Pathways to Management and Leadership

Level 5: Management and Leadership

Unit 5002V1

Information-based Decision Making

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Information-based
Decision Making

Contents

About this workbook

The unit

The main purpose of this workbook is to support you as you study for the Chartered Management Institute Level 5 in Management and Leadership qualifications, so it specifically focuses on the content of the syllabus for Unit 5002V1 *Information-based Decision Making*.

This workbook provides underpinning knowledge and develops understanding to improve your skills as well as to prepare you for future assessment. If you are studying for the Level 5 in Management and Leadership qualifications, then you will be assessed by your approved centre on 'your knowledge and understanding of' the following learning outcomes:

1. Be able to identify and select sources of data and information.

2. Be able to analyse and present information to support decision making.

3. Be able to communicate information that supports decision making.

The aims of this workbook

This workbook aims to help you learn how to:

- understand the sources of data and information

- analyse and present information for decision making

- implement effective decision making

- understand the communication process

- use meetings as a channel to communicate decisions.

Syllabus coverage

The table below shows which sections of the workbook address each of the assessment criteria of the qualification syllabus.

Unit 5002V1 syllabus coverage	Addressed within section:
Information-based Decision Making	
1.1 Examine the nature of data and information	1
1.2 Evaluate relevant sources of data and information	1
1.3 Discuss the criteria for selection of data and information	1
1.4 Identify the legal requirements relating to the collection, use and storage of data and information	1
2.1 Evaluate the decision-making models which are used to support decision making	3
2.2 Identify those to be involved in analysing information and decision making	3
2.3 Evaluate methods of presenting decisions made	2
3.1 Evaluate methods of communicating decisions	4,5
3.2 Discuss the processes for implementing a communications method	4,5
3.3 Evaluate the implementation of the communications method	4,5

Getting started

It is often said that the better the quality the information obtained the better quality the decision. So it makes sense to examine the quality of information we use to make our decisions as managers. Having explored the information we have sourced, we often have to analyse it and make some sense of the information we've obtained. There are a variety of methods we can use to do this but it's often the case of using the right tool for the job.

Having analysed information and prepared it into a form that is useful to us and others, we often have to then apply it to make decisions. Again, there are a variety of techniques that we can use to do this, so it's helpful to understand the relative merits of each.

An important aspect of decision making is how the decision needs to be communicated. There is a generic process that can be used for all communication and this is especially helpful for decision making, as it encourages you to think about message quality and communication channels.

An important channel for communicating the results of information analysis and decisions is a meeting. However, meetings can be ineffective if not facilitated correctly, so it's important to identify best practice in this area.

This workbook explores how these various components of managing information, decisions and communication interact and relate to each other.

How to use the workbooks

The workbooks provide ideas from writers and thinkers in the management and leadership field. They offer opportunities for you to investigate and apply these ideas within your working environment and job role.

Structure

Each workbook is divided into sections that together cover the knowledge and understanding required for that unit of the Chartered Management Institute Level 5 in Management and Leadership. Each section starts with a clear set of objectives that identify the background knowledge to be covered, and the management skills in the workplace that enable you to demonstrate this knowledge. You do not have to complete the sections in the order they appear in the workbook, but you should try to cover them all to make sure that your work on the unit is complete. There are self-assessment questions at the end of each section that allow you to check your progress. You may want to discuss your answers to these questions with your line manager or a colleague.

Activities

Throughout the workbooks there are activities for you to complete. These activities are designed to help you to develop yourself as a manager. Space is provided within the activities for you to enter your own thoughts or findings. Feedback is then provided to confirm your input or to offer more ideas for you to consider.

To get the best from the workbooks, you should try to complete each activity fully before moving on. However, if the answer is obvious to you because the issue is one you have encountered previously, then you might just note some bullet points that you can then compare quickly against the feedback. You may sometimes find it difficult to write your complete response to an activity in the space provided. Don't worry about this — just keep a separate notebook handy, which you can use and refer to as needed.

Try not to look at the feedback section before completing an activity. You might like to cover up the feedback with a postcard or piece of paper while you are working through an activity.

Timings

Timings are suggested for each section and activity, although it is important that **you** decide how much time to spend on an activity. Some activities may occupy only a few moments' thought, while others may be of particular interest and so you might decide to spend half an hour or more exploring the issues. This is fine — the purpose of the activities is to help you reflect on what you are doing, and to help you identify ways of enhancing your effectiveness. It's always worth writing something though even if it's brief — the act of writing will reinforce your learning much more effectively than just referring to the feedback.

Scenarios

There are scenarios and examples throughout each workbook to illustrate key points in real workplace settings. The scenarios cover a wide range of employment sectors. As you work through, you might like to think of similar examples from your own experience.

Planning your work

The reading and reflection, scenarios and activities in each section of the workbooks are designed to take around two hours to complete (although some may take longer). This is a useful indicator of the minimum length of time that you should aim to set aside for a study session. Try to find a quiet place where you will not be interrupted and where you can keep your workbooks, notes and papers reasonably tidy. You may also like to think about the time of day when you work best — are you a 'morning person' who likes to get things done at the start of the day, or do you work better in the evening when there may be fewer disturbances?

Preparing for assessment

Further information on assessment is available in the Student Guide produced as part of the *Pathways to Management and Leadership* series. If you have any further questions about assessment procedures, it is important that you resolve these with your tutor or centre co-ordinator as soon as possible.

Further reading

Suggestions for further reading and links to management information are available via ManagementDirect through the Study Support section of the Institute's website at http://mde.managers.org.uk/members. Alternatively, email ask@managers.org.uk or telephone 01536 207400. You will also find titles for further reading in the Bibliography at the end of this workbook.

Section 1 Identifying sources of data and information

Time required: about 2 hours

Learning outcomes

By the end of this section you should be able to:

1.1 Examine the nature of data and information

1.2 Evaluate relevant sources of data and information

1.3 Discuss the criteria for selection of data and information

1.4 Identify the legal requirements relating to the collection, use and storage of data and information.

The information challenge

We live in an age of information overload. As well as being bombarded with it from the media and from advertising, we have the internet at our fingertips, a gateway to a seemingly infinite amount of information.

> *With so much information now online, it is exceptionally easy to simply dive in and drown.*
>
> (Alfred Glossbrenner, computer communications guru)

In our daily lives, we filter out much of the information around us. We are selective, processing only what is of interest to us. Managers have to be equally selective; but instead of focusing on what is of interest to them, they have to focus on the information that is useful to getting the job done — and ignore the rest. The challenge is being able to stay focused on your information needs. Just because there's a great deal of information doesn't mean it's relevant, useful or that it warrants any of your time.

The Chartered Management Institute has produced two checklists on managing information and knowledge:

- Checklist (150): Handling information — avoiding overload
- Checklist (166): Knowledge management.

What is information?

The words 'data' and 'information' are often used as though they mean exactly the same thing, but there is a difference.

- **Data** are the undigested facts and figures that are collected on innumerable subjects. You may gather data yourself or use data that have been gathered by other people.

- **Information** is data that you have processed or selected so that it meets your requirements.

Below are two examples that illustrate the difference.

- A manager of a service providing meals-on-wheels in the community is preparing to plan how the service should develop over the next year. He asks customers to complete a feedback form that asks questions about how they found the service. The completed forms provide the 'data'. If the manager then analyses the data and summarises the results, the data is turned into information, which could answer questions such as how satisfied are customers with the service, has their satisfaction increased since the last survey and what are the main causes of dissatisfaction?

- While at a conference, a manager attended a seminar on the use of thermal imaging for electrical fault finding. She could see that it offered potential for giving advance warning of insulation breakdown or faulty components. She took the reports of the process (the data) and selected the findings that were relevant to her own type of plant (turning the data into information).

The process of turning data into information can be as simple as a person identifying that something they hear will provide useful information for a particular purpose. It doesn't necessarily have to be written down.

Therefore, the commonly used term 'information overload' should more accurately be called 'data overload'.

Information into knowledge

Often, information by itself is not enough on which to act. It needs to be combined with a manager's experience and insight (sometimes referred to as 'tacit knowledge') to give the knowledge that enables effective action. This concept of 'knowledge management' (i.e. how the combination of information and tacit knowledge that people have in their heads can best be captured and used) is relatively new within organisations.
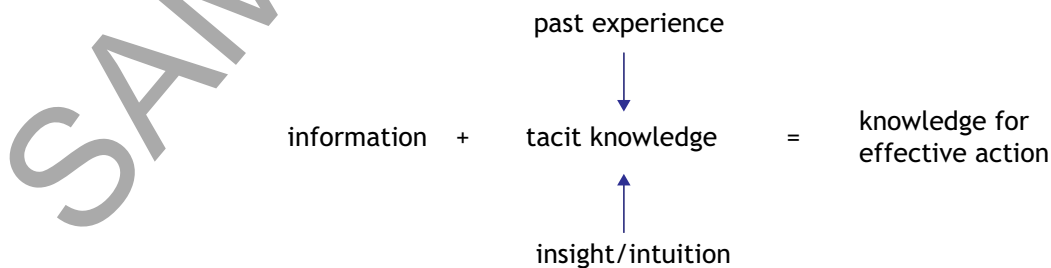
Fig. 1.1: Knowledge management (reproduced with permission from Elsevier, Pergamon Flexible Learning, *Using Information for Decision Making*, 2005)

Types of information

There are two basic types of information. Quantitative information is expressed in figures. It answers questions such as:

- How much?
- How many?
- How frequently?
- How likely?
- How quickly?

Quantitative information is usually obtained from analysing large amounts of numerical data. It is objective, in that you are likely to get the same information, no matter who analyses the figures.

Qualitative information is concerned with things that cannot be measured in numerical terms. It answers questions such as:

- What?
- Why?
- How?

Qualitative information is subjective. It reflects the knowledge and perspective of the individual who provides it. It gives you depth, while quantitative information gives you breadth. There are times when each type of information is useful.

Activity

Activity 1.1   **(about 5 minutes)**

Below are two information needs. Note down the types of qualitative and quantitative information you would want in order to make a decision.

1. Information needed to choose which style of illustration to use in a promotional brochure:

2. Information needed to select a candidate to appoint for a job:

Feedback

> 1. To choose the promotional brochure you would probably discuss styles of illustration with people who had experience of the market. You might also show them to a small group and ask for their reactions. In either case, you would receive qualitative information. You would also want to compare costs (quantitative).
>
> 2. If you made the appointment solely on performance in a test, you would be using quantitative data. If you took other things into account, such as the impression that the applicant made at interview, you would also be using qualitative data. An assessment centre lies somewhere between the two, as assessors try to be as objective as possible and translate observations into quantifiable scores.

Transforming qualitative data into information

Qualitative data do not quantify the findings. This may mean that there is no easy way to check these data. You have to rely on the accuracy and adequacy of your source. As a consequence, you must select your source with care, and also be prepared to ask the right questions.

Activity

Activity 1.2   (about 10 minutes)

In each of the following situations, decide whether the data source is adequate and accurate. If it isn't, what other source could you use?

1. You want to write to the research and development manager of a company to discuss the possibility of setting up a project with your own organisation. You ask a friend who used to work there for his name. He says, 'It's Hammer. Or Hanner. No, it's definitely Hanner, Richard Hanner. Or was it Michael? I'm almost positive it's Hanner, but I can't be sure of his first name.'

2. You want to find out some information about a conference centre you are planning to hire for the launch of an upmarket new product. It's important that the venue contributes to the sense of quality and style you want to associate with the product. You receive a set of glossy brochures from the centre, in which the accommodation looks sensational.

Feedback

1. *This information is neither reliable nor adequate. You need to telephone the organisation and ask for his full name.*

2. *This information is probably adequate, but it may not be reliable. The accommodation was probably newly decorated for the photographs in the brochures. You need to visit the venue to check on its current appearance, or send someone else with a checklist of points on which to report back.*

When you want qualitative information, you often need to ask questions before you can get the information. For example, supposing you sent someone to look at the conference venue. You may expect responses to a range of questions on their return, including those shown in the table below.

■ Was the reception area tidy? ■ Would you describe him as helpful? ■ Did you get the impression that they would come up with the goods?	*These are closed questions, which require a yes/no answer or an answer from a small range of options. They are useful for clarifying details.*
■ What were the seminar rooms like? ■ What impression did you get of her? ■ When do you think they would be able to deliver?	*These are open questions, which cannot be answered in one or two words and are useful if you want your informant to supply more information.*
■ So which of the two suites you've described would you actually recommend? ■ You say you might book the dining room for special occasions — would you eat there on a regular basis?	*These are probing questions, which ask for more information. They are useful if you want to go into more detail.*

Activity

Activity 1.3   (about 5 minutes)

Identify an occasion when you've used qualitative information to make a decision. What made you confident that you could rely on the information?

Feedback

A combination of faith in the source, instinct and plausibility often gives you the confidence to rely on quantitative information. What's important is that, where necessary, you are willing to challenge the information until you are confident.

Transforming quantitative data into information

Quantitative data are based on figures. Many people, including some managers, have an aversion to numbers. When they see a chart containing figures, they assume that it will be difficult to understand. They may not even attempt to make sense of quantitative data, but rely on somebody else to provide a verbal translation and interpretation.

In order to turn quantitative data into useful information, it's necessary to find patterns and meaning in the figures, by using statistical techniques. In Section 2 we explore some ways of using statistical methods to make sense of figures.

Collecting data

Data can come from two types of source:

- Primary data is gathered by you (or your team) for your own purposes. It could include survey results, commissioned reports and notes of meetings with consultants.

- Secondary data has been gathered by other people for their own purposes. It includes, among many other things, journals, published reports, internal sales figures and commercial databases.

Primary data is likely to be more directly relevant and up to date than secondary data. However, the people who put together secondary data have greater resources available to them and are often able to provide more breadth or depth of coverage than you can manage yourself. If relevant secondary data already exists, it will usually be quicker to use it than to do your own research. Published data will usually have gone through some sort of checking process, so it's often more reliable than primary data. However, you should be aware of any bias on the part of those who prepared it. Finally, it's usually much cheaper to refer to existing data than to find everything out for yourself.

When scientists begin a piece of research, they always begin by searching the literature and finding out about previously completed work in the field. This has two benefits:

- It prevents them wasting time unnecessarily repeating work that has already been done.

- It provides a context in which their own discoveries can be understood.

In most situations where you need to gather data, you should follow this example. Gather secondary data first. Then, if

necessary, extend this secondary data with primary data of your own.

You'll now look in more detail at collecting:

■   secondary data

■   formal primary data

■   informal primary data.

Collecting secondary data

The gathering of secondary data is often described as desk research, because the data can be accessed by someone sitting at a desk. The data can come from a variety of sources.

Activity

Activity 1.4	(about 10 minutes)

The following list covers the major sources of secondary data. For each source, think of at least one example you have used yourself.

Secondary data	Example
Facts and figures collected by other departments within your organisation	
Reference books	
Databases, available online and on CD-ROM	
Journals	
Newspapers	
Published reports	
Government statistics	
Business centres and libraries	
Research organisations	

Feedback

Your list will reflect the nature of your organisation, and the work you do within it. If you couldn't think of at least one example for each of these types of source, it might be that you're not using a wide enough range of secondary data. If that's the case, you should make it a priority to investigate other relevant sources.

There are three 'golden rules' of accessing data.

1. Know what you're looking for: It's important to think through what information you need before you begin to trawl through data sources. It's often useful to draw up a briefing, as if you were going to ask a member of your team to find the information, as this will force you to think through exactly what you're looking for.

2. Use all the clues provided to find your way around: Most sources of data provide some clues on where you can find the information you need. If you're reading a book, use the index and contents page. If you're looking at a journal, read the abstract at the beginning of an article and scan the sub-headings. Don't read more than you have to.

    If you're consulting a computer database, find out appropriate search terms. These may be indexed for you. Different databases and search engines have their own rules, and it's worth spending ten minutes finding out what these main rules will allow you to do. For example, if you use one of the search engines on the internet, you can customise your search by selecting these options:

    ■ match any term

    ■ match all terms

    ■ match 2, 3, 4 or more terms

    ■ show loose/fair/good/close/strong match.

    You can ask for the results to appear in standard, summary or detailed format. For example, by keying in 'bank -river' (note the space between 'bank' and the minus sign) you can specify that you want references to banks that do not contain references to rivers, which could be useful if you were searching for data on banking systems. By keying in 'med*' you can specify that you want references to any words that start with these letters, such as medicine, medical, medicinal, and so on.

    Remember that all search tools are provided to make your life easier. They are usually easy to understand, so do use them.

3. Don't get side-tracked: Usually, due to time constraints, you have to stay focused on finding what you're looking for. However, when time does permit, a lot can be gained from scanning data from a wide range of sources to keep you up to date with the current situation.

Collecting formal primary data

Primary data are data that you collect yourself or arrange for other people to collect on your behalf. You can do this in a formal way, by using various types of surveys, interviewing experts or even setting up a full research project. You can also collect primary data by informal methods, through the use of networking. You'll look at the formal methods first:

■   surveys

■   interviews.

Surveys and questionnaires

A survey involves collecting data from a large number of subjects, which can then be analysed statistically. The more subjects you can include in your survey, the more accurate it will be — and the more expensive. You need help from professional researchers and statisticians if you're going to undertake a survey of any real size.

