

**STUDENT BOOK ANSWERS
UNIT 2
MANAGING BUSINESS ACTIVITIES**

23 PLANNING

ACTIVITY 1

CASE STUDY: TEACHING LANGUAGES

1. Explain the importance of planning to Emine when setting up a business.

The importance of planning when setting up a business cannot be over-emphasised. When organising an important event like a wedding, a holiday abroad, a special party or a house move, the event will be more successful if it is carefully planned. If the planning process is avoided things can go wrong and the consequences could be very unpleasant. For example, how good would a party be without 'proper' music? This could happen if the organiser had forgotten to book a DJ. It is sometimes said that 'failing to plan is planning to fail'.

Setting up a business can be a very complex and time consuming. However, with careful planning, the whole process is easier, less stressful and a number of expensive mistakes might be avoided. Emine needs to be aware of the importance of planning before starting her agency business.

2. Define a business plan.

A business plan is a document that shows how a business will develop over a period of time. It will contain a range of important information. For example, details about the product or service, nature and size of the market, resources needed, finance options, staff needed, location, marketing strategy and key forecasts such as costs, revenue and cash flow. Emine will probably need a business plan to help support applications for funding.

3. What might be included in the costing and finance section of Emine's business plan?

A very important part of the process when starting a business is working out how much it will all cost. This can be an intimidating task, but Emine will find it almost impossible to raise capital or borrow money if she cannot say with some accuracy how much will be needed before trading can begin. Emine thinks she will need €15 000 to start her agency and language business. The costing and finance section may contain spreadsheets that list all the costs of setting up. Costs may be divided into 'one-off' start-up costs and ongoing expenses, that is, those which will continue to be incurred once the business is trading. Emine will have to consider carefully all of these potential costs and expenses.

Once the set-up costs have been established, business owners can work out how much money they will need to raise from outsiders. They will then need to identify some possible sources of finance. Many new businesses use bank loans and personal loans from friends and family. However, there are specialists that might lend money or provide capital for new businesses.

Finally, it is a mistake to be undercapitalised when starting a business. This means that a business has not raised enough money to get started. This often means that they run out of cash and are forced to cease trading. People reading a business plan may use this section to judge whether the owners are realistic about the amount of money needed to be successful. Emine has to be sure that the €15 000 is sufficient to start the business without running out of cash.

EXAM PRACTICE

INSTANT ROAD RESCUE

(a) Define the term executive summary. (2 marks)

An executive summary is an overview of the business start-up. It describes briefly the business opportunity to be exploited, the marketing and sales strategy, operations and then finance. For example, in this case, Instant Road Rescue (IRR) is a 24-hour breakdown recovery service based in Kochi, the largest city in Kerala, with a population of over 2 million. IRR will respond to breakdown calls within a 30 km radius of Kochi and transport broken down vehicles to any location within 200 km. Also, in relation to marketing, IRR will be promoted by listing the service in appropriate directories, using roadside posters highlighting the easily memorable contact number (IRR 0484 448844) and placing leaflets on parked cars in the city (in the hope that many drivers will see the leaflet.) The use of social media by callers will be encouraged to inform friends and relatives about the service. IRR will also have a transparent pricing policy. This is a unique selling point. Callers will be charged a Rs 2000 call-out fee plus Rs 20 per km. There are also some brief details about market research, operations and the financing needs of IRR.

Ideally, after looking at the executive summary a reader will be keen to know more. The executive summary should be written last because it is a summary of the whole plan. Some would argue that this is the most important part of the business plan. This is because anyone who reads only part of the plan will always look at this particular section.

(b) Explain the purpose of an elevator pitch in a business plan. (4 marks)

Some business plans contain an elevator pitch. Entrepreneurs will be expected to tell others about their business idea – particularly investors, money lenders and potential customers. Therefore, a useful section in a business plan will be the elevator pitch. This is a summary that can be used in a ‘pitch’ about the business. This is likely to be a 2-minute talk introducing the business – its name, what the business does, its aims, how it is different from competitors and who it is for. Jagbir and Kafar will have to repeatedly explain to people such as the bank, suppliers, subcontractors, potential customers and new employees what the business is all about. If they have written an elevator pitch in their business plan and learnt it, they will be able to communicate their business idea quickly and clearly.

Like the executive summary, the elevator pitch should also be written after the business plan has been completed.

(c) Discuss two important sections that should be contained in a business plan. (8 marks)

One very important section in the business plan, particularly to investors and money lenders, is the costing and finance section. Part of the process when starting a business is working out how much it will all cost. This can be an intimidating task but entrepreneurs will find it almost impossible to raise capital or borrow money if they cannot say with some accuracy how much will be needed before trading can begin. This section may contain spreadsheets which list all the costs of setting up. Costs may be divided into ‘one-off’ start-up costs and ongoing expenses, that is, those which will continue to be incurred once the business is trading. In this case, IRR needs Rs 2 million to begin trading.

Once the set-up costs have been established business owners can work out how much money they will need to raise from outsiders. They will then need to identify some possible sources of finance. Many new businesses use bank loans and personal loans from friends and family. However, there are specialists that might lend money or provide capital for new

businesses. In this case, the Singh family will provide half of the money needed to set up IRR. However, the Singh brothers hope to raise the rest from a bank loan.

Another important section will be details about the market in which the business will operate. In this section entrepreneurs need to show the size of the potential market. They will also need to identify the customer profile, that is, the characteristics of individuals or other businesses that will be targeted. The nature of competition and the various marketing priorities will also have to be discussed. Many entrepreneurs will support this section with some market research. This might show, for example, where the typical customers are based, what causes customers to buy products and the factors that customers consider when buying a particular product. In this case, Jagbir and Zafar have undertaken some research. For example, they know that the number of road accidents in Kerala, Thiruvananthapuram, increased by 20 per cent in 2016. They also know that car ownership is rising and they have done a little research into competitors. For example, they found that 80 per cent of current operators were unreliable, unprofessional, rude, over-priced and unsympathetic.

This section may also show how the business plans to communicate with potential customers. IRR plan to do this by listing the service in appropriate directories, using roadside posters highlighting the easily memorable contact number (IRR 0484 448844) and placing leaflets on parked cars in the city (in the hope that many drivers will see the leaflet). The use of social media by callers will be encouraged to inform friends and relatives about the service. Their marketing strategy might change in the future once the business is established.

(d) Assess the purpose and relevance to Instant Road Rescue of a business plan. (10 marks)

For many people, setting up a business is a life-changing decision and will have wide-ranging consequences. Therefore, it is necessary to spend some time carefully planning the whole process. Indeed, research has shown that start-up businesses that have prepared a business plan are more likely to succeed than those which have not. The business plan is how the business will develop over a period of time, like 1 or 2 years. A business plan will also be needed to support applications for funding, both at the start-up stage and in the future. Money lenders and other investors are not likely to invest in a business unless owners can provide a clear, concise vision of the future of the business. In particular, investors will want to know how the finance is going to be spent and when, and how it is going to be repaid. Writing a thorough business plan will improve the chances of success for IRR.

In particular, it will force Jagbir and Zafar to take an objective, critical and unemotional look at the whole business idea. A business plan will also provide a strategy for the development of the business. Further, it will provide an action plan which identifies key tasks which must be undertaken and goals which must be met to improve the chances of success. The Singh brothers have been involved in a business before but never taken responsibility for running such an organisation. Therefore, they will need a clear vision. A business plan will also help to highlight potential problems in advance so that solutions can be found.

In this case, Jagbir and Kafar wrote a comprehensive business plan before they started trading. The plan was also used to help raise finance for the venture – a Rs 1 million bank loan. Kafar said ‘Writing the business plan was a bit of a chore. It took a long time and all we wanted to do was to get trading. However, writing the plan ensured that we were well prepared when the launch eventually came. It made us think through a lot of important issues and helped us to avoid mistakes. For example, if we had not written the plan we would have overlooked the importance of social media in our marketing. The plan also helped us to get

finance for the business. The bank could tell that Jagbir and I were thorough, committed, honest and realistic.'

Finally, the business plan will help show readers that Jagbir and Kafar are cautious, responsible, serious and trustworthy entrepreneurs. Their venture is ambitious and a lot of money is at stake. To begin such a venture without a thorough business plan could have been disastrous.

24 INTERNAL FINANCE

ACTIVITY 1

CASE STUDY: AVIGILON

1. Define sale and leaseback.

A sale and leaseback deal involves selling an asset, such as property or machinery that the business still actually needs. The sale is made to a specialist company that leases the asset back to the seller. This is an increasingly popular source of finance. In this case, Avigilon is selling its head office (a nine-storey building) which cost them CAD 100 million.

2. How does Avigilon plan to use the proceeds from the sale of its head office?

In this case, the CAD 100 million that is likely to be raised from the sale of the head office is going to be used to reduce the company's debt, boost working capital (the liquid resources needed for the day-to-day running of a business) and increase shareholder value. The sale is likely to generate substantial profit for the company – it was purchased in 2015 for just CAD 42 million.

3. Explain two advantages to Avigilon of using sale and leaseback as a source of finance.

The main advantage to Avigilon of selling its head office is to raise CAD 100 million. It is an internal source of finance for the company. This means that there are no interest payments so costs will be lower and profit higher. There are no administration costs either as there would be with issuing shares, for example.

Another advantage with this particular method is that another party, will be responsible for the care and maintenance of the nine storey building. This will help Avigilon to reduce the running costs of its head office. A key advantage in this case is the huge profit that will be made from the sale. According to Avigilon's leader, 'Vancouver's real estate market is in a period of unprecedented growth. The building is located in one of the most desirable downtown locations. This presents a great opportunity for Avigilon to secure the space needed to support our growing business and increase shareholder value.' The sale would see Avigilon more than double their money on the purchase of the building.

EXAM PRACTICE

MUSCAT INTERIOR DESIGNS

(a) Define internal finance. (2 marks)

Internal finance is the money that is generated by the business or the current owners. The main sources of internal finance are the owner's capital, retained profit, the sale of assets or a sale and lease back deal.

(b) Explain how Qasim might have raised the initial capital to start the business in 2010. (4 marks)

Most entrepreneurs use their own money when setting up a business. The main source is personal savings. In this case Qasim may have used his own savings to provide the OMR 15 000 for the business start-up. It is also possible that Qasim used some of the money received when he was made redundant as a result of the takeover of his employer in New York. Finally, another possibility is that Qasim borrowed some of the money from family or friends in Oman.

(c) Explain the opportunity cost to Muscat Interior Design of using retained profit for financing business activity. (4 marks)

Retained profit is a common source of finance for a business. It is the profit after tax that has not been returned to the owners. Around 65 per cent of all business funding comes from retained profit. It is the cheapest source of finance, with no financial charges such as interest and administration. However, there is an opportunity cost. If retained profit is used by the business it cannot be returned to the owner. For a small business like Muscat Interior Design (MID), this might mean that owners and their families have less money to fund their lifestyle. For limited companies, it means that shareholders receive lower dividends. In the case of a public limited company this may lead to conflict if the shareholders see that dividend payments have been frozen because the directors have used the profit in the business.

(d) Assess Qasim's decision to use internal finance to fund the new contract in this case. (10 marks)

In this case, Muscat Interior Designs would prefer to use internal finance to fund the new contract. The business has some options which it can consider. It may be able to use retained profit. Figure 1 shows the profit made by the business since 2010. In the first few years of trading profits were quite low so it is doubtful that very much was retained. However, in 2016 the business made a profit of OMR 24 900. This follows on from 2015 when OMR 18 200 was made. If some of these profits were retained in these 2 years they could be used to help fund the new contract. Another option is to sell one of the vehicles mentioned in the case. This might raise a proportion of the money needed depending on the age and condition of the vehicles. Selling assets is a common source of internal finance. The business may also consider the sale and leaseback of both their vehicles and any other large items of machinery it might own.

There are some key advantages of using internal finance to fund business activity. The capital is available immediately because there is no need to wait for a bank to decide whether a loan can be advanced. If MID has any retained profit it will be in a bank account ready and waiting. However, it is fair to say that the sale of the vehicles may take some time to complete – depending on what price is wanted. Vehicles can usually be sold quickly if the price is lowered. Also, internal finance is cheap. There are no interest payments, which means that costs will be lower and profit higher. There are no administration costs either. This is a major attraction. The use of internal finance also avoids the need to bring in third parties. When using external finance, it may be necessary to extend the ownership of the business in exchange for capital contributions. For example, if other investors are used they may want a share in the business.

Despite the attractive nature of internal finance, there may be some drawbacks. The main problem with internal finance is that it may be limited. For example, a business may not be sufficiently profitable to use retained profit. In this case, there may not be enough retained profit that MID could draw on. Also, internal sources of finance are not tax-deductible. If external sources are used, the interest paid on a loan, for example, can be treated as a business cost and subtracted from business profits to reduce tax owed. Leasing charges for assets can also be treated in the same way. The opportunity cost of using internal sources may be high. In this case, Qasim may want to keep the profit made by the business for himself to fund his lifestyle. This is a decision he will have to make. If he is committed to fund the contract internally, he may have to meet this high opportunity cost and retain the profit made in 2016. Finally, it is possible that Qasim could contribute some more of his own capital although this depends on whether his personal financial circumstances allow.

25 EXTERNAL FINANCE

ACTIVITY 1

CASE STUDY: KHALID SPORTSGEAR LTD

1. Define the term business angel.

Business angels are individuals who may invest often in exchange for a stake in a business. A typical angel might make one or two investments in a 3-year period, either individually or together with a small group of friends, relatives or business associates. In this case, Rameez Raza is a business angel. He has invested AED 350 000 in Khalid SportsGear Ltd for a 20 per cent stake in the business. He hopes to withdraw his interest in the business after 5 years.

2. Explain two possible disadvantages of using business angels as an external source of finance.

One problem with using a business angel to raise funds for a business is that they usually take a stake in the business. This means that they are entitled to receive a share of the profits for the period of time that they are involved. In this case, Rameez has taken a 20 per cent stake in the business. This means that he will get one-fifth of the profit made by the business each year.

Another problem is the involvement a business angel might have in the running of the business. Since they are part-owners, they have the right to influence decision making. Some owners might look for an angel with business experience hoping that they can provide some useful input into the running of the business. Other owners will want angels to keep their distance and just maintain a financial interest in the business.

In this case, it appears that Usman is grateful for Rameez's involvement. Rameez has attended monthly meetings and made some useful contributions, according to Usman's comments.

3. Assess the impact Rameez has had on Usman's business.

It could be argued that Rameez's involvement in Khalid SportsGear Ltd has had a very positive impact on the business. He got involved at a crucial stage, during the relocation of the factory and at a time when Usman wanted to expand the business.

According to Usman: 'Throughout the last 4 years, Rameez attended monthly meetings, making valuable contributions. With his prudent advice he guided the business through a recession and helped it to double in size. He had a number of useful contacts and was particularly helpful on the marketing side. I will miss him when he moves on next year.' This suggests that Rameez's involvement was significant and effective.

ACTIVITY 2

CASE STUDY: PETAR POPOV

1. Define a bank loan.

A bank loan is an arrangement where the amount borrowed from the bank must be returned over a fixed period of time in regular equal payments. Bank loans can be obtained from commercial banks. They are an inflexible arrangement and interest will be added to the total. They can be used for long-term or short-term purposes depending on the needs of the business.

2. Calculate the total interest charge on the 5-year loan.

The total interest payable is given by:

$$7.5\% \times 130\,000 = 130\,000 \div 100 \times 7.5 = 9750 \times 5 = \mathbf{48\,750}$$

3. Calculate the monthly repayments on the loan.

Monthly repayments are given by:

$$\text{BGN } 130\,000 + \text{BGN } 48\,750 = \text{BGN } 178\,750 \div 60 = \mathbf{\text{BGN } 2979.17 \text{ per month}}$$

ACTIVITY 3

CASE STUDY: SOUTH AFRICAN BUSINESS GRANTS

1. Explain one advantage to a South African business of getting one of these grants.

One key advantage to a South African business of getting a grant is that it does not have to be repaid. This means that the source of finance is free. However, firms do have to qualify for grants. In this case, it is clear that grants of up to ZAR 1 million are non-repayable.

2. What measures must a business take in order to qualify for funding from Black Business Supplier Development Programme.

Businesses normally have to qualify for government grants. In this case, a number of important conditions have to be met in order to get the ZAR 1 million. For example, a business must ensure that it is a CIPC (Companies and Intellectual Property Commission) registered company and it is 50.1 per cent or more owned by black people (black, Indian or other non-white races). The business must also show that the management team is 50 per cent black and that it has a turnover of between ZAR 250 000 and ZAR 35 million per annum. A business must also show that it has been trading for at least 1 year and provide proof of turnover. There are also some tax requirements. A business must have valid SARS tax clearance and an IRT14 SARS document. Businesses are not likely to qualify for funding from Black Business Supplier Development Programme unless they meet these conditions.

3. Explain one reason why many governments around the world give grants to businesses.

Business grants from government sources are usually designed to support government objectives. In this case, funding from the Black Business Supplier Development Programme is only available to businesses that are more than 50.1 per cent owned by black people. The reason for this is to encourage business development among the black majority of the population in South Africa. Up until fairly recently, an overwhelming majority of businesses in South Africa were owned by white South Africans. The government is trying to address this issue and is using this particular programme to help support that aim. However, it is also hoped that the grants will help businesses to improve their competitiveness and sustainability. The grants should help to expand existing businesses and boost employment in the country. ZAR 800 000 of the total grant should be allocated specifically for tools, machinery and equipment and ZAR 200 000 is intended for business development and training. The government provides these grants so that existing businesses can improve corporate governance, management, marketing, productivity and make more use of modern technology.

EXAM PRACTICE

NAPIER HOSPITALITY

(a) Define an unsecured bank loan. (2 marks)

If a bank lends money without the borrower providing any collateral as protection, the loan is considered to be unsecured. Unsecured bank loans are risky for banks because, if the borrower defaults, the bank may not get any more money back from the borrower.

(b) Explain one disadvantage to Napier Hospitality of issuing share capital. (4 marks)

One disadvantage of issuing share capital is that all shareholders are entitled to a share of the profit. For Napier Hospitality, this means that all the future profit generated by the business will have to be shared with shareholders, including Jennifer's father. Jennifer may resent this because she was the one who started the business in the first place. She might argue that she has done all the hard work of setting up the business and surviving the first uncertain years.

Another possible disadvantage is that the new shareholders will be part-owners of the business. This means that they are entitled to have a say in the way the business is run. They can be involved in key decisions because they will control part of the company. For example, it states in the case study that Jennifer is a little worried that her father, who can afford to invest in the business, might interfere too much. This might result in conflict between family members.

(c) Explain one possible reason why Jennifer preferred external funding in this case. (4 marks)

One possible reason why Jennifer preferred external funding may be because internal funding would have been difficult. There are no assets to sell and Jennifer has spent most of her profit on developing her home in Woodstock. Figure 1 shows that profit in the business has grown steadily over the 7 years, but most of the profit has been taken out of the business. Only a fraction – around 10 per cent in the profitable years – has been retained over the period. How much of the money is left in the business cannot be determined without reference to other documents, such as the balance sheet. Internal funding options appear limited. The case study does not mention whether Jennifer has any personal savings but the chances are that most of her money has been invested in her house.

