.

Updating

- If the information you need is of the same kind, yet changes or is superseded often, it can be a good idea to set up a computer file (such as a table or database) that makes it easy to access and update this data. Alternatively, you may need to download from the internet a report or piece of information on a regular basis.

Modifying

- Modifying information involves using an existing source of data and making changes to it. If this is something that needs to occur frequently, it is a good idea to set up a computer file or other tool so the information can be categorised, easily accessed and changed if and when it is necessary. Modifying information may also mean adding to existing files or creating new categories of data.

Maintaining

- Maintaining information means keeping it updated. While the type of data remains the same, for it to remain useful, the information needs to be maintained. This may simply mean changing information as required.

Storing

- Some data is not required on a regular basis and should be stored so that it is still available for legal purposes or when it is required. There are many ways to store data. The method you choose will depend on the data, the technology available to your organisation and the method and frequency with which it needs to be accessed.

Example: deadlines and version control

Due to tight timeframes, Dave was asked to assist Lucy with gathering information for the organisation to determine if they should start a franchise. Lucy had already gathered data and was in the stage of analysing the information. She found that there were two documents with similar names, and while some information was the same, there were differences in the statistical data in both documents. When Lucy raised her concerns, she discovered that Dave had actually downloaded updated documents but hadn't used a version control process to assist the reader to know they were using the most up-to-date document.

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Practice task 6

Recall some information you have recently used in order to form an opinion or improve your knowledge about a topic.

1. How did you ensure accuracy, relevancy and reliability of the information you used?

2. How could you ensure you are accessing the most up-to-date information for your project?

Summary

1. It is important for any business to have access to all the information it needs in order to make good decisions.

2. Research and reporting are important parts of this process.

3. Different information is needed (and therefore gathered) by different organisations as well as people in different roles.

4. Information can be classified into primary and secondary sources. It is important to know which is which, and to analyse information accordingly.

5. Data can be classified as qualitative and quantitative.

6. Information can be sourced internally or externally.

7. Different organisations have different standards and expectations in terms of how data is gathered, collected, analysed and reported.

8. Different organisations have varying types and quality of information available to employees to access.

9. All data must be assessed critically as it is analysed and evaluated to determine whether it is accurate, relevant and reliable.

10. Various methods are available that aid in the efficient and reliable collection of data. Business technology can assist researchers to gather information.

11. Information must be updated, modified, maintained and stored effectively.

Learning checkpoint 1
Gather and organise information

This learning checkpoint allows you to review your skills and knowledge in accessing and organising data.

You have been asked to prepare a report on the reasons for the current increase of staff absenteeism within your organisation.

1. List as many different types of information sources you can think of that might be useful for gathering information.

2. Classify each of these information sources into the following categories:
   - primary or secondary data sources
   - qualitative or quantitative sources
   - internal or external sources.

3. Describe the ways in which you might evaluate the information you collect as a means of understanding whether the data is useful. What criteria will you use to determine whether the information is high quality in the context of this project?

4. What business technology can you use to assist you in your research and why would you choose the technology.

5. How would you store and maintain the information once you have gathered it?

Topic 2
Research and analyse information

Once raw data has been gathered, it needs to be carefully analysed so it can be understood properly and used in a meaningful way. The information you have collected needs to be read through carefully with the research objectives and other data in mind.

This step is perhaps the most important aspect of any research-based project – if the data you gather is not understood properly and analysed in the context of the issue at hand, it will not be a useful tool for decision making.

In this topic you will learn how to:

2A   Define research objectives
2B   Use valid and relevant data and research strategies
2C   Use search tools as part of an online search strategy
2D   Use reliable methods to analyse data
2E   Make suitable assumptions and conclusions

2A | Define research objectives

When you research a particular topic, it is important to have a clear understanding of your objectives before you start. Someone in your organisation may tell you what is required, and some workplaces may have particular ways to collect and analyse information. In other cases, you may have to decide what kind of information you need to collect and define your own objectives.

Objectives

During the course of your research, you may have to alter your objectives as you uncover new information or perhaps your organisation's needs change over time, resulting in different research requirements.

Here is an example of how to define objectives.

Define your research objectives
Make sure you clearly understand what you are trying to achieve.
Ensure your objectives are realistic and achievable.
Make sure you have discussed the objectives with your manager or other colleagues.
Ensure that your manager or other colleagues agrees with the objectives.
Ask yourself are the objectives consistent with your organisation's requirements for conducting research?

Hypothesis testing

When you undertake research, you are trying to answer a particular question or solve a problem. A hypothesis can be seen as a reasonable guess at the nature of the answer. For example, imagine your car breaks down. You need to investigate (research) the cause of the breakdown. You start to construct a series of reasonable guesses or theories such as:

- the car has run out of petrol
- the fan belt has broken
- the car has a flat tyre
- the radiator has overheated
- there is something wrong with the alternator.
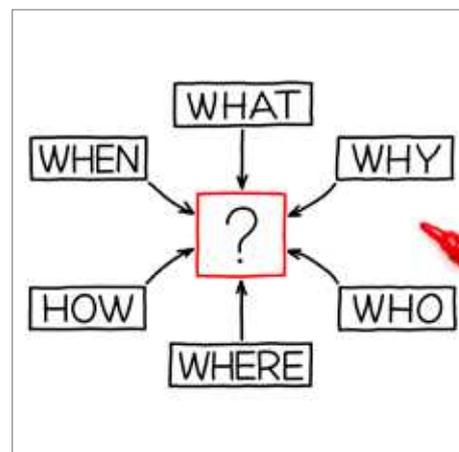
These guesses or theories are your hypotheses, which you work your way through, testing each one to see the answers it provides. Each hypothesis leads you to explore in particular directions. You look for information (data) that supports or does not support each hypothesis.

Situational diagnosis

A situational diagnosis allows you to study an event or situation in detail to place it in its wider context and determine how to change or improve it. For example, perhaps your competitor is planning significant price reductions on a popular product brand. Should you also consider price reductions? You need to analyse the situation to see whether it is worthwhile trying to compete by also reducing prices. By investigating these issues, you will start to build a picture of the situation, which will help you more effectively answer your original question: should we also reduce prices?

Situational diagnosis will quite often require you to find out:

- if price is the only selling point or whether there are differentiating factors such as free delivery, customer loyalty schemes and quality issues
- how many additional sales could be expected if your organisation reduced prices
- how price reductions affect profit margins and revenue generation and therefore impact on sales targets overall
- if lowering prices will help your business or if it can compete on other terms such as superior quality and better after-sales service
- if the organisation needs to review its advertising and marketing to better position itself.

Identification of trends

Trends can be defined as patterns or general directions, courses or tendencies. Trends can be identified in business as well as in other areas. Many organisations find it useful to collect data over a period of time so they can detect particular patterns or trends.

Examples of trends
• Reports from medical practitioners show that the number of children with peanut allergies has been on the rise for the past 20 years.
• The amount of rain that has fallen in western New South Wales has been progressively less every year for the last 15 years.

Predict future trends

Sometimes, based on past trends, it may be possible to attempt to predict future trends or provide forecasts. Redirecting or forecasting trends in the marketplace requires the collection of solid research data. To predict trends, you may need to look at historical data or research industry or information technology advances predicted for the future. You may also need to analyse client buying patterns and evaluate production costs.

Process maps

To map a process, you need to identify and record all the separate parts of the particular process, creating a map (or outline) that shows you how the process happens.

Process mapping is useful when you need to understand how or why something happens so you can change or improve the process. If you are familiar with the particular process, process mapping is relatively straightforward. By writing down each step that occurs, it is often easy to identify problems or issues.

Comparative analysis

Comparative analysis is the process of analysing separate items, situations or events and then comparing them with each other.

People do this all the time when they shop for food or clothes. They look at two bottles of fruit juice and compare them before making a decision about which one to buy. Are they the same size? Do they have the same ingredients? Is one sugar-free? Where are they made? What is the price?

In a business context, comparative analysis is just the same, except that you're evaluating different things – sales of products, staff morale in different departments, the success of last year's end-of-year client party compared to this year's, one management technique compared to others and so on.

What is important to remember when conducting a comparative analysis is, where possible, to compare the various options, events or pieces of data against one another in a consistent format. For instance, where the success of end-of-year parties are compared, stating that last year's was themed 'Winter Wonderland' and this year's had roast beef for the main course is of no relevance, as this information, although factual, is not helping you to actually compare the relative success of the two parties.

Example: define research objectives

Stacy works as a marketing coordinator for Stylish Footwear, whose sales of a new shoe style were very poor. The company had been expecting the style to be a good seller. Stacy was asked to research why sales of this item had been lower than expected. She used her knowledge of similar problems to develop a number of hypotheses as to why the style was not selling (such as customers not liking the colours; the style not being fashionable enough, and the style not fitting people's feet well). Her hypotheses helped her formulate a number of questions to ask sales staff and customers. It wasn't long before she discovered that the fit of the shoe wasn't good. Completing a situational analysis supported the trends in what women were wanting in shoe design. The data Stacy collected supported her to define her research objectives and eventually resulted in Stylish Footwear modifying the design.

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Practice task 7

1. What is the significance of developing a hypothesis?

2. What is a situational analysis?

3. Why is it important for businesses to identify trends?

4. How can process mapping be useful for your research project?

2B Use valid and relevant data and research strategies

Clear research objectives help you decide what type of information you need to gather, where to look and the information collection methods to use. The data you collect must be valid and relevant to your research task. Information is valid if it is sound, acceptable and defensible.

Use appropriate data

To ensure you use relevant and valid information, you need to involve a number of factors. Here is an overview of the importance of using appropriate data.

Source

Where is the information from? Who created it? Is the source reliable? Anyone can publish or record information and if you are using the information in a work setting, you must be confident that it comes from a reliable source. As we have seen, this is particularly relevant when dealing with information from the internet.

Currency

Is the information current? Be wary of relying on information that may be out-of-date. If the data seems older than you would prefer, but nothing more recent is available, state this in the report, or perhaps see whether you can access a series of historical data that may enable you to project what future trends may be. You may find that this has already been done by experts in the subject area.