Most surveys involve questionnaires. These can be administered face to face or by telephone, email or post. All four methods have their advantages and disadvantages, as shown in Fig. 1.2.

	Face to face	Telephone	Postal	Email
Response rate	controlled by interviewer	controlled by interviewer	unknown until replies received	unknown until replies received
Cost	high	high	low	lowest
Recruitment	controlled by interviewer	controlled by interviewer	self-selecting	self-selecting
Length of interview	as agreed with interviewee — can be up to an hour	as agreed with interviewee — can be up to an hour	usually up to 45 minutes — shorter likely to give higher response rate	usually up to 45 minutes — shorter likely to give higher response rate
Complexity of questions	can be high	can be high	must be simple	must be simple
Interviewer bias	can be present	can be present	absent	absent
Reaching dispersed sample	usually limited	good	good	good

Fig. 1.2: Advantages and disadvantages of questionnaires (adapted from Institute of Management Foundation, 1997)

Activity

Activity 1.5   (about 5 minutes)

How would you administer the following questionnaires: face to face, by phone, post or email?

1. To explore in-depth the attitudes of important customers to your services.

2. To identify the names of as many people as possible who are worth adding to a mailing list for new product or service information.

Feedback

1. *Since you need in-depth information from a small number of people, it would be better to speak to them face to face.*

2. *Here you need to ask only much more basic questions. You are also interested in getting responses from as many people as possible, so a postal or email questionnaire would be best.*

Questionnaires are usually sent only to a sample of people, not to everyone whose views you would like to know. A sample can be random, or based on quotas, which include certain numbers of people who come into different categories, such as male and female, age groups, geographical location or social groups.

Before you write a questionnaire, you should work out what you are going to do with your results. Think how you will analyse your data and whether you want everyone to answer all the questions.

The following checklist contains some points to remember when designing questions.

■ Don't ask too many questions. Think how much time the respondent will be prepared to spend on the questionnaire.

■ Ask easy questions at the beginning, sensitive questions in the middle or at the end and classification questions (such as age group) at the end.

■ Use a simple, logical structure that will not confuse people.

■ Avoid leading questions, which will influence the answers you get. (For example, 'Is this the best customer service you have received in the last two months?' plants the idea of the service being the 'best'. The question would be better phrased as follows: 'How do you rate the standard of service received?')

- Avoid jargon.

- Avoid words like 'reasonable' or 'satisfactory', which could be interpreted in many ways.

- Avoid multiple questions.

- Remember that open questions take much longer to code and analyse — so use them with care.

Questionnaires often ask about people's attitudes. The two types of question most commonly used in questionnaires are known as Likert scale and semantic differential questions.

In a Likert scale question, you write a statement and ask for a response from a range of options such as:

- strongly agree

- slightly agree

- neither agree nor disagree

- slightly disagree

- strongly disagree.

You then apply a numerical score (ranging from, for example, 5 to 1) to the answer. If you mix positive and negative statements, such as:

- I enjoy meeting new people

- I dislike talking to people I have just met

then obviously, you must remember to reverse the scoring system where appropriate, so that a 'strongly agree' answer to the first question scores the same as a 'strongly disagree' answer to the second one.

In semantic differential questions, you offer respondents a sliding scale between two opposite answers. In the following example, respondents circle the appropriate number:

Was the receptionist who took your booking:						
friendly	1	2	3	4	5	unfriendly?

If you design a questionnaire, make sure to pilot it before you send it out. This should allow you to identify any confusing questions or other problems.

Interviews

An interview can fall anywhere on a continuum between being structured to being unstructured.

Structured interviews are the same as face-to-face questionnaires. Interviewers have a set list of questions to ask and must try not to influence the answers they get. In semi-structured interviews, interviewers have a set list of topics to cover, but have more freedom in terms of the way they ask the questions. In unstructured interviews, interviewers start out with topics to cover, but can allow the direction of the interview to

change if interviewees come up with other ideas that look as though they are worth exploring.

As you move from a structured towards an unstructured format, the influence of the interviewer increases. This has both advantages and disadvantages. You can often get more in-depth answers from unstructured interviews and perhaps discover more about why and how things happen. On the other hand, the answers you get may be very difficult to analyse statistically. Some researchers begin with a few unstructured interviews that help them to identify what exactly they want to investigate. Then they move to a structured format and ask a larger number of people a simpler set of questions.

You can interview one person at a time or talk to a group of people at once. Group interviews, which are also known as focus groups, are useful for investigating attitudes. The interaction between the people in the group can bring out more data than you might get from one-to-one interviews with the same people.

For example:

> *Interviewer: I'd be interested in hearing what you thought of the cover.*
>
> *A: It was all right.*
>
> *B: Yes, it was quite attractive. Very bold.*
>
> *C: I thought it was OK, but the colour was rather bright for my taste.*
>
> *B: Shocking pink, that's what we used to call that colour.*
>
> *A: I actually preferred the other cover you showed us, the grey one. That was really nice.*
>
> *Interviewer: Did anybody else like the grey colour better than the pink?*

Collecting informal primary data

You'll now take a look at some of the informal ways you can gather primary data.

Networking is the practice of using a wide range of professional and personal contacts to obtain information. It cuts across organisational hierarchies and can give you access to facts and ideas that you wouldn't otherwise have encountered. Your contacts may be individuals you've encountered:

- at work — in your present organisation, through your previous employment, through training courses and inter-organisational contacts, etc.

- because they are members of your family, or friends of family members

- through leisure activities

- from your time in education, at school, college or university.

Use your network to provide introductions to new areas of information. Useful questions to ask include the following.

■ Where could I read about the latest research in this area?

■ Which organisations are active in this field?

■ What are the key books or references?

■ Who are the key people in this field?

You can then make contact with more formal, and verifiable, sources of information.

There are dangers in relying too much on your network to provide information. Just because you know someone doesn't mean that they are necessarily the best person to offer information.

Another problem with using networks is that they can't always be relied upon to give information in time. You may not be able to wait until an ex-colleague has dinner with his squash partner next week and asks a crucial question on your behalf. For this reason, networking is often a more useful source of information in the early stages of an investigation, when you're not subject to time pressure.

If you take from your network, you must also give to it. This means that you must be prepared to provide information, advice and contacts when asked. If you don't co-operate in this way, sooner or later people will get fed up with helping you.

Quality information

Information has to be fit for the purpose for which you need it. It should be:

■ relevant

■ current

■ adequate

■ timely

■ reliable

■ cost-effective.

You'll now look at each of these characteristics in turn.

Relevant information

Information is gathered for a purpose. Therefore the information that you gather must be relevant. It sounds obvious, but it's very easy to make the mistake of collecting information for its own sake.

Scenario

Wasting time

A regional development manager for an IT firm had to arrange a conference for up to 50 account managers in the region. The

meeting was to explore plans for the provision of support services to customers. He had a budget of £1,500.

'I was trying to choose a hotel for a small conference. I asked Chris to phone round and see what the choice was in the area. Two days later, she presented me with a dozen glossy brochures. I spent a morning looking through them, staring at pictures of swimming pools, restaurants, gyms and landscaped gardens — and reading about simultaneous translation facilities and videoconferencing suites. I was wondering whether I preferred a sauna or a jacuzzi and whether it was better to have an à la carte or buffet lunch. Then I suddenly came to my senses. All I really needed was a room that would hold 50 people, a video, a rostrum and a flipchart, with access to a reasonably priced restaurant at lunchtime. Everything else was irrelevant.'

The scenario illustrates how easy it is to waste time if you don't stay focused on your objective, and allow irrelevant information to flood in. Irrelevant information is a waste of your time. You must be clear about *why* you want the information, so that you can specify *what* information it is that you need.

These two steps will make sure that you avoid being side-tracked by irrelevant information, as in the following example.

Scenario

Focusing on information needs

The manager trying to choose a hotel conference could have saved a lot of time by asking Chris to complete the following matrix.

Purpose: To choose a hotel for the regional account manager conference (needs to be within a 20-mile radius)

Hotel	Hold 50 people?	Video?	Rostrum?	Flipchart?	Price of lunch?	Other comments
1. Imperial Court	✓	✓	X	✓	£15	Easy parking
2. Palm Beach	✓	✓	✓	✓	£18	No lift

The most common reasons given for not being specific about information needs are that not enough time is spent thinking it through and they're not sure what's wanted.

Current information

You need information that's relevant to the current situation — not a situation that existed in the past. Your information should be obtained from data that is as up to date as possible. Most data has a limited shelf-life.

Activity

Activity 1.6   **(about 10 minutes)**

Would you consider that these types of data were useable?

	Yes	No
1. Last year's catalogue from an office equipment supplier:		
(a) if you were working out the budget for re-equipping the office	☐	☐
(b) if you were working out a new layout for the desks and filing cabinets in the office.	☐	☐
2. A six-month-old copy of a trade journal/ professional magazine:		
(a) if you were deciding whether to accept an invitation to be interviewed by the journal/magazine	☐	☐
(b) if you wanted to place an advertisement	☐	☐
3. Last year's copy of an expensive yearbook produced by your industry's trade association:		
(a) if you were choosing key figures in the industry to invite to a presentation	☐	☐
(b) if you wanted to check the details of a safety initiative described in the yearbook.	☐	☐

Feedback

1. (a) *No, because the prices would probably have changed.*

   (b) *Here you would be interested only in the dimensions of the items, which would be unlikely to have changed. So last year's catalogue would be OK.*

2. (a) *Assuming the publication has not undergone a change of editorial policy, this would probably give you the information you needed.*

   (b) *No, because advertising rates may have changed in the last six months.*

3. (a) *No, because these key figures may not still be in the same jobs.*

   (b) *You could certainly use the out-of-date yearbook to check the details of the initiative, but you would also be wise to consult a current copy for updated information.*

It is usually cheaper and more convenient to use the data you have to hand, rather than search out new data. In some circumstances, old data can still yield valuable information. In other situations, they can be completely misleading.

Adequate information

You need to make sure that you gather enough information to meet your requirements.

Don't assume that you will get all the information you need from one individual or organisation.

Activity

Activity 1.7	(about 5 minutes)

What information might you need if you were considering a job application for a post in your team? Where could you get this information?

Information	Source

Feedback

Compare your answer with this:

Information	Source
■ *academic qualifications*	*CV/application form*
■ *previous experience*	*CV/application form, discussion at interview*
■ *ability to do the job*	*discussion at interview, psychometric tests, references*
■ *communication skills*	*CV/application form, impression given at interview*

Timely information

You have to be able to gather information by a particular date. This can affect the type of data you use, and the source you get that data from.

You often have to strike a balance between time, cost and quality. If you can't get the information you need in order to

make a decision at the time you want it, the following options may be open to you:

- Pay a financial premium to get the information faster.
- Make your decision on the basis of inadequate information.
- Delay your decision until the appropriate information is available.

What you do in a situation depends on the urgency of the decision and whether its importance justifies paying extra to get the information more quickly. Sometimes, you have to make such a quick decision that you can't afford the time to get any but the most basic information. And in some situations it's not possible to get information more quickly by paying more for it.

Reliable information

You need to be able to trust your information. When you look at a piece of information, ask the following questions:

- Has it been put together by someone who really understands the decision and its implications?
- Is there any reason why anyone should try to mislead you?
- Are there any other barriers to getting accurate information?

If you suspect that you're not getting an objective view on the situation, go back to the original data and draw your own conclusions.

Cost-effective information

You have to balance the benefits of getting the right information against its costs.

Activity

Activity 1.8   **(about 5 minutes)**

1. You want to purchase a new filing cabinet for your non-confidential papers. What could be the cost of choosing the wrong cabinet because of lack of information about its features?

2. You have been asked to decide whether a letter dismissing a member of staff should be sent out in its present form. What could be the cost of sending out the letter if it proved to be incorrect?

Feedback

Here are some possible costs of choosing the wrong filing cabinet:

- *reduced efficiency, if it becomes difficult to get access to your papers*

- *cost of replacement filing cabinet*

- *cost of removing the wrong filing cabinet.*

If you spot your mistake quickly, your costs will not be much more than the price of a replacement cabinet.

However, if you make the wrong decision about the letter of dismissal, you could find that your organisation is involved in paying for the staff time, legal fees, bad publicity and compensation payments of a case for wrongful dismissal. These costs could easily amount to many thousands of pounds.

Clearly, it is worth investing much more time in finding out if the dismissal letter was correct than in getting the information about the filing cabinet.

The cost of getting the right information can include:

- *the cost of the information itself, including fees for using a database, consultancy fees, costs of books, journal subscriptions or conference fees*

- *the cost of staff time*

- *lost opportunity costs of other more profitable activities that could have been undertaken instead.*

In order to be cost-effective, the cost of getting any information must clearly be less than the benefits from using it.

Activity

Activity 1.9   **(about 5 minutes)**

Use the following checklist to review information that you have recently used.

Before collecting the information did I:

- identify clearly the purpose of collecting the information?
                                                                   Yes/No

- set a deadline for collecting the information?   Yes/No

- decide how much time and resources to invest?   Yes/No

Am I confident that the information collected:

- is all relevant?   Yes/No

- is enough to meet the purpose?   Yes/No

- is sufficiently up to date?   Yes/No

- is reliable?   Yes/No

- has been cost-effective to collect?   Yes/No

Feedback

You may find it helpful to use this checklist as a reminder whenever you are gathering information or assessing the quality of the information you plan to use.

Managing data and information

Collecting data and information is often only the first stage. You then have to decide what to do with it. It needs thoughtful maintenance if it's to remain useful and, where personal details are involved, to remain within the law. Here, we look at:

■   the Data Protection Act

■   storing data

■   retrieving data

■   using electronic databases.

The Data Protection Act

If you store data that contain the personal details of individuals, or information that is of a sensitive nature, you must make sure that they comply with the Data Protection Act 1998.

The Act lays down rules about the handling of personal information and how it may be obtained, held, used and disclosed Personal information can include details such as names, addresses, customer history, and so on. Although called the Data Protection Act, it actually protects individuals, rather than data. It provides the subjects of personal data with mechanisms for gaining access to that data, challenging any misuse or abuse of that information and seeking redress if they suffer damage or distress as a result of any breach of the law.

The Data Protection Act 1998 is based around the following eight principles:

1.   Personal data shall be processed fairly and lawfully. Personal data processing may take place only if specific conditions have been met. These include the 'data subject' giving consent or the processing being necessary for the legitimate interests of the data controller.

     Additional conditions apply for personal sensitive data such as ethnicity, religion, trades union membership.

2.   Personal data shall be obtained for only one or more specified and lawful purposes.

3.   Personal data shall be adequate, relevant and not excessive in relation to the purpose or purposes for which they are processed.

4.   Personal data shall be accurate and, where necessary, kept up to date.

5. Personal data processed for any purpose or purposes shall not be kept for longer than is necessary for that purpose or those purposes.

6. Personal data shall be processed in accordance with the rights of data subjects under this Act.

7. Appropriate technical and organisational measures shall be taken against unauthorised or unlawful processing of personal data and against accidental loss or destruction of, or damage to, personal data.

8. Personal data shall not be transferred to a country or territory outside the European Economic Area unless that country or territory ensures an adequate level of protection for the rights and freedoms of data subjects in relation to the processing of personal data.

The Act applies to all personal information held in 'any relevant filing system' so this includes paper as well as databases, spreadsheets and word-processing folders.

Activity

Activity 1.10   **(about 5 minutes)**

Which principles of the Data Protection Act 1998, if any, are relevant to the following activities?

1. Throwing a floppy disk containing personal details of employees on to a skip.

2. Using the results of an anonymous survey of people's spending habits to plan an advertising campaign.

3. Using out-of-date data to assess customers' credit ratings.

Feedback

1. *This could give unauthorised people access to the data and is forbidden by the seventh principle.*

2. *Since these data are anonymous, they are not covered by the Act, which deals only with information about identifiable individuals.*

3. *The fourth principle states that data should be accurate and, where necessary, kept up to date.*

If you have any concerns about the way personal data is stored on computer in your department, you must improve your procedures.

For more information about your obligations under the Data Protection Act, refer to the following website: www.ico.org.uk

Storing data

Once you have used the information, you have to decide what to do with it. Do you throw it away or file it for future reference? If you will need the information to monitor the results of your decision, then obviously, you have to keep it. However, you may well have collected a lot of material that could be useful in the future.

The storage of information takes space, time and money. You have to balance this use of resources against the time and money it would take to find the information if you needed it again.

Activity

Activity 1.11	(about 5 minutes)

Look at the data you have collected for a particular purpose. Note down the purpose and then ask yourself the following questions:

Purpose	Your response
When am I going to need these data again?	
Will they still be current at that time?	
What are the costs of storing them?	
What are the costs of re-acquiring them?	
Could anyone else in the organisation use these data?	
Are they already duplicated within the organisation?	
Is there a central site where I could make these data available?	
How will I make sure that the storage conforms to the requirements of the Data Protection Act?	

Now decide what you will do with the data.

Feedback

> *It's not always easy to balance the costs of keeping or re-acquiring data. You may not be comparing like with like. You may, for example, have to compare the financial cost of buying an obscure trade directory with the cost to your time (and temper) of having such a large collection of books that you cannot find a particular volume when you need it.*

Retrieving data

If you do decide to store data, you must be able to access them again easily when you need them. If not, you might as well have thrown them away in the first place. There are two connected aspects to the storage and retrieval of data. You need:

- a system in which you can place your data
- to identify your data.