(d) Assess which method of finance Napier Hospitality is likely to use in this case. (10 marks)

Although Jennifer would prefer an unsecured bank loan, she is unlikely to get one for NZD 400 000. Even though the business is profitable, it could be argued that a bank would be reluctant to lend Napier Hospitality NZD 400 000 without any security. In recent years, banks have become very cautious about lending to small businesses, because of the recession and the increased risk of lending to business. The bank might also need more information, such as a thorough business plan supported with cash flow forecasts and details of how sales are going to be generated.

If Jennifer really wanted a bank loan she would have to consider a mortgage. A bank would be much happier granting a secured loan where they have some protection. Jennifer might have to consider this option seriously unless she is genuinely prepared to share ownership, either with her family or a business angel.

Raising money by extending the ownership of the business is often difficult for entrepreneurs, but there are advantages. If Jennifer were to find a suitable business angel she would get the

money without having to pay interest. This would raise the profitability of the business. A business angel might also have some good ideas to pass on and help the business develop. Also, most business angels want to invest and then 'cash-in' their investment about five years later. However, finding a suitable business angel might be difficult and time-consuming. It could also cause problems if the business angel starts to try to exert too much control.

Setting up a private limited company might be the way forward. Fresh capital will be raised and the payment of interest is again avoided. However, the new shareholders would be entitled to a share of the profit for as long as the company is trading (unless Jennifer can buy back the shares at a later date). There is also the fear that her father might interfere too much. Not only might this disrupt the running of the business, but it could also lead to a breakdown in Jennifer's relationship with her father.

To conclude, I think Jennifer might have to decide between a mortgage and a business angel. It is unlikely that a bank would grant an unsecured loan and there is a risk of damaging family relationships. If Jennifer is lucky and can find a suitable business angel, this might be the best way to raise the finance. However, if this ends up being too difficult, the mortgage would be the best option.

26 FORMS OF BUSINESS

ACTIVITY 1

CASE STUDY: UCHE OKAFOR ASSOCIATES

1. (a) Why do you think Okafor, Ezuego and Amokachi, drew up a deed of partnership?

When a group of people form a partnership it is common to draw up a deed of partnership. This is not a legal requirement, but it does help to clarify the rights of each partner in the event of a disagreement. The deed of partnership is a legal document; it covers issues such as how much capital each partner has contributed, how profits should be shared and how much control each partner has. In this case, the deed states that profits are shared 40 per cent, 40 per cent and 20 per cent between Okafor, Ezuego and Amokachi, respectively. Without a deed of partnership, it might be difficult to resolve a dispute.

(b) In 2016, the partnership made a profit of NGN 25 million. In the absence of a deed of partnership, how much profit would Amokachi be entitled to?

If partners choose not to draw up a deed of partnership, profits should be split equally between partners. So, in the absence of a deed of partnership, Amokachi would be entitled to a NGN 8.33 million share of the profits in 2016.

2. Explain two advantages of a partnership illustrated by this case.

One of the advantages of forming a partnership is that more capital can be raised. In this case, the partners contributed NGN 8 million each and were therefore able to raise a total of NGN 24 million. Another advantage is that each partner can specialise in a particular field. In this case, one of the strengths of the business is that each partner is a specialist in a particular branch of accountancy: Okafor is a tax specialist; Ezuego is an investment analyst; and Amokachi is in charge of external audits. This has helped the business to attract a wider range of clients. It will also improve the efficiency of the business.

3. Discuss two possible reasons why Okafor Associates decided against inviting a sleeping partner into the business.

When the partners decided to expand, they needed to raise more capital. However, they decided against inviting a sleeping partner.

One possible reason for this is that all future profits would have to be shared with the new partner. Although a sleeping partner does not contribute to the running of the business, they are entitled to a share of the profits indefinitely.

Another possible reason for the decision may have been the worry that the partner might have caused conflict in the future. A sleeping partner may develop an increased interest in the business in the future. This could lead to disagreements about how the business is run and result in wasted resources if the conflict occupies too much of the partners' time.

ACTIVITY 2

CASE STUDY: GROPAK

1. Explain two advantages of becoming a shareholder in GroPak.

One advantage is that shareholders in GroPack will be entitled to a share of the profits. They are likely to receive dividends each year if the company is successful.

A second advantage is that shareholders will have a say in how the business is run. Shareholders are owners of the business and therefore are entitled to contribute to company decision making. The extent of their power depends on how many shares they own. Those members with the most shares will have the most power.

2. Explain who runs a private limited company.

A private limited company is run by a board of directors. These directors are elected by the shareholders. The board of directors, headed by a chairperson, is accountable to shareholders. The chairperson should run the company as the shareholders wish. If the company performs badly, directors can be voted out at an annual general meeting (AGM).

3. Assess the likely impact on Kika of GroPak becoming a private limited company.

Operating as a sole trader, Kika had unlimited liability. This means that Kika's personal assets were at risk if the business failed. However, as a shareholder in a private limited company, she has limited liability; the most she can lose is the original amount used to buy the shares.

A key advantage of becoming a limited company is that Kika can raise the extra money needed to fund the expansion. Banks have been reluctant to lend to Kika, which has reduced her funding options significantly. The sale of shares to family and two key employees will raise the €400 000 needed.

Another benefit to Kika is that GroPack will have more status and credibility trading as a private limited company. For example, suppliers and customers often have more confidence when dealing with an 'official' or 'formal' trading operation.

However, there are one or two drawbacks that Kika may encounter. As a limited company, control and decision making are shared with the other shareholders. It is possible that Kika's view about the way the business runs differs from those of other shareholders. This could create conflict and hold back the development of the business. The business might also operate less flexibly. This is because making key decisions is likely to be slower as more people are involved in the decision-making process.

Overall, the impact on Kika should be positive. With limited liability, she has protection. She will also raise the money needed to expand. Provided the sale of shares is done selectively, she can ensure that shares are only sold to like-minded people. This will reduce the risk of conflict in the future.

ACTIVITY 3

CASE STUDY: CARREFOUR

1. Explain the difference between a franchisor and a franchisee.

A franchisor is a business that allows another business to use its idea for a fee. In this case, Carrefour Group is a Franchisor. Around 7000 of its 12 000 stores are run by franchisees. The franchisee is the business that pays for the right to use the franchisor's idea. They may be individual entrepreneurs or perhaps a small group.

2. Discuss the key benefits to franchisees of taking out a Carrefour franchise.

One of the main advantages to entrepreneurs of taking out a franchise is that the business idea is already tried and tested. There is proof that it can be successful. This helps to reduce the risk to entrepreneurs of starting a business. However, franchisors usually offer franchisees a range of other benefits. In this case, one of the main advantages of taking on a Carrefour franchise is the reputation the group has for providing great value quality products,

as well as a network of experienced service and operating staff. Carrefour is a well-developed customer-focused chain and franchisees have the opportunity to exploit Carrefour's powerful purchasing operation and use their own skills to create a thriving business.

Another key benefit to Carrefour franchisees is the independence they enjoy. Although Carrefour is an international chain, franchisees are encouraged to identify and serve the needs of their local customer base. For example, Carrefour reckons that each of their French stores works with about 100 local producers. Finally, Carrefour offers management training programmes, job training and training in merchandising. Carrefour has also created Teach, a specialist training centre designed to meet the specific needs of franchisees.

3. Assess the benefits to the Carrefour Group of its franchising operation.

One of the main benefits to a franchisor like Carrefour of setting a franchise operation is that business growth will be faster. This is because a large number of stores can be developed all at the same time. The effort and financial risk needed to develop new stores is transferred to the franchisee. This means that new stores can be opened more quickly. Carrefour now has 12 000 stores around the world. The pace of growth can be much faster using a franchising operation. Franchising is also a much cheaper way of growing. This is because the franchisees are providing the start-up capital for each store. In this case, Carrefour franchisees have to provide up to €280 000 in order to obtain a franchise.

Another significant benefit to franchisors like Carrefour is that franchisees are likely to be better motivated than standard employees. This is because they have the chance to make money if the venture is successful. Therefore, it is possible, for example, that franchisees will work much harder to make a success of the business. Carrefour would benefit from this as their financial share from the business will be higher.

However, there are some drawbacks. For example, the total potential profits from the Carrefour group operation are shared with franchisors. Also, the cost of supporting franchisees, such as training, might be very high and there is always a chance that a poor franchisee might damage the reputation of the whole group. However, to protect the Carrefour brand the group has a cautious recruitment policy for its franchisees. For example, the desired skills for opening a Carrefour franchise include relevant management experience (ideally gained in food retailing), a desire to be an independent entrepreneur and business owner, customer service skills, management skills, the ability to work independently, strong communication skills and a genuine interest in food distribution. This should help to ensure that the Carrefour retail operation continues to be profitable.

EXAM PRACTICE

KHAN ACADEMY

(a) Define social enterprise. (2 marks)

Generally, social enterprises aim to improve human and environmental well-being, rather than making profit for external owners. In this case, Khan Academy is a not-for-profit business that aims to change education for the better by providing a free world-class education. All of the resources on Khan Academy's website are available to anyone – there are no subscription fees or other charges. Its services are aimed at students, teachers, home-schoolers or adults returning to the classroom. The website offers practice exercises, instructional videos, dashboard analytics and teacher tools, empowering learners to study at their own pace.

(b) Explain one benefit to Khan Academy of operating an online business. (4 marks)

Online businesses have a number of benefits. Access to the business for customers and other interested parties is via the internet. All online businesses will have a website which gives information about the products sold, prices and general information about the company. In this case Khan Academy offers educational services such as practice exercises, instructional videos and teacher tools. This means that anyone in the world with access to the internet can enjoy the services offered by Khan Academy. The main advantage of online businesses is their ability to reach a global market.

Another benefit is low set-up and running costs. Traders can build their own websites for a few hundred pounds. Many online businesses are run from home, which eliminates the need to find business premises. For around £2000, new online traders can get a service that includes web design, domain name registration and arranging hosting of the website by an Internet service provider.

In this case, Khan Academy is a social enterprise, so keeping set-up and running costs low will mean that more resources can be used to design and develop new learning materials.

(c) Assess the importance of growth in internet usage on an online business like Khan Academy. (10 marks)

Table 6 shows a huge growth in internet usage since it was introduced. The figures show that, in 2013, over 2500 million people worldwide were using the internet – all of whom have access to online businesses like Khan Academy. Clearly online businesses will benefit from this massive global market. For example, although many of Khan Academy's students are from the United States, the rest come from countries including India, Brazil, Mexico, South Africa and beyond. The site also has video lessons translated into almost 40 languages. Access to a growing number of students worldwide will help Khan Academy achieve its aim of changing education for the better by providing a free world-class education for anyone anywhere.

Online businesses that are not social enterprises – for example, Amazon – will also benefit from increased internet usage, raising sales revenue and profit as access to their retail services reaches across the world.

The growth in internet usage can benefit traditional businesses. For example, many of these place adverts on the internet. By advertising their products on the websites of others, well know companies will reach a huge audience. This will help them to raise their global profile, generate more awareness of their products and increase revenue and profit.

Therefore, the growth in internet usage will not just benefit online businesses alone.

27 FORMS OF BUSINESS: PLCS

ACTIVITY 1

CASE STUDY: NINTENDO

1. Define a public limited company.

A public limited company is owned by shareholders and the name of the company ends in plc. Like a private limited company, it is run by a board of directors under the supervision of a chairperson who is accountable to the shareholders. In this case, Nintendo became a public limited company when it was floated on the Osaka Stock Exchange in 1962.

2. How might a new investor buy shares in Nintendo?

Shares in a public limited company like Nintendo can be bought and sold on the stock market. This is a market for second-hand shares and is accessible to anyone. It is possible to buy shares in any public limited company online using a share-dealing site. Nintendo shares are traded on the Osaka Stock Exchange but they can be bought through an online dealer.

3. (a) Calculate the percentage change in Nintendo's share price between 2012 and 2017.

The percentage change between 2012 and 2017 is given by:

$$\text{Percentage change} = (\text{JPY } 34\,760 - \text{JPY } 8970) \div 8970 \times 100$$

$$\text{Percentage change} = 25\,790 \div 8970 \times 100$$

$$\text{Percentage change} = \mathbf{287.5\%}$$

(b) Explain what might account for the change in Nintendo's share price between 2012 and 2017.

Over the period between 2012 and 2017, the Nintendo share price has risen sharply by 287.5 per cent to JPY 34 760. This is a big increase and is likely to reflect the financial performance of the company. Investors buy shares to make money. If a company does well it grows and dividends climb: as a result, demand for their shares rises and the price goes up. In this case, one important reason why the share price increased was the booming sales of the new Switch system. This new product shares features of traditional home gaming machines and handheld units. Switch looks set to be the company's first big hit since Wii more than 10 years ago. In 2016, Nintendo generated sales of US\$4190 million. Investors have probably bought shares in Nintendo because they think their performance is likely to improve as sales of the new game take off.

ACTIVITY 2

CASE STUDY: DELIVERY HERO

1. Define an IPO.

An IPO (initial public offering) occurs when a company 'goes public'. The process, also called a flotation, means that a company's shares are offered to the public for the first time. Going public is time consuming and expensive. Once the company has been floated, shares are traded on the stock market. In this case, Delivery Hero announced plans for an initial public offering (IPO) to raise €450 million in 2017.

2. Explain the reasons why an IPO is expensive.

A flotation is likely to be time consuming and expensive. A great deal of administration is necessary and it is common for a specialist such as an investment bank to be awarded the task, which is likely to be very expensive. First, a company needs to publish a prospectus and may need to employ lawyers to ensure that it is 'legally' correct. The company must publish thousands of these and distribute them to potential investors. The share issue must also be underwritten. This means that the company must insure against the possibility that some of the shares remain unsold. A fee is paid to an underwriter who must buy any unsold shares. The company will also have advertising and other administrative expenses.

3. Why has Delivery Hero planned an IPO?

Companies like Delivery Hero use IPOs to raise money. In this case Delivery Hero plans to raise €450 million. Additional capital is often needed to get a company out of debt or invest in new business ventures. In this case, according to the CEO of Delivery Hero, the money was needed to develop the business. Niklas Östberg (Delivery Hero CEO), said the IPO would 'further enable us to develop the company and provide us with additional capital to expand our leadership positions in the online food ordering and delivery market.' He also said the flotation would improve the flexibility of the company.

EXAM PRACTICE

TASSELLI

(a) Define the term company prospectus. (2 marks)

One of the first jobs when undertaking an IPO (initial public offering) is to publish a company prospectus. This is a detailed document that advertises the company to potential investors and invites them to buy shares before the day of the flotation. A company prospectus is like a brochure advertising the sale of shares.

(b) Explain one possible motive for Tasselli's IPO. (4 marks)

As with most flotations, the main motive is to raise money. In this case, Tasselli raised about €100 million. Some of this money will be used to develop the business in the future. For example, the brand, which has around 90 stores, planned to open about five to ten new stores a year between 2017 and 2019.

Another motive for the IPO is to raise the global profile of the business. According to information in the case, Tasselli planned to grow its presence in Europe. This means that as an international 'player' the company will find it easier to recruit and retain talented employees in the field of design and management, for example. This will also help to improve the performance of the company.

(c) Assess the drawbacks to Tasselli of going public. (10 marks)

One significant drawback is the possibility that the owners will lose some control of the company. Since anyone can buy its shares, it is possible for an outside interest to exert control. At worst, outsiders could take complete control of a company if they buy enough shares.

A legal requirement of plcs is that all of the company's accounts can be inspected by members of the public. Competitors may be able to use some of this information to their advantage. Plcs also have to publish far more detailed information than private limited companies. Further, the way plcs operate is influenced by various Company Acts, which aim to protect shareholders. Compliance with company legislation will use up company

resources. For example, plcs often employ a company secretary to deal solely with compliance issues.

However, in this case, only just over 20 per cent of the company has been floated, so the risk of the owners losing control is minimal. Even though the drawbacks are real, they are probably outweighed by the benefits. Tasselli is raising a large amount of money, some of which will be used to develop the business. Also, production costs may become lower as the firm expands and gains economies of scale. Plcs are expected to grow and as they get bigger unit costs are likely to fall. This will improve their competitiveness and should generate more profit.

It is a possibility that Tasselli could dominate the market. It is a high-profile brand and the media attention resulting from the flotation may help to reinforce the brand further. Most plcs aim to grow and may eventually exercise some control in the market. For example, they may be able to create barriers to entry preventing competition. It could be argued that, in this case, the drawbacks of going public would be outweighed by the benefits.

(d) Assess whether you think the flotation will be successful. (10 marks)

The success of the flotation will depend largely on whether potential investors think they can make money out of buying the new shares. If they are positive about Tasselli's future prospects, they are likely to buy shares and the IPO will be successful.

Evidence in the case suggests that this might be likely. In 2017, the business expected to make a profit of €25 million on sales of around €150 million. It also enjoyed profit margins of around 9 per cent. This is very positive. The brand was popularised when it was featured in a Hollywood movie and its growing popularity in Europe saw it featured on the cover of a leading magazine.

However, the business environment has become more challenging, with flagging demand from the Chinese and Russian markets, and conflicts in, for example, Ukraine and the Middle East. Also, the luxury goods industry has been suffering a slowdown. In 2017, it was reported as having slowed by 2 per cent on 2016 figures. These are not ideal conditions for a flotation and investors may become cautious, preferring lower risk investments.

It could be argued that the IPO will be successful. Tasselli is a strong brand with 'tried and tested' products. Its CEO and creative designer are planning to stay on at the company. Both of these key staff will retain small stakes in the company and the flotation will enable them to be rewarded in shares if they help to improve the company's performance and share price. This is very positive for potential investors. The share price closed at €1.62 after the first day's trading. This was 1 cent higher than the initial flotation price of €1.61. This suggests that investors were relatively happy with the offer.

28 LIABILITY

ACTIVITY 1

CASE STUDY: DANISH SANDWICHES

1. Analyse two impacts of running a business with unlimited liability. Use examples from this case to illustrate your answer.

Business owners with unlimited liability, such as Merete Jensen, are exposed financially to the failure of their businesses. If their business collapses owing money to external parties such as banks, suppliers or the tax authorities, the owners will have to meet these debts from personal resources. This means that, if owners do not have the money to pay off these debts, they can be forced to sell private assets to raise the cash.

In this case, Merete had to pay a customer DKK 70 000 out of her own money as an out-of-court settlement because the business bank account only contained DKK 15 600. This highlights the risk taken by entrepreneurs when setting up an unincorporated business. The owners of unincorporated businesses may be financially liable if sued successfully by stakeholders, such as customers, employees or suppliers. This all arises because there is no separation of legal identity between the business and the owners.

Merete might also be liable if she falls behind with her rent payments. She pays rent six months in advance and has signed a five-year contract to this effect. If the business struggles to pay this money, Merete will have to use her own private resources to pay the landlord.