Content

You can usually gain a fair idea of the quality of the content by looking at how well the information is written, formatted and organised. For example, if you were given a poorly typed training manual full of spelling mistakes that was formatted and laid out badly, you would be reluctant to rely on the accuracy of its content.

Authenticity

Is the information what it claims to be? Who has written and researched it? What methods did they use?

Documents can be forged and websites tampered with, so look for information that is authentic and produced by reliable sources. Look for information that has footnotes citing raw data sources, and publications or other information that has been produced by well-known, reputable organisations.

> **Organisational criteria**
>
> You may also have to ensure information meets the expectations of your organisation. Different organisations may have different standards when it comes to the validity, quality and reliability of the information and sources depending on how material is to be used. You will have to find out what degree of analysis is required.

Use appropriate research strategies

There are many different ways to conduct research. Research strategies may include surveys, interviews, focus groups, data analysis, product sampling and documentation analysis and review.

Whatever methods or strategies you select to collect your data, make sure the method is appropriate for the research task and makes efficient use of the resources available.

Considerations to ensure a research method is appropriate can include:

- time spent
- type of data required
- expectations of others
- resources available
- overall research objectives.

Interviews

Interviews are a good way to question or discuss particular issues with people. You can obtain information in interviews that may be difficult to collect using other methods such as observation or by reading questionnaires or other documented accounts.

Always plan the questions you intend to ask and carefully think through how and why responses to each question will relate back to your original research topic or issue. Try to avoid asking leading questions (where interviewees are more likely to answer in a particular way) or closed questions (which are answered with a 'yes' or 'no' response) if you want in-depth, honest responses.

It can be useful to record interviews so you can write down in detail parts of or the entire conversation or discussion later without missing anything. However, voice recorders make some people nervous and less inclined to speak out.

You can also take notes. If you are taking notes, it can be a good idea to first prepare a template or answer sheet where the person's responses can be recorded beneath each question you plan to ask them.

Conduct interviews

You can use varying methods for conducting interviews. Here is an example of different ways to conduct interviews.

1 **Individual**

Face-to-face or via the telephone, using either tightly structured questions in a specific order or allowing the discussion to develop naturally.

2 **Groups**

Using prompts such as pictures or someone else's opinions to start the discussion.

3 **Online**

Utilising programs such as Survey Monkey to email to interviewees to complete within a set timeframe.

Focus groups

A focus group is a good way of obtaining feedback on an idea or product. A focus group is when a carefully selected group of people are asked to come together to discuss a particular issue. Focus groups, like interviews, provide qualitative information, which can be used in conjunction with statistics or other quantitative data to help understand an issue better.

Sometimes, a particular research problem is best answered with in-depth information that results from a well-run focus group. For example, you could invite a dozen customers to gather and discuss your company's new product and how it meets their needs compared to similar products available.

Prior to the focus group, you may have gathered data on each of the attendees, such as their rate or method of usage, loyalty or location (this may have helped you select the participants), and then perhaps provided them with a sample to use for a while beforehand so they can comment on it in some detail.

Data analysis

Depending on the type of data that you have collected, different methods of data analysis can be used to help you make sense of the information and to relate it back to the research topic in a meaningful way.

For example, data collected from a survey that records staff morale and attitudes (quantitative data) could be analysed by using different statistical analysis tools (such as finding out the average response to each question).

If you have gathered a series of written reports or journal articles related to your subject, then a good way of analysing this sort of information is to read through it all carefully and identify (perhaps using a highlighter, underlining or tagging the section with a sticker) in each text sections that are directly related to your topic or answer a particular sub-question related to your research. When the information has been understood and classified in this way, you can then compare what different sources say about the same issue and undertake further analysis.

Product samples

Product sampling involves giving away samples of a product and then asking for feedback from people who have used it. As demonstrated by the focus group in the case study, users may be asked to discuss their experiences of the product in some detail or may be asked to answer a brief survey or questionnaire about the product.

The idea is to get feedback from people about their reactions to the product after they have actually used it, which can then be used to improve the product further, determine how the product should be marketed or provide the organisation with data on the product that can be used for other purposes.

Observation

Observation involves watching and recording any event of interest. You may observe the ease with which staff learn how to operate new software, or customer reactions to the new layout of a store.

When collecting data through observation you can:
- record the information as it happens
- record the information later
- record the information by taking notes of what you see or filming events to view later
- plan the activity in advance or leave it completely unstructured
- participate in the event and observe while you participate, or act as an observer only.

Observation considerations

When you use observation as a means to collect data, there are a number of considerations you need to think about.

When collecting data through observation you may need to consider:
- Is the time of the observation relevant?
- Will my data be different if I observe the event at a different time?
- What shall I record?
- Shall I try to record everything or only selected aspects?
- How shall I record the data?

- Have I followed ethical processes by ensuring anyone being observed is made aware that I am observing them?
- Will participants' behaviour change as a result of informing them they are being observed?

Questionnaires

Questionnaires are commonly used to collect data about people's views on products or situations. Questionnaires are lists of specific questions. The same set of questions is asked of a group of people so the answers can be compared and analysed. Questionnaires can be in written format or can be posed verbally. Some examples of when a questionnaire might be used follow.

Post purchase

After you have bought a new car, or other item, the place you purchased it from may send you a customer satisfaction survey that asks you to provide feedback on the way their staff handled themselves during the sale.

An election

A telephone survey may be used to ask people how likely they are to vote in an upcoming election.

Political issues

A survey conducted by a government body or authority may ask people for their opinions on policies related to an important issue such as water conservation.

Schooling

A questionnaire given to all parents who enrol their children at a private school that asks them for details about their child (name, date of birth) as well as how parents made the decision to enrol the child at that school.

Design questionnaires

Questionnaires can be difficult to design and the data can be complex to analyse, as there are so many different ways you can design your questions, and each respondent may interpret the questions differently. It can be useful to base your questionnaire on similar studies and test it on a few people before you begin your data collection.

Questionnaires can be posted to respondents, who then fill them out and return them. You can use a questionnaire to interview respondents over the telephone or in person. Many organisations use online questionnaires.
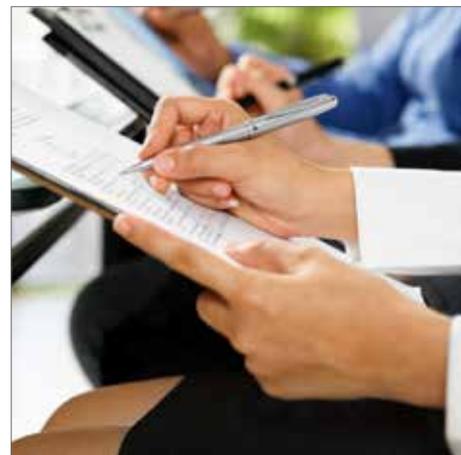
Formulate questionnaires

Here are some handy hints for designing a questionnaire.

1 **Simplicity**

Keep your questions as clear and simple as possible. Include two or three short, simple questions instead of one long one.

2 **Clarity**

Avoid ambiguous questions or questions that need further explanation before people can answer them.

3 **Types of questions**

Do not ask too many open-ended questions (questions that cannot be answered with a simple yes or no), as they take too long for the respondent to complete and for you to analyse.

4 **Test**

Test your questionnaire on a few people before you start gathering data.

5 **Use of white space**

Use a clear and simple layout with lots of white space so it is easy to read and understand.

6 **Directions**

Include clear instructions explaining how to fill out the questionnaire.

7 **Explanations**

Introduce the questionnaire and explain the aim of your research if posting questionnaires to respondents.

Formulate questionnaires

| 8 | **Replies**
If posting questionnaires to respondents, include a stamped, self-addressed envelope so respondents can return the questionnaire as easily as possible. |
|---|---|

| 9 | **Appropriate method**
Consider which method is the best way of providing the questionnaire to respondents – what will make it easy for them? Which method is likely to result in the greatest number of responses? |
|---|---|

| 10 | **Useability**
Keep the questionnaire as short as possible. |
|---|---|

| 11 | **Thanking respondents**
Thank the respondents for completing the questionnaire (at the end of the written questionnaire or the interview). |
|---|---|

Document reviews

Most research tasks involve the use and analysis of documents and other written material at some point. You may start to define your research aims by first reading about what has been done before, often called a literature review. Documents can also help you place the information you gather into a wider, more meaningful context.

You will be expected to locate, read and critically assess written information relevant to the research task. You will have to make decisions about which documents contain useful and reliable information, and which sections of information you could extract, summarise and include in your information gathering.

The types of documents you use can include anything that is relevant to the research tasks and your particular objectives.

Online researching

If you refine your use of search engines to maximise the relevance of material, online searches can provide data quickly and efficiently.

Here is more information about online research.

Government websites

Federal government websites contain news about tendering opportunities, legislation and regulations, media releases and information about the government services. State and territory government websites contain information specific to each state and territory, such as small business advice. Local government websites describe guidelines about council services and regulations.

Travel information

Travel agents have websites and email newsletters that you can subscribe to learn about the latest special offers. Airlines, bus and car hire companies, hotel chains and individual hotels all have websites and email addresses. Airline tickets and hotel rooms are often cheaper if you purchase them online.

Market research data

Some market research companies investigate and publish periodic reports on particular subjects. Some offer subscription services to regular reports and data. They can save time when you need complex information quickly, but they charge for their services.

Publications

Many newspapers and magazines operate websites where current and past articles can be viewed and downloaded. You may be able to subscribe to email newsletters or pay to access certain published material.

Reference and technical information

There are various websites you can use to access reliable, factual information from sources such as dictionaries, encyclopaedias, books of quotes and thesauruses.

It's a good idea to discuss your research tasks with other people as they may know websites that may be useful to you.