Storage systems can use various methods of classification. Paper-based records can be arranged:

- by subject
- alphabetically
- by frequency of use
- by date
- by reference number.

Some records are even stored by size. The method of classification is related to the reason why the records are kept. Unless it is part of an organisation-wide system, it may have been chosen by the person who has to use the system most regularly. It may, however, be completely impenetrable to other occasional users.

A good data storage system makes it easy to extract the information you need. It should also be consistent with the other systems in the organisation, so that data can be linked. And it should also make the recording of data as simple and automatic as possible.

Using electronic databases

Data that are stored on an electronic database can be used much more flexibly. A database record is like a form, in which a box (called a field) can be indexed and searched. There are several types of field:

- a character (or alphanumeric) field contains words, such as names, streets, towns or codes
- a numeric field contains figures, such as amounts of money, which can be used for calculations
- a date field contains dates
- a logic field contains yes/no or true/false answers to questions such as 'Service agreement?'.

You can instruct the database to show you any records in which, for example, the town field = Birmingham, or the amount paid is greater than £200. This provides instant access to information. When a database is designed, it's essential that thought is given to how it will be used in future. As long as the appropriate fields are set up, the information they contain can be retrieved and analysed.

Activity

Activity 1.12   **(about 20 minutes)**

Look at the databases used in your department and discuss them with the people who enter data and extract information.

1. How easy is it to enter data?

2. How easy is it to extract information?

3. Could these databases yield more (or more useful) information than you are taking from them at the moment?

Feedback

Some commercially designed databases are very sophisticated indeed. The specifications may be much higher than you actually need. This could mean that staff are entering unnecessary data. On the other hand, it could also mean that you could get much more information from them, if you used their facilities more fully.

Summary

Now that you've reached the end of this section you should be able to

1.1 Examine the nature of data and information

1.2 Evaluate relevant sources of data and information

1.3 Discuss the criteria for selection of data and information

1.4 Identify the legal requirements relating to the collection, use and storage of data and information.

Self-assessment questions

Use these questions to check whether you have understood the key issues in this section. If you are not sure, or really don't know the answers, this suggests you need to work through parts of this section a second time.

1. What is the difference between data and information?

2. What does a manager often have to combine with information to obtain knowledge for effective action?

3. What are the advantages and disadvantages of collecting primary data?

4. How useful is networking as a concept for gathering information?

5. What are the five characteristics of information that is fit for purpose?

6. What types of data are covered by the Data Protection Act 1998? Does it include paper filing systems?

If you could answer the self-assessment questions, then you are ready to move on.

In the next section you'll look at different methods of analysing and presenting data to meet people's information needs.

Section 2 Analysing and presenting information

Learning outcome

By the end of this section you should be able to:

2.3 Evaluate methods of presenting decisions made.

Analysing and presenting quantitative information

A mass of numbers often has very little meaning and therefore needs to be presented in a way in which instant conclusions can be drawn. You'll briefly explore the following methods, which can be used to find pattern and meaning in numbers:

- averages
- grouping your data
- distribution
- trends
- correlation.

You may already be familiar with some or all of them. If so, move on to the next part of the material.

Averages

Imagine that you want to know how long to allow for a particular part of a process. You check back in the records and find that, on the previous ten occasions it has been performed, the activity has taken the following numbers of days:

2, 4, 5, 3, 4, 4, 6, 10, 5, 4

As it stands, you can't do much with this data. You need to find an average figure that you can build into your schedule.

There are three ways of working out an average. The **mean** is obtained by adding up all the results and dividing the total by the number of results. In this example, you would get

$$\frac{47}{10} = 4.7 \text{ days}$$

The problem with this figure is that it's distorted by the one occasion on which the activity took ten days. This was an untypical result that may have been caused by special circumstances, but it has affected the average figure.

The **median** is the middle result if you arrange all the results in order, like this:

⇩

2 3 4 4 4 4 5 5 6 10

Because there is an even number of results in this set, you actually have to take the two middle results and divide them by 2, to get a median of 4. The median is useful in situations where you have one or two extreme results.

Another way of looking at these results is to ask the question: 'How long does it usually take?' The **mode** is the result that occurs most frequently. In this set of numbers, 4 crops up more often than any of the other numbers, so 4 is the mode.

Activity

Activity 2.1   (about 5 minutes)

You are negotiating the renewal of a service contract for a piece of office equipment, which allows up to ten visits a year at a current cost of £400 per year. The contractors say that they have been called in seven times over the last year, and the cost to them of making the repairs has been: £30, £35, £35, £40, £40, £40, £180.

They say that this averages out at £57.14 a visit, and therefore they want to increase the cost of the contract to £500 per year as the ageing equipment will need increased servicing in the future.

How could you use the identification of the mode or median as an argument for keeping down the cost of the contract?

Feedback

You should point out to the contractors that they have worked out the mean, which has been distorted by one unusually large figure. If you can argue that a similar expense is unlikely to arise again, you should suggest that it would be fairer to look at the median or the mode, either of which would give an average cost of £40 per visit, and the new contract should be based on this figure.

Grouping your data

When you are looking at a large number of figures, it can be helpful to summarise them by putting them into groups. For example, imagine that you work in a large factory. You are planning some staff training and want to find out the people to whom you should offer training first. You have a printout in front of you that lists the number of times last year each worker produced goods that were rejected by the quality checkers.

The printout starts like this:

Name	D.O.B.	Employed	Line	Faulty goods
Achen, J.	23.1.88	22.4.01	A	40
Alvarez, M.	5.7.75	30.5.99	B	20
Attwood, P.	3.9.60	19.3.96	B	63
Aziz, M.	4.6.68	9.11.95	E	21
Brown, T.	6.3.74	16.10.03	C	49

The printout continues for several pages, giving the same information for all 250 people who work on the assembly lines. It is impossible to draw any conclusions from this mass of data, unless you organise it in some way.

One way you could organise the data would be to list people in order of the number of faulty goods they produced, and direct your training at the top section of the list first. However, there is a high staff turnover in your factory, and many of the people with the worst record are no longer working for the company. You need to group people in some other way.

Another method you could use is to look at the records on the five different assembly lines. You would do this by taking everyone on Line A, and working out the mean number of mistakes per year, then doing the same for Lines B, C, D and E. You could then put the results on a bar chart as shown in Fig. 2.1. This tells you at a glance that Line A makes more mistakes.
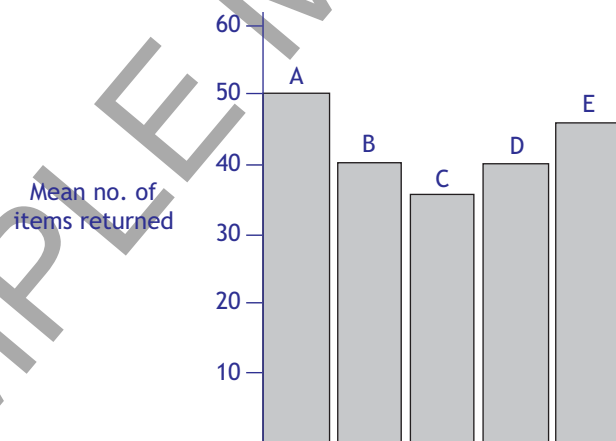
Fig. 2.1: Bar chart showing mean number of mistakes by line

Or you could group workers in another way, by age. You would have to divide the workforce into convenient age ranges, say 21—25, 26—30, 31—35, 36—40, 41—45, 46—50, 51—55, 56—60 and 61—65, and work out the mean number of mistakes for people in each group. You could then draw a histogram, as shown in Fig. 2.2. This tells you that the 21—25 age group makes the most mistakes.
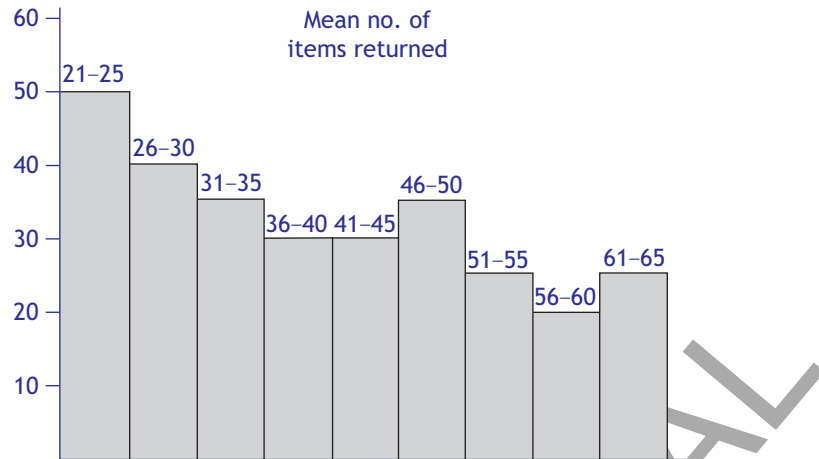
Fig. 2.2: Histogram showing mean number of mistakes by age group

You may have noticed that the columns touch each other in the histogram, but have space between them in the bar chart. This is because the horizontal scale in a bar chart is used to define categories of items from different times or different places. The bars could be arranged in any order, and the graph would still have the same meaning. On a histogram, the sequence of numbers on the horizontal axis has some meaning. Here, it shows the increase in age of the workers. By the way, it is important that the intervals between the numbers on the vertical axis are the same.

Activity

Activity 2.2   (about 5 minutes)

Look back at the printout. How else could you group the workers?

Would you present this information using a bar chart or a histogram?

Feedback

The printout also gave the date at which each worker began their employment at the factory. This might be a better way of deciding which group needed training. The graph you would use to present the results would be a histogram, because it would have a numerical scale (showing years or months of employment) on the vertical axis.

Distribution

If you have a large number of figures, you often need to summarise them in some way. The mean, median or mode will give you three different types of average. The **range**, which is the difference between the lowest and highest figure, is also useful in some situations. However, extreme results at the low and high ends of the scale can sometimes make the range somewhat misleading. For example, an analysis of calls made by telephone fundraisers showed that:

> *Seventy-five per cent of the phone calls were made in less than two minutes, the shortest lasted only ten seconds and the longest 25 minutes.*

Another statistic, the **standard deviation**, gives you information about how tightly the figures are clustered around the mean. Imagine that you have done a survey on the number of cups of coffee that members of staff buy from the office machine in a week. Your results are shown in Fig. 2.3.

Cups of coffee bought each week	
Cups of coffee	**People**
01	01
02	03
03	04
04	06
05	11
06	12
07	10
08	08
09	06
10	04
11	03
12	02
13	01
14	01

Fig. 2.3: Cups of coffee bought each week — numerical presentation

You can get a better impression of what is happening if you present the figures as shown in Fig. 2.4.

Cups of coffee bought each week	
Cups of coffee	People
01	•
02	•••
03	••••
04	••••••
05	••••••••••••
06	•••••••••••••
07	•••••••••••
08	•••••••••
09	•••••••
10	••••
11	•••
12	••
13	•
14	•

Fig. 2.4: Cups of coffee bought each week — visual presentation

Each dot represents one person who comes into this category. You can see that the dots form a sort of curve. The most popular number of cups of coffee is six — and the line curves down on each side to the least popular number. You often get a curved shape like this when you arrange data to show how frequently things happen.

Now imagine that you did a similar survey on people's tea-drinking habits, and produced the results shown in Fig. 2.5.

Cups of tea bought each week	
Cups of tea	People
01	•
02	••
03	••
04	••
05	•••
06	••••
07	•••
08	••
09	••
10	•
11	•
12	•
13	•
14	•

Fig. 2.5: Cups of tea bought each week — visual presentation

You can probably see that this curve is much flatter. The number of people in the most popular groups, where the frequency is highest, is not very different from the number in the groups at the edges of the curve. The standard deviation gives you a statistic that you can use to compare the shape of these two curves. It tells you the average amount by which all your results deviate from the mean.

You can work it out like this (although we don't necessarily recommend that you try it now):

1. Start by working out the mean for all the values. In the example of the cups of tea, this would be the total number of cups bought, divided by the total number of people.

2. For each group, subtract the mean (which you worked out in Step 1) from the value (the number of cups bought).

3. For each group, calculate the square of your results in Step 2.

4. For each group, multiply this figure by the frequency (the number of people in the group).

5. Now add up the results you worked out in Step 4 and divide this figure by the total frequency (the total number of people in the survey).

6. Finally, take the square root of this figure. You now have the standard deviation.

As you can imagine, working out the standard deviation on paper is a lengthy process. Computer programs exist that can do the calculations for you, even taking the figures directly from spreadsheets.

The larger the figure you have for the standard deviation, the more dispersed are your results.

Activity

Activity 2.3   **(about 2 minutes)**

Can you think of any situations in which it would be useful to know the standard deviation as well as the mean?

Feedback

> *It is helpful to know the standard deviation in many situations where you are comparing different sets of data. Your example may be similar to this one:*
>
> > *We were comparing the times it took to perform the same task using different systems. We had the average (mean) time for each system, but it was also important to know which system was more consistent. We chose the system that had the smaller standard deviation, even though the mean time was slightly greater.*
> >
> > Process plant manager, oil refinery

Trends

If you have data that have been collected over a period of time, you can arrange them to provide information about what is likely to happen in the future.

Activity

Activity 2.4   **(about 2 minutes)**

1. Look at Fig. 2.6. What does it tell you about the past?

2. What do you think was likely to happen in 2005?
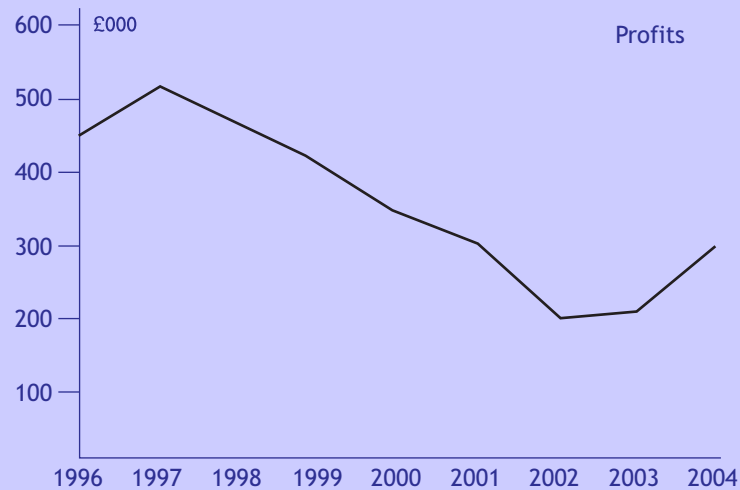
Fig. 2.6: Profits during years 1996–2004

Feedback

The graph tells you that profits more than halved in the years 1997 to 2002. At that point, the decline was halted and profits now appear to be going up again. You could not make any predictions for 2005 on the basis of this graph alone, because the upturn has only been going on for a year. It could be a temporary blip. However, the graph could indicate the type of questions you should be asking. Why did the profits decline before 2002? What was done in 2002 to remedy the situation? You could then assess whether the action taken is likely to be effective. If it is, then you could expect profits to continue to rise. If it's not going to be effective, then the long-term decline of the company will probably resume, and it may not stay in business much longer.

Sometimes, you have data that vary a great deal from one period to the next. For example, if you were looking at the monthly sales figures of a shop that specialised in school uniforms, you would probably see peaks during the months that contained the start of a new term. If the line on a graph is zigzagging up and down, it can be difficult to see underlying trends. It is helpful to even out the peaks and troughs by working out what is known as the moving average. This is done by plotting another line on the graph that shows the mean results for a longer period, usually 12 months, which ended in the month in question.

Correlation

You often need to know whether one activity or set of circumstances affects something else. If you put more people on the tills of a supermarket, do sales rise? Is there any relationship between the number of special offers that you advertise and the total level of sales? If you increase (or decrease) the volume of piped music, do people buy more? In order to answer these questions, you need to know the **correlation** between two things.

You can look for a correlation by drawing a scatter diagram, as shown in Fig. 2.7.
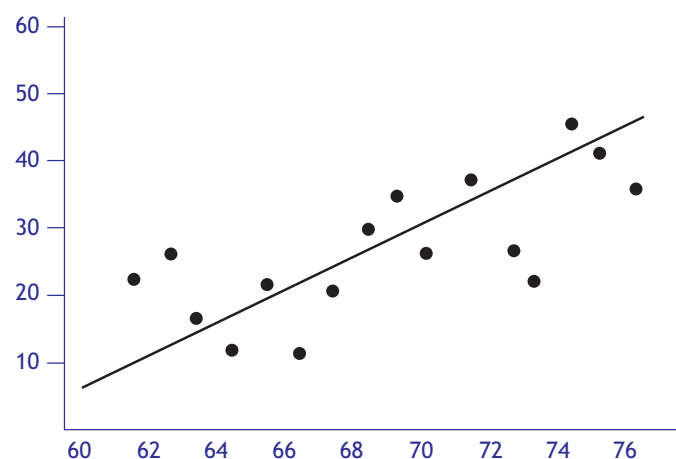
Fig. 2.7: A scatter diagram

In this example, the horizontal axis shows the outside temperature in degrees Fahrenheit and the vertical axis shows the number of ice creams sold. Each dot represents an occasion when the temperature was measured and the number of ice creams was counted. A straight line has been drawn through the dots, with an equal number of dots each side of it. This shows clearly that the number of ice creams sold rises when the temperature goes up. This is known as a positive correlation: as one value goes up, so does the other value that you are measuring.