ACTIVITY 2

CASE STUDY: SIBANYE GOLD

1. Explain what is meant by a rights issue.

A rights issue is a way of raising additional share capital. It is where existing shareholders are given the 'right' to buy new shares at a reduced price. This is cheap and simple, and creates free publicity. The number of shares offered is based on current holdings. In this case, Sibanye shareholders can buy nine new shares for every seven that they currently own. Rights issues are also normally regarded as a cost-effective way of raising quite large amounts of money. In this case, Sibanye is raising around US\$1000 million.

2. A Sibanye shareholder owns 14 million shares. Calculate the cost to the shareholder of buying the complete entitlement.

A shareholder with 14 million shares would be allowed to apply for 18 million new shares. This is because shareholders can apply for nine new shares for every seven they already own. The cost of this purchase would be given by:

$$18 \text{ million} \times \text{ZAR } 11.28 = \text{ZAR } 203\,040\,000$$

3. Explain why the rights issue was oversubscribed in this case.

The rights issue organised by Sibanye Gold was oversubscribed by five times. This means that the applications for new shares were five times greater than the amount of shares available, that is, the new shares were very popular. This was probably because the shares were offered at an attractive 60 per cent discount. This means they were on offer at 60 per cent below the current share price in the market – they were very cheap! Also, Sibanye Gold has a reputation for good, regular dividends. Sibanye's dividend yield is 5.64 per cent which is well above the 2.16 per cent average for South African companies.

EXAM PRACTICE

ILGA SKUJA

(a) Define limited liability. (2 marks)

Owners of incorporated businesses are shareholders. This means that owners have limited liability. Their financial liability is limited to the amount of money they invested in the business. It is a fixed sum and equal to the amount of money they paid for their shares. If a limited company collapses, the owners' private assets are fully protected. Shareholders cannot be legally forced to sell personal assets to meet business debts.

(b) Analyse two implications to Ilga Skuja of forming a limited company. (6 marks)

In addition to financial protection, shareholders in limited companies, such as Ilga Skuja, also have protection from legal claims on the business. This is because the owners and the business have a separate legal identity. For example, if a customer sues a limited company for damages, there can be no claim on the private wealth of the shareholders if the business cannot pay the compensation. However, there are exceptions to this rule. Courts may decide that individuals are liable if a crime has been committed or if the company has failed to maintain adequate records and accounts, hold annual general meetings or file annual reports. This is most likely to happen with private limited companies.

Limited companies may find it easier to raise larger amounts of money from investors. This is because shareholders' private assets are protected. As a result, investors are more willing to buy shares in limited companies because they know precisely the extent of their liability. It is limited to the size of their investment. In this case, Ilga is considering raising some money for her business by becoming a limited company.

(c) Evaluate whether Ilga Skuja should raise finance by forming a limited company or using other sources of funds. (20 marks)

Ilga Skuja needs to raise €12 000 to return her business to its previous level of profitability after suffering some setbacks. She needs to retrain and invest in new technology. To begin with, it seems that internal sources are not likely to be an option. This is because the business only made a profit of €7000 in 2016 and €5200 (estimated) in 2017. Also, the business bank account is close to its overdraft limit of €3500 and there are cash flow problems. It does not say in the case study whether Ilga has any private cash resources, although she does own a house.

It is likely in this case that Ilga would seek external funding. She may prefer to raise the €12 000 using an unsecured bank loan, however, it could be argued that a bank might not wish to lend to the business given that profits have fallen and competition is now growing. Ilga might consider the newer sources of funding such as peer-to-peer lending (P2PL) and crowd funding. She may also try to attract a business angel. However, she would have to make a strong case to persuade people to invest. In particular she must be able to show investors that the business has a real future after she has been retrained and invested in new technology. She will have to draw up a detailed and convincing business plan.

Ilga is also considering setting up a limited company to raise some money for the business. However, although Ilga would enjoy limited liability, she is worried that she would lose some control. She has met with a couple of prospective investors who have some experience in the music industry. She was impressed with some of their ideas for the development of her business and thinks they might provide €10 000.

Finally, the business has no collateral but Ilga owns an €80 000 house with €50 000 outstanding on the mortgage. She may be able to increase the mortgage on her house to

raise the full €12 000. However, since she has unlimited liability, if the business failed, she could end up losing her house. It is likely that Ilga will find it difficult to raise the money needed due to the current weak state of the business. Perhaps, she could raise the €12 000 by using a variety of different sources. For example, €2000 unsecured loan, €3000 P2PL, €3000 crowd funding and €4000 mortgage. The funding options for Ilga are very limited in this case unless she decides to form a limited company and allow two new investors into the business in return for most of the money needed (€10 000). It is a difficult decision. Owing to Ilga's worry about losing some control of the business, perhaps she should try to raise the money herself and maintain her complete independence.

29 SALES, REVENUE AND COSTS

ACTIVITY 1

CASE STUDY: FC BARCELONA

1. Why might FC Barcelona find it difficult to calculate sales volume?

When a business sells clearly identifiable units of output, such as a farmer selling tonnes of wheat, measuring or calculating sales volume is straightforward. However, in some cases it is difficult to identify single units of output in a business. In this case, FC Barcelona has three key sources of revenue. This includes revenue from match day activities, broadcasting and commercial. However, each of these revenue streams can be broken down further into an even wider range of sources. For example, sources of commercial revenues might include the sale of merchandising such as replica shirts, clothes and virtually anything containing the FC Barcelona logo; sponsorship; advertising; travel packages to overseas fixtures; weddings; business meetings and other similar functions at the stadium; stadium tours; and revenue from providing hospitality. For FC Barcelona it would be quite difficult to identify total sales volume for the year.

2. If FC Barcelona play 19 games in La Liga in a season, calculate total revenue from programme sales if an average 23 500 programmes are sold at each match for €2.

Sales revenue from a season of La Liga programme sales would be given by:

$$19 \times 23\,500 \times \text{€}2 = \text{€}893\,000$$

EXAM PRACTICE

RAZIA MALIK

(a) Define fixed costs. (2 marks)

Fixed costs are those costs that do not change when the level of output changes. They stay exactly the same over all levels of output. In this case, the fixed costs of running the business start-up training courses include the car lease, insurance, other fixed costs and the special promotion in 2017.

(b) Define sales volume. (2 marks)

Sales volume is the amount of output sold in a specific time period. The way sales volume is measured will depend on the nature of the business. In this case, the sales volume for Razia Malik's training courses in 2016 was 200 units. She delivered a total of 200 training courses in 2016. Sales volume should not be confused with sales revenue, which is the value of output sold in a specific time period

(c) Calculate the profit made by the business in 2016. (4 marks)

$$\begin{aligned} \text{Profit} &= \text{total revenue} - \text{total cost} \\ &= (\text{€}600 \times 200) - (\text{€}8000 + [\text{€}400 \times 200]) \\ &= \text{€}120\,000 - (\text{€}8000 + \text{€}80\,000) \\ &= \text{€}120\,000 - \text{€}88\,000 \\ &= \text{€}32\,000 \end{aligned}$$

(d) Analyse two methods a business might use to increase sales volume. (6 marks)

Most businesses will be keen to improve sales volumes providing they have enough capacity. One approach that could be used is to increase expenditure on advertising. The main aim of all methods of advertising is to increase sales volume. Different businesses and industries are likely to have their own preferred methods. For example, many global car manufacturers like to use television adverts. This is because the performance of a car can be demonstrated using a motion picture. Many small businesses rely on much cheaper advertising media such as adverts in local newspapers. However, businesses must monitor carefully the impact on profit of increased expenditure on advertising when trying to lift sales volumes. Heavy expenditure on advertising may have a negative impact on profit even though sales volumes rise.

Businesses are likely to increase sales volumes if their advertising and promotion is more targeted. That means that it should be aimed more accurately at the people who are most likely to purchase the product. For example, a golf equipment retailer could place a print advert in a national newspaper that sells several million copies per day. However, the same advert placed in a monthly golf magazine, with a much lower number of sales, might be far more cost effective. This is because the advert is directed solely at golfers, that is, people who might be interested in buying golf equipment. The advert is more targeted. Many businesses are using social media to help make advertising more targeted.

(e) Price elasticity of demand for Razia's courses is estimated to be -1.2 . Assess the extent to which Razia achieved her objective by raising the price of the courses from CAD 600 to CAD 900. (10 marks)

If Razia increases the price of the courses to CAD 900, demand for them will fall. This is because demand is price elastic. The 50 per cent price increase (from CAD 600 to CAD 900) will result in a 60 per cent fall in demand. Therefore, the number of courses sold in 2017 would fall by 60 per cent to just 80. This would have a negative impact on both revenue and profit. Before the price increase, sales revenue was €120 000 ($€600 \times 200$). However, after the price increase, sales revenue would fall to €72 000 ($€900 \times 80$). This is a significant drop and would have a negative impact on profit.

In 2016, the value of profit was €32 000. However, in 2017 after the price increase, profit would be €20 000 ($€72 000 - [€12 000 + \{€500 \times 80\}]$). This is a fall of €10 000 and consequently Razia did not reach her profit target. Profit did not rise but actually fell from €32 000 to €20 000. However, Razia may have enjoyed some other benefits. The number of courses run by Razia fell from 200 in 2016 to 80 in 2017. This means that Razia did not have to work as hard. The 60 per cent fall in demand meant that Razia would have more leisure time.

To conclude, it is clear that Razia did not achieve her objective after raising the price of the courses. Her 10 per cent profit increase was not achieved. However, she still made €20 000 for a lot less work (about 60 per cent less). Whether Razia is happy with this outcome depends on how much value she attaches to leisure time.

30 SALES FORECASTING

ACTIVITY 1

CASE STUDY: GARDEN FURNITURE SALES

1. Use the data from Table 2 to explain one reason why sales for this business are higher in Q3 than in Q1.

Sales in Q3 are higher than those in Q1 due to the seasonal nature of the business. Sales of garden furniture will tend to rise during warmer months, as people take advantage of the weather and eat outside. The table shows that, in both 2014 and 2015, sales in Q3 are more than three times those in Q1.

2. Explain why sales forecasting will be useful for this business in terms of: (i) staffing (b) buying supplies.

(a) Sales forecasting can help a business plan its staffing levels to ensure that it has the right number of staff at different times of the year. Previous years' sales show that sales in Q3 are much higher than in Q1. The business will need more staff at certain times of year so it can manufacture the furniture to meet demand. Sales data is a useful indicator of what the level of demand will be. From this information, managers at the business can decide what staffing levels should be at different times.

(b) Sales forecasting tells a business what its production levels will be at different times of the year. The higher sales in Q2 and Q3 mean that, to be ready to meet this demand, the business will need to produce its furniture in good time. To enable this production to take place, supplies of component parts will need to be available, and contracts with suppliers can be placed to ensure that materials are available.

ACTIVITY 2

CASE STUDY: VAL THORENS

1. Use the data from Table 3 to explain the meaning of seasonal variations.

Seasonal variation means that demand is different at different times – seasons – of the year. The demand for accommodation at ski resorts increases dramatically in Q4 and Q1, as skiers arrive to enjoy the snowy ski slopes. In Q4 of 2017 the number of rooms let at the Prince Hotel was 4090 – almost four times greater than in Q3 (840).

2. Calculate the percentage change in room sales at the Hotel Prince between: (a) 2016 quarter 1 and quarter 3 (b) 2016 quarter 4 and 2017 quarter 4.

(a) Between Q1 and Q3 in 2016 the number of rooms sold at the Prince Hotel fell from 4420 to 710, that is, by 3710. The percentage change over this period is given by:

$$3710 \div 4420 \times 100 = \mathbf{83.9\%}$$

(b) Between Q4 in 2016 and Q4 in 2017 the number of rooms sold at the Prince Hotel fell from 4110 to 4090, that is, by just 20 rooms. The percentage change over this period is given by:

$$20 \div 4100 \times 100 = \mathbf{0.49\%}$$

3. Assess two possible impacts on Hotel Prince of the seasonal variations shown in Table 3.

One impact on the Prince Hotel would be that sales at different times of the year vary, which means that cash flow is not consistent. This might mean that net cash flow is weak at certain times of the year, that is, during the summer months in Europe. However, since the hotel owners always know that cash flows will fall in the summer, they can prepare for the lower levels of cash inflows. For example, the business may arrange a bank overdraft or save cash when cash flows are high during the winter.

A second impact on the Hotel Prince is that, at certain times of the year, that is, in Q4 and Q1, it may be difficult to meet the demand of skiers. In certain very busy weeks the hotel may struggle to meet this demand. This may result in poor customer satisfaction and reputational problems. However, as there is a large amount of sales data from previous years, the hotel owners do have a clear picture of what the change in demand will be, and can therefore plan ahead. For example, they may raise their prices at very busy times to reduce demand a little.

ACTIVITY 3

CASE STUDY: ORGANIC FOOD SALES

1. Define consumer trends.

Consumer trends are the habits and behaviours of consumers with regard to the products they buy and how they use them. Trends can change due to seasonal factors, and also due to changing fashions. Some trends occur over a longer time period. For example, ebook sales are now slowing down after their initial success. In this case, there is a growing consumer trend to buy organic food in Europe.

2. Calculate the percentage increase in retail sales of organic food between 2005 and 2014.

The percentage increase in retail sales of organic food in Europe is given by:

$$\text{Percentage increase} = (\text{€}26.2 \text{ billion} - \text{€}11.9 \text{ billion}) \div \text{€}11.9 \text{ billion} \times 100$$

$$\text{Percentage increase} = \text{€}14.3 \text{ billion} \div \text{€}11.9 \text{ billion} \times 100 = \mathbf{120.2\%}$$

3. Discuss how some farmers in Europe might respond to the data shown in Figures 1 and 2.

Figure 1 shows a growing consumer trend in Europe. The graph shows that European consumers are buying more organic food. Over the time period, between 2005 and 2014, retail sales of organic food have increased by 120.2 per cent. This information is likely to be used by some European farmers. Those farmers that already produce organic food are likely to expand production. They may adjust their sales forecasts and try to produce more. Other farmers, whose resources are used up in other growing activities, may decide to switch production to organic food. Businesses aim to meet the needs of consumers by responding to consumer trends. Those farmers that can adapt to changes in the market quickly are likely to be more successful.

The information in Figure 2 may also influence farmers. The graph shows that organic food is particularly popular in a minority of European countries such as Germany, France, the UK and Switzerland. Therefore, farmers in these countries might have the most to gain by switching production in favour of organic produce. Also, farmers in neighbouring countries might decide to produce and export organic foods to those that consume higher levels.

Generally, information showing consumer trends will be used by businesses to help make more accurate sales forecasts and subsequently affect their production decisions.

ACTIVITY 4

CASE STUDY: CATHAY PACIFIC

1. Explain one impact on Cathay Pacific's sales forecast in response to growing competition in the market.

One impact is that the sales forecast is likely to overestimate the likely sales revenue for Cathay Pacific. Sales forecasts are produced in advance of actual trading periods and in this case before the effects of fierce competition in the market was finally realised. As a result, Cathay Pacific may not have known the full extent of competition in the market. Cathay Pacific now faces a threat from mainland Chinese and Middle Eastern airlines that are expanding rapidly in the region. Also, airlines such as Air China and China Eastern are offering more direct services from the mainland. This makes it less attractive for passengers to travel via Hong Kong. There is also competition from Middle Eastern airlines such as Emirates, Etihad and Qatar Airways. The impact of this competition was to reduce revenue for the first six months of the year – by 9.2 per cent to HKD 45 680 million. In the future, Cathay Pacific will have to build in the effect of increasing competition into their sales forecasts.

2. Why might time series data from Cathay Pacific – details of sales in previous years – be less reliable following the emerging competition on a number of fronts?

Time series data is historic in the sense that it does not reflect current market conditions. Cathay Pacific's previous sales were those generated from the airline market as it was, and before the fierce competition emerged. Cathay Pacific's time series data was based on this different market. The actions of rival airlines effectively means that the market is more competitive and that Cathay Pacific's sales are likely to be lower than in previous periods.

As such, the time series data is less reliable as a tool to forecast future sales due to the fact that the current market is not the same. The market for air travel is dynamic. Although passenger traffic might be growing across the world as incomes rise in many countries, an increasing number of airlines are providing an increasing number of services. This makes sales forecasting more difficult.

EXAM PRACTICE

HYUNDAI HEAVY INDUSTRIES

(a) Define a sales forecast. (2 marks)

A sales forecast is a prediction of future sales revenue. This is often based on previous sales data.

(b) Explain how the orders might affect future sales forecasts for HHI. (4 marks)

A sales forecast is a prediction of future sales. The increase in orders placed with HHI are very significant, a 416 per cent increase. These extra orders will clearly affect sales in the current period. The order value was more than one-half of the combined three companies' annual sales forecast of US\$7500 million. In May, the HHI Group received orders for 20 ships worth US\$1300 million. This could also rise to 29 ships and US\$1900 million assuming that all the orders are completed. In April 2017, the three companies got 21 orders worth US\$1000 million.

The size of the orders means that HHI, when projecting future sales, will forecast higher sales in future periods. This is reasonable given that the dramatic increase in orders means that HHI has clearly strengthened its position in the market for ships.

(c) Analyse two possible difficulties businesses might encounter when making sales forecasts. (6 marks)

Predicting the future is very difficult indeed. One problem is that consumer tastes and preferences are changing all the time. Many businesses use time series data to help predict future sales. This is called extrapolation. However, although this is helpful, it is not a perfect method. Just because something happened in the past it does not mean that it will continue to happen. For example, an external event might have an unexpected impact on sales. A business making garden furniture may forecast a 6 per cent increase in sales using time series data. However, a spell of prolonged cool, damp weather in the summer would see demand for garden furniture fall dramatically. A wide range of external factors such as the weather, political factors, changes in society, rival's activities, economic events, environmental factors and developments in technology make forecasting future sales very difficult.

Another problem that forecasters might encounter is selecting and analysing the wide range of data that might be available. There is a lot of data available to consumers, businesses and the government. Forecasters have to decide which data is best for their needs. Sometimes data relating to the same issues might be conflicting. For example, when the UK voted to leave the EU, some sources said that the UK economy would benefit. In contrast, others said it would be disastrous. A real difficulty of accurate sales forecasting lies in the sheer amount of data that exists which might influence the forecast.

(d) Assess the factors that might affect sales forecasts at HHI in the near future. (10 marks)

Sales forecasts depend on a range of different factors. HHI has just experienced a huge increase in orders. Past demand (or historic sales) will have a significant impact on sales forecasts. However, HHI is not likely to expect such a surge in orders next year. Although the company might be more optimistic about future sales, it is not likely to extrapolate this recent dramatic trend. Forecasters will have to take into account other factors.

One important factor is economic growth. The sale of ships is linked strongly to how well the global economy is doing. If global growth is sound, and incomes are rising, more goods and will be demanded and international trade is likely to rise. During 2016, international trade growth was slow. However, the World Trade Organisation has predicted that global growth in trade will be 2.4 per cent in 2017. In 2018, the forecast was for growth of between 2.1 per cent and 4 per cent. This will probably mean that HHI will be more optimistic about their future sales forecasts.

Orders for commercial ships may also have risen due to the lifting of sanctions in Iran. After a number of years, where Iran was excluded from the majority of international trade (due to its position on the development of nuclear facilities), the nation is now allowed to trade freely again. Therefore more ships will be needed to transport goods – particularly oil. HHI will have to take this into account.