Search databases

Some organisations specialise in collecting information and making it available via a database. Many of these databases are commercial websites that only allow subscribers to access their collections. For example, if you are asked to research the history of sales of office space in a particular area, a number of sites specialise in collecting this information and providing it in report form, at a cost. Other examples include recruitment websites that allow employers to list job advertisements for a fee payable to the business. The listing and payment can usually be done online. These advertisements are then made available to jobseekers through the same website. Mortgage brokers also provide a database of services online. They provide a list of the services offered by a number of mortgage providers. Users can pay a fee to these brokers to find the best deal.

Databases

Databases are often able to provide information that is difficult to obtain from other sources such as complete texts of journal articles. In this instance, a subscriber is able to search for articles about particular subjects and download them. Finding databases appropriate to your needs is not easy, and it can be frustrating to find one that appears to have the information you need but is a subscription-only site. If you do find a database that holds information, you can use on more than one occasion, make a folder in your favourites for databases and add to it. An effective and relevant database can save a lot of time.

Some organisations have databases available for members only, allowing them access to services, including databases. Other online information is available through subscription only. Many paper-based journals have websites that offer access to databases with archived editions of past issues and other online information to current subscribers. After paying a subscription fee you are given a user name and password that allows you to access the information.

Speak to your colleagues about the types of databases they use. Some of them might subscribe to sites that may be very useful to you for searching purposes.

Example: data and research strategies

David has been asked by his company to prepare a questionnaire for suppliers to get information on how to improve the current ordering system they have in place. He has been asked to survey 40 suppliers and has been given a list of companies to contact by his manager. Because the organisation already has a good idea of what type of ordering system they will implement, their questions are focused on how well this is likely to work.

When the questionnaire's format and content was finalised, David sends it out via email and includes clear instructions on how to send the completed questionnaire back. He calls them a few days later to see how it is going and ensures that they return it to him.

David's manager was very pleased to see that all of the 40 questionnaires were completed properly and returned on time.

As a result, the data that was gathered was of an excellent quality, could be easily analysed and compared and really helped the company implement a first-rate ordering system that suppliers were happy to use.

Practice task 8

1. What steps might you take to ensure relevant and valid information is used for your research project?

2. Name four techniques for collecting data.

2C | Use search tools as part of an online search strategy

Using the internet efficiently to locate the information you need is a valuable skill. This mode of research enables you to gather the most up-to-date data, make comparisons with other reports and data provided on the same topic, and validate your data.

Use search engines

You need to use search engines effectively by selecting appropriate keywords and phrases. Each search engine functions differently and the same three words typed into two different search engines will provide you with different results. Don't place too much faith in a single search engine. No one engine will find every information source for you, or even the best source.

Once you know the purpose of your search and the type of information you are seeking, you should be able to determine the right search engine for the task. Some tips for finding the right search engine follow.

Depending on the task, the right search engine might be:

- a subject directory to browse through sites
- a subject directory's search engine to obtain general information
- a general search engine (using advanced search features if required) for a specific piece of information
- a subject gateway or portal site for general information on a specific topic
- a specialised search engine for a specific piece of information on a specific topic.

Select key words and phrases

The skill of searching is knowing how to find phrases, links and related information that can lead you to where you want to go.

Choose a phrase or few words that are closely related to your topic and write them down. Remember, if your keywords are too broad, it will take longer to find what you need. The more specifically the words relate to what you need to find, the quicker you will find it. Begin by analysing your topic so you don't waste time with sites that are too general. For example, if you are searching for the number of aged care facilities, phrases will be more useful than individual words: 'aged care' may bring up thousands of sites, 'aged care facilities' will bring up hundreds and 'aged care facilities in Victoria' will bring up pages relating to facilities in that state.

Bear in mind that geographical names can be spelt in different ways and that English has spelling variations; for example, 'organisation' and 'organization'. You might have to include both spellings to maximise your search results.

Variations of terminology

Variations in the spelling of cultural or geographic terms should be included when doing a search. For example, the variations of spelling in 'Armidale' and 'Armadale' will give different results.

If you are stuck for words to use in your search, you can use a thesaurus for inspiration. A thesaurus lists synonyms (words that have related meanings) and you can use these words in place of the ones you have been using to search. This is one of the best ways to find new sources of information.

A report or magazine article about your topic can give you examples of relevant terminology and the spelling to use for your keywords and phrases.

Search operators

Refining a search means narrowing down the results until you have just the ones with references to the specific information you want. Search engines usually let you refine your search by using operators, or Boolean operators. Operators are words or symbols used either before or after keywords. They affect how the keyword or phrase is searched and can dramatically alter the results you get. It takes practice to become familiar with these operators, which can be combined in complex ways.

Example: use search operators

The following example shows the various functions of Boolean operators when looking for information about cricket clubs in Tasmania.

Operator	Action	Example
+ before keywords	The results will include only websites with the keywords that have this symbol before them.	Entering **cricket+clubs** will find only websites with both words.
AND before keywords	Same as +	Entering **cricket AND clubs** will find only websites with both these words in them.
OR before keywords	Any of the words will be searched. This results in much greater numbers of sites being found. This is a default setting in many search engines.	Entering **clubs OR associations** will find websites that have either of these words in them.
- before keywords	The word after- will not be searched.	Entering **cricket -insect** will find only websites that have 'cricket' but not 'insect' in them.
NOT before keywords	Same as -	Entering **cricket NOT insect** will find only websites that have 'cricket' but not 'insect' in them.

... continued

... continued

* as part of a word	Will find all words with the first part of the word in them.	Entering **surf*** will return results for surf, surfing and surfer, among others.
"phrase"	The words or phrase between the quotation marks must be an exact match.	Entering **"Tasmanian cricket clubs"** will find only those sites with this phrase.
Combining operators		
+ and - or AND NOT	Finds sites with one word but not the other.	Entering **cricket +clubs -associations** or **cricket AND clubs NOT associations** finds websites that have the words cricket and clubs in them, but not cricket and associations.

Hyperlinks

A hypertext link (a clickable icon or highlighted word or phrase) allows you to navigate between different pages on a site. Links can also connect to pages on other websites. Sometimes, clicking on a link opens a new window in your browser, so you can easily look at several pages if you need to cross-reference between them. Other links direct your browser to another website. You can continue to navigate through the new site or use the back button on your browser to return to the original site. You need to identify the links and decide which ones will lead you to the information you require. Sometimes you will follow the wrong path and will need to go back and try again. Here is some guidance around navigating websites and using hyperlinks that can assist in a quicker and better way to search for information needed.

Navigate websites

Websites usually contain a number of pages that can be accessed through links from a home page. Every website is different and each search you conduct will have a different purpose and goal. Some sites have very simple home pages with a few links to further pages listed down one side or in the middle of the page. Other sites contain many more choices. Sites with many pages will often use a site map to help you navigate. This provides an overview of all the pages on the site.

Many websites allow you to search for information within that site using a search box displayed on the home page. Some online databases require you to follow a number of steps and move through multiple pages before you can enter keywords and do a search. Others have a search option as a link.

Navigate hyperlinks

Links can be pictures, symbols, buttons and anything at all that are clickable online. Embedded links are hyperlinks to other sources of information contained in a document or image. For example, a travel site may display a map of the world, and when you click on the area of the map you are interested in, the browser takes you to web pages containing information relating to your chosen region. Sometimes it is difficult to identify links. An easy way to find them is to move your mouse pointer over a web page and look for any changes in your pointer from an arrow to a hand or changes to the webpage such as words that change colour or pictures that change shape as you pass over them.

If you click on a link and then change your mind, you can press the Stop button. The new page will then stop downloading. This is also useful if the page is taking too long to appear. It is easy to get lost once you start clicking on links. Many websites have navigation buttons on their web pages. Buttons or words such as Top, Back and Home are clickable and allow you to navigate your way around the site.

Some links don't take you to another webpage or site. Instead, they open a file containing sound, film or pictures or perhaps some software to download. Many sites have clickable pictures that lead you to an enlarged version of the picture when you click on them.

Use hyperlinks wisely

When using Boolean operators to find different web pages for information, use links wisely:

- Scan the page or document for relevant links.
- Keep track of where you are.
- Use the stop button when you have taken a wrong turn.
- Add relevant pages to your bookmarks or favourites.
- Use the history section to track where you have been.

Practice task 9

1. Using the Boolean operator of '+ before keywords', find information on marketing journals in Australia. Write the website address for a journal available through an Australian website.

2. Using the Boolean operator of 'AND before keywords', find information on professional business associations within Australia. Write the website address for the association.

2D Use reliable methods to analyse the data

Once you have obtained relevant information, you need to analyse your material and edit it to meet the required purpose. You have probably already started to interpret and analyse the information as you collected it. Early analysis may help you to direct the later stages of your research more effectively.

Data analysis

The first step in data analysis is to put your data into order. After collecting all the information, you may have notes in different places, bulging files, interview recordings, charts, diagrams and piles of questionnaires. In order to analyse your material, you may need to spread the data out on the floor, a table or a wall. You will have to see the types of resources you have available for data analysis and how best you work.

To convert your data into a manageable form, you need to sort and summarise so it is easier to analyse.

You can draw attention to key pieces of information by:

- adding notes or comments to data
- highlighting sections of text or figures
- labelling materials
- selecting particular sections of data and filing them together
- choosing a few typical examples to describe your larger body of data noting critical or important pieces of information.

Methods of data analysis

There are five major methods of data analysis that are commonly used to aid in the understanding and analysis of data:

1. Get feedback on results.
2. Review previous research.
3. Peer review.
4. Data samples.
5. Statistical analysis.

Get feedback on results

Getting feedback on results involves presenting information and confirming with others (such as subject matter experts, managers or supervisors or those to whom you will be presenting the research results) that the data collected:

- is relevant and will suit the purpose of the research
- has been collected and analysed in a rigorous way

- is accurate
- is instructive and informative
- will enable recommendations and decisions to be made.

Time the feedback

Getting feedback on results can be done at the conclusion of the research phase but can also be done as the research project progresses. The benefit in doing the latter is that preliminary results may lead to other questions or suggest to the researcher that further investigation into a certain area or topic may be instructive.

The feedback may also alert the researcher to potential problems in the way data has been collected or analysed that can be addressed before the research is completed. Feedback can also confirm and reinforce that research is progressing smoothly.