If you drew a scatter diagram showing how many hot drinks were sold from a stall when the temperature was at different levels, you would expect to see the straight line going in the other direction. This would be an example of a negative correlation: as one value falls, the other goes up.

As well as knowing which direction the line goes in, it's useful to know how tightly the dots are clustered around it. The closer they are to the line, the stronger the relationship between the two variables you are examining. The statistic that gives you this information is the correlation coefficient, which is usually represented by the letter r. The calculations necessary to arrive at the correlation coefficient are beyond the scope of this workbook, but you should be able to recognise the significance of this statistic when you see it.

■ A correlation coefficient of –1 is a perfect negative coefficient.

■ A correlation coefficient of 0 indicates that there is no relationship between the two variables.

■ A correlation coefficient of +1 is a perfect positive coefficient.

Activity

Activity 2.5   **(about 5 minutes)**

Which correlation coefficient is likely to belong to each of these situations?

(a) —0.1

(b) —0.8

(c) +0.7

1. The number of customer complaints received in relation to the amount spent on customer care training.

2. The height of employees in relation to their success rate making telephone sales calls.

3. The months of experience workers have had and the speed with which they perform a particular activity.

<table>
<tr><td>Feedback</td><td>

1. *You would expect a negative correlation here. As training increases, complaints should go down. Hence, -0.8 shows a strong correlation between these two things.*

2. *As far as we are aware, no relationship has ever been established between these two variables. You would expect a correlation coefficient near to zero. Therefore -0.1 is the most likely result out of the three given here.*

3. *Here, you would expect a fairly strong positive correlation. So +0.7 is the most likely answer.*

</td></tr>
</table>

You can use correlation coefficients to compare different sets of data. They can help you find out more about cause and effect and to predict the consequences of future actions.

Communication options

You may be asked to collect and present information for a number of options so that one option can be selected. This may involve:

■ drawing up a list of options

■ exploring the pros and cons of various alternatives

■ making a recommendation.

Alternatively, you may just be asked to gather evidence to support a particular option. In either situation, you need to present the facts as clearly and succinctly as possible.

Remember that the reason you have been asked to do the preparatory work on the decision is to save other people's time. They won't want to know everything that you've found in the course of your investigations or to have to analyse the data themselves. Use graphs and charts to organise what you've found out.

All they want to know is information that is of direct relevance to them. This usually means:

■ a list of options

■ concrete details of what these options will involve

■ a logical argument comparing the various options

■ a recommendation

■ warning of any risks associated with the chosen option.

It is often possible to summarise most of this information on a chart. You may have seen tables such as that in Fig. 2.8 in consumer magazines.

Summary of information			
Magazine racks	Acme Star	Tokyo 339	Bologna Princessa
Capacity (no. of mags)	12	10	8
Styling	*	**	***
Price	24.99	29.99	45.99
Weight	1 kg	0.5 kg	1.5 kg
Height	30 cm	30 cm	35 cm
Width	50 cm	55 cm	60 cm
Depth	12 cm	15 cm	10 cm
Wall-mounted	✓	X	✓
Durability	***		*
Assembly instructions	**	***	*
BEST BUY Our verdict: The Acme Star is not pretty, but it makes up for its unexciting appearance with its strong construction, large capacity and attractive price.			

Fig. 2.8: Summary of information

This tells the prospective buyer a great deal of information to help them choose from these three products. Notice that the chart:

- contains precise data (such as the dimensions)
- uses ✓ and X to indicate the presence or absence of a feature
- rates some features using a star system.

The verdict at the bottom sums up the information, makes a recommendation and warns prospective purchasers of the Acme Star's main disadvantage — its looks.

You can use charts that follow the same principles as this one to sum up the different options in many different kinds of decision.

There are obviously some types of decision where this kind of presentation is not appropriate. These could include situations where the criteria concern ethical matters or are sensitive or contentious in some other way. However, where practical decisions are to be taken, a chart of this kind can be extremely effective.

Using a report to present information

A report is usually the result of an information-collection process. It's tempting to move straight into information collecting without clearly defining the answers to the following questions.

- What is the purpose of the report?

- What decisions will be made as a result of the report?

It may be useful to draft a prototype structure of a report, right at the beginning, to be sure that the information in the report will enable decisions to be taken.

Here's an example:

Prototype report

Key decisions

The Corporate Management Competencies had been developed and a process created to integrate their use into performance management. Research was then required to make the following decisions:

Should the process, in its present form, be cascaded throughout the company?

- If no, what amendments should be made?

- If yes, which methods of cascading the process should be used?

Information needed to make decisions

1. How practical and beneficial is the proposed process?

2. How practical are the following methods of cascading the information?
   - briefings
   - one-to-one discussions between line manager and manager.

Prototype report

1. Introduction

   During January/February, pilot use of the Management Competencies in performance management was monitored on varying scales in each division such as:

   - marketing (include quantitative data for how many managers/line managers involved in each division and manner of briefing)

   - finance

   - customer response.

2. Summary of findings

3. Recommendations

4. Information collected

The following information was collected:

- The average time taken for line managers and managers to agree core competencies was x hours (include range)

- X per cent of managers/line managers found the guidance on the process of identifying core competencies to be satisfactory. The following suggestions were made for improvements:
    — (suggestions) (suggested by X per cent)
    — (suggestions) (suggested by X per cent)
    — etc.

- X per cent of managers/line managers found the documentation to help identify core competencies to be satisfactory. The following suggestions were made for improvements:
    — (suggestions) (suggested by X per cent)
    — (suggestions) (suggested by X per cent)
    — etc.

- etc.

Source: based on 'Backward marketing research' (1985)

It's highly likely that the structure of a final report will evolve. However, the discipline of thinking things through at the earliest stage can avoid time and effort being misplaced.

Contents of a report

A report should be clearly divided into sections and should contain the following elements.

- A **title** page (including date and name of author).

- **Contents** (if the report is longer than five pages).

- **Summary** (again, if the report is longer than five pages. The summary should give an overview of what the report is about and the recommendations).

Below is a summary of a review of a company's training department.

Summary

A number of factors, including feedback from customers, new corporate initiatives and the departure of the Corporate Training Officer, indicated that a comprehensive review of the Corporate Training Service (CTS) was needed. The purpose of the review was to identify potential model(s) for the future operation of the CTS.

During the review, research is concentrated in four main areas:

1. Consultation with customers (details of the consultation are given in Appendix 1).

2.　Consultation with members of staff currently involved in the delivery of training (details are given in Appendix 2).

3.　Review of planned corporate initiatives, which involves changes in employees' skills, behaviours or attitudes.

4.　Investigation of external good practice that could influence the structure and delivery mechanisms used.

Analysis of the information obtained resulted in two potential models for a revised CTS:

■　Option 1: Strengthened CTS

■　Option 2: Minor amendments to current CTS (a description of the existing CTS is given in Appendix 3).

These options are described in detail in the report. After each description the rationale behind it is given, with a summary of any potential pitfalls and funding implications.

■　A third potential option (Appendix 4) involves centralising all training and training budgets, as well as increasing the number of corporate training personnel significantly. This has been dismissed as being impractical within the current structures of the company.

Recommendations

Option 1 (Section 3) should be selected.

The schedule for the appointment of the main post (corporate training consultant) to support option 1 is as follows:

The summary should give an overview of what's in the report and its recommendations.

■　**Introduction**: This should include the purpose of the report and its terms of reference.

■　**Main body of the report**: This should be clearly structured into numbered paragraphs.

■　**Conclusion**: These are the main findings of the report and must be based on the information in the main body of the report.

■　**Recommendations**: These include the recommended actions and must clearly result from the conclusions.

■　**Appendices**: These should give information about what was used in the report.

Always write the main body of your report before attempting the summary, conclusions or recommendations.

It's vital that you keep your reader in mind when writing a report. They need a clear, structured route to the conclusions and recommendations.

Activity

Activity 2.6 (about 1 hour)

Compare four reports written by different people in your organisation. Which report do you consider to be the most effective in meeting its purpose? Why?

Feedback

Assessing reports other people have written is a useful way of developing your own skills. Identifying how they could have been improved can help you make sure that you don't make the same mistakes.

Using flowcharts and checklists

Using flowcharts, especially when a sequence of decisions has to be made, can be a useful way to present information (as shown in the example in Fig. 2.9).

Does anyone answer the door? — Yes → Hand over directory and get signature on white form

No ↓

Can you leave directory with neighbour? — Yes → Hand over directory and get signature on white form

No ↓

Can you leave directory in a safe, dry place? — Yes → Hide directory and put pink slip through door saying where it is. Initial white form

No ↓

Put blue slip through door. Write X on white form
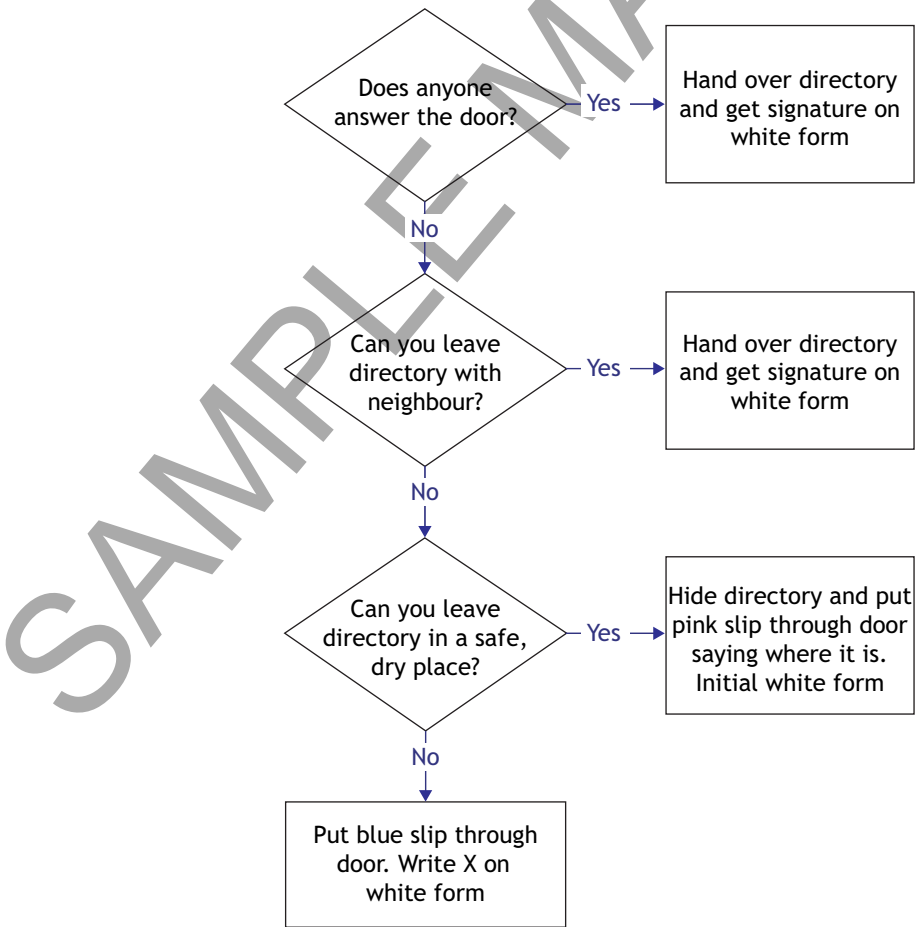
Fig. 2.9: Example of a flowchart

Another way of giving information to clarify decisions is to prepare a checklist. This is a useful format if there are a lot of things that must be considered. Here is an example:

> Check these points before passing an invoice for payment:
> - name of payee matches purchase order
> - amount matches purchase order
> - work description matches purchase order
> - signature of budget-holder present
> - invoice is coded
> - invoice is dated.

Checklists should cover all the important points, but should not insult people by stating the obvious, or take up their time unnecessarily. A good checklist is a helpful aide-memoire, not an irritation.

Summary

Now that you've reached the end of this section you should be able to:

2.3 Evaluate methods of presenting decisions made

> **Self-assessment questions**
>
> Use these questions to check whether you have understood the key issues in this section. If you are not sure, or really don't know the answers, this suggests you need to work through parts of this section a second time.
>
> 1. Why is it important to find a way of presenting information in a way that is accessible to the reader?
> 2. Define the terms 'mean', 'median' and 'mode'.
> 3. What is 'standard deviation' and when might it be helpful to use it?
> 4. What does a correlation coefficient show?
> 5. What two questions should you answer before you begin to write a report?
> 6. What are the advantages of drafting a prototype report?
> 7. How should a report be structured?

If you could answer the self-assessment questions, then you are ready to move on.

In the next section you'll explore the decision-making process. Without good information, any decision making is going to be fundamentally flawed.

SAMPLE MATERIAL

Section 3 Making a decision using information

Time required: about 2 hours

Learning outcomes

By the end of this section you should be able to:

2.1 Evaluate the decision-making models which are used to support decision making

2.2 Identify those to be involved in analysing information and decision making.

Approaches to decision making

> *The importance of decision-making in management is generally recognised. But a good deal of the discussion tends to be centred on problem solving, that is on giving answers. And that is the wrong focus. Indeed the most common source of mistakes in management decisions is the emphasis on finding the right answer, rather than the right question*
>
> (Peter Drucker, management writer and consultant)

Decisions are about being faced with a choice. Some decisions are routine. In routine decisions the choice can be very simple and is matter of following procedures. Alternatively, it can be very complex with the advantages and disadvantages of a wide range of options being closely evaluated. In these cases, the decision has to be tailor-made to the individual circumstances.

There are several ways to make a decision. These include:

- making a random choice
- following tradition
- going by the book
- going by experience
- gut feelings
- making a systematic comparison of options.

Making a random choice

Making a random choice is not a bad way to make your mind up when you're in a situation where:

- you have to make a decision quickly in order to move on to the next stage, *and*
- the consequences are not important, *and*
- you have no idea which option to choose.

Here is one situation where a random choice was appropriate:

We were rushing to get a report ready for a meeting. My assistant came to me with two versions of the cover. One was printed on shiny white card and the other on matt grey card. They both looked good — I would have been happy with either version. There was no point in making a meal of the decision, so I just picked up the one that was nearest to me on the desk and said, 'We'll go with this one.'

The big advantage of this method is its speed. It's appropriate in situations where the swiftness of the decision is more important than the potential consequences of the various options. It's not appropriate in situations where making the wrong choice could have serious outcomes.

Following tradition

Some traditions are valuable, but others just acquire a spurious authority because they have been going on for so long. For example:

We've always sent our best customers a desk diary in December, so let's do the same this year.

The directors and senior managers have always had reserved parking spots at the front of the building.

People can get so used to 'the way things are done round here' that they don't even realise that they are taking a decision to act in a particular way. Following tradition does not guarantee that you will make a good decision, especially if circumstances have changed since the tradition was established. When you make a traditional choice, people will be familiar with what happens next. This may be an advantage or a disadvantage.

Activity

Activity 3.1   **(about 10 minutes)**

Think about your own experience and give an example of a time when:

1. you followed tradition when you made a decision

2. you broke with tradition when you made a decision.

In each case, explain the reasons for your decision.

Feedback

Compare your answers with the following examples.

Following tradition

I had to choose where to hold the annual office party. I looked at several venues, but in the end I chose the same restaurant that we've used for the last five years. The staff there know us and the arrangements have always worked well in the past. It seemed the safest thing to do.

Breaking with tradition

When I started this job I found that the weekly departmental meetings were often a complete waste of time, so I decided to call a meeting only when we needed to get together. My reason for doing this was obviously to save time, and also to demonstrate that I valued my own time and the time of other people in the department. Because I was new in the job, I suppose I also wanted to show them that I wasn't afraid of doing things differently.

Following tradition can be an appropriate way to make a routine decision. However, you need to check that there are sound reasons for following the tradition. Many people resist change because they feel comfortable with the way things are; it doesn't necessarily mean it's the best way.

Going 'by the book'

This is the method that is used for making many routine decisions. It involves consulting the written instructions or guidelines that have been produced for the purpose. Used in appropriate circumstances, it is usually perfectly satisfactory. However, if you have ever needed to persuade someone who goes strictly by the book to take a non-routine decision, you will be aware that this method has definite limitations.

The following example shows the limitations of 'going by the book'.

I needed to make an urgent phone call from a train. It was a genuine emergency — I had been delayed on my way home from a meeting and needed to arrange childcare for my daughter who would shortly be arriving back from school. My mobile wasn't topped up unfortunately, so I asked the buffet steward if I could use his phone. He refused, on the grounds that passengers weren't permitted to use company equipment. I explained my problem but he wouldn't budge. He told me that it was more than his job was worth to let me use that phone. In the end, I borrowed another passenger's mobile. I wrote a strong complaint to the train company, complaining about this inflexibility, and received a letter of apology.

It's important to recognise when the 'book' is inadequate, and also to make sure that your staff understand the circumstances in

which they should either depart from the guidelines or refer a decision to a higher authority.

Going by experience

The right type of experience or 'tacit knowledge' can be enormously helpful when you have to make a routine decision. You can instantly recognise the criteria to use and which procedures or guidelines apply in the situation. You are also in a good position to make a tailor-made decision, and may not have to go through a more complex decision-making process of making a formal comparison of all the various options.