HHI has recently increased the intensity of its marketing efforts to meet clients' needs. This is likely to have helped increase orders for new ships. If a business improves its marketing strategies, it should benefit from an increase in demand. Information in the case also says that HHI is in a strong financial position and the company's reputation for shipbuilding expertise has been recognised by customers. These are additional factors that should affect the future sales forecasts for HHI.

To conclude, HHI is likely to be very optimistic about future sales. However, the company must be cautious and also take into account how much capacity the business has left. It is very unlikely that sales forecasts will reproduce the surge in orders experienced in 2017.

31 BREAK-EVEN

ACTIVITY 1

CASE STUDY: MÜLLER CAMPING-ANHÄNGER

1. Define the term contribution.

Contribution is the difference between selling price and variable cost per unit. It is the amount of money left over after variable costs have been subtracted from revenue. The money contributes towards fixed costs and profit.

2. Calculate the contribution made by each trailer.

$$\begin{aligned} \text{Contribution} &= \text{selling price} - \text{variable cost} \\ &= \text{€}800 - \text{€}500 \\ &= \text{€}300 \end{aligned}$$

Therefore, each trailer sold makes a contribution of €300.

3. Calculate the profit made by Müller Camping-Anhänger if 2000 trailers are made and sold in a year.

$$\begin{aligned} \text{Profit} &= \text{total contribution} - \text{fixed costs} \\ &= (2000 \times \text{€}300) - \text{€}200\,000 \\ &= \text{€}600\,000 - \text{€}200\,000 \\ &= \text{€}400\,000 \end{aligned}$$

Therefore, profit for the year is €400 000

4. A new company enters the market, and Müller Camping-Anhänger is forced to lower its price to €650 in the coming year. Calculate the impact the price cut will have on annual profit. (Assume that output stays the same at 2000.)

$$\begin{aligned} \text{Contribution} &= \text{selling price} - \text{variable costs} \\ &= \text{€}650 - \text{€}500 \\ &= \text{€}150 \end{aligned}$$

$$\begin{aligned} \text{Profit} &= \text{total contribution} - \text{fixed costs} \\ &= (2000 \times \text{€}150) - \text{€}200\,000 \\ &= \text{€}300\,000 - \text{€}200\,000 \\ &= \text{€}100\,000 \end{aligned}$$

Therefore, the price cut reduces the profit made by Müller Camping-Anhänger from €400 000 to €100 000.

ACTIVITY 2

CASE STUDY: MARIAM NANJEGO

1. Calculate the monthly break-even output for Mariam Nanjego's business.

$$\text{Contribution} = \text{selling price} - \text{variable cost}$$

$$= \text{UGX } 50\,000 - \text{UGX } 40\,000$$

$$= \text{UGX } 10\,000$$

$$\text{Break-even} = \text{fixed cost} \div \text{contribution}$$

$$= (\text{UGX } 1\,000\,000 + \text{UGX } 500\,000) \div \text{UGX } 10\,000$$

$$= \mathbf{150}$$

Therefore, Mariam needs to sell 150 gift packs to break-even in a month.

2. Calculate the total cost and total revenue at the break-even level of output.

$$\text{Total cost} = \text{fixed costs} + \text{variable costs}$$

$$= (\text{UGX } 1\,000\,000 + \text{UGX } 500\,000) + (150 \times \text{UGX } 40\,000)$$

$$= \text{UGX } 1\,500\,000 + \text{UGX } 6\,000\,000$$

$$= \text{UGX } 7\,500\,000$$

$$\text{Total revenue} = \text{price} \times \text{quantity}$$

$$= \text{UGX } 50\,000 \times 150$$

$$= \mathbf{\text{UGX } 7\,500\,000}$$

3. Calculate the profit made by the business if 200 gift packs are sold in a month.

$$\text{Profit} = \text{total revenue} - \text{total cost}$$

$$= \text{UGX } 50\,000 \times 200 - (\text{UGX } 1\,500\,000 + 200 \times \text{UGX } 40\,000)$$

$$= \text{UGX } 10\,000\,000 - \text{UGX } 9\,500\,000$$

$$= \mathbf{\text{UGX } 500\,000}$$

EXAM PRACTICE

GOWDA CHANDA INC.

(a) Define margin of safety. (2 marks)

The margin of safety is the range of output between the break-even level and the current level of output, over which a profit is made. In this case, the margin of safety at the planned level of output of 1000 tonnes is 200 tonnes.

(b) Calculate the price charged for recycled plastic material per tonne. (4 marks)

According to the break-even chart in Figure 3, the total revenue at the break-even point of 800 tonnes is US\$40 000. The price charged by the business is given by:

$$TR = P \times Q$$

$$\text{US\$}40\,000 = \text{price} \times 800$$

$$\text{US\$}40\,000 \div 800 = \mathbf{\text{US\$}50}$$

(c) Calculate the variable cost per tonne of recycled plastic material. (4 marks)

According to the break-even chart in Figure 3, total cost at the break-even level of output is US\$40 000. Variable cost per tonne is calculated as follows:

$$\text{Total cost} = \text{fixed cost} + (800 \times \text{variable cost per tonne})$$

$$\text{US\$40 000} = \text{US\$20 000} + (800 \times \text{variable cost per tonne})$$

$$\text{US\$40 000} - \text{US\$20 000} = 800 \times \text{variable cost per tonne}$$

$$\text{US\$20 000} = 800 \times \text{variable cost per tonne}$$

$$\text{US\$20 000} \div 800 = \text{variable cost per tonne}$$

$$\text{US\$20 000} \div 800 = \text{US\$25}$$

(d) Explain one impact on Gowda Chanda Inc. of the machinery breakdown. (4 marks)

Unfortunately, there was a machinery breakdown on 12 November and the monthly output was only 700 tonnes. Essential repairs had to be carried out, which stopped production for several days. As a result, the business was plunged into a loss-making situation.

According to the break-even chart, when output was cut to 700 tonnes, total cost was US\$37 500 and total revenue was only US\$35 000. Therefore, the business will make a loss of US\$2500 in November due to the breakdown. The margin of safety of 200 tonnes was completely 'wiped out'.

(e) Assess the usefulness of break-even analysis to Gowda Chanda Inc. (10 marks)

Break-even analysis is used in business as a tool to make decisions about the future.

In this case, the break-even chart shows Gowda Chanda the amount of plastic pellets that must be sold each month to break-even. The chart also shows the total cost, total revenue and profit or loss made at different levels of output. Gowda Chanda needs to sell 800 tonnes of pellets each month to break-even.

Break-even charts can also help to answer 'what if' questions. For instance, if price went up, what would happen to the break-even point? Or what would be the break-even point if variable costs were higher?

Break-even analysis may also be used in business plans. In this case, the break-even chart shows clearly the effect of the machinery breakdown on profit levels. When production stopped in November, output fell to just 700 tonnes. This meant the business made a loss of US\$2500 in that month.

However, when using break-even analysis it is important to recognise some of its limitations. It is often regarded as too simplistic and some of its assumptions are unrealistic. For example, it assumes that all output is sold, so that output equals sales, and no stocks are held. Many businesses hold stocks of finished goods to cope with changes in demand. There are also times when firms cannot sell what they produce and choose to stockpile their output to avoid laying off staff. Gowda Chanda might store plastic pellets at times when demand falls.

The effectiveness of break-even analysis depends on the quality and accuracy of the data used to construct cost and revenue functions. If the data is poor and inaccurate, the conclusions drawn on the basis of the data are flawed. For example, if Gowda Chanda underestimates variable costs, the level of output required to break-even will be higher than suggested by the break-even chart.

Finally, it is assumed that the total revenue and total cost lines are linear or straight. This may not always be the case. For example, a business may have to offer discounts on large orders, so total revenues fall at high outputs. If this happened, the total revenue line would rise and then fall, and be curved. A business can lower costs by buying in bulk, so costs may fall at high outputs and the cost lines will be curved.

Overall it appears that, in this case, break-even analysis is a helpful tool in simple financial management. The break-even chart shows clearly how many tonnes of pellets need to be sold to break-even in a month. The chart also showed the effect of the breakdown in machinery during the month. Provided Gowda Chanda is aware of its limitations, break-even analysis can be useful.

32 CASH FLOW

ACTIVITY 1

CASE STUDY: SALIM AND AMJAD QADIR

1. Using examples from this case, explain the difference between cash inflows and cash out flows.

Cash inflows are the cash receipts of a business. In this case, Qadirs receives cash from the sale of textiles to its individual customers, cash from credit sales made 60 days earlier and some bank interest each month. Cash outflows are the payments made by the business. In this case, payments are made for inventories (stocks of fabric), rent, utilities and other expenses. In May, the total cash inflows for Qadirs business was PKR 117 100. Total cash outflows were PKR 89 100.

2. Complete the cash flow forecast for Qadirs' textile business to show the:

- (a) total cash outflows for each month;
- (b) net cash flows for each month;
- (c) closing balance for each month;
- (d) opening balance for June and July and March.

See table below:

	May	June	July
Cash inflows			
Cash sales	104 000	110 000	98 000
Cash from credit sales	12 000	15 000	17 000
Bank interest	1100	1200	1200
Total cash inflows	117 100	126 200	116 200
Cash outflows			
Inventory purchases	67 500	70 100	62 100
Rent	10 000	10 000	10 000
Utilities	4000	4000	5000
Other expenses	7600	6100	7400
Total cash outflows	89 100	90 200	84 500
Net cash flow	28 000	36 000	31 700
Opening balance	15 900	43 900	79 900
Closing balance	43 900	79 900	111 600

3. Explain the possible impact that the new credit sales to traders might have on the firm's cash flow.

When a business sells goods on credit to its customers, it has to wait a period of time before it receives the cash from the sale. In this case, Qadirs is allowing dress-makers in the city to buy on 60-day credit terms. These generous payment terms may be introduced to reward customers that buy larger quantities. Although there is no mention of this in the case, it is reasonable to assume that traders will buy more fabric than individuals.

Credit sales can sometimes cause cash flow difficulties for businesses. This is because a business may have paid out cash to buy inventories, but then has to wait 60 days for the cash to return to the business after credit sales have been made. In this case though, there appears to be no such problems. The 3-month cash flow forecast shows that the cash position improves dramatically over the time period. At the end of May, the business has a cash balance of PKR 43 900. By the end of July this had risen to PKR 111 600. Also, at the moment, credit sales are still less than 20 per cent all total sales.

EXAM PRACTICE

CHARLTON PLASTICS LTD

(a) Explain one reason why a cash flow forecast is an important part of a business plan. (4 marks)

A business plan will almost certainly contain a cash flow forecast. Producing a cash flow forecast is an important part of the planning process. For example, moneylenders and other investors are not likely to invest in a business unless owners can provide a clear, concise vision of its future. In particular, investors will want to know how the finance is going to be spent and when, and how, they will see a return for their investment. This is where a cash flow forecast will be particularly helpful.

(b) Calculate the closing balances in the cash flow forecast resulting from the changes above. (4 marks)

See table below, where brackets show minus figures:

	Jan	Feb	Mar	Apr
Cash inflows				
Home sales	124 000	124 000	125 000	128 000
Export sales	62 000	63 000	66 000	72 000
Interest	3000	3000	3000	3000
Total cash inflows	189 000	190 000	194 000	203 000
Cash outflows				
Wages	55 000	57 000	57 000	57 000
Materials	76 000	71 000	75 000	81 000
Insurance	4000	4000	4000	4000
Drawings	21 000	21 000	21 000	21 000
Tax payment	11 500			

Other overheads	24 000	27 000	28 000	30 000
Total cash outflows	180 000	191 500	185 000	193 000
Net cash flow	9000	(1500)	9000	10 000
Opening balance	12 300	21 300	19 800	28 800
Closing balance	21 300	19 800	28 800	38 800

(c) Discuss the impact of the changes in the cash flow forecast on Charlton Plastics Ltd (8 marks)

The overall impact of the changes to Charlton's cash flow forecast is slightly positive. The closing cash balance before the changes was forecast to rise from CAD 21 300 in January to CAD 37 300 in April. After the changes the closing balance was expected to rise from CAD 21 300 to CAD 38 800. This represents a cash increase of CAD 1500.

The changes listed have no impact on the cash inflows. Cash inflows for each month are expected to remain the same.

Although the changes in the list will only affect the totals for cash outflows, they are not all negative. There have been changes in market conditions and the cost of materials is expected to fall by a total of CAD 19 000 over the 3 months (CAD 7000 in February, CAD 6000 in March and CAD 6000 in April). This will have a positive impact on Charlton's cash flow.

However, the other two changes in the forecast signify a higher than expected cash drain. This is because wages are expected to rise by CAD 2000 a month starting in February and an unexpected tax demand of CAD 11 500 has to be paid immediately in February.

To conclude, the changes in the variables will not significantly change the overall look of the cash flow forecast. The closing cash balance each month is comfortably positive and there is no need for any corrective action.

(d) Evaluate whether or not the use of cash flow forecasts will benefit Charlton Plastics Ltd (20 marks)

The financial director will use the cash flow forecast to help control and monitor cash flow in the business.

The main purpose of the forecast is to help identify in advance when the business might wish to borrow cash. At the bottom of the forecast the monthly closing balances are shown clearly. This will help the director to identify when a bank overdraft might be needed. A business should try to avoid being overdrawn because interest is charged, but if it does have to borrow, having advance notice means this can be organised in good time with the bank and unauthorised borrowing charges avoided. Alternatively, if certain payments can be delayed until cash is available, this will avoid borrowing altogether. In this case though, the business is forecast to have positive closing balances every month over the time period.

Careful planning in business is becoming increasingly important. It helps to clarify aims and improve performance. Cash flow forecasts are a key part of the planning process in any business, so Charlton Plastics Ltd will benefit from good forward planning.

Both during and at the end of the financial year, Charlton Plastics Ltd should make comparisons between the predicted figures in the cash flow forecast and those that actually occur. By doing this it can identify where there have been any problems and look for possible

reasons for any significant differences between the two sets of figures. For example, it might be that an overpayment was made. Constant monitoring in this way should allow a business to control its cash flow effectively.

Finally, if Charlton Plastics Ltd needs to raise finance in the future, lenders often insist that businesses support their applications with documents showing business performance, outlook and solvency. A cash flow forecast will help to indicate the future outlook for the business. It is unlikely that any potential investor or lender would finance a business without a thorough business plan supported by a cash flow forecast.

Despite the obvious benefits of using cash flow forecasts, it is important to recognise their limitations. Of necessity, some of the financial information used in forecasts is based on estimates. For example, even under normal trading conditions it is difficult to predict sales revenue for a future time period – this has to be estimated. It is also difficult to estimate future costs, particularly variable costs. In this case, there were some unexpected changes in material costs – they fell due to changes in market conditions. By contrast, wages increased unexpectedly and there was a tax demand for CAD 11 500, which had to be met. If the figures for cash inflows and cash outflows are not accurate, then the net cash flows and closing balances will be unreliable. In this case, changes were made to the original forecast. However, there could be more changes in the future.

Business activity is subject to external forces beyond the control of owners and managers. Changes in factors such as interest rates, the state of the economy, government legislation, exchange rates, competition and consumer tastes, can all have an impact on costs and revenues. As a result, there will be an impact on a cash flow forecast. In this case, the changes to the cost of materials were unexpected.

Finally, a cash flow forecast only focuses on one important business variable: cash. Other variables, such as profit, profit margins and productivity are also important. The cash flow forecast is a one-dimensional tool and cannot be used on its own to evaluate the performance of a business. Charlton Plastics Ltd would need to recognise this.

To conclude, most businesses use cash-flow forecasts and should be aware of their limitations. Charlton Plastics Ltd should continue to use forecasts since their limitations are outweighed by the benefits.

33 BUDGETS

ACTIVITY 1

CASE STUDY: FIBRECRAFT LTD

1. Prepare the sales revenue budget for FibreCraft Ltd.

See table below:

	Jan	Feb	Mar	Apr	May	Jun
Kayak	NZD 42 000	NZD 42 000	NZD 42 000	NZD 46 000	NZD 50 000	NZD 60 000
	(NZD 200 × 210)	(NZD 200 × 210)	(NZD 200 × 210)	(NZD 200 × 230)	(NZD 200 × 250)	(NZD 200 × 300)
Explorer	NZD 22 000	NZD 22 000	NZD 24 200	NZD 24 200	NZD 26 400	NZD 28 600
	(NZD 220 × 100)	(NZD 220 × 100)	(NZD 220 × 110)	(NZD 220 × 110)	(NZD 220 × 120)	(NZD 220 × 130)
Twin-seater	NZD 8400	NZD 9800	NZD 9800	NZD 11 200	NZD 11 200	NZD 14 000
	(NZD 280 × 30)	(NZD 280 × 35)	(NZD 280 × 35)	(NZD 280 × 40)	(NZD 280 × 40)	(NZD 280 × 50)

2. Use the sales volume budget to calculate total revenue for each month and for the whole six-month budget period.

See table below:

	Jan	Feb	Mar	Apr	May	Jun
Monthly Total = NZD 493 800	NZD 72 400	NZD 73 800	NZD 76 000	NZD 81 400	NZD 87 600	NZD 102 600

3. What does the budget show over the time period?

According to the sales volume budget, FibreCraft Ltd plans to increase sales revenue over the six-month time period from NZD 72 400 to NZD 102 600. This is an increase of 41.7 per cent. The increase in sales volume accelerates each month. This should be good news for FibreCraft Ltd.

ACTIVITY 2

CASE STUDY: US CORN BELT

1. Calculate the sales revenue variances for each month and the total sales revenue variance for the whole budget period.

See table below:

	Jan	Feb	Mar	Apr	May	Jun	TOTAL
Budgeted income (US\$)	100 000	110 000	120 000	125 000	140 000	175 000	770 000
Actual income (US\$)	90 000	110 000	128 000	129 000	152 000	197 000	806 000
Variance	10 000A	0	8000F	4000F	12 000F	22 000F	36 000F

2. Explain the variance in February.

In February the variance is zero. This means that the planned sales revenue was exactly the same as the budgeted sales revenue. In February 2014, both planned income and actual income were US\$110 000.

3. Explain two possible reasons for the pattern of variances over the six-month time period.

According to the calculations in the previous answer, the sales revenue variance improves significantly over the six-month budget period. In January, the sales revenue variance is

adverse, but by June it is very favourable. Actual income is US\$22 000 higher than the planned income in June 2104.

One reason for this could be that Bobby Beddoes has experienced an increase in demand for their services. Farmers in the area may have experienced more breakdowns than predicted (perhaps due to adverse weather). Alternatively, competition faced by Bobby Beddoes may have dwindled.

Another possible reason for the improvement in sales revenue could be a price increase. If Bobby Beddoes raised the price of their services, sales revenue would also rise, provided demand was not elastic.

The shareholders in Bobby Beddoes are likely to be pleased with the actual outcomes shown by the budget.

EXAM PRACTICE

CAZADECOCHES.ES

(a) Define variance. (2 marks)

A variance is the difference between a budgeted value and the actual financial outcome. The calculation of variances is a useful exercise in budgetary control. For example, in 2015 the budgeted income (sales revenue) for cazadecoches.es was €2.14 million. However, the actual income for the year was only €2.13 million. This means that the income variance was €10 000 Adverse.