Review previous research

Not all research needs to be conducted first hand in the form of surveys, questionnaires or interviews. A valuable method of understanding an issue is to consult research undertaken by others. Provided you can identify research that is closely linked to the topic or issue you are investigating, it is possible to benefit from the findings of others.

Careful review of previous research can assist you to collect data as well. For example, you may come across samples of surveys you could adapt or research results that prompt you to interview staff about a previously unthought-of issue. Studies undertaken in the USA or the UK may be closely linked to your topic, but may not be useful for your own research findings as conditions there may be different, terminology used may cause confusion (such as middle income earners in the USA may be classified differently those in Australia) or the basis of the research findings do not correlate well with the situation you are researching.

Here are some questions to consider when reviewing the work of others.

Questions to consider when reviewing the work of others:

- When was the research conducted?
- Is it current and up to date?
- Are the conditions at the time of the study similar to today's conditions?
- Where was the research conducted?
- Is it relevant in the market or area I am researching?
- Is the research of useful quality, integrity and reliability?

Peer review

Providing results (or preliminary findings) to your peers can help you research a topic effectively and ensure that any recommendations will have a better chance of being adopted.

Here is an example of how peers can assist your research.

Differing perspectives

Provide different perspectives and understandings on the same issue.

Encouragement

Provide support, encouragement, advice and ideas.

Additional points

Guide your research in other directions.

Alerts

Alert you to specific issues that may affect the outcomes of your research or the process.

Critical review

Review your work with a critical eye and provide constructive feedback.

Detailed feedback

Give you detailed feedback on how any proposed changes will affect their area of responsibility and help you come up with possible solutions to any negative impacts.

Data samples

Data sampling involves using a small percentage of a total population to assist you to understand the entire population. Conducting a comprehensive survey of all staff in an organisation, all residents of a suburb, all citizens of a country or even all members of a team is difficult, costly, time consuming or simply impossible.

Most poll or survey results we see reported in the media use data sampling as a technique for understanding how a much larger group of people feel about a particular issue. As with all elements of the research process, it is important to understand how the survey was conducted, and how and why those in the sample were included.

Here are two examples of data sampling.

Poll before an election day	Surveys
A poll before an election day asking a small percentage of randomly selected voters what their voting intentions are. Based on the results of these polls (expressed as a percentage), assumptions are made about how the entire voting population may respond, giving a prediction of outcome.	Surveys asking people for their opinions on different matters. The people might be randomly picked or included because of their opinions. For example, many newspapers have 'vox pop' sections where people are asked for their thoughts on an issue.

Techniques to identify samples

Researchers use a number of different techniques to identify a sample. The most commonly known and used method is the simple random sample. This is where every item has the same chance of selection as every other, and the selection of an item does not affect the chances that any other is chosen.

Random sampling of an organisation's employees can include writing down everyone's name on identical pieces of paper, placing them in a bag and then drawing a certain number of names out of the bag, randomly selecting particular names without being influenced by any external factors. This method is suitable for surveying a certain number of employees, with no preferences as to the profile of people included in the sample.

Sub-group samples

Sometimes you may want to ensure that the data sample includes people from particular groups such as voters from particular seats or employees from specific locations. In these situations, you can control the sample by creating subgroups (for instance, placing names from each category in a bag and selecting them).

Other considerations to include when using a data sample are the total number of participants as well as the total from various subgroups. Like many statistical issues, this can be a complicated process depending on a number of factors.

Here is an overview of things to consider when selecting sub-groups.

Things to consider when selecting sub-groups

- The confidence level desired (generally speaking, the more people surveyed the more you can be confident that the results reflect what the population believes).
- The sampling error you are prepared to allow.
- The standard deviation (which indicates how spread out the data is in relation to the average).

Statistical analysis

Statistical analysis is a way of understanding data and obtaining insights into what people think about particular issues related to your research. Statistics help us understand data in a more meaningful way than using raw information, and allow us to compare information that may not be presented in comparable formats when in a raw state. Statistical representation of data also allows us to see the information in perspective, especially when dealing with large numbers.

The discipline of statistics is a complicated topic and one that statisticians can spend years learning about. Most statistical methods used in a business context are known as inferential statistics, which involves using a sample to infer results that are likely to be obtained from a larger group (population).

Here are examples of commonly used statistical analysis tools.

Analysis tools
• Variance – measures how far a set of numbers is spread out.
• Mean, median and mode – mean is the average; median is the middle and mode is the value that occurs most commonly.
• Probability – measures the likelihood that something will occur.
• Testing hypotheses – formal procedure used to either accept or reject the hypothesis.
• Correlation – how two sets of data are linked.
• Regression analysis – estimating the relationship between variables.

Demonstrate statistics

There are many methods of presenting statistics, but simple percentages are probably more familiar to most people than raw data. The following present simple percentages and the raw data they derive from.

Simple percentages	Raw data
• 92 per cent of all survey respondents agreed that changes to the government's environment policy were overdue.	• Of the 1,072 people surveyed, a total of 987 thought the government's environment policy needed to be changed urgently.
• Just 8.6 per cent of cases required further follow-up.	• Follow-up was required in just 8,752 out of a total 101,599 cases.
• We have seen a 56 per cent improvement in average call answer times since this time last month.	• Last month the average call answer time was 15.2 minutes while this month it was 8.6 minutes.

Example: data analysis

Elena is the HR manager. She has been asked to set up new HR policies and practices that will better suit the growing business and position the agency as an employer of choice by developing and implementing family friendly policies.

Elena set about researching this issue. After planning the research and identifying her objectives, she determined that she would need to use a number of different data analysis techniques in order to provide solid recommendations, shown here.

Data collection methods

- Collecting and reviewing papers and studies conducted by employer groups and other organisations
- Surveying the company's staff and managers on issues that were important to them to identify general issues of concern, and how the company could make improvements
- Conducting focus groups or one-on-one discussions with a small number of staff to understand better how to implement practices that would be valued by them.

Analysis techniques

- Getting feedback on the results (both during the project and at its conclusion)
- Critically reviewing other research and analysing it in the context of the specific research issue
- Asking other managers to review the findings and preliminary recommendations and provide their feedback
- Data sampling
- Statistical analysis.

Practice task 10

1. What are the five methods of data analysis?

2. What is meant by 'probability' in relation to data analysis?

3. What is meant by mean, median and mode in relation to data analysis?

4. What type of method would you use for analysing:

    a) Sales figures?

    b) Customer response to a new product?

2E Make suitable assumptions and conclusions

When you analyse data, you are making judgments about what is valuable and significant. Your interpretation of the data may be different from someone else's. Part of the research process involves developing your own understanding of the data you have gathered and analysed, and comparing your interpretation to that of others.

It is unsatisfactory to just present your data and think your research is complete. You must also interpret what you have found and draw out its meaning for others. This is an important aspect of effective research.
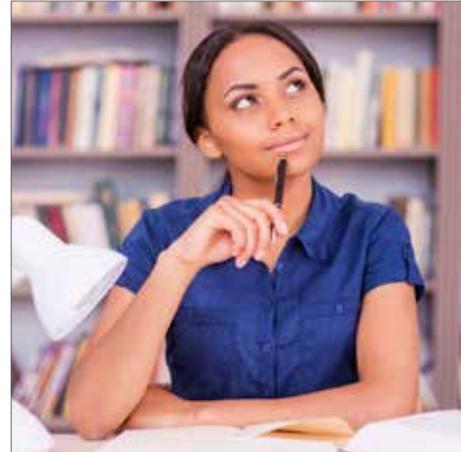
Make assumptions

When attempting to find meaning in your data, you should look at your data from all angles, arrange it in different ways and ask questions. This process may reveal additional meanings. For example, by plotting your sales figures on a chart, you may be able to see new things such as a clear dip in sales in the middle of the year that was not obvious to you before.

Be careful about using your data to try to prove your point. The data must always speak for itself, even if you do not like what it says.

You will make assumptions about what the research results mean. You will have to decide what you think is significant and what you believe the information is saying. This part of the process allows you to develop conclusions and recommendations so others can learn from what you have discovered.

You can make sure your assumptions are valid by demonstrating the clear relationship between the data and your conclusions. You must also be able to justify your research by explaining how you came to your conclusions, and your assumptions must fit in with your overall research objectives.

If your assumptions do not match your objectives, you have probably drifted away from your task's particular goals and you may need to refocus your research.

Develop conclusions

Through the process of analysis, you have interpreted the data, and now you must produce something meaningful that you can pass on. How can you share your findings with others?

You can complete your research by summarising in a few paragraphs or points what you have discovered, developing conclusions about what it means and making recommendations about what should happen next.

Here is an example of how to develop conclusions.

Process for developing conclusions

• Gather the material together and make sense of it.

• Form your own opinion.

• Develop your line of reasoning.

• Make suggestions about what should happen next, if required.

Recommendations

Your recommendations should be brief and clear. They should state in a few words what your research suggests should be done next. Recommendations must also be in line with the organisation's business objectives.

Here are some questions to ask in formulating recommendations.

Questions to ask in formulating recommendations
• Will the action you suggest make a positive contribution to the organisation's goals?
• Are the suggested actions in line with the organisation's ethical and quality assurance processes?
• Does the recommendation take into consideration the organisation's ability to be responsive and flexible so action can be implemented immediately?

Example: develop conclusions

Ralph was working hard on a report and recommendations on family-friendly work policies for the board in time for their next meeting. Based on the information he had gathered and analysed, and the feedback he had received from his peers and manager, he felt that the recommendations he was going to make would support the project's initial goals and reasons for doing the research, as well as address concerns and issues the board may envisage.

He had based all of his recommendations on results indicated by the data. To demonstrate this, he linked each recommendation to data and employee opinion so it was clear that recommendations and policies were made as a direct result of information obtained during the study.

For example, the review of existing research, staff survey results and interviews all suggested that having time available to care for sick children or aged parents, in addition to four weeks paid annual leave per year would be highly valued by employees.