The danger here is that you won't recognise when a decision lies outside your experience. The following example illustrates the danger of making assumptions.

Scenario

Lack of experience

When I was working for a publishing company, a lot of unsolicited manuscripts arrived on our desks. I normally read the adult fiction, but one day a colleague asked me to take a look at a children's book that someone had sent in. I thought it was complete rubbish and said so in my report. On the basis of my verdict, we rejected the manuscript. The author took it elsewhere. It wasn't an international bestseller, but the author went on to write several books that were. If I hadn't written that report we would have been his publisher. The mistake I made was to assume that I had the experience to know what type of children's book would appeal to the public, when I really didn't.

Activity

Activity 3.2   **(about 10 minutes)**

Use the diagram below to record the topics about which you have and haven't got the experience to make a decision. If you feel very confident about the relevance of your experience, write the topic near the centre of the circle below. If you are less sure, write it near the edge of the circle. If you know that you don't have the experience to make a decision about something, write it outside the circle.

Start by writing the following topics on your diagram, then add some other topics of your own.

- health and safety
- employment law
- staff training
- ICT.
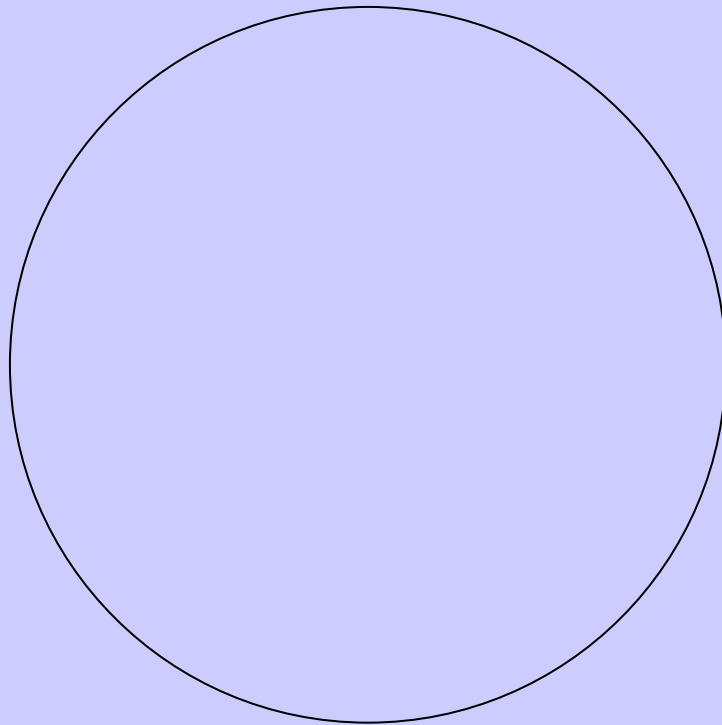
Feedback

If a decision lies outside your experience, it's much better to admit it and get some expert advice from someone who has got the relevant experience.

Gut feelings

Sometimes you may get a strong feeling about which way a decision should go, regardless of what the evidence suggests.

One of the candidates for the job looked really good on paper. He had excellent qualifications and an impeccable work record in his CV. And he was charm

> *personified at the interview. But there was something I couldn't put my finger on that made me uneasy.*

In a situation like this, you can't go on intuition alone. Begin by considering whether your reaction is due to:

- something about you
- something about the option that you are considering.

For example, are you made uneasy by this candidate because:

- he reminds you of somebody you don't like?
- he has managed to achieve things you would like to have done yourself?
- there's something about his appearance you don't like?
- he looks as though he might be up for your job in a couple of years' time?

Examine your own prejudices and fears. If you can honestly say that your gut feeling is not connected to them, then try to work out the source of your uneasiness. We pick up a lot of subconscious messages and many of them are important. In this situation, it could be that:

- the candidate's body language is showing that he's hiding something
- his work record does not follow a normal pattern
- he didn't ask a question that you would have expected him to ask
- you vaguely remember rumours about difficulties at one of the places where he has worked.

If you have an irrational feeling against a particular option, this may be a signal that you need to get more information about it. Gut feelings are often an indication that what appears to be a routine decision actually needs to be a tailor-made decision.