(b) Calculate the income, expenditure and profit variances for 2015, 2016 and 2017 for cazadecoches.es. (4 marks)

See table below, where brackets show minus figures:

	2015	2016	2017	2018	2019
Budgeted income	2.14	2.2	2.6	3	3.8
Actual income	2.13	2.14	2.22		
Income variance	0.01A	0.06A	0.38A		
Budgeted expenditure	1.99	2.11	2.01	2.01	2.1
Actual expenditure	2.01	2.21	2.3		
Expenditure variance	0.02 A	0.10 A	0.29 A		
Budgeted profit	0.15	0.09	0.59	0.99	1.7
Actual profit	0.12	(0.07)	(0.08)		
Profit variance	0.03 A	0.16 A	0.67 A		

(c) Discuss the possible impact of the new comparison site on cazadecoches.es. (8 marks)

The variances calculated in (b) suggest that the investment in the new comparison site for second-hand cars may not be paying off.

The profit variances show a deterioration between 2015 and 2016. In 2015, the business planned for a profit of €150 000, but only made €120 000. The profit variance was €30 000

adverse. The situation gets worse in 2016 and 2017. By 2017 the adverse profit variance has risen to €670 000, and in 2016 the business actually made a loss of €70 000.

(d) Assess the usefulness to cazadecoches.es of using variance analysis. (10 marks)

cazadecoches.es may enjoy a number of benefits when using variance analysis as a method of financial control.

Generally, it allows managers to monitor the performance of the organisation as a whole, as well as different sections of the organisation. For example, analysing departmental cost variances may allow a business to find out why certain departments are incurring high costs. Alternatively, it allows businesses to identify good practice and discover why some costs are lower. Prompt variance analysis allows managers to assess whether variances are caused by internal or external factors. Once causes have been traced, they can be corrected.

By identifying variances and their causes, managers may be able to produce more accurate budgets in future. This will aid planning and perhaps improve the performance of the business. In this case, incorporating the second-hand car comparison site has incurred three successive years of adverse profit variances. Further analysis shows that both income and expenditure variances are adverse and may be due to the investment in the development of the new comparison site.

Budgetary control allows management to control the business by setting objectives and targets. It forces management to think ahead, helps the co-ordination of large and complex organisations and allows the objectives of the business to be communicated to the workforce. It can also act as a motivator to the workforce, by providing workers with targets and standards. Improving the budget position is an indication of success for a department or group of workers. Fear of failing to reach budgeted targets may make workers work harder.

However, cazadecoches.es may have encountered problems when setting budgets and using them as a tool for financial management. Problems may arise because figures in budgets are not actual figures. The figures are plans based on historical data, forecasts or human judgement, and are likely to be imperfect. The setting of budgets may lead to conflict between departments or staff, and the time spent setting budgets could have been spent on other tasks.

Sometimes businesses set over-ambitious objectives. When this happens, the budgeting process is pointless because budgets are being drawn up for targets that are unachievable. The budget then ceases to become a benchmark with which to compare the outcome. This may have happened in the case.

Also, if workers are not consulted about the budget, it will be more difficult to use that budget to motivate them. Budgets that are unrealistic can also fail to motivate staff. Budgets can also be manipulated by managers, who may be able to arrange a budget that is easy to achieve, making the department look successful. Budgets may also constrain business activities. For example, some really important R&D might be terminated because the budget ran out – just as a breakthrough was imminent.

In this case, budgetary control seems to have benefited the business. The company has identified some problems using variance analysis and may be able make some changes in their strategy to improve financial performance. There is no evidence in the case to suggest that problems associated with budgetary control have impacted on cazadecoches.es.

34 PROFIT

ACTIVITY 1

CASE STUDY: WEST RYDE HOTEL

1. Calculate: (a) gross profit; (b) operating profit; (c) profit for the year for 2017 and 2016.

For 2017:

$$\begin{aligned} \text{Gross profit} &= \text{Turnover} - \text{Cost of sales} \\ &= \text{£}2\,341\,700 - \text{£}1\,090\,000 \\ &= \text{£}1251\,700 \end{aligned}$$

$$\begin{aligned} \text{Operating profit} &= \text{Gross profit} - \text{Operating expenses} \\ &= \text{£}1\,251\,700 - \text{£}399\,100 \\ &= \text{£}852\,600 \end{aligned}$$

$$\begin{aligned} \text{Net profit} &= \text{Operating profit} - \text{Interest} \\ &= \text{£}852\,600 - \text{£}21\,000 \\ &= \text{£}831\,600 \end{aligned}$$

For 2016:

$$\begin{aligned} \text{Gross profit} &= \text{Turnover} - \text{Cost of sales} \\ &= \text{£}2\,600\,700 - \text{£}980\,500 \\ &= \text{£}1\,620\,200 \end{aligned}$$

$$\begin{aligned} \text{Operating profit} &= \text{Gross profit} - \text{Operating expenses} \\ &= \text{£}1\,620\,200 - \text{£}388\,900 \\ &= \text{£}1231\,300 \end{aligned}$$

$$\begin{aligned} \text{Net profit} &= \text{Operating profit} - \text{Interest} \\ &= \text{£}1\,231\,300 - \text{£}19\,300 \\ &= \text{£}1\,212\,000 \end{aligned}$$

2. Calculate the percentage change in the profit for the year between 2016 and 2017.

Net profit fell from £1 212 000 in 2016 to £831 600 in 2017. The percentage change in net profit is given by:

$$\text{Percentage change} = \text{£}380\,400 \div \text{£}1\,212\,000 \times 100 = \mathbf{31.39\%}$$

3. Analyse whether the financial performance of the hotel has improved over the 2 years.

Between 2016 and 2017, the profit made by West Ryde Hotel has fallen by 31.39 per cent from £1212 000 to £813 600. This is a significant decrease and the owners of the hotel may be worried. They would have to investigate the downturn and try to determine whether the fall in profit is caused by internal or external factors.

ACTIVITY 2

CASE STUDY: APPGAME

1. What is meant by a statement of comprehensive income?

At the end of the trading year, businesses produce financial documents that show key information relating to the financial performance of the business. One of these documents is called the statement of comprehensive income. This shows the income and expenses of a business during the financial year. It is used to calculate gross profit, operating profit and net profit. It is usual to show two years trading figures so that immediate comparisons can be made.

2. Calculate the missing figures in the statement for AppGame.

See table below:

	2017 (KRW 000 million)	2016 (KRW 000 million)
Revenue/turnover	6.444	5.871
Cost of sales	4.191	3.713
Gross profit	2.253	2.158
Selling expenses	1.223	1.112
Admin expenses	0.234	0.211
Operating profit	0.796	0.835
Interest	0.201	0.216
Profit for the year (net profit)	0.595	0.619
Taxation	0.120	0.121
Profit for the year (net profit) after taxation	0.475	0.498

3. Assess the possible impact on AppGame of the staff shortages in 2017.

According to the statement of comprehensive income for AppGame, the net profit before tax has fallen slightly from KRW 619 000 in 2016 to KRW 595 000 in 2017. This is a fall of just 3.8 per cent, and may not appear too significant. However, revenue for the year has grown from KRW 5 871 000 to KRW 6 444 000 a rise of 9.8 per cent, so AppGame may have expected profits to rise.

The slight fall in profit may be due to staff shortages impacting on the higher cost of sales – paying overtime rates to existing staff, perhaps. There was also an increase in overheads, which contributed to the fall.

Finally, although the fall in net profit was only small, the directors of AppGame may have been disappointed because the company had been growing rapidly in recent years and expectations may have been much higher.

ACTIVITY 3

CASE STUDY: CHAPPERTON LTD

1. Explain the difference between the gross profit margin and the profit for the year (net profit) margin.

The gross profit margin shows the gross profit made on sales turnover. The net profit margin takes into account all business costs including interest, other non-operating costs and exceptional items. It is usually calculated before tax has been deducted. The gross margin will always be higher than the net profit margin. The profit for the year (net profit) margin will probably be of most interest to the owners of the business. This is because the profit for the year (net profit) margin focuses on the profit left after all deductions have been made. It is the final amount of profit left over for the owners.

2. Calculate the gross, operating and profit for the year (net profit) margins for 2013 and 2014. Present the information in a table.

See table below:

	2014	2013
Gross profit margin	51.5%	63.2%
Operating profit margin	31.5%	31.6%
Profit for the year (net profit) margin	30.6%	30.8%

3. Assess the financial performance of Chapperton Ltd in 2014.

Between 2013 and 2014, Chapperton Ltd enjoyed a significant increase in both turnover and profit. Turnover rose by 37 per cent, gross profit by 11.7 per cent and profit for the year (net profit) by nearly 39 per cent. The shareholders would probably be very pleased with this performance.

The profit margins have also been protected. Although the gross margin fell from 63.2 per cent to 51.5 per cent, the other two margins have remained fairly stable. The gross margin may have fallen due to increases in the cost of sales or possibly the need to lower prices slightly, perhaps due to competition. Overall though, it is unlikely that shareholders would be critical of this performance.

EXAM PRACTICE

PUCHONG POLYMER

(a) Calculate the gross profit margin for Puchong Polymer in 2016 and 2015. (4 marks)

For 2016:

$$\text{Gross profit margin} = \text{Gross profit} \div \text{Revenue} \times 100$$

$$\text{Gross profit margin} = \text{MYR } 207.2 \text{ million} \div \text{MYR } 650.3 \text{ million} \times 100 = \mathbf{31.9\%}$$

For 2015:

$$\text{Gross profit margin} = \text{Gross profit} \div \text{Revenue} \times 100$$

$$\text{Gross profit margin} = \text{MYR } 227.9 \text{ million} \div \text{MYR } 670.7 \text{ million} \times 100 = \mathbf{34\%}$$

(b) Calculate the profit for the year (net profit) margin for Puchong Polymer in 2016 and 2015. (4 marks)

For 2016:

Net profit margin = Net profit (after tax) ÷ Revenue × 100

Net profit margin = MYR 53.1 million ÷ MYR 650.3 million × 100 = **8.2%**

For 2015:

Net profit margin = Net profit (after tax) ÷ Revenue × 100

Net profit margin = MYR 81.8 million ÷ MYR 670.7 million × 100 = **12.2%**

(c) Discuss the impact on Puchong Polymer of difficult global trading conditions. (8 marks)

Between 2013 and 2014, Puchong Polymer saw both its revenue and profit fall. The fall in revenue was quite small – just 3 per cent. However, the fall in the ‘bottom line’ from MYR 61 million to MYR 38.3 million was significantly more – a 37.2 per cent fall. The larger fall in profits suggests that Puchong Polymer may have struggled to keep its overheads down. There is also the possibility that global trading conditions have worsened.

A deterioration in global trading conditions may well have impacted on the company. Puchong Polymer’s chief executive officer suggested that the weakness in the mining market, caused by political and economic uncertainties, might undermine the strength and resilience of the business.

Indeed, there has been slower than expected growth in the Chinese economy. A few years ago China was a huge customer for raw materials but recently a slowdown in the Chinese economy, particularly the construction sector, coupled with a global fall in demand for commodities, has hit many businesses.

(d) Evaluate whether Puchong Polymer should try to improve its profitability by (i) lowering costs or (ii) raising prices. (20 marks)

If the economic outlook for the future worsens further, Puchong Polymer might consider taking some action to protect the financial performance of the business. An improved performance is likely to benefit all stakeholders. Increasing the profit margins will improve performance.

One way to improve profit margins is to raise prices. This will generate more revenue for every unit sold. However, raising prices might have an impact on the level of sales. Generally, when prices are raised, demand will fall. However, if demand is not too responsive to changes in price, the increase in price will generate more revenue even though fewer units are sold. Raising price is always risky because it is never certain how competitors will react. Puchong Polymer has a lot of overseas markets and current trading conditions may not permit an increase in price.

Puchong Polymer could also raise profit margins by lowering its costs. It can do this by buying cheaper resources or using the existing resources more effectively. It might be possible to buy raw materials and components from new suppliers that offer better prices. It may also be possible to find new providers of essential services, such as telecommunications, electricity, insurance and IT support. For example, there has been increased competition recently in the supply of gas, electricity and telecommunications.

Another option might be to find ways of using cheaper labour. For example, some businesses have moved overseas to take advantage of cheap labour in places like China and Eastern Europe.

However, these measures may have drawbacks. When taking on new suppliers it is possible that they are cheaper because they are not as good. The quality of raw materials might be inferior, they may be unreliable and supply might not be guaranteed. Moving abroad to take advantage of cheap labour may be disruptive. It may also damage the image of the company if they lay off large numbers of staff in the UK. So when looking to acquire cheaper resources, a business must be cautious and understand the pitfalls.

Making better use of current resources will improve efficiency and lower costs. A business might do this by introducing new working practices or training staff. This would help to raise labour productivity. In this case, Puchong Polymer has already put some of its workers on a short working week to save money.

A business could also upgrade its machinery by acquiring newer, more efficient models. This would raise capital productivity. A business might be able to reduce waste by recycling materials, for example.

Some of these measures might also have drawbacks. For example, the workers might resist new working practices, and new technology often has teething problems. This could disrupt the business.

Overall, the option to raise prices is probably not available to Puchong Polymer because global trading conditions are weak. Puchong Polymer might also have strong competitors, which it could lose out to if prices were hiked. More likely, Puchong Polymer will look at more options to reduce costs. With some staff already on a shorter working week redundancies may be necessary. However, Puchong Polymer would want to avoid this because if their staff are highly trained, they might regret laying them off if the global economy picks up again.

35 LIQUIDITY

ACTIVITY 1

CASE STUDY: TAQA

1. Give two examples of assets that TAQA might own.

Examples of assets owned by TAQA might include oil processing plants, refineries, oil exploration equipment such as oilrigs, filling stations, power generation plants, machinery, equipment, tools, offices, furniture, stocks and cash.

2. Explain the difference between liabilities and capital.

Liabilities are the debts of the business, that is, what it owes to others. Liabilities are a source of funds for a business. They might be short term, such as an overdraft, or long term, such as a mortgage. In 2016, the total value of liabilities for TAQA was AED 96 420 million. Capital is the money put into the business by the owners. Along with other sources of finance it is used to buy assets.

3. Calculate the value of capital for TAQA in 2016.

Assets = Capital – Liabilities

AED 104 492 million = Capital – AED 96 420 million

Capital = AED 104 492 million – AED 96 420 million

Capital = **AED 8072 million**

ACTIVITY 2

CASE STUDY: WANG MOTOR PARTS

1. Calculate the current ratios and acid test ratios for Wang Motor Parts between 2015 and 2017.

See table below:

	2017 (CNY million)	2016 (CNY million)	2015 (CNY million)
Inventories	34.2	28.3	27.8
Trade and other receivables	12.4	11.2	13.8
Cash and cash equivalents	5.7	3.1	4.9
Current assets	52.3	42.6	46.5
Loans and other borrowings	14.2	16.2	13.1
Trade and other payables	11.9	13.1	10.7
Current tax liabilities	4.1	5.2	4.2
Current liabilities	30.2	34.5	28
Current ratio	1.73	1.23	1.66
Acid test ratio	0.6	0.41	0.67

(b) Assess whether Wang Motor Parts has enough liquid assets.

According to the current ratio, Wang Motor Parts appears to have enough liquid assets in 2017 and 2015. The ratios in both years lie in between 1.5 and 2. However, in 2016 the current ratio did fall to 1.23, which is below the desired level of 1.5. However, as the business recovered in 2017, it could be concluded that the firm's liquidity is OK according to this measure.

The acid test ratio tells a different story. In all years the ratio is below the desired level of 1. In 2016 it is well below 1 at 0.41. This suggests that Wang Motor Parts' liquidity position is not as sound as first thought. In recent years, the business has been forced to hold high levels of inventories so that it can deliver just-in-time to its customers. According to the acid test ratio, this is placing a strain on Wang Motor Parts' liquid resources.

To conclude, the business does have a healthy cash balance, and even though it dipped in 2016, there is nothing to suggest that the business cannot cope with the situation.

ACTIVITY 3

CASE STUDY: FIRST QUANTUM MINERALS LTD

1. Explain why First Quantum Minerals Ltd encountered liquidity problems.

Liquidity problems occur when a business runs short of working capital – particularly cash. In this case, First Quantum Minerals Ltd encountered problems when the price of copper fell in the global market. This meant that the company's revenue started to fall. However, the company was also in debt and was beginning to struggle to meet debt payments. Indeed, at one point the future of the company was in doubt. Investors were warned that the company could collapse.

2. Explain how First Quantum Minerals Ltd resolved their liquidity problems.

Luckily for First Quantum Minerals Ltd, the price of copper began to rise again and its revenues were boosted. The company also raised some money by selling one of its assets – the Kevitsa mine in Finland – for US\$712 million cash. First Quantum also reduced its operating costs and planned to raise a further US\$2500 million in a finance deal to help fund the development of a new mining project in Panama. This allowed the company to meet debt payments and resolved the liquidity crisis.

EXAM PRACTICE

THE KOWLOON TOY COMPANY

(a) Define working capital. (2 marks)

Working capital is the amount of money needed to pay for the day-to-day running of a business. Kowloon Toy Company needs working capital to pay expenses, such as raw materials, wages and fuel to make toys. The working capital of a business is the amount left over after all current debts have been paid. It is the relatively liquid assets of a business that can easily be turned into cash, less the money owed by a business that needs to be paid in the short term. In the balance sheet of a company, working capital is calculated by subtracting current liabilities from current assets. Working capital is sometimes called net current assets.

(b) Calculate the value of working capital for the Kowloon Toy Company between 2014 and 2017. (4 marks)

Working capital = current assets – current liabilities

2017:

Working capital = HKD 34.2 billion – HKD 28.1 billion = **HKD 6.1 billion**

2016:

Working capital = HKD 30.9 billion – HKD 23.1 billion = **HKD 7.8 billion**

2015:

Working capital = HKD 28.3 billion – HKD 16.5 billion = **HKD 11.8 billion**

2014:

Working capital = HKD 23.4 billion – HKD 11.6 billion = **HKD 11.8 billion**

(c) Calculate the current ratio for the Kowloon Toy Company between 2014 and 2017. (4 marks)

Current ratio = Current assets ÷ Current liabilities

2017:

Current ratio = HKD 34.2 billion ÷ 28.1 billion = **1.21**

2016:

Current ratio = HKD 30.9 billion ÷ HKD 23.1 billion = **1.34**

2015:

Current ratio = HKD 28.3 billion ÷ HKD 16.5 billion = **1.72**

2014:

Current ratio = HKD 23.4 billion ÷ HKD 11.6 billion = **2.02**

(d) Explain how reducing receivables may not lead to an increase in the value of working capital for the Kowloon Toy Company. (4 marks)

One of the problems faced by the Kowloon Toy Company is that buyers want at least 120 days' trade credit when buying toys. This means that the company must wait at least three months before they are paid, which creates problems when trying to pay the bills. If Kowloon could reduce debtors by speeding up payments it would get its cash quicker.