One of Ralph's recommendations was to implement a flexible leave system where everyone was entitled to two weeks unpaid leave per annum, on their manager's approval. This recommendation was linked to the findings of his research, which resulted positively on staff satisfaction levels.

Practice task 11

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

Case study

The results of a community research project found that 70 per cent of males over the age of 70, who were living in small units and flats, had a higher incidence of social isolation. The majority of men stated that they missed working in their sheds now that they lived in a smaller residence. Partners of the men who were also part of the study, said their male partner would sit for long periods of the day whereas they had once worked in their sheds in the backyard and often had friends come over to socialise in the shed as well.

1. What is the main issue highlighted by the project?

2. Write a recommendation for the project.

Summary

1. It is important to clearly define your research objectives to guide the research process.

2. There are various methods for setting the objectives and goals of your research, including hypothesis testing, situational diagnosis, and identification of trends, process mapping and comparative analysis.

3. It is important to make use of data that is valid and relevant to the research objectives.

4. To assess the relevance and validity of data you need to analyse its source, currency, content and authenticity.

5. The research strategy selected must be consistent with the objectives of the research.

6. Possible research strategies include interviews with colleagues and clients, focus groups, data analysis, sampling, observation, questionnaires and document reviews.

7. Different research strategies will be appropriate in different circumstances, as they each have their advantages and disadvantages in different situations.

8. There are various methods of data analysis, including getting feedback on results, review of previous research, peer review, data sampling and statistical analysis.

9. Making suitable assumptions in the course of data analysis is a useful and important step to take.

10. Research findings need to be shared by developing conclusions that summarise your findings, their meaning and how they relate to the research objectives.

Learning checkpoint 2
Research and analyse information

This learning checkpoint allows you to review your skills and knowledge in researching and analysing information.

Part A

For your current organisation or for an organisation with which you familiar, collect two examples of reports that are the products of some type of research process.

The two reports must be different in their content and style. For instance, one might be in a formal format (such as a marketing or sales report). Another might be a short memo-style format on an issue (such as the venue for this year's end-of-year party).

Evaluate and write a critical summary of each report based on the following:

1. What type of data was collected?

2. Is the data valid and relevant to the topic?

3. What types of research strategies were used?

4. How was the data that was collected analysed?

5. Are the assumptions and conclusions clear and supported by evidence?

Part B

Case study
You have been asked to research a range of ergonomic chairs for the office so management can make a decision on which ones to purchase.

1. What is your research objective?

2. What research strategies did you use to identify the information you needed?

3. What search tools did you used?

4. Where did you source your data?

5. How current is the information?

6. How reliable is the information?

7. How did you analyse the information?

8. What conclusions did you develop?

Topic 3
Present information

The success of any research project depends on communicating the findings. You can present your issues and recommendations in a variety of ways; for example, orally in a personal presentation, or written in a report or correspondence format.

As decisions are likely to be made on the basis of the contents of any report and its recommendations, it is important to ensure the information is presented in a manner that is professional, distributed on time and in an accessible manner, is written in an appropriate style for the audience who will receive it and structured in a way that reflects concerns or issues the organisation wants addressed by the project.

In this topic you will learn how to:

3A   Present recommendations using suitable business technology
3B   Present reports using an appropriate structure and format
3C   Distribute research findings
3D   Obtain feedback on the suitability of findings

3A Present recommendations using suitable business technology

Thoughtful presentation is an important part of conducting your research effectively. It presents the information in a way that makes it easy to understand and use. There are a number of things you have to consider when presenting your recommendations.

Develop recommendations

Research reports present data, draw conclusions from that data and make recommendations based on the data and the conclusions. They are commonly used in workplace investigations.

If you are required to develop recommendations, you must do so very carefully because recommendations are used by others to help them make important decisions. Many people do not have time to read entire reports and are only interested in the key outcomes of the research. They might review the introduction or executive summary and then go straight to the recommendations. You can start developing recommendations by analysing your data or information carefully.

Two questions that you could ask yourself when developing recommendations are:

* What does the data tell you?
* How can you summarise this information into a few key points?

Criteria for developing recommendations

You then need to identify the criteria on which you will base your recommendations. These may be specified in the research brief.

Here is an example process for identifying the criteria for recommendations.

Process for identifying criteria for recommendations
Locate, evaluate and rate three products
• The products must cost less than $3,000 and be available for immediate delivery.
Narrow down your options
• What answers did you find to the research problem you set out to investigate? Ten suitable products were located.
• Which answers best fit the criteria? Five of them cost less than $3,000; four can be delivered immediately.
Consider your results
• Can you be sure the best options you have found are based on sound and thorough research?
• Can you back up your findings with reliable information?
Draft your recommendations
• Keep each recommendation brief – one sentence if possible.
• You can use bullet points or numbers so your recommendations stand out clearly from the rest of the text.

Present your research

How you present the information you have collected, analysed and edited depends on the original purpose and the intended audience. Different research tasks are best suited to particular types of presentations. You should try to match the style of presentation to the scope and size of the research task. Some situations demand a very formal and structured way of reporting on information while others only require a brief summary of information or an informal email.

Technology

When presenting your research it can be helpful to use technology such as electronic whiteboards, computers/laptops, overhead projectors, video conferencing, videos and voice recorders. You may need to combine both electronic presentations, such as PowerPoint, with hardcopies of the report. Your report may include charts, diagrams and other graphics prepared on a computer.

Here are several examples of how a report can be presented:

- Created using a word processor
- A photocopied hardcopy
- Printed in colour or black and white
- Bound
- Converted into slides or handouts

Example: use technology

Consider the following examples where different mixes of business technology are used.

- A team member who is asked by their manager to find a local cafe that will deliver sandwiches for a team meeting and to establish the costs of catering could simply send an informal email or chat to their manager about their findings.

- A finance manager who is asked to investigate and report on financing options for a growing manufacturing firm needs to write their findings up into a report for the next management meeting. They are expected to follow the company's reporting format and give a PowerPoint presentation to the management team that summarises the main findings and recommendation for an appropriate financing source.

- A customer service manager who is asked to find a more efficient way of managing customer queries and then talk to their manager about the identified solution before implementing it, undertakes their research and then summarises it and the preferred solution in a word processed document that is easy and quick for the manager to read. They email this to their manager first and then discuss the information at an informal meeting the next day.

- A team leader who is asked to complete a tender online.

Structure and format of the information

How you present your information and recommendations will be influenced by how you structure and format your report. Some things to consider when developing the structure and format of your report follow.

The structure and format of a report can be influenced by:

- the type of information
- the level of complexity of the information and recommendations
- the way it needs to be shared among stakeholders
- preferences of the manager, person or group who commissioned the research
- standards of the organisation
- experience of the person undertaking the research
- other factors external to the organisation such as government tender presentation requirements.

Prepare the report

When deciding how to present your information, consider the following points.

Document type	Report, memo, email message, poster, appendix.
Formatting	Headings, fonts, links and templates.
Content	Summaries, comments, copies of actual text.
Language	Different language for different audiences.
Tone	Formal or informal.
Checking	Proofreading, producing drafts, asking for feedback.
Printing	Type and size of paper, number of copies required.
Distribution	Forwarding copies by hand, email, post or in meetings.
Filing	Filing paper or electronic copies or both.

Report development

Recommendations can be presented in a number of forms, the main two being written reports and oral presentations. This process of report development can be made easier if you ask yourself some questions at the start.

Here are some examples of questions to ask when reporting development.

Questions to ask when developing a report
• How much does your audience know about the topic? Are they experts, informed, poorly informed?
• Will the intended audience read it?
• Will the intended audience file it for later use?
• Will the intended audience use it to make a decision?
• Will the intended audience use the information for a report of their own?
• Will the audience make changes based on its findings?
• If the audience is unfamiliar with the material, do I need to structure the information in a way that the reader or listener is informed and understands the issues?
• If the audience is unfamiliar with the material, do I need to identify issues in the introduction?
• If the audience is unfamiliar with the material, do I need to explain the facts in the main body?
• Do I need to lead the audience to the conclusions by presenting a solution or recommendation based on the facts they can understand?

Types of written reports

Here is an outline of some of the various types of reports that you may be required to develop.

Examples of the types of reports you could be required to develop

1

Technical background report

Contains background information on a specific topic tailored to the needs of a particular audience. This type of report does not include instructions, recommendations or new and original data.

2

Instructions

Instructions can describe procedures for particular work tasks or short user-manuals for an appliance, equipment or program.

3

Feasibility, recommendation and evaluation reports

These reports are similar in that they investigate a problem or opportunity, compare options and then include recommendations. Feasibility reports determine if a project is a practical or worthwhile undertaking.

4

Primary research report

Refers to the research and data collection someone does themselves (as the primary researcher). The report presents data, draws conclusions and explains how you came to your conclusions (your methodology).

5

Technical specifications

Are used to describe new products. The types of information in such a report could include product construction, materials, functions, features, operation, price, costs, performance and market potential. This type of report usually contains less writing and more tables, graphs and figures than other reports.

6

Proposal

A proposal suggests that certain activities should take place; for example, you may write a proposal to a government body requesting funds to undertake particular research. Proposals can contain parts of other report types; for example, feasibility, and technical background.

7

Business prospectus or plan

Used as part of regular planning activities. People write them to help them think through issues before they start their business or for a plan to attract investors. Business plans usually describe the business, target market, competition, projected income, day-to-day operation and expected output.

8

Organisational policies and procedures

Policies and procedures describe the guidelines, rules and regulations of the organisation and the expected behaviour of staff. Policies and procedures are similar to instructions.

9

Correspondence in letter format

In a detailed letter or letter report, information is presented in the same format as a standard business letter with the addition of a subject line that sets out the focus of the letter information.

Style of language for written reports

Here are some useful hints and tips for preparing a written report.

Avoid a personal tone

Report writers should avoid the use of personal terms such as 'I', 'we', 'my' and 'me' and the use of redundant expressions like 'in my opinion'. It is possible to write a report full of opinion without resorting to the use of personal terms. If you hold the view that x is y then simply state 'x is y'.