Systematic comparison of options

This method of taking decisions is based on a model developed by Kepner and Tregoe (1981) in *The New Rational Manager*. It provides a framework that you can use for any decision where it's worth investing time and resources in identifying the best answer. There are five main stages in the process.

```
┌─────────────────────────────────────────────┐
│ 1. Define the decision and establish objectives │
└─────────────────────────────────────────────┘
                      │
                      ▼
┌─────────────────────────────────────────────┐
│      2. Clarify and define the objectives      │
└─────────────────────────────────────────────┘
                      │
                      ▼
┌─────────────────────────────────────────────┐
│    3. Gather information and generate options   │
└─────────────────────────────────────────────┘
                      │
                      ▼
┌─────────────────────────────────────────────┐
│              4. Evaluate options               │
└─────────────────────────────────────────────┘
                      │
                      ▼
┌─────────────────────────────────────────────┐
│            5. Make a final decision            │
└─────────────────────────────────────────────┘
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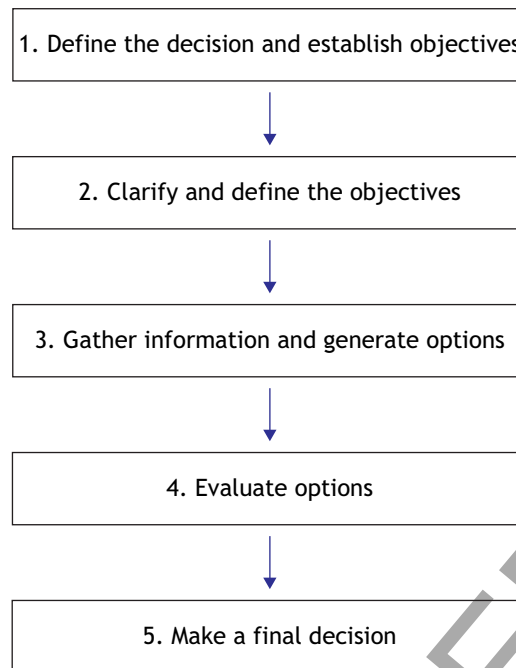
Fig. 3.1: Rational decision-making process (reproduced with permission from Elsevier, Pergamon Flexible Learning, *Using Information for Decision Making*, 2005)

You'll look at each of these stages in turn.

Define the decision and establish objectives

Start by stating exactly what decision you are taking. This helps clarify your thinking and lets everyone know what the real issues are. To illustrate the decision-making process we'll use the following scenario about a lunch, although of course, in practice, you're not likely to invest time and effort in this type of decision.

Scenario **Lunch for important clients**

Some important clients from another part of the country are coming to an all-day meeting at your organisation. You have to decide what to do with them at lunchtime. It's common practice in your organisation to order a range of gourmet sandwiches to eat at the meeting table, but you don't think this is appropriate on this occasion. You realise that you need to impress these particular clients by taking them out to lunch.

So the decision you have to take is: Which restaurant should I choose to give these clients lunch?

Next, consider what the perfect answer to your decision would achieve. You will probably have to gather some information to work out some objectives that are attainable and realistic. It doesn't matter if some of your objectives are incompatible at this stage. However, wherever you can, make them measurable.

For example, you may decide to set the following objectives:

- price per person not over £40

- good wines available

- good food

- the clients will be impressed with the service and atmosphere

- local dishes served, to remind clients of their visit to this part of the country

- some degree of privacy, so we can talk business during the meal

- the meal will take about an hour and half in total

- within ten minutes' drive of the office.

What's important is that the objectives you set for any decision contribute towards your department's objectives and, ultimately, to the organisation's objectives. It makes sense that everyone in an organisation is 'pulling in the same direction'.

Strategic decisions	Mission
Business decisions	Business objectives
Operational decisions	
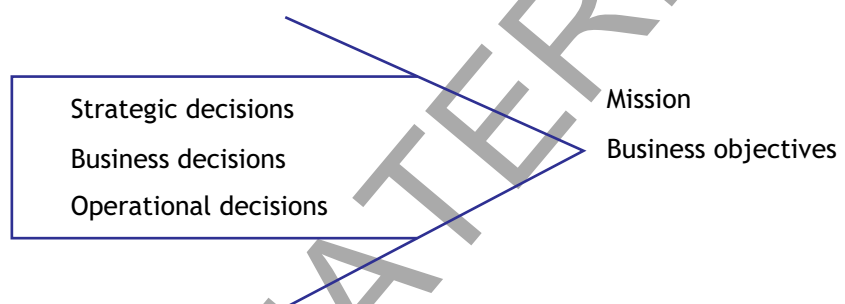
Fig. 3.2: Organisational alignment (reproduced with permission from Elsevier, Pergamon Flexible Learning, *Using Information for Decision Making*, 2005)

For example, if you work for a not-for-profit organisation where the whole focus is on maximising income to provide services for customers, then taking clients to the kind of lunch outlined in the scenario may not be appropriate.

Activity

Activity 3.3   (about 5 minutes)

Select three decisions you've made recently. Make a note of them below and briefly explain how they contributed towards objectives for your work area.

1.

2.

3.

Feedback

> *On a day-to-day basis, it's often easy to lose sight of the wider picture — the whole organisational context in which you are operating. However, it does set important boundaries when you have a decision to make.*

Clarify and define the objectives

You now have to decide which of your objectives you must have — and which you would like to have, but can live without if absolutely necessary. The difference between a 'must' and a 'want' is that if one of the options you consider doesn't meet a 'must' objective, it should be rejected. For example, you may decide that your musts and wants are as follows.

Musts	Wants
■ good food ■ the clients will be impressed with the service and atmosphere ■ the meal will take about an hour and a half in total ■ within ten minutes' drive of the office	■ price per person not over £40 ■ good wines available ■ local dishes served, to remind clients of their visit to this part of the country

The way that you clarify your objectives into 'musts' and 'wants' will depend entirely on your priorities. It could be that the price of the lunch is a crucial factor, or that you would be prepared to take a little longer over the meal if you could find somewhere really special.

Now look more closely at your 'musts'. Find a way of measuring them, or a standard that an option should meet in this area. For example, you might consider that a suitable standard for 'good food' was that the restaurant had a certain number of stars in a restaurant guide. The reason for doing this is that you need some non-subjective (and relatively easy) way of telling whether an option meets these criteria.

Think about how important each of the 'wants' is to you and give it a numerical weighting out of ten. Give ten points for something that is really important, and under ten for something that is less significant.

This is how you might weight the 'wants' in the feedback to the last activity:

■ price per person not over £40 (10)

■ good wines available (8)

■ local dishes served, to remind clients of their visit to this part of the country (5).

Again, the weight you give to each point depends entirely on your own priorities.

Gather information and generate options

Now you have to assemble your list of options. This is an information-gathering exercise. Remember the advantages (and disadvantages) of collecting either primary or secondary data — and the characteristics of quality information. Gathering quality information is a prerequisite of making good decisions.

Once you've found out more about the options available, you may decide that you want to modify your 'musts' and 'wants'. For example, if you discovered that one particular restaurant had panoramic views of the river, you might think about adding 'pleasant surroundings' to your list of 'wants'. If this happens, adjust your 'musts' and 'wants' before moving on.

Evaluate options

Assemble the options in a format that makes it easy for you to compare them. In the example, if you relied on a restaurant guide for your information, you might do this by marking the relevant pages in the guide and writing a list of your options on a piece of paper:

- Riverbank Restaurant

- Wilson's

- Carabino's

- Le Trottoir.

Now go through your list of 'musts' and reject any options that don't meet all these criteria. For example, if you discovered that although Le Trottoir met all your other essential requirements, it was very noisy and crowded, it would have to be crossed off the list.

You will now have a shorter list of options, all of which meet your essential requirements. The choice will now be made on how well they score against each of your 'wants' objectives. It helps to draw up a chart at this stage, as in the example below.

Wants	Weight	Riverbank		Wilson's		Carabino's	
Price	10						
Good wines	8						
Local dishes	5						
Total							

Look at each 'want' one at a time. In the left-hand column, under each restaurant name, you would give each of the options a score out of ten for this feature. You would also give the alternative that best meets this 'want' your top score, and score the others proportionately. The scores may look something like those shown below.

Wants	Weight	Riverbank		Wilson's		Carabino's	
Price	10	9	90	10	100	7	70
Good wines	8	7	56	8	64	10	80
Local dishes	5	10	50	8	40	5	25
Total							

Activity

Activity 3.4   **(about 5 minutes)**

Now add up the scores. Which restaurant comes out on top?

Feedback

You should have given the Riverbank Restaurant 90 + 56 + 50 = 196 points, Wilson's 100 + 64 + 40 = 204 points and Carabino's 70 + 80 + 25 = 175 points. So Wilson's would be your first choice, closely followed by the Riverbank Restaurant.

Make a final decision

If you find that two or more options score similar totals, check that you are happy with the weightings and scores you gave earlier in the process before you make a final decision. For example, if you decide that good wines are really not as important as you thought they were, you could find that the Riverbank Restaurant actually comes out on top.

Activity

Activity 3.5   **(about 10 minutes)**

Think of two decisions that you have to make in the near future. Which methods will you use to come to these decisions? Why?

Decision 1

Method:

Why?

Decision 2

Method:

Why?

Feedback

Check your answers against these points:

- *Making a random choice*: Do you need to make a quick decision and are the consequences relatively unimportant?

- *Following tradition*: Is the decision routine? What are the benefits of not breaking with tradition here?

- *Going by the book*: Is the decision routine? Are the existing guidelines relevant?

- *Going by experience*: Is your experience relevant?

- *Gut feelings*: Are these due to your own prejudices and fears, or do they have an objective basis?

- *Systematic comparison of options*: Is this decision important enough to justify the time and resources you will give to it?

Setting decision making in context

Becoming a skilled decision maker requires these approaches to be set in a wider context. You need to be able to:

- recognise when there's a problem to solve rather than just a decision to make

- avoid unnecessary decisions

- assess risks associated with a decision.

Decisions and problems

Not all decisions start off as problems. However, it's important to be able to identify a problem where it exists. Once you have clearly identified the problem, you can then move into your choice of decision-making process. If you don't, you may miss out on laying the foundations for an effective outcome.

It's very easy to confuse decisions with problems, especially if they are described to you by someone else, as in the following scenario.

Scenario

Is it a decision?

Your assistant comes to you and says:

Jane is coming to the end of her contract next month. I've been rather disappointed with the results she's produced. We could give her another six months, but I don't think we should renew her contract. What do you think?

On the face of it, this looks like a decision. Only two options are offered:

- give Jane another six-month contract

- don't renew Jane's contract.

However, what you really have here is a problem: Jane is not producing the results she was expected to achieve. Therefore, you need to investigate the problem before moving on to making a decision.

Investigate a problem by:

- defining the boundaries

    - How long has Jane been under-performing?

    - Is she under-performing in all areas of her job, or just some areas?

- identifying possible causes

    - Is Jane ill, or perhaps going through a period of stress at home?

    - Has she received adequate training?

    - Are there other factors at work that make it impossible for her to do her job properly?

- investigating possible causes

    - You may find that Jane received no training as the rest of the team were very busy when she started.

Once you know the cause, devise a range of alternative actions to deal with the problem. For example, if Jane hasn't received adequate training, the options could be:

- give Jane another six-month contract and hope she gets up to speed

- give Jane another contract and provide her with some relevant training

- don't give Jane another contract, but make sure that her replacement receives adequate training

- replace Jane with someone who has already received appropriate training.

Now there really is a decision to be taken.

Activity

Activity 3.6   **(about 5 minutes)**

Put yourself in the position of the manager who was asked whether Jane should have another contract. If you restricted yourself to the two options that were originally presented — and failed to discover that this was a problem caused by lack of training — what could the consequences to the organisation be of:

1. renewing Jane's contract?

2. not renewing Jane's contract?

1. You may be lucky. Jane could gain in experience and improve her performance without training. On the other hand, she may not. In this case, she will continue to underachieve.

2. You may have missed an opportunity to develop Jane into a valuable employee. You will certainly be involved in the expense of finding a replacement. And if you are not aware of the importance of training, you may well make the same mistake with her replacement.

If you take a decision when you really ought to start by investigating a problem, the chances are that the problem will not go away.

Avoiding unnecessary decisions

A skilled decision maker must be able to recognise when there is a decision to be taken — and when there isn't. There are situations in which you may be asked to make your mind up about something, but should probably hold back. For example:

- when you are not the best person to take the decision
- when the time is not right.

Is this my decision?

Don't waste your time by trying to make other people's decisions for them. It's important to recognise when a decision is at too high a level for you, and pass it on to the relevant person within the organisation.

Activity

Activity 3.7 (about 5 minutes)

Give three examples of decisions that you would refer to a senior manager within your organisation.

1.

2.

3.

Do these decisions have anything in common?

Feedback

Senior managers are usually responsible for taking strategic decisions, while middle managers are responsible for decisions related to the implementation of strategy. The examples you identified are likely to involve situations in which you were uncertain how to apply the organisation's strategy, or that were not covered by it, or where the strategy clearly wasn't working. Your examples could also have been decisions for which there wasn't a precedent, or where the consequences of getting things wrong were potentially serious for the organisation.

If you refer a decision to a higher authority, you will probably be asked to describe the options and perhaps to make a recommendation. It's important that this information is presented clearly and precisely (using the techniques explored in Section 2).

You may also be tempted to take operational decisions that really ought to be the responsibility of people in your team. This can happen if:

- you don't trust the people you are managing to make the right decisions

- team members are frightened of making the wrong decisions

- accepted procedure says that it's your responsibility to make these decisions

- you are worried about diminishing the area of your authority.

Activity

Activity 3.8   **(about 5 minutes)**

Think about the decisions that members of your team regularly refer to you. Could they handle more decisions for themselves? Consider each statement below and tick the relevant box if appropriate. Jot down examples in the third column.

Could they handle more decisions themselves:	Tick if appropriate	Examples
if they had more skills and experience?		
if they had more confidence?		
if the system allowed them to?		
if you were willing to let go?		

Feedback

If you could think of some decisions in any of these categories, it may be that you need to develop the skills or confidence of the people you manage, or make recommendations for changes in the decision-making structure of your organisation.

Giving the people you manage more responsibility for decisions can be a way of empowering them — and so increasing their commitment to what they are doing.

Getting the timing right

The pressure to make a quick decision can come from three sources:

- from your own desire to get the decision over with
- from the people who will be affected by the decision who want to know where they stand
- from the situation itself.

If the pressure comes from either of the first two sources, set a time or a date when you will make the decision, and, if relevant, tell the people involved.

> *I had to decide whether or not to fund a project, which had been proposed by someone in my department. She was on tenterhooks about the result and was asking me about it every day. It was a good project and I was pretty sure I would agree to the funding she had asked for. However, I knew I couldn't decide until I had discussed the matter with the two independent experts I had asked to comment on the proposal. So I explained that I wouldn't be able to give my verdict until after that, at the beginning of the next month. She was disappointed at first, but once she knew when to expect a result she was able to concentrate on her work.*

However, if the circumstances themselves demand that you make a quick decision, don't put it off. Some decisions really do have to be made immediately. They may not be the decisions that you would most like to have behind you, or the ones which other people are pressing you to take. They may not even be the decisions where the consequences are particularly important.

You need to be able to distinguish between decisions that are important and decisions that are urgent. A decision can be urgent without being particularly important. It can also be important without being urgent. A few decisions are both urgent and important.

	high urgency	
low importance	Decisions that are urgent but not important	Decisions that are important and urgent	**high importance**
	Decisions that are neither urgent nor important	Decisions that are important but not urgent	
	low urgency	

Fig. 3.3: Matrix: urgency and importance of decisions (reproduced with permission from Elsevier, Pergamon Flexible Learning, *Using Information for Decision Making*, 2005)

Activity

Activity 3.9   **(about 5 minutes)**

Can you identify occasions when:

1. an important but non-urgent decision became important and urgent?

2. you made a decision too quickly that wasn't urgent?

Feedback

Most people have erred in either direction at some time or another. What's important is that you identify the quadrant in which a decision lies at an early stage — and then act accordingly.

It's not a good idea to take a decision when you are angry. Other emotions can distort your judgement, too, as in the following examples.

- *I felt so grateful for his support that I agreed to sign the contract immediately.*

- *I decided to withdraw the formal warning on the spot because I felt sympathetic about the problems he was experiencing.*

- *I was really disappointed about the way my proposal was received and I decided not to put it before the board.*

- *I only made that statement to the press because I was shocked at what had happened.*

- *I was so embarrassed by the way the customer had been treated that I over-reacted when I spoke to the member of staff involved.*

Try not to make a decision when you are emotionally involved in the situation. If circumstances permit, wait until you feel more detached.

Assessing risks

In ordinary life, people have a tendency to over-estimate the possibility of unlikely things happening — especially if these things coincide with their personal hopes or fears. This is why millions of lottery tickets are sold every week. At the same time, many of us have a tendency to under-estimate the risks of much more likely events — especially if we don't want them to happen or if they reveal some unpleasant truth about ourselves.

In management decision making, you need to get a realistic picture of the risks involved. Your first source of information here is what has happened in the past. For example, if you were considering using a supplier, you could assess:

■ your organisation's previous experience with this supplier

■ other organisations' experience with this supplier

■ the standing of this supplier within the industry, as demonstrated by its membership of trade associations or regulatory bodies.

What happened in the past can't guarantee what will happen in the future, but it will give you some indication of what's likely to happen. The further a decision takes you into unfamiliar territory, the riskier it is. For example, it's very risky to sell a new product in a new market, but less risky to sell a new product in an established market, or an established product in a new market.

Sometimes it's enough to make a subjective assessment of the risks. In other situations, you will need to quantify these dangers. It may be advisable to consult someone with an understanding of statistical probability. For example, if you were making decisions about a survey you were about to commission, a statistician would be able to tell you how representative of the general population the results would be if you sent questionnaires to 50, 100 or 500 people.

If a decision has important financial implications, you may need to prepare a sensitivity analysis. This describes the amount by which key figures, such as the cost of materials or labour, would have to change to turn a good investment into a bad one.

Minimising risk

There are two types of risk to consider:

■ the risk that something will prevent you from implementing your decision

■ the risk that your decision will not produce the effects you expect.

Activity

Activity 3.10	(about 5 minutes)

You have just decided on the hotel to book for a conference.

1. What could prevent you from implementing the decision?

    What could you do to reduce this risk?

2. Why might your decision not produce the effects you expect?

What could you do to reduce this risk?

Feedback

1. *Two problems you might encounter are that the hotel can't take your booking, or that the funds to pay for the conference are no longer available. You could protect yourself against these risks by checking the availability of these resources immediately before deciding and also, once the decision is made, confirming it as quickly as possible. You could also have a second choice of hotel ready, in case the first is not available.*

2. *The main risk you face here is that the conference facilities are not of the standard you expected. It's also possible that your original objectives were unrealistic, or that you chose the wrong selection criteria. You can minimise these risks by taking extra care with the first stages of a decision, and ensuring that your information is accurate, adequate and current.*

You can also minimise risks by testing out or piloting decisions before you implement them fully.

Advantages of carrying out piloting or feasibility studies include:

- Problems can be highlighted and rectified before a project is launched, saving expense and damage to credibility.

- It offers an opportunity to get buy-in from the people involved in the pilot; they can then become 'champions' by advocating its widespread introduction.

- The engagement of the pilot audience can lead to new ideas, which can add further value if incorporated.

- It can provide evidence for funding bodies.

For example, if you design a questionnaire, it's important to pilot it with a small group of people before you begin your full-scale survey. Many questionnaires get poor results because the questions are unclear or do not elicit the required responses. Piloting is likely to reveal questions that don't work well.

The key points to remember in order to minimise risk are:

- get quality information on which to base your decision

- be rigorous with your decision-making process

- have a contingency plan

- don't introduce further risks by delaying the implementation of your decision

- carry out testing wherever possible.

The Chartered Management Institute has produced a useful checklist on decision making:

- Checklist (015): Making rational decisions.

Summary

Now that you've reached the end of this section you should be able to:

2.1 Evaluate the decision-making models which are used to support decision making

2.2 Identify those to be involved in analysing information and decision making.

Self-assessment questions

Use these questions to check whether you have understood the key issues in this section. If you are not sure, or really don't know the answers, this suggests you need to work through parts of this section a second time.

1. Under what circumstances is making a random choice an appropriate method to use when making a decision?

2. What are the potential pitfalls of making a decision by 'going by the book'?

3. What are the main stages in making a decision based on a systematic comparison of options?

4. Why is it important to identify if a problem exists before making a decision?

5. What criteria would you use for deciding whether a decision should be referred to more senior management?

6. How can you encourage team members to become more proactive in taking operational decisions?

7. Why is it important to deal with decision making at the right time?

8. What can you do to minimise the risk associated with the outcome of a decision?

If you could answer the self-assessment questions, then you are ready to move on.

In the next section, you'll look at how important the communication process can be for communicating information analysis and decisions made.

Section 4 Communicating information and decisions

Time required: about 2 hours

Learning outcomes

By the end of this section you should be able to:

3.1 Evaluate methods of communicating decisions

3.2 Discuss the processes for implementing a communications method

3.3 Evaluate the implementation of the communications method.

The communication process

Our communication skills are something we tend to take for granted. Of course, we're all skilled at communicating; we've been doing it since the day we were born. We communicate spontaneously, often without thinking, and sometimes find that we have to live with the consequences.