However, this would not affect the size of working capital, because the size of current assets would remain the same. If customers did pay quicker, cash would rise but debtors would fall by the same amount – so there would be no change in current assets. Therefore, working capital stays the same.

However, there is an advantage because liquidity has improved. Cash is the most liquid of all assets and can be used to pay bills, whereas debtors cannot.

(e) Assess the measures that the Kowloon Toy Company might use to deal with its problems. (10 marks)

The twin problems faced by the Kowloon Toy Company – a long trade credit period and large inventories caused by seasonal demand – are reflected by the calculations in (b) and (c). Over the time period, the size of working capital declines from HKD 11.8 billion to HKD 6.1

billion. This is a 48 per cent decline. The current ratio has also fallen over the time period to below 1.5 – the level below which a firm might struggle to pay its bills. The company's trading activities have raised current liabilities at a faster rate than current assets. Table 4 shows that current liabilities have grown by 142 per cent from HKD 11.6 billion to HKD 28.1 billion.

To increase working capital, it is necessary to raise current assets or reduce current liabilities or both. The problems faced by the Kowloon Toy Company are probably typical of those in the industry. Most toys are sold just before Christmas and there is a need to build up stock in the months running up to Christmas. One way to avoid stock piling would be to increase production levels just before Christmas. However, this can only be done if the company has spare capacity. It might be able to offer overtime to staff and take on temporary staff but flexible machinery would also be needed.

One option might be to use just-in-time manufacturing to reduce inventories. Inventories are not likely to be very liquid so minimising their value will help to preserve cash. Operating a just-in-time approach to manufacturing means that stocks of raw materials and components are delivered to a business only when they are needed – 'just-in-time'. They are not held in storage warehouses. Also, a business will only make products to order which eliminates the need to hold stocks of finished goods. This means the amount of cash tied up in inventories is reduced.

The Kowloon Toy Company might also use debt factoring to boost liquidity or persuade customers to pay their bills earlier. Although, as explained in (d) above, this would not increase the size of working capital. However, it would improve liquidity.

Another option would be to convert some non-current assets into current assets – this would increase working capital. Table 4 shows that the value of non-current assets has increased by nearly 30 per cent from HKD 104.2 billion in 2014 to HKD 131.6 billion in 2017. These non-current assets represent quite a large proportion of total assets for the business. It may be possible for the Kowloon Toy Company to sell some unwanted fixed assets for cash to boost working capital. Alternatively, the company might wish to explore the possibility of selling fixed assets, such as property, machinery and vehicles, and leasing them back. This would also raise current assets and hence working capital.

Another long-term solution to the problem is to raise some fresh capital. The Kowloon Toy Company may be able to raise fresh capital by selling some new shares – in a rights issue, for example. Some of this capital could be used to reduce current liabilities, by paying off overdrafts and short-term loans perhaps. Alternatively, the business could take out some long term loans, thereby switching debt from short term to long term and increasing working capital by reducing current liabilities.

These are some of the key solutions to the problems faced by the Kowloon Toy Company. However, it is difficult to say which would be the best without further information. It would be helpful to know the size of inventories throughout the year, the amount of manufacturing capacity the company is using and its profit margins. An analysis of current assets and current liabilities would also be of use. The Kowloon Toy Company operates in a challenging industry with seasonal demand. If the company is undercapitalised the best solution may be to raise some fresh capital and use it to reduce current liabilities.

36 BUSINESS FAILURE

ACTIVITY 1

CASE STUDY: KACS

1. Define overtrading.

Overtrading is likely to occur when a business tries to grow too quickly. Cash and other liquid resources get tied up financing the expansion of the business and eventually the cash runs out. Without cash, a business cannot trade. In this case KACS had disastrous cash flow problems. This was caused by the company growing too quickly. Resources became strained because KACS was unable to fund the additional working capital requirements of the new, larger business.

2. Explain how it is possible for a profitable business like KACS to fail.

It is possible for a profitable business to collapse if it runs out of cash. One likely cause is that a business is overtrading. If a business grows too quickly, it uses up liquid resources to fund the growth. This is exactly what happened to KACS. Up to 2015, the business had grown to PKR 4200 million sales and was trading profitably. However, the directors decided to grow the business further after several contract opportunities arose and during 2016 recorded sales of PKR 6700 million. It was alleged that the company was growing too quickly, resources became strained and it ran out of cash.

Profitable businesses can also fail if they get a large bad debt, if they are faced with a large and unexpected payment or if they offer trade credit which is too generous. The importance of effective cash flow management cannot be over-emphasised. The main reason for the majority of business failures is cash shortages – both profitable and unprofitable.

ACTIVITY 2

CASE STUDY: BRAZILIAN SOYBEANS

1. Calculate the percentage change in soybean prices over this time period.

Soybean prices fell from US\$1800 per bushel in 2012 to US\$1000 per bushel in 2017. The percentage change is given by:

$$= 1800 - 1000 = 800$$

$$= 800 \div 1800 = 0.44$$

$$= 0.44 \times 100 = \mathbf{44.4\%}$$

2. Explain how changes in market conditions have resulted in business failure in this case.

Changes in market conditions can sometimes result in sharp fluctuations in prices. This might have a negative impact on businesses if prices fall sharply. In certain industries, firms are 'price takers'. In the global soybean market for example, farmers are price takers – they have no control over the price they get for their soybean harvest. Unfortunately, between 2012 and 2017, the price of soybeans fell by 44.4 per cent. As result, growers were getting a lot less for their output. This meant that a lot of farmers, particularly those in debt like Grupo Bom Jesus, went bankrupt. Their businesses were not generating enough revenue to cover their costs. As a result, many soybean farmers, including Grupo Bom Jesus, went bankrupt.

3. To what extent do you think economic conditions contributed to the failure of Grupo Bom Jesus?

The general state of the economy, both domestic and global, can have an impact on the success of businesses. When economies are growing, businesses will benefit from rising incomes and rising demand. However, in contrast, a downturn in the economy, particularly if it is prolonged, can cause trading difficulties for many businesses. In this case, the recession in Brazil has contributed to the difficulties faced by soybean growers. However, it could be argued that the fall in the global market price of soybeans, and the size of debts held by many farmers, were far more influential in the failure of soybean businesses in this case. One reason for this is because cooking oil and cattle feed, which are made from soybeans, are relatively income inelastic. Also, a significant proportion of the Brazilian soybean harvest was for export.

EXAM PRACTICE

DICK SMITH

(a) Explain the difference between the internal and external causes of business failure. (4 marks)

Businesses fail for a wide variety of reasons. In some cases, the cause of failure comes from within the business. These are the internal causes of business failure. Examples might be poor cash flow management, overestimating sales, overtrading or selling poor quality goods. In contrast, some causes of failure are beyond the control of the business. These are external factors and result from forces outside the business, such as changes in market conditions, the state of the economy, natural phenomena or supplier problems.

(b) Evaluate whether the failure of Dick Smith was due to (i) internal factors or (ii) external factors. (20 marks)

Business failure may be caused by internal factors such as poor cash flow management or external factors such as competition. In this case, the failure of Dick Smith was caused by several factors.

One of these was the strength of rivals in the market. Competitors might bring out superior products. They might read market conditions more effectively. They may charge lower prices because their costs are lower. They may be a powerful company and use destroyer pricing to drive smaller rivals out of the market. In recent years, many manufacturers in the west have been outcompeted by low-cost producers from China and other emerging nations. Many high street retailers have collapsed because people are doing more of their shopping online where the same products are often cheaper. In this case, an increasing number of Dick Smith customers were buying online and competition from rivals such as Harvey Norman was fierce. According to the company's administrators, the market changed. They said 'the consumer electronics market is highly competitive with rapid changes in consumer demand patterns.' This resulted in low margins for Dick Smith, a decline in market share and slow revenue growth.

Ineffective inventory control can cause problems for businesses. Poor inventory control may mean a business is holding too much stock, too little stock or the wrong sort of stock. If a business carries large quantities of inventory, money is tied up in unproductive assets. Inventories do not generate any return for a business until they are sold. Consequently, if inventories are built up, costs will be incurred and the flow of revenues may be insufficient. The costs of holding inventory can be significant and include storage, handling, labour, insurance, stock theft and stock becoming out-of-date.

If the wrong sort of stock is bought by a business this could cause serious problems. For example, if a retailer buys stock that cannot be sold because it is not in demand, it may eventually have to be sold at a loss. In this case, the stock held by the stores did not meet

customer needs. Consequently, the business was left with a lot of obsolete and unsellable stock. As a result, in 2015, Dick Smith declared that AUD 60 million of its inventory was worthless. Inventory management is crucial in the retail sector and if a business makes errors they can be very costly.

Dick Smith also had problems with its cash flow. Information in the case suggests that Dick Smith was trying to grow too quickly and therefore overtrading. This led to a considerable financial commitment and rapid outflows of cash. As a result, the business was forced to increase borrowings. Cash flow was also damaged by high running costs due to Dick Smith operating a much larger store network than its rivals. Furthermore, the credit terms obtained by Dick Smith and the cost of other finance was said to be too high. This placed a further strain on the business. Finally, in an effort to improve cash flow the business organised some big discount sales to raise cash levels. However, the low margins on these sales, and the rising cost of finance needed to support the business, eventually led to the failure of the business.

It might be argued that internal factors were mainly responsible for the failure of Dick Smith. Poor inventory control, ineffective cash flow management, operating with thin margins and failure to secure funding on reasonable terms were all factors that were in control of the business. It could be argued that the blame for the failure of Dick Smith lies with those managers responsible for these errors. Although fierce competition (an external factor) also contributed, most would agree that the company failed because of poor decision making.

37 PRODUCTION, PRODUCTIVITY AND EFFICIENCY

ACTIVITY 1

CASE STUDY: ARMANDO SOUSA

1. Use this case as an example to explain what is meant by job production.

Job production involves the production of a single product at a time. It is used when orders for products are small, such as 'one-offs'. Production is organised so that one 'job' is completed at a time. A wide variety of goods and services are produced using this method of production. In this case, Armando Sousa is providing financial services to his clients. He uses job production because every single job he undertakes is unique. Every client is different and every set of accounts produced by Armando will be different. The accounts will contain different financial information because his clients all run different businesses. Armando is likely to work on one client's accounts, complete them, and then move on to the next client.

2. Explain why job production might help to motivate Armando and his trainee.

It is argued that job production will help to motivate people in the workplace. The tasks Armando and his trainee carry out may require a variety of skills, knowledge and expertise. For example, they will be dealing with different clients and different businesses when producing accounts. Their work may be more challenging and interesting. They will also see the end result of their efforts and be able to take pride in their work. This should help to raise the level of job satisfaction.

ACTIVITY 2

CASE STUDY: WANNASRI GARMENTS

1. What is meant by batch production?

Batch production involves performing several processes on a number of identical units, all at the same time. The group – or collection – of identical units is called a batch and can vary in size. After a particular process has been performed on the entire batch, the batch is transferred to another workstation, where another process is performed. Operating in the clothes industry, Wannasri Garments might use the following processes to make its garments: making patterns, cutting, sewing, attaching buttons and zips, finishing and packaging.

2. Explain why batch production is common in the clothes industry.

Batch production is common in the clothes industry because manufacturers produce a variety of different clothes and designs in different sizes and colours in the same factory. For example, Wannasri Garments might make some outfits for hotel staff, overalls for industrial workers and sportswear all in the same day. The same processes are likely to be used, with the same staff and the same machinery. Only the designs and materials are likely to change. Demand is not likely to be high enough to continually produce one type of outfit all day, every day. Consequently, the use of flow production is not likely to be appropriate.

3. Explain one way in which Wannasri Garments might have overcome some of the typical problems associated with batch production.

One of the problems with batch production is that different machinery and tools might be needed when switching from one batch to another. To overcome this problem, the

manufacturers of machinery have tried to develop more flexibility and diversity in their machinery.

In this case, Wannasri Garments has invested in flexible machinery to help overcome this problem in batch production. Flexible machinery can cope with the wide variety of designs and materials that Wannasri Garments needs to offer its customers. Wannasri Garments also employs multi-skilled staff. This means they are adaptable and can use the variety of skills needed when switching production from one design to another.

ACTIVITY 3

CASE STUDY: HSBC

1. What is meant by downsizing?

Downsizing is a measure used by businesses to reduce costs and improve efficiency. It involves reducing capacity by laying off workers and closing unprofitable divisions.

In 2013, HSBC planned to lay off up to 14 000 global staff in a cost-cutting move likely to include redundancies among the bank's back-office IT employees. HSBC outlined the plan in its three-year strategy. The measure could see the total workforce reduced to 240 000 by 2016, bringing the total of number of redundancies to 55 000 since 2010.

2. Explain (a) one benefit and (b) one drawback to HSBC of downsizing.

(a) Benefits of downsizing for businesses may include lower costs with increased profit and a leaner, more competitive operation.

In this case, HSBC said it aimed to save US\$2000–3000 million in annual costs in addition to the US\$4000 million it had already saved.

(b) One drawback for HSBC is that laying off workers means that the business will lose skills, experience and knowledge. In some cases, businesses have been forced to hire back redundant staff as expensive consultants. Downsizing might also have an adverse effect on the morale of workers. It can be quite depressing for workers to see their colleagues leave and it may also make them feel insecure in their own jobs. This could have an adverse effect on motivation.

EXAM PRACTICE

TANDEM REFRIGERATORS

(a) Define flow production. (2 marks)

Flow production is an efficient method of production. It is organised so that different operations can be carried out, one after the other, in a continuous sequence. Products move from one operation to the next, often automatically. Flow production is a suitable method of production when large quantities are produced and the product is quite standardised. Workers are often semi-skilled, specialising in one operation only.

(b) Explain one advantage to Tandem Refrigerators of using flow production. (4 marks)

Flow production is best suited to companies like Tandem Refrigerators that produce very large quantities of output. One of the main advantages of this method is that unit costs are low. This is because Tandem can exploit economies of scale. Lower costs mean that Tandem will be more competitive. Output can also be produced more quickly using flow production. This is because flow production is very efficient relative to other methods of production.

(c) Analyse how Tandem might improve capital productivity. (6 marks)

One way to improve capital productivity is to ensure that plant and machinery is serviced regularly and maintained effectively. It is easy for businesses to overlook the importance of regular servicing and thorough maintenance. This might be because machines seem to work OK until they breakdown. However, with regular servicing and maintenance, machinery is much less likely to breakdown and more likely to operate efficiently – using less fuel for example. Machinery breakdowns can be very expensive since production might be completely stopped for a period of time.

Productivity can also be improved if businesses regularly update obsolete machinery. Even if machines are in full working order, it is possible that newer versions are more effective due to advances in technology. Businesses should also renew worn out and poor performing plant and machinery. Capital equipment does not last forever. Eventually it becomes less reliable and at higher risk of breakdowns which can hold up production. In this case, Tandem Refrigerators has invested €400 million in updating its manufacturing facilities.

Finally, capital productivity will be higher if operatives are thoroughly trained in its uses. Operatives need to understand how to work safely with plant and machinery so that its efficiency can be maximised. Inadequately trained operatives are not likely to get the most out of machines and they may be a danger to themselves and their work colleagues. Tandem Refrigerators plan to use some of their investment in training to improve productivity.

(d) Assess the possible impact on Tandem Refrigerators of its €400 million investment to increase productivity and upgrade its manufacturing facilities. (10 marks)

According to the information in Figure 2, Tandem Refrigerator's profitability has fallen sharply since reaching €111.3 million in 2007. By 2015, profit for the year was only €4.5 million. This suggests that the company has encountered some problems in recent years. It is probably feeling the impact of fierce competition in the market from powerful multinationals like Whirlpool, LG and General Electric. However, some of the company's problems appear to be internal. The company is currently operating with out-of-date technology which suggests that some investment is needed.

Consequently, in 2016 the company invested €400 million to increase productivity and upgrade its dated manufacturing facilities. This was to help prepare for the launch of a new SMART fridge – designed to help reduce food waste. Tandem Refrigerators aimed to create a lean production strategy. The investment included an upgrade to the main assembly plant which involved a redesign of the whole assembly operation. Tandem planned to break production down and increase the number of specialised tasks to help speed up the flow. If workers become more specialised, their performance is likely to improve and their output per day (for example) will increase. Through specialisation, workers become more expert and work quicker. This will help to Tandem to improve productivity and lower costs.

Tandem plans to construct a new automated loading and unloading unit to help allow the introduction of just-in-time (JIT) production. Tandem also purchased a large area of land next to its site in Leipzig to provide key suppliers with a new location for their operations. JIT will help Tandem to reduce the costs of holding large quantities of inventory. Also, if a number of key suppliers move next door to the main assembly plant in Leipzig, this should help to control the supply chain more effectively. In connection with this commitment to JIT, Tandem introduced some specialist customer relationship management (CRM) software. This should also help to improve efficiency.

Tandem also plans to open a new research centre dedicated to the development of new products. Early signs suggest that Tandem's new SMART fridges will be well received in the

market. The company now hopes to develop more new products and gain some of the 'first-mover' advantages in the industry. For example, Tandem may be able to make a lasting impression on customers. This can result in improved brand recognition and lasting brand loyalty. It may charge premium prices by exploiting early adopters in the market and have more time to develop their production processes to help perfect their products or services. Finally, Tandem may be able to control resources in the industry. For example, they may win exclusive contracts with key suppliers or important human resources.

This significant investment, along with its commitment to training and product development, should help to secure the future of the company. A lot depends on the success of the new SMART fridge. If the early signs prove correct Tandem may start to thrive again. However, investment does not come without risk. There may be short-term problems with the new technology. The greater number of tasks for employees may prove to be too repetitive and boring which could have a negative impact on worker motivation. Also, becoming a 'first-mover' carries risks. For example, first-movers incur the high costs of product development that 'copycat rivals' are likely to avoid. Followers into the market can also learn from any mistakes made by first-movers and after careful analysis make modifications to products so that they are superior to those of first-movers. It is also possible that first-movers, in fear of missing out on market opportunities, launch products before they are properly ready. 2016 could well be a turning point for Tandem Refrigerators. If the investment pays off, the company might become highly profitable again.

38 CAPACITY UTILISATION

ACTIVITY 1

CASE STUDY: APPLGATE HOLDINGS

1. Calculate capacity utilisation for each of the 3 years shown.

Capacity utilisation = Current output ÷ Maximum possible output × 100

2015:

Capacity utilisation = $10\,900 \div 18\,000 \times 100 = 60.55\%$

2016:

Capacity utilisation = $14\,000 \div 18\,000 \times 100 = 77.77\%$

2017:

Capacity utilisation = $15\,200 \div 18\,000 \times 100 = 84.44\%$

2. Account for the pattern of capacity utilisation between 2015 and 2017.

Between 2015 and 2017, capacity utilisation has increased from 60.55 per cent to 84.44 per cent. This is quite a significant improvement for Applegate Holdings. Capacity utilisation has probably improved because the company has increased its sales as a result of its export drive in China.