Retain objectivity and impartiality

It is impossible to be purely objective in a report, but aim to be as impartial as possible. To achieve this, avoid emotive terms, present facts, distinguish assumptions from opinions and minimise unsubstantiated assertions.

Use precise language

Your report should convey its meaning coherently and unambiguously. Use short sentences. Write as simply and directly as possible. When editing, remove excess words and phrases. Avoid useless expressions that add nothing to your meaning. Avoid clichés, jargon and hackneyed expressions.

Avoid spelling and grammatical errors

These days, it is easy to make sure that spelling and grammar errors do not appear in any document you prepare. Make use of your computer's spellcheck and grammar check functions and consult a dictionary if you are unsure. Always read through it before submitting it.

Make a start

It might sound odd, but if you feel that you do not know where to start, just begin wherever you feel most able and fill in the gaps later. Some people find it easier to write out the structure of a report first and then fill in each section. Others prefer to start writing the draft.

Draft your written report

Decide on the format for presenting your information that will suit your purpose and audience. It is advisable to use headings if a number of points or areas of information will be presented in the report or correspondence. Some short reports may be prepared in point form to maximise impact.

Here are some points to keep in mind when writing the main text of a workplace report.

Things to remember when writing your report
• Be consistent in format and writing style
• Recognise time limitations
• State the main purpose clearly
• Emphasise the most important information
• Write in plain English
• Ensure the conclusions or recommendations are based on the information you have provided
• Use the style and format required by the organisation where appropriate.

Report format

If your findings are to be presented as a written report, you will need to choose a presentation format that will convey your findings effectively and is appropriate for your audience, the type of information you are sharing and the resources you have available to you. You need to be aware of the particular requirements of your organisation and the standards expected.

A standard report has the following five key sections:
- Title page.
- Introduction that defines the purpose.
- Main body that sets out and discusses key findings.
- Conclusion that summarises main points.
- Recommendations, if appropriate.

Memos and emails

If your information is brief, your report could be written as a memorandum or email. Most memo or email reports are short, usually one to three pages in length. Information should be presented as concisely as possible.

Here is an example of what needs to be included in a memo or email report.

Elements to be included in memo and email reports
• The name of the receiver
• The name of the sender
• The date
• The subject
• The main body of the report
• The conclusions and recommendations

Report structure

Besides the sections of a standard report some reports also include a summary or a table of contents. Further examples of what might make up the overall structure of a workplace report follow.

Summary

If your report is long or contains complex information, it is useful to include a summary of the report. Often called an executive summary, it contains a summary of the research strategy, key findings and the recommendations.

Table of contents

The table of contents includes headings for each section of the report with corresponding page numbers, so the reader can gain an overview of the information contained in the report and go straight to specific sections.

List of figures

A list of figures includes all illustrations and their corresponding page numbers. This list is usually located at the beginning of a report following the table of contents.

Attachments or appendices

An attachment or appendix contains any additional information of interest to the topic but is not essential for understanding the findings such as:

- detailed statistical information
- samples of questionnaires or interview questions – official documents or extracts
- lists of contributors and acknowledgements
- the written request for the report.

Glossary

A glossary explains the meanings of words or terms used in the report.

Bibliography

A bibliography includes the books, government publications, journals, videos, audio files, databases and websites the writer used in researching and preparing the report. For ways of presenting references, consult a style manual.

Index

An index lists the contents of the report, or topics covered, as keywords with page numbers so the reader can look up specific information.

Pre-formatted report templates can be used if you do not have an example or format to follow. While some of these are more stylistically based, they may still be of use to you in certain situations.

Edit and review a written report

Rarely, a writer produces a good paper in the first draft. Go back over your report or correspondence to improve it.

Here are seven key aspects of the editing and reviewing process.

Editing and reviewing steps

1 Check spelling, grammar and punctuation.

2 Check organisation and continuity.

3 Check writing style.

4 **Check facts.**

5 Check calculations.

6 Check clarity of presentation.

7 Check for repetition.

Revise a report

There are many questions that might be posed when revising and editing your report or correspondence.

Questions that you could ask yourself when revising and editing reports include:

- Does the title tell you about the report?
- Does the introduction accurately state why the report was written and what it covers?
- Does the body of the report present the facts in logical order?
- Are all statements in the report factual and clearly expressed?
- Are the headings brief and descriptive?
- Are photographs, diagrams and other illustrations used appropriately?
- Is the language precise and clear?
- Have all redundant expressions been removed?
- Are the arguments clearly presented?
- Do the conclusions reflect the information in the report?
- Are the recommendations positive and practical?

Oral reports

You may be required to present your research findings as an oral report as well as in writing. For example, you may have to give a presentation to:

- a board or committee
- your team
- the whole staff
- the managing director or chief executive officer
- a conference audience.

Delivery method

Your delivery method will depend on the audience and the nature of the information you are presenting. An oral report could be presented informally, such as part of the general discussion in a staff meeting, or formally during a teleconference, or in front of a board, committee or general audience and using prepared aids such as slides. It can be daunting to stand up in front of people and present your research. The more you practise your presentation beforehand, the easier it will be.

Here are some handy hints for making successful oral presentations.

Hints for making successful oral presentations

1 **Structure of presentation**
Kept it brief (no more than one hour without a break).

2 **Resources**
Can be enhanced by using visual aids; for example, slides, whiteboard, handouts.

3 **Right pitch**
Retain the audience's interest.

4 **Practised**
Be well prepared and rehearsed.

5 **Time for clarification**
Allow time for group discussion.
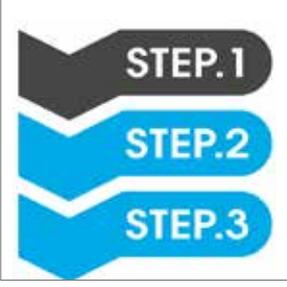
6 **Relevancy**
Be relevant and keep to the point.

Verbal presentations

Know your audience and structure the presentation in a logical, clearly defined manner. Make effective use of eye contact. Use anecdotes and humour only when appropriate.

Most speakers also make use of written material and graphics to accompany and highlight aspects of their information. This might include tables and graphs, handouts, summary booklets, quizzes, cartoons and relevant quotes.

Practise your presentation to ensure your timing is accurate. Pay attention to the tone and inflection of your voice, so listeners concentrate on what you are saying and not how you are saying it.

Here are some handy tips to remember when planning and giving an oral presentation.

	Visual aids Don't rely too much on slides – a good presenter will talk authoritatively about the topic they are presenting and only use visual aids to illustrate a point or provide background information (such as a graph or example).
	On topic The presentation is likely to be the time when all the research you have conducted is summarised and presented to key people who will use the information to make decisions. Remember the original purpose of the research you have been conducting and make sure that the presentation links back to this.
	Recommendations Make recommendations clear and, as with a written report, link them back to major findings of your research.
	Project process Include in your presentation a brief overview of how various checking and confirmation steps (such as getting feedback) were helpful during the process.
	Disseminate findings Include brief summaries of important data you collected during the research if you plan to discuss it, or consider providing attendees with a written information pack containing a summary of the research findings; this may be especially useful if the information is very detailed, lengthy or is difficult to convey orally.

Structure an oral presentation

Just as you need to structure the written report, an oral presentation will also need to be structured. Developing a dot point presentation outline to follow will ensure you don't miss any of the main points.

Here is an outline of key point that should be considered when structuring an oral presentation.

Tips for preparing a report outline
• Start with an introduction that gives a brief background as to why the research was conducted and how the presentation fits in with the original research brief.
• Give a brief summary of the research methods used and why they were chosen.
• Provide an overview of the main findings of the research, how they were discovered and how they are relevant to the topic or issue at hand.
• Finish with a summary of suggested recommendations.

Presentation models

Other models or options are available when deciding on how to structure a presentation so it makes the most impact.

Here is an example of one of the most used models: the AIDA model.

AIDA model

- A – Get the audience's Attention/build their Awareness.
- I – Keep their Interest.
- D – Make them to want to follow your recommendations (Desire).
- A – Motivate them to take Action.

Practice task 12

1. What are four types of technology you could use to present a report?

2. What are the main considerations when planning a report document?

3. When would you use a summary?

4. What is a bibliography?

3B | Present reports using an appropriate structure and format

The presentation of information in a report depends on the purpose of the material, the type of material and the intended audience. There are many different choices you can make and you need to know what is expected in your workplace.

Organisational requirements

Your report must conform to the requirements of your organisation. Some workplaces have particular report formats that must be followed or house styles to use. For example, all reports must contain the business logo on the cover page and footers throughout the document, indicating file path of where it is stored.

Many organisations have a manual outlining their house style. This often includes instructions about the correct format and style to use for a range of business and presentation documents, including the preferred fonts, heading styles and layout to use. For example, all electronic presentations must include the organisation's name and logo in the bottom left-hand corner of each slide.

Learning how people and businesses operate – what is appropriate and what professional standards apply in different situations – is part of most jobs. If you are unsure about any of the organisation's requirements, ask someone for advice. Before submitting your final draft, it is advisable to ask a colleague or supervisor to read the draft and make suggestions for improvement.

Example: report structure and format

After researching the possibility of exporting the organisation's main product to new markets, Fiorella prepared her written report. She started by drafting the main headings or sections of the report and then went back and filled in the content. She found this a useful process because it helped her organise the information and meant she covered all parts she needed to include in the report.

Her manager, Tao, was impressed by the first draft which outlined the data collected and Fiorella's analysis; the conclusions made and resulting recommendations. Tao was concerned, however, that Fiorella had failed to use the organisation's style guide when formatting the report. Fiorella accessed the style guide and realised she hadn't included the company's logo, hadn't used the font style and size required, didn't have tables in the right format and hadn't included a footer with the file name and path. Even the page numbers were incorrectly placed!

With a bit of tweaking Fiorella changed the report to match the organisation's style guide. Tao was impressed with the finished report and asked Fiorella to present the report at the senior managers meeting the following week.