Having a greater insight into what's happening when you communicate increases your ability to adapt the way you interact with people and influence their response to you. Increasing your awareness of the process and context of communication will increase your effectiveness of working with others.

The first model of the communication process was developed by Claude Shannon and Warren Weaver. The aim of the model was to enable engineers from the Bell Telephone Company to transmit mechanical messages more effectively (Fig. 4.1).
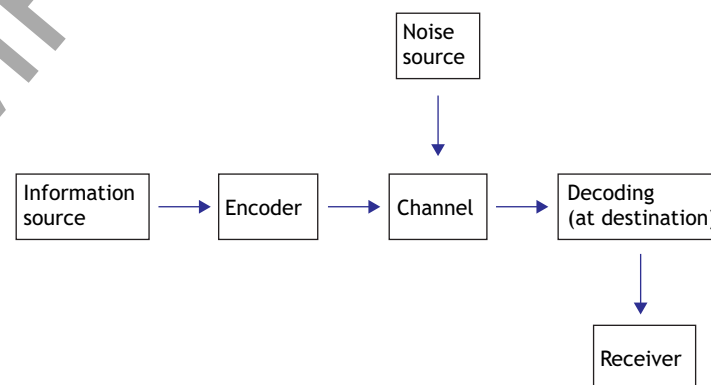
Fig. 4.1: Shannon and Weaver's model of communication (adapted from Shannon and Weaver, 1963)

Although developed for mechanical messages, the model successfully captures what happens when people communicate, and provides a starting point for understanding what's happening when we communicate, as the examples in the table show.

Shannon—Weaver element	Equivalent in human communication
Source	Sender is the person who sends the message
Encoder	Sender chooses the words for the message
Channel	This could be face to face, email, written
Receiver	This is the person who will receive the message
Decoding	The receiver of the message has to interpret the message and understand it
Noise source	Anything that interferes with the message being received by the receiver

Breaking down the communication process into these stages can help pinpoint where pitfalls can occur when people communicate. For example, you may choose words that are confusing or over-complicated (that is, the message fails at the encoding stage). Alternatively, the person you talk to may not be listening or may not have the knowledge to interpret your words (the decoding is faulty), or the message may never get to the intended person (a channel failure).

Activity

Activity 4.1   (about 10 minutes)

Identify instances when something you communicated failed, or failed in part, because of problems in each of the following areas.

Examples of communication failure due to:

1. encoding

2. channel

3. decoding

Feedback

Although mechanistic, briefly stopping to consider the process of communication and potential for problems can be helpful in preventing a communication failure. We'll look at these areas in more detail in the context of verbal communication.

Encoding the message

Most people focus on selecting the right words to convey a face-to-face message. But it's even more important to be aware of the messages that your body language and tone are giving. Psychologists claim that over half the message you convey comes from non-verbal communication. For example, Mehrabian (1970) in *Tactics of Social Influence*, deduced that:

- 55 per cent is based on your body language

- 38 per cent on the way you say something

- 7 per cent on the words you use.

Body language

Non-verbal communication covers all the ways in which we send messages to people when interacting with them that do not involve the use of words. It includes the following:

- **Facial expressions:** These reflect what a person is feeling — interest, surprise and fear. They can often override the message that is being sent in words. For example, a person may hear 'pleased to see you', but a momentary frown might have sent a clear message that they weren't pleased to see you at all. Most facial expressions are the same across all cultures; they are innate and shared by all human beings. For example, the spontaneous facial expressions that denote fear, joy, sadness or excitement:

  Eyebrows are important in the expressing of emotions. Perhaps most important is the 'eyebrow flash', a rapid up and down flick of the eyebrows that conveys recognition and approval. The ability to telegraph friendly intentions from a safe distance would have had obvious survival value for our ancestors.

  (Gudykunst, 1983)

- **Eye contact:** This plays an important part in verbal communication. Generally, people who like each other have more eye contact than people who don't. You search for more eye contact when you listen than when you speak. The amount of eye contact varies between cultures. For example, people from 'contact cultures', such as South Americans, or those from Mediterranean countries, tend to engage in more eye contact than people from non-contact cultures, such as north Europeans and Asians.

- **Posture and gestures:** These include the way we stand, sit and move. They can give strong messages about what a person is feeling. For example, arms crossed can mean a person is feeling defensive or unsure, covering your mouth can indicate lack of confidence, while drumming fingers indicates impatience. People who are deeply engrossed in discussion will mirror each other's body language. A mirroring body will often help to create rapport — if someone leans forward, the other person will also lean forward.

- **Use of space and touch:** This is influenced by cultural rules. Some cultures ('contact' cultures) readily integrate the use of touch, whereas other cultures (non-contact cultures) are less tactile. People from contact cultures stand or sit closer to each other than people from non-contact cultures.

A study by Jourard (1996) showed how many times couples touched each other in cafés in different parts of the world:

- Puerto Rico — 180 times per hour

- Paris — 110 times per hour

- London — 0 times per hour.

Research by Gudykunst (1983) showed that people behave differently when they are interacting with people they perceive as being culturally different to themselves, than when they are with people who they perceive as being culturally the same. The research concluded that people find it much easier to get to know people from similar cultures.

Body language is very difficult to control. Some experts believe it's impossible to fake it, whereas others argue that you can control up to 15 per cent. Whatever the reality, it's useful to be aware that:

- your body language will be sending messages every time you interact with other people

- the more you 'tune in' to other people's body language, the more effective you can become in interpersonal relationships.

People vary in their ability to pick up cues from body language. Some people are very sensitive to the body language of others, and will interpret and respond to it spontaneously. Others can be almost immune and completely switch off from picking up on any non-verbal messages. It's beyond the scope of this workbook to explore the reasons for this, but it's becoming clear that people who have highly developed skills of interacting with people are the ones likely to become most successful in today's workplace:

> *The rules for work are changing. … These rules have little to do with what we were told was important in school; academic abilities are largely irrelevant to this standard. The new measure takes for granted having enough intellectual ability and technical know-how to*

do our jobs; it focuses instead on personal qualities, such as initiative and empathy, adaptability and persuasiveness.

(Goleman, 1999)

Activity

Activity 4.2   **(about 10 minutes)**

Identify two recent occasions when you picked up cues from the body language of people at work. For each one, identify how your interpretation of the body language influenced your response in the situation.

■ Incident 1:

■ Incident 2:

Feedback

The ease with which you completed this activity is likely to be a measure of how 'tuned in' and sensitive you are to the non-verbal messages sent by others. Becoming more aware of body language involves consciously looking for clues as you interact with people. As you tune in to the body language of others, you will find yourself being able to respond to it instinctively. Where appropriate, try shutting your eyes when you talk to someone. You'll notice just how much you rely on non-verbal signals as you talk.

The way you say it

We convey a lot through the way we say things. The pitch of our voice, rate of speech and loudness all combine to convey meaning. A person can use exactly the same words when answering a phone on two occasions but convey completely different meanings, depending on the emphasis placed on the words.

Generally, the way you are feeling will be conveyed in your voice. Most people will automatically rely on the message conveyed by how you say something rather than what you say.

The words you choose

Most of the time, we speak spontaneously; often not knowing the words we're going to use until we've said them. However, at

work you often need to think through the main points you want to make. Doing this will:

■ give structure to what you say

■ make sure you include all the points you want to make.

It's also important not to introduce over-complicated language or jargon into what you say. This is likely to result in communication failure as the receiver struggles to decode the message.

Choosing the channel

How are you going to send the message? If there is a choice, you need to consider the channel that is most appropriate from the receiver's point of view.

Verbal (if so, when and where):

■ one to one

■ group

■ presentation

■ formally

■ informally

■ phone.

Written:

■ email message

■ email and attachment

■ print

■ noticeboard

■ publication, e.g. newsletter.

Using Shannon and Weaver's terminology, there are a number of 'noise sources' that can affect the channel and cause the message to fail to reach the sender, or become distorted. For example, if you decide to use the phone, will the absence of body language distort the message? Is the canteen the wrong environment in which to discuss some issues? In the case of written communication, how do you make sure that the receiver will actually get the document to read within the required timescale?

Activity

Activity 4.3   **(about 5 minutes)**

Consider the part of your response to Activity 4.1 that related to the communication channel. How could the problem over the channel have been avoided?

Often, the success of a channel is bound up with how the receiver responds. The channel may have worked as a means, but it also has to motivate the receiver to decode the message.

Decoding the message

Activity

Activity 4.4   (about 1 minute)

Who has responsibility for decoding the message? Tick what you think is the correct answer.

1. The receiver
2. The sender
3. Both.

Feedback

Responsibility has to lie with the receiver; they have to decode the message and make sense of it. However, there's a common belief that if you send information to someone, the communication is complete.

Look at the following examples, both of which abdicate some of the sender's responsibility for communicating effectively.

> I told them all about it during the site meeting, including what to do if they had concerns. It's no good introducing problems at this late stage.

Or in the case of written information:

> I will send the email with the customer feedback report attached and ask for comments by the 26th. If I don't hear anything by then I'll assume they've got no comments so we'll go ahead with the recommendations.

The act of sending information doesn't automatically shift responsibility on to the receiver for making sense of that information. First, the sender has to make sure that the receiver is actively engaged with the communication process; only then can responsibility shift to the receiver to interpret the information.

In the first example, the message may not have got across, or the problems may not have arisen until late in the process. In the second, the sender should give the receivers a realistic time to respond, and ask them to confirm that they have no comments if that is the case.

Activity

Activity 4.5   (about 10 minutes)

Identify an occasion when you failed to communicate because the receiver didn't engage and attempt to understand your message. Identify why this happened and how you could have behaved differently to ensure that the message was received.

When did it happen?	Why did it happen?	What could you have done differently?

Feedback

Get into the habit of thinking that you, as a sender, are responsible for getting your message across. It will help you tailor what and how you communicate to the receiver, and make you a more effective communicator.

In verbal communication, the receiver's role is to listen. Listening to someone sends a powerful message that you value them. Implicit in listening is the message 'you are worth devoting my time to; what you have to say is important'. In contrast, paying lip service to listening will soon send a loud and clear message that you do not value the other person.

Listening enables you to understand another person's point of view. Covey (1989) stresses the importance of understanding in his book Seven Habits of Highly Effective People*:*

> If I were to summarise in one sentence the single most important principle I have learned in the field of interpersonal relations, it would be this: Seek first to understand, then to be understood.

Being able to listen is the key to effective communication.

Effective listening

People can speak at approximately 160 words a minute and our brains can think at the equivalent to 1,000 words a minute.

Activity

Activity 4.6   (about 2 minutes)

What implication does this have for listening?

Feedback

> *It's very easy to listen half-heartedly. Our minds can be doing anything from formulating responses to thinking about something completely different as we appear to be listening.*

There are many reasons why we don't listen to someone who is talking. Here are just some of them.

Nine reasons for not listening

1. I don't need to hear what you've got to say; I know it already.
2. I don't want to hear what you've got to say; it might embarrass me.
3. I don't care what you say, so I'm thinking about my reply.
4. I don't want to listen to you because I don't like you.
5. I'm getting bored because you're taking too long to make your point.
6. I'm getting confused because you're going too fast for me.
7. I've got more important things on my mind right now.
8. I'm more interested in what is going on over there.
9. I'm in a hurry, and if I show interest you might keep me here longer.

(Source: adapted from Reilly, 1993)

Activity

Activity 4.7   **(about 5 minutes)**

What behaviours (verbal and non-verbal) convey that someone is not listening?

Feedback

> *Behaviours that convey someone is not listening include: lack of sufficient eye contact, a glazed expression, interrupting, not being able to reply to questions, turning their body away, showing impatience. In practice, it's quite difficult to carry on talking when it's clear that someone is not listening.*

Listening is not the same as hearing. Hearing is a passive activity — we can hear something without actually processing the information. Listening involves making sense of what we hear. It's an active process that demands complete attention.

Here's some guidance on how to listen:

1. Stop talking. You can't listen if you are talking.
2. Imagine the other person's viewpoint.
3. Look, act and be interested.
4. Observe non-verbal behaviour.

5. Don't interrupt.

6. Listen between the lines for things left unsaid or unexplained. Ask about them.

7. Make no judgement or criticism when listening.

8. Rephrase and reflect back what the other person has said at key points of the conversation to check understanding.

9. Stop talking — this is the first and last point, because all other techniques of listening depend on it.

(Source: adapted from Senge et al. 1994)

Activity

Activity 4.8   **(about 5 minutes)**

Consider the listening checklist above. Which two points in the checklist give conclusive evidence to the sender of the message that you are listening?

Feedback

It's only by questioning anything that's been left unsaid or by reflecting back to check understanding that a receiver gives the sender conclusive proof of listening. Note that this involves talking and leads us on to viewing the communication as a two-way rather than simply a one-way process.

Activity

Activity 4.9   (about 20 minutes)

Below are the behaviours associated with effective listening as identified by Goleman (1999). For each one:

- rate yourself on a scale from 1 (I do this) to 5 (I need to improve in this area)

- ask a colleague or friend to rate you, or discuss your response with someone you trust.

Listening openly and sending convincing messages		
People with this competence:	Own rating	Colleague's / friend's rating
■ are effective in give-and-take, registering emotional cues in attuning their message		
■ deal with difficult issues in a straightforward way		
■ listen well, seek mutual understanding and welcome sharing of information fully		
■ foster open communication and stay receptive to bad news as well as good		

Feedback

Some people develop these competences instinctively while others have to consciously work on them. However, as highlighted earlier in this section, the rules for work are changing.

Communication is a two-way process

The Shannon—Weaver model represents a one-way communication process, which is essentially about information giving. For example, a presentation to a large audience is a prime example of one-way communication. There is little or no facility for the audience to respond (Fig. 4.2).
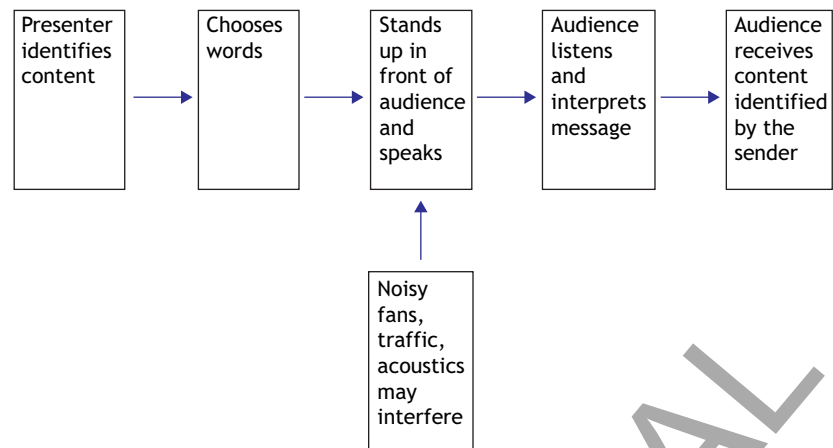
Fig. 4.2: One-way communication process (adapted from Shannon and Weaver, 1963)

You can only be sure that communication has taken place if it becomes a two-way process — feedback from the 'receiver' is returned to the 'sender' to show that the message has been received. So the process of effective communication between people is more accurately represented by Fig. 4.3.
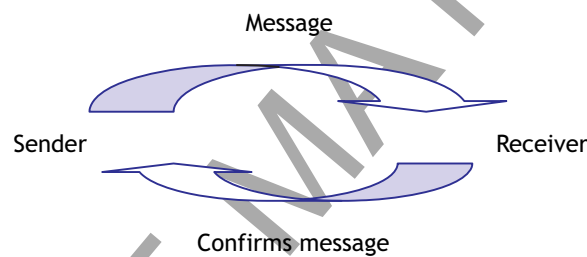

Fig. 4.3: Two-way communication process (reproduced with permission from Elsevier, Pergamon Flexible Learning, *Communication in Organizations*, 2005)

In face-to-face communication, as dialogue ensues, the roles of sender and receiver become interchangeable as conversation bounces to and fro.

Activity

Activity 4.10   (about 10 minutes)

Consider your experience of the following types of communication. For each one select the response that most accurately describes the process.

	One-way dialogue	Mostly one-way dialogue	Two-way dialogue involving limited feedback	Two-way dialogue
A report you produce for your line manager				
Telephone conversation with a customer (internal or external)				
Team briefing you give				
Team briefing you attend				
Email you receive from team member				
Notice on noticeboard				

Feedback

Communicating face to face has the most potential for immediate feedback, but this doesn't necessarily mean that the potential is used or encouraged. Written communication is often one way. Where it is two way, feedback tends to be delayed, although with email, immediate written feedback to the sender is common.

Therefore, communication can be defined as 'A process involving the exchange of information, ideas or feelings between people resulting in a common understanding'.

It doesn't have to be two way for communication to take place. However, there's no way of knowing if one-way communication has been effective.

Activity

> **Activity 4.11**   **(about 2 minutes)**
>
> Consider the definition of communication given above. To what extent do you think it generally describes what happens between members of your team? Mark a point on the continuum below.
>
> Not at all (0%)_____Totally (100%)

Feedback

> *Effective communication results in common understanding. There are times when one-way communication may be more appropriate or when minimum feedback is called for. The acid test is whether or not common understanding has been reached.*

E-communication

These days, the most common form of written communication you're likely to use is email. Although it's hard to imagine a world without email, it has its downsides. Here are some examples.

- **It is overused**: The ability to 'copy' emails to many people has added to the problem of 'information overload'. This means that you'll often get information that you don't need. Even if you don't spend time reading it, the act of filtering out what you do read takes up time.

- **Too much information is sent**: The ease with which attachments can be sent means that vast quantities of information may be received. It's a technique for shifting responsibility for filtering out relevant parts from the sender to the receiver. In practice, it often means that no one actually extracts the relevant information.

- **It can be an intrusion**: The arrival of an email can disturb concentration. Some people find it difficult to ignore its arrival until a convenient time to deal with it.

- **It's used to avoid face-to-face communication**: Emails can be used to 'dump' work on to people and deliver bad news.

- **It's an easy tool for breaching confidentiality**: It's a very simple process for an employee to forward an email and spread news or gossip.

Many organisations have policies related to email use. Here is one example.

Internal email policy
1.   In the case of urgent communications, the sender must not assume that an email message has been received and if necessary must follow it up with a telephone call.
2.   Formal internal correspondence may be sent via email, without the need for additional hard copy via conventional mail, provided that: ■   the sender's PC is set up to 'Request a read receipt' for all messages sent   ■   formal email correspondence and any attachments are signed with the name of the sender.
3.   All email correspondence is 'discoverable' under the rules of evidence, and can be retrieved and used in litigation, unless protected by a 'suitable rider'.
4.   Senders must be aware of the very large volumes of email that may be received by their addressee. The 'High Importance' icon that can be attached to an email to draw particular attention to it should be used only when necessary.

It's important to recognise that email isn't a private communication channel:

I think that people sometimes naively believe that an e-mail is somehow not a public communication.

Chris Major (former head of PR, AstraZeneca)

Summary

Now that you have reached the end of this section, you should be able to

3.1 Evaluate methods of communicating decisions

3.2 Discuss the processes for implementing a communications method

3.3 Evaluate the implementation of the communications method.

Self-assessment questions

Use these questions to check whether you have understood the key issues in this section. If you are not sure, or really don't know the answers, this suggests you need to work through parts of this section a second time.

1. What are the main stages in the process of communication?

2. What has to happen for you to know that your message has been received and understood?

3. How can you demonstrate to someone that you have listened to what they have said?

4. Identify the main channels of communication you use. What are the advantages and disadvantages of each one?

5. Identify two examples when:

   (a) the onus was on the receiver to act on information sent to them

   (b) the onus was on the sender of the information to check that the information sent made sense.

If you can answer the self-assessment questions, then you are ready to move on.

In the next section, we look at a context in which effective communication is essential: facilitating meetings.

Section 5 Using meetings to communicate information and decisions

Time required: about 1½ hours

Learning outcomes

By the end of this section you should be able to:

3.1 Evaluate methods of communicating decisions

3.2 Discuss the processes for implementing a communications method

3.3 Evaluate the implementation of the communications method.

Organisations and meetings

James Houghton (then CEO of Cornering) made a rule that anyone who believed that he or she added no value in a particular meeting of regular frequency, nor obtained any value, could take his or her name off the list of participants for that meeting. A very large number of ritualised meetings died very quickly.

(Source: adapted from Gratton and Ghoshal, 2002)

In many organisations, meetings are seen as huge time-wasters and an excuse for procrastination and indecisiveness. As illustrated by the extract above, many people attend meetings who simply have no need to be there. The action of calling a meeting can give a feelgood factor; something has happened and any related work or decisions can justifiably be postponed until the meeting. Sometimes an 'if in doubt, call a meeting' syndrome pervades an organisation. As long as progress is seen to be being made it doesn't matter how slow and tortuous that progress might be.

The Chartered Management Institute has produced two useful checklists on facilitating meetings:

- Checklist (002): Handling effective meetings
- Checklist (081): Team briefing.

Types of meeting

The term 'meeting' is a catch-all to describe anything from a brief exchange of ideas or information in a corridor to a very formal, regulated meeting of shareholders or directors.

Activity

Activity 5.1		(about 5 minutes)

List the meetings you've attended in the last month.

Impromptu meetings (by chance in a corridor)	Planned work-related meetings	Formal meetings

Estimate, roughly, the amount of time you spend in meetings in an average week. Include time spent travelling.

Feedback

Planned work-related meetings are likely to take up a substantial amount of your time. Some managers spend more than 60 per cent of their time in meetings. It's important that this time is used effectively and kept to a minimum.

Who's who in a meeting

Meetings need someone to take control and lead them. This is the role of the 'chair' or facilitator and involves the following tasks:

- **Preparing for the meeting**: Making sure the necessary people are invited, putting together an agenda, distributing any papers (this work may be delegated).

- **Running the meeting**: The chair is in charge of the meeting and is responsible for opening the meeting, ensuring the agenda is followed, making sure everyone has an opportunity

to contribute, and summarising points raised and actions agreed.

All formal meetings, and those with more than five or six participants, will need a chairperson. Sometimes — for example, in a committee — the role of chair is a permanent position. In workplace meetings, the chair can be appointed to run a specific meeting. As a manager, you are likely to chair your team meetings. However, encouraging other people to take on the role can be an excellent development opportunity, as well as giving you an opportunity to focus on participating in the meeting.

Meetings also need someone to take the minutes — that is, to make a written record of what happened during the meeting. In formal situations this is likely to be the role of a PA. In less formal meetings, it can be any participant who is willing to take on the role.