3. Explain one benefit to Applegate Holdings of operating closer to full capacity.

Applegate Holdings, like most businesses, will prefer to operate at close to full capacity. Working at full capacity does have benefits. Average costs will be lower because fixed costs will be spread across more units of output. This will help to improve competitiveness and raise profits. Also, staff motivation might be good if workers feel secure in their jobs. People in the organisation may also be happier if there is lots of work with opportunities to increase their earnings by doing overtime. Finally, a busy operation can improve the company's image. In this case, customers, particularly the new overseas customers in China, might be confident that Applegate Holdings can deliver a good service because it is a busy, established and an experienced manufacturer.

EXAM PRACTICE

MALAGA SHIPPING

(a) Define capacity utilisation. (2 marks)

Capacity utilisation concerns the use that a business makes from its resources. If a business is not able to increase output, it is said to be running at full capacity. In this case, the capacity of the container ship per trip is 16 000 containers. In 2014, the company shipped an average of 14 500 containers per trip. This shows that the ship was not operating at full capacity. It could have carried a further 1500 containers per trip.

(b) Calculate the capacity utilisation for Malaga Shipping between 2014 and 2017. (4 marks)

See table below:

	2014	2015	2016	2017
Average number of containers per trip	14 500	13 600	12 000	9500
Capacity per trip	16 000	16 000	16 000	16 000
Capacity utilisation per trip	90.6%	85%	75%	59.4%

(c) Discuss the importance of Malaga Shipping increasing capacity utilisation. (8 marks)

There are both benefits and drawbacks to operating below full capacity.

On the downside, if a business is working with under-utilised capacity, it will not be making the most of its resources. It may be operating inefficiently because its unit costs may not be minimised. In this case, operating a ship has high fixed costs. If the ship is under-utilised, average costs will rise quite sharply.

Operating with too much spare capacity may also affect the morale of workers. They may feel that the business is struggling to generate orders, which might mean that workers feel insecure in their jobs. In this case, customers do appear to be drifting away and workers may well be feeling the decline themselves. The managing director says: 'The situation is worsening almost by the month. I get far more phone calls from customers who say they've decided to quit than those who are interested in exporting to Middle East.'

However, it could be argued that operating at below capacity does have some benefits. For example, a business would be able cope more easily with sudden increases in demand. A business that is not able to meet immediate customer needs may lose out in the long term. Customers might go to rivals that are able to deal with demand fluctuations.

Also, when working below full capacity there is likely to be less work-related stress. Both workers and managers will be more relaxed and comfortable with their workloads. This might reduce sickness and absenteeism.

Despite the advantages of under-utilisation, Malaga Shipping will be worried about its capacity utilisation. It has fallen from 90.6 per cent in 2014 to just 59.4 per cent in 2017. It will not benefit from the above advantages because it is currently experiencing declining demand, and the workload for the people operating the ship will not change much whether it is full or half full (except when loading and unloading).

Malaga Shipping must try to increase capacity utilisation because the company is now operating very close to the break-even point of 9000 containers per trip. The current margin of safety is very slim.

(d) Assess the measures that Malaga Shipping might take to increase capacity utilisation. (10 marks)

The fall in capacity utilisation from 90.6 per cent to 59.4 per cent is a serious problem for Malaga Shipping, and it needs to be addressed.

It is possible for a business to increase capacity utilisation. Common approaches might include reducing capacity. It might do this by rationalising, for example. This involves getting rid of resources that the business can do without. This might be achieved by reducing staff

by making people redundant, selling off unused fixed assets, leasing capacity, moving to smaller premises where costs are lower or mothballing some resources.

However, most of these options are not really available to a company like Malaga Shipping. For example, reducing staff on the ship may not be possible because a certain size crew would be needed regardless of the load size, for health and safety and operational reasons. Malaga Shipping is not likely to have many unused assets – its main asset is the container ship. It may not be possible to move to new premises or mothball resources, again because the business focuses on the ship, which cannot be physically scaled back.

However, one possible option here is to lease capacity. Malaga Shipping may be able to let other shipping companies use its spare capacity to transport goods on their ship. Even if they did this at a reduced price there would be a positive contribution. Finally, Malaga Shipping might be able to reduce capacity in its office or related activities. However, this is not likely to make much of an impact on costs.

The main solution to Malaga Shipping's problem is probably to increase sales. If it generates more custom, there will be more containers to carry, so capacity utilisation will rise. Malaga Shipping might need to invest heavily in promotion to increase sales. However, if these costs are not covered by the extra revenue generated, raising capacity utilisation in this way may not be viable.

Some businesses can increase the usage of their assets to reduce capacity. However, again, this is not really possible for Malaga Shipping because presumably its ship is at sea most of the time anyway.

To conclude, neither outsourcing nor redeployment will help Malaga Shipping to reduce capacity. This is because the two measures are not appropriate given the nature of the business.

The options available to Malaga Shipping include generating more custom by investing in an effective marketing strategy or carrying containers at a reduced rate for other shipping companies. If the decline in business to the troubled Middle East region is a widespread problem, there may be other shipping companies in the same position. This might provide some scope for sharing resources. It may also be possible for Malaga Shipping to switch to other routes, again by investing in marketing. Finally, it may be possible for Malaga Shipping to sell its large container ship and purchase a smaller vessel with less capacity and lower running costs. However, more information would be required before this option could be considered.

39 INVENTORY CONTROL

ACTIVITY 1

CASE STUDY: MELCO ELECTRONICS

1. Calculate the (a) minimum stock level, (b) re-order level, (c) re-order quantity, (d) lead time for the computer chips.

(a) 100 000 units (b) 200 000 units (c) 300 000 units (d) 3 weeks (approx.).

2. Explain one reason for the change in stock level after the sixth month.

For the first six months, stocks of the circuit boards fluctuate uniformly. Stocks fall at a constant rate from 400 000 to 100 000 and are then replenished when the delivery arrives. However, after the delivery in the sixth month, stock levels fall sharply to 0. By the end of the seventh month MelCo Electronics completely runs out of circuit boards.

There could be two reasons for this. If MelCo Electronics failed to place an order at the normal re-order level, stocks would have not been replenished. Alternatively, an order might have been placed at the normal re-order level, but the supplier has failed to deliver. There could be a problem with the new supplier. It states in the case study that the new supplier was 19 per cent cheaper than the previous one, but it is possible that the new supplier is unreliable.

3. Discuss the possible consequences of the change in stock level after the sixth month for MelCo Electronics.

When MelCo Electronics runs out of stock it may encounter problems. The circuit boards are presumably an important component in the assembly of control panels. Without this key component, it would not be possible to manufacture any more. If production were held up, workers and machinery will be idle. As a result, the business will lose money because these resources still incur costs. If there is an extended delay, there could be quite a negative impact on the profitability of the company.

It is also possible that MelCo Electronics will have to disappoint some of their customers. If it has urgent orders and stocks of finished goods run out, it will not be able to meet customer demand. Some customers may decide that they cannot wait and look for new suppliers. These customers might be lost for ever. This means that, in the long term, the impact of the failed delivery of circuit boards could be quite serious for MelCo Electronics.

ACTIVITY 2

CASE STUDY: LEAN PRODUCERS

1. Explain two advantages of just-in-time production.

Companies that use a just-in-time (JIT) approach to production can reduce their operating costs and therefore increase profit. Using JIT helps to eliminate or reduce inventory holding costs. Inventory holding costs can be significant. For example, they include storage costs such as rent, heating, lighting and labour costs (warehousing staff and security guards, for example). There may be spoilage costs where the quality of inventory may deteriorate over time or become obsolete. There may also be a threat of shrinkage where very large inventory holdings pose a theft risk from staff. Another important cost is the opportunity cost of holding inventory. Money tied up in inventory does not earn any financial return. The money could be put to more productive uses such as investing in training.

Another benefit of JIT is that cash flow is improved. Inventories are a relatively low liquidity current asset since there is no guarantee they will be sold. Thus, if inventories are eliminated or significantly reduced, a business is likely to have more cash. This means a business can meet its day-to-day expenditures more easily and may also help the survival of a business.

2. How does this case highlight one of the key problems with just-in-time production?

One of the main problems with JIT is that companies rely a lot on suppliers and transport systems. When orders are being delivered JIT, any delays caused by transport systems can be very disruptive. In this case, the poor quality of some US roads are holding up deliveries of finished goods, components and other materials to sites belonging to Whirlpool and Caterpillar. This meant, for example, that a washing machine being transported from a regional distribution centre to a customer via a local distribution centre now sits overnight in a lorry park. Therefore, the delivery is delayed by a whole day and extra inventories have to be held. The hold-ups in delivery, and the resources used to deal with the problems, obviously raises costs for these companies. Overall, it is reckoned that the poor condition of the US road network is costing businesses millions of dollars a year. One transport authority said the cost of wasted fuel and driver time caused by road congestion amounts to about US\$27 000 million per year. The capacity of US roads has been reduced due to a lack of maintenance in recent years.

3. Explain how some companies have dealt with the problem identified in question 2.

Some companies have come up with a number of solutions to deal with the problem. For example, some decided to keep more inventories and vehicles on the road for longer periods of time. Others set up 'just-in-case' warehouses and guarded parking sites at strategic locations between suppliers and assembly plants. For example, Whirlpool has established a number of guarded car-parks on the outskirts of major cities such as Chicago, Milwaukee and Minneapolis.

Another approach was used by Caterpillar, one of the world's largest shippers by weight. It often delivers very large machines in parts. For example, when transporting orders to ports for export it breaks some of its heaviest machines into parts and then re-assembles them on the dock side before loading onto ships. This sounds expensive but according to a spokesperson from Caterpillar it is cheaper than obtaining the heavy-load permits that are required to transport very heavy machines on poorly maintained roads.

EXAM PRACTICE

TOYOTA

(a) Define just-in-time stock management. (2 marks)

Just-in-time stock management involves holding low or zero stock levels, including stocks of raw materials and components, and stocks of finished goods. Just-in-time requires suppliers to deliver small quantities of stock at regular intervals, exactly when they are needed – just in time. In this case, the just-in-time principle has been extended. Toyota makes only what is needed, when it is needed, and in the amount needed.

(b) Explain one reason why Toyota does not hold buffer stocks. (4 marks)

Some businesses keep buffer stocks – like emergency stocks, held in case there is a stock shortage. A business might hold buffer stocks of finished goods in case there is a sudden increase in demand. If a business is not able to meet a surge in demand, it will miss out on sales opportunities. Also, some businesses need to hold buffer stocks of important raw materials or components to protect themselves from a break in supply. Breaks in the supply of crucial raw materials or components can lead to halt in production.

However, in this case Toyota does not use a buffer stock system. Toyota operates a just-in-time approach to stock management and production. This means that stock levels are kept very low indeed. It also only produces cars when they have been ordered. This eliminates the need to hold stocks of finished goods.

(c) Discuss the importance to Toyota of minimising waste. (8 marks)

A failure to control stock adequately can result in wasted stock; for example, if a business over-produces, it will have to stockpile finished goods. This will cost money and reduce profits.

Toyota has gone a step further and developed a production system that aims to completely eliminate waste. The Toyota Production System (TPS) focuses on seven sources of waste: over production (largest waste), time on hand (waiting), transportation, movement, processing itself, stock at hand and making defective products. Waste elimination is achieved by building on the just-in-time method of production. Toyota makes only what is needed, when it is needed, and in the amount needed. This means that stocks of finished goods are never held, reducing stock-holding costs almost to zero.

Clearly, if Toyota has developed a complete production system based on the removal of waste in production, waste minimisation is of the utmost importance to the company. Eliminating waste will also reduce inconsistencies, and unreasonable requirements on the production line. Total production costs will be lower and profits will be higher.

(d) Assess the extent to which lean production has helped Toyota to gain a competitive edge. (10 marks)

Toyota uses its own fully-developed production system called the Toyota Production System (TPS). It is based on the just-in-time approach to production, but it also uses other lean production methods such as kaizen. Kaizen means continuous improvement. There is a strong link between kaizen and lean production because it focuses on waste reduction.

When making cars, Toyota has some important principles relating to stocks. When a vehicle order is received, a production instruction must be issued to the beginning of the vehicle production line. The assembly line must be stocked with the required number of all needed parts so that any type of ordered vehicle can be assembled. The assembly line must replace the parts used by retrieving the same number of parts from the parts-producing process (the preceding process). Finally, the preceding process must be stocked with small numbers of all types of parts and produce only the numbers of parts that were retrieved by an operator from the next process. This lean approach ensures that cars are produced only to order and that all the stocks of components and materials are ready for production, but without the need to hold large quantities of stock.

TPS has helped Toyota to keep improving the way it manufactures vehicles. It has also developed a corporate culture where employees have to constantly grapple with challenges and problems and must come up with fresh ideas. As a result, costs are reduced and the general benefits of just-in-time are enjoyed.

Toyota's approach to production has received considerable praise in the world of manufacturing. Indeed, TPS has been so successful over the years that many other manufacturers have adopted or adapted it to meet their own needs. Also, through the use of TPS, Toyota has gained a competitive advantage in the car industry. Competitiveness has improved because lean production raises productivity, reduces costs, cuts lead times, lowers the number of defective products, improves reliability and speeds up design time. With these improvements, Toyota can charge lower prices, offer better quality and reliability and fight off rivals in the global market place.

Lean production has inevitably helped Toyota to improve its competitive advantage. However, other aspects of Toyota's operations and corporate strategy may have made a contribution. For example, the company may have made important breakthroughs in research and development, its marketing team may have performed very well or the company may have an extremely competent leader. It could be argued though, since others are keen to adopt it, that much of Toyota's competitive advantage has come from TPS.

40 QUALITY MANAGEMENT

ACTIVITY 1

CASE STUDY: NESTLÉ

1. Define quality assurance.

Quality assurance is a commitment by a business to maintain quality throughout the whole organisation. The aim of quality assurance is to prevent problems before they occur rather than detect them after they have occurred. One important aspect of quality assurance at Nestlé is to ensure the safety of its products.

2. Explain why quality assurance is such an important issue for Nestlé.

Nestlé operates in the food and confectionery industry. The quality of products in this market is particularly important. This is because poor quality in such products could pose a danger to customers. According to a spokesperson for Nestlé, the company's main concern regarding confectionery production is the salmonella bacteria that can cause severe food poisoning. The company has to ensure that ingredients, such as cocoa, nuts and sultanas, are free from any bacteria that could cause illness. Nestlé is also concerned about the growing threat from allergens. The spokesperson said that Nestlé focuses on the development of safe products for young consumers who are growing up with allergies. If some of Nestlé's products were contaminated it could pose a serious health threat to customers. It could also be a serious threat to the reputation of Nestlé – one of the biggest food and confectionery companies in the world.

3. What evidence is there in this case to suggest that Nestlé takes quality assurance seriously?

In 2016, Nestlé opened a new US\$31 million quality assurance centre in Ohio, USA. At 82 000 square-feet (7820 m²) it is Nestlé's largest quality assurance centre in the world and has been opened to explore the increasing threat of foreign bodies in confectionery production. The centre has a 32 000 square-feet (2970 m²) biology lab, an upgraded chemistry lab and related facilities where 60 per cent of food testing will take place. Nestlé's investment in this specialised quality assurance facility suggests that Nestlé takes quality assurance very seriously.

It could also be argued that some of the comments made by the Nestlé spokesperson in this case supports the view. For example, Nestlé claims it is working very hard to eliminate foreign bodies getting into products. If a product contains a foreign body from the agricultural environment, it may be potentially dangerous to customers (particularly children). Compared to bacteria and allergens, the possible dangers posed by foreign bodies are often overlooked. The Nestlé spokesperson said that it is an emerging challenge and something the industry should seek to address.

ACTIVITY 2

CASE STUDY: WINNEBAGO

1. Define quality circles.

Quality circles are small groups of employees who meet on a regular basis during work time to discuss progress and solve problems. The meetings are voluntary and might consist of groups of between 6 and 12 people. They are likely to spend their time pinpointing, examining, analysing and solving problems in areas in which they are directly involved. These might include innovation, work relations, quality, productivity and safety and costs.

Quality circles help to improve communication in the workplace and make better use of labour resources.

2. Assess the importance of quality circles to Winnebago.

Winnebago has a reputation among motorhome enthusiasts for high quality and innovation, dating back to its founding in 1958. In its effort to maintain very high-quality standards, Winnebago has used quality circles for many years. Indeed, the company has won the Recreational Vehicles Dealer Association's prestigious Quality Circle Award every year since its inception in 1996. This suggests that quality circles have been used to improve operations at the Winnebago factory.

Winnebago designs and manufactures components to high specifications. Higher quality is also the result of ongoing testing. The computerised road simulator (nicknamed 'The Shaker') and the nearly 1 km test track can simulate the effects of years of normal driving in just a few days. Components are checked under hot, cold, wet and dry conditions and every Winnebago RV goes through a high-pressure water tunnel and is checked for leaks before shipping. These testing methods may have been perfected over a period of time using quality circles to bring about improvements. The fact that Winnebago has consistently won awards for using quality circles suggests that they are very important indeed.

ACTIVITY 3

CASE STUDY: CFKS

1. Explain one way in which kaizen can help a business improve productivity.

Kaizen means continuous improvement and is perhaps the most important concept in Japanese management. Every aspect of life, including social life, working life and home life, is constantly improved in Japan. Western businesses' efforts to improve efficiency and quality have tended to be 'one-offs'. Productivity remains the same for long periods of time, then suddenly rises. In Japan, improvements in productivity are small but continuous and may result from changes in production techniques that are introduced gradually.

At CFKs, advances have been made along the length of the production chain, from training staff in additional skills so that they can switch between tasks, to better management of the purchasing function. Productivity has risen 5 per cent in the past year following these changes. Further improvements are also expected in the future.

2. Explain one way in which CFKs has benefited from the introduction of kaizen.

CFKs is totally committed to quality and has enjoyed a number of benefits from introducing kaizen. Generally, productivity has risen 5 per cent in the past year following changes. This in turn helped to raise profit by 10 per cent.

In one example, the company noticed that lots of visits to its website failed to result in a purchase. As a result, they spent some time investigating possible reasons for this. It was discovered that their 'checkout' button was not clearly visible. They resolved the issue and web sales grew by 10 per cent.

EXAM PRACTICE

THE POWARTH GROUP

(a) Define total quality management. (2 marks)

Total quality management (TQM) is a method designed to prevent errors, such as poor-quality products, from happening. The business is organised so that the manufacturing process is investigated at every stage. It is argued that the success of Japanese companies is based on their superior organisation. Every department, activity and individual is organised to take into account quality at all times. The use of TQM now extends to service providers, such as hotels in this case.

(b) Explain how the use of teamworking might improve the quality of service at the Powarth Group hotels. (4 marks)

Teamworking has a number of advantages and can be used to improve quality. TQM stresses that teamwork is the most effective way of solving problems. For example, a team of employees will have a greater range of skills, knowledge and experience than a single individual. It may be possible for a team to tackle a greater variety of problems, and team ideas are more likely to be used than individual ones.

TQM strongly favours teamwork throughout the business. It builds trust and morale, improves communications and co-operation and develops interdependence. If staff are happier, customer service in the hotel will be better.