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Practice task 13

Using your workplace, or one you are familiar with, describe the requirements or house styles for use of specific formats, styles and structures for reports.
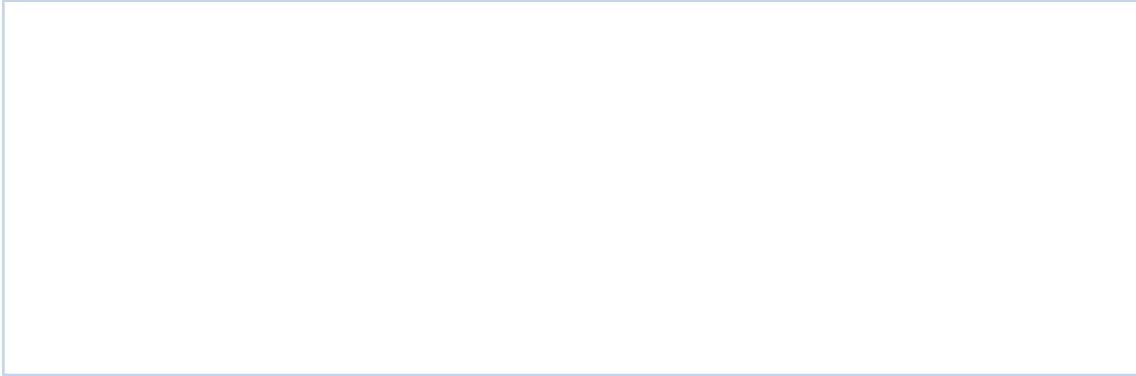
3C | Distribute research findings

Once research and analysis has been completed, you will need to ensure the findings of the project are distributed and shared with those who need them to make decisions or may find them useful.

Preparing a written report or delivering an oral presentation (or both) are the main ways in which information can be shared with others but you also need to think about the best way to distribute research findings and select the most appropriate method of distribution for the particular situation.

Distribute research

The distribution method you use to share your report with others depends on a range of factors, such as the type of report, the method of presenting it, the intended audience, time lines and available resources.

Here are several examples of how reports can be distributed or presented.

Hardcopy report

James is a senior manager at a bank and has been asked to present a report to the board of management on the latest market research conducted by his department, which is confidential. The company's corporate standards stipulate that presentations to the board follow a particular structure. James has followed this and, as a result, his report is a hardcopy document that is quite lengthy and formal in its approach. As well as providing board members with the report on the day, he will make a 45-minute oral presentation to them, which will be accompanied by slides and data extracts provided as handouts to support items discussed during his presentation.

Verbal report

Martine is a check-in team leader for an international airline. Her company is always looking to improve the way they do things, and have an innovative approach whereby staff are asked to submit new ideas to promote efficiency and better customer service to their local managers. If approved, they are trialled by the staff member in question and, if successful, rolled out to other locations across the company.

Martine identified a customer satisfaction problem that related to queuing times and came up with a solution, which has worked very well. She has been asked to present information on her solution orally and in a written report to groups of 10 team leaders at a time (located around the world) via the internet and teleconferencing. She has developed an electronic PowerPoint presentation, which she can talk through that lasts 20 minutes.

> **Email**
>
> Dina is the administration manager at a hotel in Perth. She has been asked by her manager to research providers of limousine services (which the hotel will provide on a complimentary basis for guests who book suites) and to report to him on her findings and recommendations. She conducts her research and describes the various options in a one-page Word document, which she emails to her manager, who discusses it with her over morning tea.

Report type

Before completing your report, you need to clarify:

- How much information needs to be shared?
- Does the information have to be presented in a certain way?
- Is it very long?
- What format is it in?
- Is the information confidential or sensitive?
- Is it to be part of a larger report (such as your department's quarterly report)?
- Is it one of a series of reports on similar or updated information?

Present the research

You need to decide the right method for presenting the report. Written reports may need to be composed, formatted and structured in a certain way to ensure they meet with corporate guidelines or the expectations of those who will be receiving the information. A written report could be formal such as a 50-page, full-colour, professionally copied and bound document that includes highly structured text, plans, charts, and tables or diagrams; or informal such as an email or simple Word document that uses dot points to highlight key information.

Presenting data in a hardcopy format may be a good way to distribute information that has been drawn together from a variety of sources, such as Microsoft Word, Excel and Project or created in a specialist software program to which your audience does not have access such as CAD or page layout programs.

Some written reports need to be accompanied by an oral presentation or you may find that different audiences require different presentation methods – key stakeholders may want both. Others less involved in the decision-making process but who need to know the outcomes of the research, may just need to receive the written section of the report. Other situations may require an oral presentation only.

Technology may be available that could mean that videoconferencing, teleconferencing, internet meeting software, data projection tools or other devices can be used to help deliver information to different groups. The technology may influence the way the information is presented. Here further information provides an outline of other considerations such as the audience, the timelines and resources needed.

Audience

The audience to whom you will be targeting your report will greatly influence the way research findings are distributed. As well as personal preference, other factors, including the number of people who make up the audience, their interest or stake in the project and their role in the organisation, will all influence the selected mode of communicating research findings.

You may find that different groups require different types of reports or presentations – sometimes to communicate the same results and recommendations. For example, board members might expect a formally presented written and oral presentation delivered at their next meeting, yet managers might just need a brief oral overview of the project and its findings. Different audiences may require different approaches, language and levels of formality to make the information relevant and of interest to them.

Time lines

Time lines can have a considerable effect on the way research findings are distributed, and should influence the decisions you make on how to best present the findings. When distributing research findings, it can be helpful to ask the following questions.

Questions to ask regarding distribution time lines
• How urgently does the audience need the information delivered to them?
• Are you working to a deadline?
• How critical is the fast delivery of information?
• How much time will you be allowed to make your presentation?
• How much time will your audience have to listen to your presentation and read about your research findings?

Resources available

Sometimes, research projects are given a budget with which to work, which may include a component for the distribution of findings. This may cover the cost of having printed and bound reports prepared, travelling to deliver oral presentations or using technology such as videoconferencing.

It is important to find out early in the process the expectations and needs in terms of distribution of the findings, as well as whether any budget has been allocated to cover the costs of creating and delivering impressive reports and presentations.

These examples show how different factors can affect the type of distribution method used.

Martine's example	James's example	Dina's example
In Martine's example, because her audience was located around the world, a hardcopy report and face-to-face presentation to dozens of team leaders would not have been as effective, timely and cost-efficient as distributing electronic material over the Internet and talking about it on the phone.	James's example illustrated that in some circumstances, certain presentation and distribution standards are expected and need to be followed.	Dina's example was the least formal of all of them and took up a small amount of time, yet was very effective and suited the situation.

Distribute research

There are a number of ways to distribute research findings – again the method of distribution needs to be carefully chosen and assessed to make sure it is the most suitable and effective way of providing information to the audience. Here are some examples of distribution methods.

In person

Delivering the information in person; for example, handing copies of a report to those who requested it, distributing copies of a report in a meeting or at a conference.

Email

Sending the report to key stakeholders by email can be a very handy tool for quickly sharing information with people both in the office next door and across the globe. Make sure that recipients are able to open any attachments you send and that the size of your files are not too big and check for confidentiality.

Online

Sharing information online; for example, on a website or intranet site, is a great way to make information available to a large number of people but remember once information is available online, you have almost no control over who can access it. Confidential reports and other information should be kept password-protected if possible or distributed via other means.

Fax

Sending a report or other information by fax is a good solution if you need to send time-critical information to people that is available only in hardcopy and cannot be scanned, or if recipients do not have access to email.

Post

If the report you need to send does not have to be urgently delivered, if it is too large to send by email or contains information that cannot be easily sent or read electronically, then surface mail might be appropriate. Some people prefer hardcopy to reading on screens.

Courier

Delivering information by courier offers the same benefits as the postal system; however, it is faster and therefore suitable for time-critical items.

Internal mail

Large organisations may have an internal mail service that enables you to deliver documents at no cost and often very quickly. Many organisations with offices in different cities have a regular overnight courier service.

Print

Sharing information in print; for example, in a newsletter or journal article, means that a wide number of people have access to the data or findings. Many organisations have newsletters that employees and others can access. Brief information that is of general interest is best suited to being distributed in this way.

Example: distribute reports

Naren had finalised his research report and his manager asked him to distribute copies to the department managers in each state, in preparation for an internal meeting the next day. Naren decided that the quickest method was via email, as the 20-page document, which needed to be read by the managers prior to the meeting, could be attached to an email and sent out straight way.

Practice task 14

Case studies

Case study one:

It is 2.00 pm, and a company based in Brisbane has just completed a tender response that has to be received by a government department in Canberra by 4 pm the next day. The documents have to be submitted in hardcopy.

Case study two:

Hayley, who works in her company's head office in Melbourne, has to urgently get copies of a feasibility report to six senior managers located in Melbourne, Hobart and Adelaide. The report is in Word and is about 25 pages long.

Case study three:

Linh has written a proposal for her manager based on some research she has just conducted. Linh works from home, in Fremantle, and her manager is based in the centre of Perth. The report is not urgent but is quite long and includes a lot of photocopied examples from books as well as a Word report and an Excel spreadsheet.

For each case study above, state the best method of distributing the report and explain why this would be the best method.

3D Obtain feedback on the suitability of findings

How do you know that the research you have undertaken has effectively answered your initial research questions or problems? Was the information you provided suitable; was it sufficient and did it enable the user to make a decision? Feedback and comments from a variety of sources can be extremely useful in verifying your findings.

Sources of feedback

Sources of feedback can be internal or external. The work colleagues, who have requested the information or report, can be excellent sources of information. Sometimes it is appropriate to distribute draft reports to external committees or individuals for comment. Feedback can also be sought from those you regularly ask for advice such as a coach or supervisor at work, friends and family.

Different sources of feedback produce different types of information; for instance, an informal conversation, an email or a quality report. The challenge is to analyse this information and understand how it relates to the suitability of your own findings. Sources for feedback will each have their own benefits and disadvantages.