Reasons for holding meetings

Meetings need at least one purpose.

Activity

Activity 5.2   **(about 10 minutes)**

Consider three meetings you've attended recently. Identify the purpose(s) of each meeting by ticking the appropriate row(s). There is space for you to add additional purposes of the meeting.

	Meeting 1	Meeting 2	Meeting 3
Information giving/updating			
Reviewing progress			
Decision making			
Problem solving			
Planning			
Consultation			
Team building			
Other			

Feedback

It's likely that the meetings you attend have a variety of purposes. For example, an appraisal meeting will be about reviewing progress and planning. A team meeting may combine updating, problem solving and planning activities.

Before any meeting you should be able to answer the following questions:

■   Why is this meeting being held?

■   What should be achieved as a result of this meeting?

If you are unclear, or you found the questions difficult to answer, then you need to take action by either getting clarification or reconsidering the need for the meeting. Even if a meeting does have a purpose, its cost-effectiveness should still be considered.

Every meeting costs money. Take, for example, a meeting between a manager (total annual cost to the company £75,000) and a team member (total annual cost to the company £50,000). Assuming that the meeting lasts one hour and there were no travel costs, the breakdown would be as follows.

Combined cost to the organisation of employment:

> £75,000 + £50,000 = £125,000
>
> 226 working days a year = 1582 hours
>
> Cost of 1 hour meeting = £79.01

Whether it would be £79 well spent depends on the outcome of the meeting. If the only outcome was deciding that the office kettle should be replaced then it would be difficult to justify the cost. However, if the meeting resulted in the introduction of a more efficient rota system, then it would have been a very cost-effective use of time.

Activity

Activity 5.3   **(about 15 minutes)**

Select three meetings you've attended recently that involved different people. Estimate the cost to the organisation for each meeting. You may need to include the cost of travelling (time and expense).

Meeting 1:

Meeting 2:

Meeting 3:

Feedback

Costs are relatively easy to quantify. More difficult is making a judgement as to whether the outcomes achieved by the meeting were worthwhile (a cost-effective use of resources). People in organisations have to communicate to make things happen and often meeting face to face is the best option. Meetings can also help to build relationships, which in turn can lead to improved team working, increased motivation and a better quality of decision making.

Activity

Activity 5.4   (about 10 minutes)

For each meeting you identified in Activity 5.3, answer the following questions.

	Meeting 1		Meeting 2		Meeting 3	
	Yes	No	Yes	No	Yes	No
Did the outcome(s) of the meeting contribute towards meeting your work objectives?						
Did the outcome(s) of the meeting contribute towards meeting organisational goals/targets?						
Did everyone who was there need to be there?						
Were people adequately prepared so they could maximise their contribution?						
Were discussion and contribution constructive?						
In your judgement, was the meeting a cost-effective use of resources?						

Feedback

Before calling a meeting, you need to make a judgement as to whether it will be an effective use of time. For remote teams, it may be worth exploring the use of technology to avoid time spent on travelling and associated costs. For example:

- *teleconferencing/phone conversation (cheapest alternative to a face-to-face meeting)*

- *videoconferencing (participants can see as well as hear each other; sophisticated and costly in terms of setting up the hardware)*

■ *Microsoft NetMeeting© (a service providing data-conferencing, text chat, whiteboard and file transfer, as well as point-to-point audio and video)*

■ *email (exchanges can extend over days, as ideas are circulated and conclusions reached).*

There are two questions to ask before having a meeting:

1. Is this meeting necessary? ⇨ If no ⇨ Don't have it

⇩ *If yes*

2. How can its effectiveness and efficiency be maximised?

Meeting preparation

Preparation is the key to maximising the effectiveness and efficiency of a meeting. After identifying the purpose and outcomes of a meeting, you need to identify who should attend. You need people at a meeting who have:

■ the knowledge and experience to contribute

■ the skills to be constructive

■ the motivation to want to see outcomes

■ the authority to make decisions

■ a need to be informed.

Activity

Activity 5.5   (about 10 minutes)

Select a meeting that you will be running in the near future — for example, a regular team meeting.

1. What is/are the purpose(s) of the meeting?

2. What do you want the outcome(s) of the meeting to be? (Try to be objective as possible.)

3. How long will you schedule the meeting to last?

4. Is holding the meeting a cost-effective use of time and resources?

Feedback

Once you've clarified the reason for holding the meeting and identified who should attend, it's essential that the other participants receive the necessary briefing. You need to distribute an agenda beforehand.

For example, formal agendas traditionally take the following format:

Shorebird Catering Ltd Team meeting	— Title of organisation and type of meeting
Westland Office, 10.00am, 3 November 2012	— Date, time, venue
1. Apologies for absence	— Apologies — a culture of receiving apologies saves time waiting for people who can't attend
2. Minutes of last meeting	— Usually these have been circulated beforehand, so they can simply be approved as signed by the chair as being a true record of the last meeting
3. Matters arising	— This allows people to discuss any matters related to the last minutes, e.g. progress on actions
4. Main agenda: 4.1 Christmas menu 4.2 Staff rota 4.3 Butcher supplies 4.4 Customer complaints 4.5 Staff ideas	— These are items that have been planned as topics to be dealt with during the meeting; think carefully about the order — it's often best to put agenda items that need most discussion at the top
5. Any other business (AOB)	— This gives the opportunity for discussion of any items that arise during the meeting or that people have brought to the meeting but had not time to be included in the main agenda
6. Date and time of next meeting	— Usually agreed during the meeting

Note that each agenda item is numbered.

For less formal meetings, adding detail into the agenda can help make the meeting more productive, as people will be more prepared to contribute. Here is an example.

Shorebird Catering Ltd

Team meeting: 3 November 2012; Westland Office

10.00am

1. Apologies

2. Minutes of last meeting

3. Matters arising

4. Main agenda:

    4.1 Christmas menu

    — SD to circulate sample menus; JR to bring cover designs; LL to estimate costings

    4.2 Staff rota

    — all to check staff holiday bookings over Christmas; maternity leave cover for HJ to be considered

    4.3 Butcher supplies

    — action resulting from drop in quality and delivery times to be decided

    4.4 Customer complaints

    — SD to bring latest

    4.5 Staff ideas

    — all to collect prior to meeting

5. AOB

An agenda gives the framework for the meeting. It's useful to email a draft agenda to participants in good time to see if they want to add any items. This will help you to set a realistic time limit for the meeting, based on experience.

Leading meetings

If your role is to lead a meeting, whether or not you are in the formal role of 'chair', you need to make sure that:

■   all participants can contribute and there is constructive discussion

■   the agenda is followed within time constraints

■   you set the framework by opening discussion, summarising the main points and ensuring that action points are agreed.

It's not an easy task. It requires staying in control without dominating the meeting, as well as allowing all participants to be involved. Your leadership style will have a major impact on how you behave in a team meeting.

The leadership model developed by Tannenbaum and Schmidt (1973) is a continuum, with autocratic at one end and democratic at the other. It focuses on how decisions are made within a team, although the styles can also be transferred to approaches to leading meetings.

Autocratic					Democratic
Manager takes decision alone, without any consultation	Manager takes decision alone but 'sells' benefits to team members	Manager presents ideas for discussion and pretends to consult (has already chosen preferred option)	Manager presents ideas for discussion and genuinely consults	Manager presents ideas and asks team to decide subject to certain limits and boundaries	Manager joins the team in decision-making process

The style of leadership adopted by a manager will depend on the manager's own personality and experiences, the characteristics of team members and the purpose of the meeting.

You may need to change style during the course of a meeting. For example, there may be items on the agenda where it's appropriate to allow participants to discuss and explore issues and then come to a consensus with little or no input from you. At the other extreme, there may be occasions when you need to direct the outcomes of meeting items. Therefore, leading a meeting involves recognising the importance of participation and encouraging it, while at the same time keeping to the agenda. This will often mean that you have to stop discussion, summarise and move onto the next agenda item.

Managing a discussion

During meetings, it's easy for participants to get sidetracked and forget the purpose of the meeting. Therefore your role is to control the discussion by:

- introducing each agenda item clearly to give direction and remind people what they are in the meeting to do

- setting a time limit for a discussion

- keeping track of the discussion by summarising people's input

- asking questions to make sure that what people have said has been understood

- asking participants to keep the discussion relevant — people may try to hijack the agenda to make their own points

- making sure action points resulting from the discussion are agreed and accurately recorded (it's useful to ask the person

taking the minutes to read back items, especially if they have been controversial).

Don't be afraid to intervene to keep the meeting on track. It may feel awkward but participants should respect your role in leading the meeting.

Activity

Activity 5.6 (about 5 minutes)

List the communication skills that are particularly relevant when managing a discussion.

Feedback

Body language is very important. For example, facial expressions and eye contact can send clear messages in a meeting to indicate when it's time to move on. You can also pick up feedback from a participant's body language.

You need to speak clearly and with authority as you manage a discussion. Listening is also essential, so you can clarify, ask relevant questions and accurately summarise.

Activity

Activity 5.7 (about 5 minutes)

Select a meeting you have recently attended or led. Did you/the person leading the meeting:

	Yes	No
■ keep to the agenda?		
■ introduce each point on the agenda?		
■ keep the meeting on schedule?		
■ allocate discussion time for agenda items?		
■ sensibly encourage participation?		
■ keep the discussion relevant to the agenda items?		
■ summarise at appropriate intervals?		
■ make sure action points were agreed and recorded?		

Feedback	*Reflecting on other people's behaviour and reviewing your own is an important habit to get into. You learn a lot from observing how other people handle meetings. If you lead a meeting, ask for feedback from other participants on how it went.*

Creativity in meetings

In a time-pressured work environment it's often difficult to set aside good-quality thinking time. It's often easier to pursue the most obvious, tried-and-tested route than to look creatively at an issue and bring in fresh ideas.

Meetings can give an opportunity to think creatively. Allowing a group of people to think laterally and generate ideas can:

- confirm that the planned approach is the best one

- introduce new approaches or methods of solving issues.

Thinking creatively is hard work. Good ideas are often the result of a lot of hard thinking or, as legendary inventor Thomas Edison is renowned for observing:

> *Genius is 2 per cent inspiration and 98 per cent perspiration.*

People need to be allowed the space to think creatively. Meetings can be an ideal forum for giving that space in a structured way, where people can bounce ideas off each other and explore new directions.

There also has to be an environment that encourages creative thinking and is receptive to it. It's within your remit as a manager to create this kind of culture within your team.

The culture of an organisation has a direct impact on the quality of communications. For example, in *The Change Masters*, Kanter (1983) identified a 'segmentalist culture' in which ten rules for stifling innovation would thrive. The same rules can apply to stifling open and honest communication.

1. Regard any new idea with suspicion — because it's new and because it's from below.

2. Insist that people who need your approval to act first go through several other levels of management to get their signature.

3. Ask departments or individuals to challenge or criticise each other's proposals. (This saves you the task of deciding; you just pick the survivor.)

4. Express your criticisms freely and withhold your praise. (That keeps people on their toes.) Let them know they can be fired at any time.

5. Treat identification of problems as a sign of failure, to discourage people from letting you know something in their area isn't working.

6. Control everything carefully. Make sure people frequently count anything that can be counted.

7. Make decisions to reorganise or change policies in secret, and spring them on people unexpectedly. (This also keeps people on their toes.)

8. Make sure that requests for information are fully justified and make sure that it is not given out to managers freely. (You don't want data to fall into the wrong hands.)

9. Assign to lower-level managers, in the name of delegation and participation, responsibility for figuring out how to cut back, lay off, move people around or otherwise implement threatening decisions you have made. And get them to do it quickly.

10. Above all, never forget that you, the higher-ups, already know everything important about this business.

(Source: adapted from Kanter, 1983)

Activity

Activity 5.8   **(about 2 minutes)**

On a continuum between encouraging innovation and stifling it, where would you place your organisation.

Encouraging innovation_____Stifling innovation

Now consider your team. On a continuum between encouraging innovation and stifling it, where would you place the predominant culture in your team?

Encouraging innovation_____Stifling innovation

Feedback

Methods you may consider using within your team to encourage innovation and creativity include:

■ *brainstorming*

■ *six thinking hats.*

Brainstorming

This technique aims to unleash as many creative ideas or solutions as possible. The aim is to allow people's minds to roam free and then capture the ideas they come up with. Capturing ideas on a flipchart, however impractical or wild, can then trigger off new ideas in other people's minds, which may lead to fresh insights.

It's important that all participants are aware of the following rules.

■ Every idea is valid — no matter how impractical it seems.

■ There should be no criticism of any idea.

- Ideas mustn't be explored during the group-think session — just recorded on the flipchart. The scribe should note down every idea — no sifting.

- Set a time limit, say five minutes, but be prepared to extend the time slightly if the ideas are continuing to flow.

It's better to have someone who is not participating in the brainstorming session to write the ideas on the flipchart. When the time is up, discuss the ideas and select the ones that seem worthy of greater exploration.

Six thinking hats

In *Six Thinking Hats* (2004), Edward de Bono introduces the concept of parallel thinking. This involves looking at a problem or issue from many different angles before drawing conclusions. To do this in a systematic way, de Bono introduces different-coloured 'thinking hats'. Different-coloured hats can be worn in practice, although it can be enough just to have reminders of the different thinking types — on pictures on the walls, for example, or on coloured squares in the centre of a central table, or something similar.

During meetings, people can focus on the type of thinking associated with a particular hat, as in the table below.

Colour of hat	Type of thinking	Example
White	Looking at facts	The budget has been slashed by £50K
Red	Identifying emotions, hunches, intuition	Anger; incredulity that the importance of the service hasn't been recognised; feeling demoralised
Black	Looking at all the problems, negative aspects	We just can't meet demand. It's not good ... because ...
Yellow	Looking at all the positive aspects	It could give us an opportunity to ...
Green	Creatively identifying solutions, ideas, actions	How about ... or ...

The final hat, the blue hat, is worn by the chair to signify a controlling role. This involves asking participants to wear particular hats or categorising contributions into a 'thinking type'. For example:

- *Let's move on to focusing on green-hat thinking.*

- *We seem to be getting dragged back into black-hat thinking, so can we move on to yellow-hat thinking.*

The 'six hats' approach can be particularly useful if there are strong emotions that need to be aired before the meeting can

move on to discuss matters in a constructive manner. For example, the chair may clarify the facts by asking people to wear 'white hats'. Then, if 'red hats' are worn, any strong feelings and emotions can be aired and logged before moving on.

Techniques such as brainstorming and de Bono's six thinking hats can produce inspired and innovative results. However, a number of barriers can prevent people being willing to engage in creative thinking. These include:

■ fear of criticism

■ pressures and constraints (e.g. pressure to provide a solution in a short timescale or constraints set by the way things are 'normally' done or have been done in the past)

■ not believing that you have the ability to think creatively.

However, most people respond well to the invitation to look at situations creatively.

Writing the minutes

Minutes provide a record of what happened during a meeting. They ensure that everyone has the same understanding. In formal meetings, a record of the main discussion points is often necessary. Here is an example.

PORT DEVELOPMENT MEETING, 10 January 2012

Venue: Harbour Office

Present: John Barker   Kate Krier

              Sibina Patel   Chris Day

Apologies: Paul Cliffe (annual leave)

MATTERS ARISING

Caton Buoy: Survey now complete (issued 29 July). This buoy is shown to mark the western boundary of a submerged bank. The shallowest part of the bank is some 500 metres east of the current buoy position. To move the buoy to the east would guard the shallowest part but would then expose the western boundary to incoming traffic.

Action: Charts to circulate to masters for comment but the view from the meeting was that it should remain in its current position. CD to chase

AGENDA

3.1   Dredging consents

SB reported that all the regulators met on 11 April with John Eccles representing the Port of Caton. The results of this meeting were summarised in a letter stating that it is expected to determine the consent on 20 September. Any issues raised could delay the issue of the consent.

Action: JB to check no further issues

In less formal meetings, it may be decided that minutes should be in the form of action points. In this case, the next meeting would begin with a review of the progress on the actions.

Team meeting 25.11.2012

Attendees:

Noah Crossley

Keesha Bentley

Martha Smith

John Williams

Peter Mason

Frank Hindley

Summary of information, resulting agreements and actions

1.   The minutes of the last meeting were read and agreed.

2.   Matters arising:

   (a) John had explored the feasibility of contracting out.

Action: Peter to discuss with finance director

   (b) It was decided that no charge should be made for the Charter transport.

Action: Martha to inform users

It's important for any agreed actions to be clear. It's the chair's role to make sure the minutes are circulated after the meeting.

Summary

Now that you've reached the end of this section you should be able to

3.1 Evaluate methods of communicating decisions

3.2 Discuss the processes for implementing a communications method

3.3 Evaluate the implementation of the communications method.

Self-assessment questions

Use these questions to check whether you have understood the key issues in this section. If you are not sure, or really don't know the answers, this suggests you need to work through parts of this section a second time.

1. How would you judge the cost-effectiveness of a meeting?

2. Identify the criteria you could set to help you decide if a person should attend a meeting?

3. Why might your leadership style need to change during a meeting?

4. What is the purpose of keeping a record of what was agreed during a meeting?

5. What benefits can be brought by introducing creativity into a meeting?

If you could answer the self-assessment questions, then you are ready to move on.

Before you move on

Preparing for assessment

You have now completed the workbook — *Information-based Decision Making* — covering Unit 5002V1. If you are studying for the Chartered Management Institute Level 5 qualifications in Management and Leadership and are preparing for assessment, you should now be confident of your knowledge and understanding of the required learning outcomes. The table below indicates which sections of the workbook addressed each of the learning outcomes.

Unit 5002V1	Addressed within section:
Be able to identify and select sources of data and information	1
Be able to analyse and present information for decision making	2, 3
Be able to communicate information that supports decision making	4, 5

These learning outcomes will be assessed by your approved centre, usually through the use of an approved written assignment. Make sure that you know all the necessary information about assessment procedures by referring to the Student Guide for the *Pathways* series of workbooks, or through discussion with your centre.

The Study Support section for this unit can be located by visiting the CMI's online ManagementDirect management and leadership portal at http://mde.managers.org.uk/members. Study Support can be found by clicking on the Study Support tab located underneath the ManagementDirect search box. Here you can find short videos on leadership from senior managers within major organisations, checklists, articles and book reviews. These will all broaden and enhance your knowledge and understanding of this subject.

The bibliography at the end of this workbook lists the references to other texts used in this unit, and can also be used as a source of further reading if required.

Reflecting on progress

At this point it might be useful for you to stand back from your studies and reflect on your progress through this unit. Ask yourself how you are doing in terms of:

1. Improvements in management and leadership skills

   ■ Have I applied the workbook activities to my role in my workplace?

   ■ Have I identified the aspects of my role that I am not so good at, as well as those I am good at?

   ■ Have I identified further personal development needs that I will actually work on?

   ■ Have I been noting issues and questions to address in other Units?

2. Learning and study skills

   ■ Have I achieved a balance between work, home and study activities?

   ■ Have I developed good time-management skills for my studies?

   ■ Have I used a range of necessary learning skills?

   ■ Have I used all the sources of help available to me?

   ■ Have I prepared for assessment as well as possible?

Don't forget to prepare any action plans that arise from your answers to these questions.

Planning your next steps

In addition to preparing a personal action plan, you may like to consult your personal tutor or co-ordinator of your approved centre to help plan and address:

■ your next unit of study

■ any issues that arise from your job-role or workplace activities

■ any study skills support that you have identified

■ what you need to do to succeed with your personal action plan.

The Management and Leadership Standards

In addition to covering Unit 5002V1 for the Chartered Management Institute Level 5 Management and Leadership Qualifications, this workbook also relates to the National Occupational Standards for Management and Leadership. These describe in detail the activities, behaviours and knowledge that define effectiveness in the management field. You can find full details about the standards at www.skillscfa.org/

The National Occupational Standards for Management and Leadership do not correspond exactly with the Chartered Management Institute's Level 5 in Management and Leadership syllabus, as they provide competency statements that are not defined by level, but are focused towards the needs of

organisations. Each workbook therefore draws on components from one area or more of the National Standards.

How this workbook relates to the standards

The material in this workbook relates to some extent to the National Occupational Standards units listed in the table below.

Management and Leadership National Occupational Standards	
Unit	**Unit title**
EC2	Manage information, knowledge and communication systems
EC5	Use information to take effective decisions

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The CMI Management Library holds an extensive range of books and pamphlets for loan to members. A postal loan service is offered to members in the UK only. You will only pay your return postal charges. Go to www.managers.org.uk/library to review the collection and to place your requests.

Websites

www.skillscfa.org/ — sets out the national standards that describe the level of performance expected in employment for a range of management activities

www.managers.org.uk — Chartered Management Institute

www.ico.org.uk — the Information Commissioner's Office website, giving guidance on access to official information and protecting personal information

www.legislation.gov.uk/ — the full text of the Data Protection Act