Comments from colleagues or customers

After findings and recommendations from a research project have been distributed to stakeholders and other interested groups, it is likely they will provide you with their thoughts, opinions and feedback on the issues covered in the report. Feedback from colleagues has benefits and disadvantages.

Here are examples of the benefits and disadvantages of colleague feedback.

Benefits
- Those who offer feedback often focus on specific issues that concern them, and these can highlight particular aspects of the report.
- If offered freely, then no time, effort or money will be required from you in gathering feedback.

Disadvantages
- Could be informally offered and therefore may not be detailed enough or recorded properly. You have to ensure it is recorded formally and ask questions to get the detail and breadth of feedback you need.
- Feedback may only be provided by some and not all colleagues, resulting in feedback being uneven or skewed.

Customer satisfaction questionnaires

Asking others what they think of the research findings in a structured way can produce constructive feedback on your research, and ensures the feedback you get is rounded, broad and useful in that it provides feedback in the areas you want or need it.

Here is an example of benefits and disadvantages of customer satisfaction questionnaires.

Benefits	Disadvantages
• Feedback will focus on areas that you have targeted. • Feedback will be rounded if a wide range of people are consulted and if questions are broad. • Feedback can be used in the future to assist yourself and others to conduct more effective research projects.	• Will take time, effort and possibly money. • Will require further analysis once feedback is gathered.

Audit documentation or reports

An audit is an examination of records to check their accuracy and is not limited to financial information. An audit can be conducted on any topic, including research papers, reports and other documentation that is produced because of a research project.

Audits involve detailed checking of information to make sure the results that are published or reported reflect what actually happened, so an auditor will want to see detailed, primary and secondary source information, and the research findings to make sure that they match up.

Here are some examples of benefits and disadvantages of using audit reports as a source of feedback.

Benefits

- An audit is likely to be detailed and in-depth.
- A successful audit will add credibility to your project and report.

Disadvantages

- The person auditing the results of the project may need to know a lot about the process and the topic researched if they are to verify the accuracy of the results.
- Copies of all source documentation need to be kept on hand if the audit is to take place. This may include survey results, transcripts of interviews, notes and journal articles.

Quality assurance data

Quality assurance data can provide useful information on a wide range of issues and can be instructive in terms of the effectiveness of research findings and recommendations or in targeting issues related to poor quality.

For example, a research report may suggest that sub-standard quality is the cause of a downturn in sales. Ongoing quality assurance data that demonstrates this even after a report has been issued will substantiate these claims. The same is true of problems resulting from non-adherence to quality processes.

Quality assurance data (like other sorts of information) can be a symptom of other problems, such as teamwork or leadership issues, which in turn may cause quality issues, which lead to a downturn in sales.

Here are some examples of the benefits and disadvantages of quality assurance data.

Benefits	Disadvantages
• Data may be general in nature and easy to convey to others. • Information is likely to be recorded or tracked over time, so improvements in quality data as a result of the report or recommendations being adopted should be easy to identify.	• Report could take some time to evaluate depending on production schedules and how data is captured and reported. • Poor results may be actually caused by other issues that are harder to diagnose.

Problems that occur

Another source of feedback that is similar to quality assurance data is information on issues such as items returned and customer complaints (or compliments). Provided this data is recorded and tracked properly, it can offer the same sorts of benefits and disadvantages as quality assurance data. Like quality data, problems can be indicative of a variety of different issues, so feedback from this source may mean that additional investigation needs to be undertaken.

Here are some examples of benefits and disadvantages of this type of feedback.

Benefits

- The feedback can reveal all sorts of issues, so care needs to be taken to find and address the real cause of the problem.
- Improvements can be identified if the feedback is recorded and tracked over time.

Disadvantages

- Customer feedback can take time to analyse and evaluate.
- Sufficient data needs to be collected in order for trends to be analysed and tracked over time.

Financial information and indicators

In many organisations, success is measured in financial terms. Therefore, if your report and its recommendations suggest changes be made to a process or other aspect of the organisation, it is possible the effects of this change could also be measured in financial terms.

For instance, a report may suggest that changes be made in the way that goods are packaged, and could advise that using a different provider of packaging materials should result in savings in the cost of purchasing packaging materials. If this recommendation is put in place and the effects of it measured, then the financial data that tracks costs should reflect a corresponding reduction in costs.

Here is an example of a benefit and disadvantage of using financial indicators as a source of feedback or information.

Benefit

If the data is linked to issues identified in the research findings then direct correlation between issues, recommendations and results may be seen.

Disadvantage

Financial indicators may not be available or relevant enough to be directly linked to aspects of your report.

Report feedback

You might receive formal or informal feedback from your manager and others about your report. The feedback you collect can be used to help you direct your future research tasks effectively. Some feedback may highlight problem areas that require further investigation or point to new areas that could also be explored. Other feedback may confirm your findings and indicate your research was sufficient.

It can be useful to keep a record of feedback you receive so you can refer to it when planning future research.

Formal feedback

Formal feedback can be provided in a number of ways. Four different methods for providing formal feedback follow.

Written critique

Written critique of your report that highlights aspects of it that are particularly useful or could have been more instructive or detailed; feedback like this can be written by one person or by a group, and may provide broad-based feedback or may be quite narrow in its focus.

Written advice

Written advice suggesting improvements, edits or further research to be undertaken, which have come about as a result of the information in your report.

Written acknowledgment

Written acknowledgment of work well done in the form of a private or publicly circulated email or letter (which could be posted on a noticeboard or given verbally at a staff meeting).

Meetings

Scheduled meeting where the research findings and report are discussed, evaluated and possibly acted upon.

Informal feedback

The effect of research findings and recommendations on work practices, activities and decision making can be tracked by formal methods (such as quality assurance data) or may be reported more informally; for example, through emails, conversations and simple observations. Feedback is not always reliable. For example, if you have received a verbal second-hand or third-hand report, you may have to verify its veracity before you act on it.

Here are three examples of types of informal feedback.

Conversations with others	Conversations with managers, team members, colleagues, other stakeholders or with those involved in the activities described in a report. All of these different individuals and groups can give you feedback on the content of the report, the impact any adopted recommendations are having or other more general issues related to the research project.
Second-hand reports	Second-hand reports (for instance, passed from the readers of the report to a colleague then to you) can be unreliable simply because they have been passed to you via another person or group and therefore may be edited or influenced by them. In these instances, try to verify the content of the feedback with the person or group from whom it originally came.
Audience reaction	Audience reaction immediately after or during a presentation can be a valuable source of feedback. However, presentations are often not the best place to receive detailed feedback and rarely give you time to fully understand complex issues. Try to allocate time for this at the end of a presentation or use a more formal feedback mechanism (such as a survey of attendees) as well as gauging informal reactions to what has been presented.

Example: continued feedback

Continued poor feedback on her organisation's management of customer service had led Nicola's manager, Irene, to ask Nicola (a customer service officer) to research and report on information concerning best practice customer service processes.

Irene read the detailed report that Nicola had prepared and shared it with customer service team leaders. After reviewing Nicola's findings, together they identified five areas where improvements could be made, and then implemented substantial changes in processes.

Irene sent Nicola an email thanking her for her work and advising her of the positive impact her research report had, detailing all the changes her report had triggered and how the management team believed they would translate into measurable improvements in service levels.

While Nicola appreciated the acknowledgment, her real reward was that improvements would be a consequence of her hard work.

Practice task 15

1. What are three examples of formal feedback?

2. What are three examples of informal feedback?

3. What is one benefit of using quality assurance?

Summary

1. Recommendations from your research can be presented using different structures and formats – the two most common presentation structures are written reports and oral presentations.

2. Common types of written reports are technical background reports, instructions, feasibility reports, recommendation and evaluation reports, primary research reports, technical specifications, proposals, business prospectuses or plans, organisational policies and procedures and correspondence of letter format.

3. Written reports usually contain several sections: summary, table of contents, list of figures, attachments or appendixes, glossary of terms, list of references and an index.

4. Oral presentations can be structured using the AIDA model, which is:
   - A – get the audience's Attention/build their Awareness
   - I – keep their Interest
   - D – make them to want to follow your recommendations (Desire)
   - A – motivate them to take Action.

5. Each of these presentation styles is appropriate for different situations.

6. The facts being presented, the audience size, audience location and the nature of the research are some of the factors that will influence which presentation format is most suitable for the research findings and recommendations.

7. The most appropriate method of distributing your findings will depend on the type of report and method of presenting research – written versus oral, intended audience, time lines and resources available.

8. The available methods for distributing findings include by person, email, online, fax, post, courier, internal mail and in print.

9. Feedback on your findings can be obtained from colleagues' or customers' comments, customer satisfaction questionnaires or interviews, audit documentation or reports, quality assurance data, incidents of problems occurring and financial information and indicators.

Learning checkpoint 3
Present information

This learning checkpoint allows you to review your skills and knowledge in presenting information.

1. What is the best way to structure recommendations and findings for the following three research tasks? Provide an outline (or headings) to be used in the report. You might like to prepare a table similar to this one.

Research tasks	Best way to structure the report
Your manager has asked you to conduct a search to find information on places to hold a conference for 200 people in Brisbane and to send the information to all board members.	
You have been asked to research ways to increase staff morale and present the information to staff.	
Your manager wants to know why the electricity account is more than in previous months.	

2. What is the best way to distribute the findings in these three research reports? You might like to prepare a table similar to this one.

Research	Best way to distribute the research findings
Your manager has asked you to conduct a search to find information on places to hold a conference for 200 people in Brisbane. The report needs to be read by all board members.	
You have been asked to research ways to increase staff morale and present the information to staff.	
Your manager wants to know why the electricity account is more than in previous months.	

3. What methods would you use to find out whether the research findings were suitable?

Research	Ways to find out whether research findings were suitable
Your manager has asked you to conduct a search to find information on places to hold a conference for 200 people in Brisbane. The report needs to be read by all board members.	
You have been asked to research ways to increase staff morale and present the information to staff.	
Your manager wants to know why the electricity account is more than in previous months.	

4. Why it is essential to receive feedback on research?