(c) Discuss the possible benefits to the Powarth Group of total quality management. (8 marks)

Generally, the use of TQM helps companies to focus clearly on the needs of customers and relationships between suppliers and customers. In this case, customer service appears to have been very poor. The letter of complaint highlights the problems with staff: 'The main problem was the staff – they were totally disinterested and as guests we felt that we were an inconvenience.' This is something that the Powarth Group needed to address.

TQM also critically analyses all processes to remove waste and inefficiencies, finding its improvements and developing measures of performance. It is hoped that the use of the suggestions box will generate ideas for improvement. TQM also helps to develop effective procedures for communication and acknowledgement of work. Finally, a TQM system continually reviews the processes to develop a strategy of constant improvement. This helps the Powarth Group to ensure that staff stay committed to the system and maintain their new standards after training and the implementation of TQM.

However, the group needed to be aware that TQM only works if there is commitment from every single member of staff in the business: the directors, hotel managers, porters, housekeepers, kitchen staff and waiters. There is a great deal of bureaucracy and documents, and regular audits are needed. This may be a problem for small firms such as the Powarth Group. Overall, given the problems that the Powarth Group experienced, the introduction of TQM has more benefits than drawbacks.

(d) Assess the extent to which the introduction of total quality management at the Powarth Group was a success. (10 marks)

TQM was introduced at the Powarth Group in 2016. By end of 2016, profits rose from €120 000 to €1.67 million, guest complaints fell by 82 per cent, staff morale improved and hotel occupancy rates had increased from 52 to 74 per cent.

These are significant improvements in the performance of the hotel group. Up until 2010, the group's performance had been lacklustre, with flat sales for five consecutive years. The new deal with the online booking group turned out to be a disaster, and the future was not looking good.

To address the group's problems, the board decided to invest €5.6 million in TQM to try to improve the quality of the hotel service. The measures they took – such as comprehensive training, both in TQM and customer service, setting up a suggestions box to encourage staff ideas, organising staff into teams and keeping records of all customer complaints – seemed to strike at the heart of the problem.

However, it may be too early to judge the success. It is only one year since TQM was introduced. Some might argue that the new system has reaped benefits very quickly indeed. Others might suggest that interest in TQM will dwindle with time and the hotel might drift back into its old ways. Perhaps the moment to judge will be in five years' time.

Also, the group did not only invest in TQM. It also invested €4.3 million in the refurbishment of half of the hotels, pledging another €5 million in investment in three years' time for refurbishing the remainder. The group upgraded its website, changed the mission statement to emphasise the quality of service and purchased a smart new hotel uniform for all staff to wear. The immediate improvement in the fortune of the hotel group would also be the result of these measures. It is not yet possible to say with any certainty that the introduction of TQM has been an overwhelming success at the Powarth Group.

41 ECONOMIC INFLUENCES

ACTIVITY 1

CASE STUDY: BAUMER FAMILY HOLIDAY

1. Explain why exchange rates are necessary.

Exchange rates exist because different countries often use different currencies. When people or businesses trade, it is necessary to make foreign payments in a foreign currency. Foreign currency can be purchased and the price at which domestic currency is exchanged for a foreign currency is called the exchange rate. In this case, the Baumer family needed to buy some Japanese currency before they went on holiday to Japan. The exchange rate they got from their bank was US\$1 = JPY 110.

2. Calculate how much Japanese currency the Baumer family were able to purchase for US\$4500.

The amount of Japanese currency the Baumer family would receive for their US\$4500 is given by:

$$= \text{US\$}4500 \times \text{JPY } 110 = \text{JPY } 495\ 000$$

3. Assess the impact on the cost to US tourists to Japan if the exchange rate depreciated to US\$1 = JPY 90.

When the exchange rate depreciates it gets weaker. This means that a domestic currency buys less foreign currency. In this case, if the dollar depreciates, it becomes more expensive for US tourists in Japan. Their currency will buy fewer yen. For example, the Baumer family would have only been able to get JPY 405 000 ($\text{US\$}4500 \times \text{JPY } 90$) at this lower exchange rate.

ACTIVITY 2

CASE STUDY: MICHEL PAPIN

1. Explain one effect that high interest rates can have on businesses.

High interest rates can be very troublesome for businesses. They can raise overheads if a business has debt, reduce demand if purchases are funded by credit cards or other forms of borrowing, and reduce investment.

In this case, the high interest rates in 1990 led to the downfall of Michel Papin's restaurant. In 1990, Michel Papin was declared bankrupt. His restaurant business went into liquidation when he failed to pay interest owing on a mortgage. The interest payments on his €155 000 mortgage were €2400 a month. The mortgage, taken out on his private residence, had been used to help fund the restaurant. However, the restaurant struggled and was not generating enough revenue to meet the high mortgage payments. Michel lost everything, with high interest rates being a significant contributory factor in his downfall.

2. Explain why a business like Michel's is likely to invest more when interest rates are low.

Interest rates in France have been historically low since 2008. The rate of interest in the EU has been between 0 and 1 per cent for 10 years now. This means that businesses can borrow at cheaper rates and investment becomes more attractive. A lot of businesses have to borrow money in order to fund investment. When interest rates are low, the returns on investment do not have to be so high to make it worthwhile.

In this case, Michel decided to expand his business. He took on four more employees and, since the interest rates were at 'rock bottom', decided to borrow €10 000 to double the size of his outside catering operation. Michel may not have undertaken this investment if interest rates had not been so low. Michel was well aware of the dangers of borrowing money when interest rates are high. Low rates will tend to encourage business investment.

ACTIVITY 3

CASE STUDY: INDIAN GOVERNMENTAL TAXATION AND EXPENDITURE

1. Evaluate whether the proposals outlined in the budget will have (a) a positive, or (b) a negative impact on businesses in the country.

(a) The proposals made by the Indian government outlined in the 2017 budget are likely to have a positive impact on many businesses. Generally, the government planned to spend more money and lower some taxes in the economy. For example, the government proposed to cut the rate of income tax by 50 per cent to just 5 per cent for those earning between INR 250 000 and INR 500 000. According to the government about 79 per cent of the 37 million Indian people who submit income tax returns earn less than INR 500 000. This would leave more cash in the hands of consumers to spend on goods such as make-up, household goods, cars and motorcycles. Businesses in these sectors are likely to respond positively by expanding their operations so they can earn more revenue and generate higher profits. It was also planned to lower rates of corporation tax for small- and medium-sized businesses. This would help to encourage enterprise in the Indian economy and persuade existing businesses to expand. With lower rates of corporation tax, these businesses would be able to keep more of their profits to invest.

The agriculture sector is also likely to benefit from new government measures. For example, there are plans to increase loans to farmers up to INR 10 trillion. The government also allocated INR 480 000 million rupees for a rural job guarantee programme and the electrification of villages. Farm vehicle makers such as Mahindra & Mahindra Ltd and fertiliser-maker Coromandel International Ltd, are examples of businesses expected to benefit from this spending. However, the main sector likely to benefit from the proposed increases in government spending is construction and related industries. The government plans to spend INR 100 000 million on the construction of a high-speed Internet network designed to connect about 150 000 villages and extend an affordable housing programme for another 5 years. The government has said it will also increase the number of railways by forming ventures with transportation companies to provide better connections to ports. Rail equipment manufacturers such as Bombardier Inc. and General Electric Co. are among companies already investing in setting up operations in India to help improve the infrastructure.

These plans to increase spending will be largely welcomed by businesses since demand in the Indian economy is likely to increase. Many will respond by increasing their operations in an effort to grow and enjoy more profit. However, some sectors will benefit more than others – the construction industry in particular and any companies involved in infrastructure development such as those that lay high-speed internet cables.

(b) A minority of businesses might not benefit from some of the announcements made by the government. For example, the government plans to change rules relating to the sale of pharmaceuticals. It wanted to reduce the price of healthcare to make it more affordable by encouraging the production of unbranded medicines. The government also planned to increase the taxes on tobacco by 6 per cent. Clearly, tobacco companies and some

pharmaceutical businesses may respond negatively to this news. Investment in these sectors might be reduced for example.

EXAM-STYLE PRACTICE

ZOOMAIR

(a) Define upswing in the business cycle. (2 marks)

An upswing in the economy occurs when GDP starts to rise again after a recession or a depression. Businesses and consumers regain their confidence and start spending again. As a result, demand increases, unemployment falls and prices start to edge up again.

(b) Explain one reason why a business like ZoomAir might be affected by a cut in income tax. (4 marks)

The government sometimes uses fiscal policy to help manage the economy. One aspect of fiscal policy is taxation. The government has the power to raise or lower taxes and introduce new taxes if it wishes. Income tax is tax paid by individuals on their earnings. If the government were to lower income tax, by reducing rates or raising personal allowances, people would have more disposable income. This cut in income tax would probably benefit ZoomAir because people may spend more money on air travel – to holiday destinations, for example. ZoomAir would sell more seats, generate more revenue and hopefully increase profit.

(c) Look at Figure 9. Discuss how European businesses, such as ZoomAir, might have responded to the pace of economic growth between 2013 and 2015. (8 marks)

Figure 9 shows that the EU economy experienced a recovery between 2013 and 2015. This means that GDP has started to grow after a period of recession. In 2013, growth in the EU was negative at less than -0.5 per cent. There was a recession at this time in many EU countries. However, during the next two years, the EU economy started to recover and by 2015, economic growth was around 2 per cent.

Once an economy starts to recover from a recession, businesses and consumers start to feel more confident again. During the recovery, unemployment starts to fall and demand starts to rise. This will help to stimulate business activity and owners will start to take a 'longer view' which means they are far more likely to invest.

Many EU businesses would have been more optimistic about future trading conditions. They might start to 'brush themselves down' and look around for fresh business opportunities. They might reconsider investment projects that were perhaps cancelled or postponed during the recession. For example, they might buy some new machinery, update their IT systems or modernise their production techniques. They might be prepared to invest more in R&D, market research and product development. Generally, the mood will change in the business community and owners will be far more positive.

In the case of ZoomAir, the period between 2013 and 2015 was a good one. Profits rose from €223 million to €401 million. Even during the recession ZoomAir still managed to be profitable. Also, between 2011 and 2015, the number of passengers carried by Zoom Air rose by 68 per cent from 35.6 million to 59.7 million. This is a significant increase and the owners of ZoomAir must be very pleased with the performance of the company – particularly since for some of this time the EU economy was experiencing a recession. The data in Figures 6 and 7 suggests that ZoomAir have been expanding their operations throughout the whole period. The airline has kept its costs low by buying fuel-efficient aircraft and reducing baggage-handling costs by charging passengers for checking-in luggage.

This case does help to show that different businesses will respond in different ways when faced with changes in economic conditions. Businesses like ZoomAir might be a minority, but it does show that it is still possible to deliver success during a recession. And once the upswing arrived, ZoomAir was in a strong position and able to benefit from rising demand in the EU economy.

(d) Evaluate whether or not Zoomair will benefit from an appreciation in the exchange rate. (20 marks)

If there is an appreciation in the exchange rate for France the euro would be getting stronger against other currencies such as the British pound and the Swiss franc. This means that people living in the Eurozone (countries that use the euro) can buy more of other currencies. However, people living outside the Eurozone will have to pay more to fly with ZoomAir since their currencies are relatively weaker. This might have an impact on ZoomAir.

According to the pie chart in Figure 8, 21 per cent of ZoomAir's passengers are from the UK (11 per cent) and Switzerland (10 per cent). Both the UK and Switzerland are outside of the Eurozone. This means that the price of airfares charged by ZoomAir would rise to passengers from these two countries. Consequently, there is likely to be a fall in demand. This would have a negative impact on ZoomAir since both revenues and capacity utilisation would fall. This would result in a fall in profits and might threaten dividend payments. Also, 9 per cent of passengers are classified as 'Other'. If some of these live outside the Eurozone then demand may fall by even more. For those living inside the Eurozone, the price of the airfares charged by ZoomAir will stay the same. Consequently, there should be little, or no real impact on demand in this sector of the market.

Another possible impact relates to ZoomAir's costs. One of the main costs to an airline is aviation fuel. This is likely to be imported by ZoomAir since France is not a big oil-producer. Depending on the size of the appreciation, and the proportion of costs taken up by aviation fuel, this could have a significant effect on the 'bottom line'. An appreciation in the euro means that imports become cheaper. Therefore costs will fall and profits will rise.

The overall impact of the appreciation in the euro is difficult to determine. Costs will definitely be lower since aviation fuel is cheaper. However, the impact on demand and revenues is harder to evaluate. The appreciation will only affect between 21 and 30 per cent of ZoomAir's passengers. However, the market for budget fares is competitive and consequently demand might be fairly price elastic. For example, UK passengers might choose to fly with a UK carrier where fares are priced in pounds not euros. To conclude, ZoomAir might just about benefit from the appreciation in the euro. With lower costs, the airline may have some scope for price cuts. This might help to retain non-Eurozone customers such as the UK and the Swiss, and also attract more Eurozone customers because of the cheaper fares..

42 LEGISLATION

ACTIVITY 1

CASE STUDY: IKEA

1. Define unfair dismissal.

In some circumstances, an employee may be unfairly dismissed. This means that legally an employee is wrongfully dismissed and has the right to claim compensation. Employees may have grounds to claim unfair dismissal if they were dismissed because they were trying to join a trade union, became pregnant, refused to work on a Sunday or were made redundant without a proper procedure. In this case, a tribunal in Ireland said that an IKEA employee was unfairly dismissed for drinking a milkshake costing €1.25. An IKEA HR manager said that the case was treated as 'gross misconduct' as in any case of theft. However, the tribunal did not agree that the matter was 'substantial ground justifying dismissal'. As a result, IKEA had to pay the employee €30 000 in compensation.

2. Explain the impact of employment legislation on IKEA in this case.

In this case, legislation designed to protect employees has had an impact on IKEA. By unfairly dismissing one of its employees, the company has incurred an unnecessary cost of €30 000. However, as a proportion of IKEA's annual revenue and profit, this amount of money is probably trivial. A more important impact might be the possible effect on the image and reputation of IKEA. People outside the organisation might consider IKEA to be mean for sacking an employee for such a minor issue. Many might say that an official warning would be a more appropriate punishment. Consequently, IKEA might suffer a drop in sales and be perceived as an unreasonable employer. This might affect their recruitment process. Many businesses would want to avoid such bad publicity.

ACTIVITY 2

CASE STUDY: BUSINESS DAMAGING THE ENVIRONMENT

1. Explain how the three businesses discussed in the case have been affected by legislation.

The three businesses in this case have been caught damaging the environment as a result of their operational activities. ASP Sealing Product Ltd, Umang Dairies Ltd and Dairy India Private Ltd were penalised for releasing dirty water into India's waterways. As a result, action was taken by India's National Green Tribunal (NGT), a body responsible for bringing actions against those that damage the environment. The NGT imposed a fine of INR 1 million each on the businesses for releasing untreated waste and the use of underground water resources without permission. In addition to the fines, the three units were forced to close down their operations until further notice from the NGT.

The penalties in this case are quite severe. The companies will incur higher costs as a result of the fine but more importantly their operations have been shut down. Depending on how long the closure order remains, the impact on the three businesses could be very significant. The companies will not be able to generate any revenue while they are closed down. If the closure remains for a lengthy period of time, the survival of these businesses might be threatened. There is no information in the case about the duration of the closure order.

2. Explain why environmental legislation is needed.

Generally, environmental legislation is needed to protect the environment from the potential damage that businesses might cause. Businesses can often reduce their costs and gain an

unfair advantage in the market by ignoring the environmental consequences of their activities. As a result, the environment gets damaged – sometimes permanently. In this case, companies have been discovered polluting Indian waterways and using water without permission. If the authorities failed to take action, this sort of practice would be encouraged and the environment would suffer. The regulations here are designed to prevent pollution.

EXAM PRACTICE

PADWELL ELECTRONICS PLC

(a) Calculate the increase in the weekly wage bill as a result of the increase in the minimum wage. (4 marks)

The number of workers earning the minimum wage is:

$$90\% \times 4800 = 4320$$

The total number of hours worked in a week by those earning the minimum wage is:

$$4320 \times 36 = 155\,520$$

So, the increase in the weekly wage bill is:

$$155\,520 \times \text{£}0.19 = \text{£}29\,548.80$$

(b) Explain the main impact of the national minimum wage on Padwell Electronics. (4 marks)

The national minimum wage was introduced in the UK mainly to boost the pay of very low paid workers, taking some people out of poverty. Before the introduction of the national minimum wage, the government felt that businesses were not paying some workers enough to live on.

At Padwell Electronics, 90 per cent of all employees are paid the national minimum wage for a standard 36-hour week (four shifts of nine hours). When the minimum wage was increased the weekly wage bill for Padwell Electronics rose by £29 548.80. Over a financial year this amounts to £1 536 538. This represents a significant financial cost to the business.

(c) Explain one way in which the proposed merger with Deptford Electricals might be affected by competition policy. (4 marks)

Competition policy is designed to protect the interests of consumers and promote competition in markets. The Competition and Markets Authority (which replaced the Office of Fair Trading and the Competition Commission in 2014) is responsible, among other things, for investigating mergers that might restrict competition in a market.

In this case, a proposed merger between Padwell Electronics and Deptford Electricals has attracted the attention of the authorities. It is thought that the merger might result in the combined business being too dominant in the market. As a result, the authorities are contemplating an investigation.

However, the authorities have not yet made up their minds and the delay in proceedings is irritating for Padwell Electronics. Sally Castle, the CEO at Padwell, said that this is an example of government intervention that's 'gone too far'. The delay could cost the companies involved money – especially if they invest funds in the development of the merger only to find out that it might be blocked. The delay also gives time for rivals to plan a strategic response.

(d) Evaluate whether or not the costs of complying with legislation outweigh the benefits to a business like Padwell Electronics plc. (20 marks)

Businesses often complain that legislation is too much of a burden. This is because the costs of compliance can be high. In this case, the increase in the National Minimum Wage has caused an angry response from Sally Castle, the CEO at Padwell Electronics. She said 'This pay increase is very bad for us. We try to be efficient here at Padwell, we keep our costs low, we aim to be the cheapest in the industry – it's what keeps us going.'

The actual cost to Padwell Electronics plc of the increase in the minimum wage is £29 549 per week. Over a financial year this would be £1 536 538. If Padwell Electronics does not raise its prices and there is no increase in productivity as a result of the pay increase, the company will suffer a fall in profit.

Sally also mentions another example where legislation has imposed a cost on the business. In an interview with the local press she says, 'The government is always creating new demands. Just last month we had to spend £100 000 on a new toilet block for staff. There was nothing wrong with the old block until the HSE (Health and Safety Executive) got involved.' Again, as a result of an inspection by the HSE, Padwell Electronics was forced to incur more costs. The HSE presumably said that the old toilet block needed an upgrade to improve hygiene. The new block cost Padwell Electronics £100 000.

There will be many other examples, not explicitly mentioned in the case, where government legislation has resulted in extra costs. For example, when taking on a new employee, Padwell Electronics must check that the person is entitled to work in the UK. This involves checking a passport or any other means of identification that shows that a person is a national of an EU country. If the person was born in the UK, documents such as a birth certificate, a P60, a P45 or an insurance card must be inspected. Padwell Electronics must also check that the documents belong to the applicant. If Padwell Electronics only checks the documents of people who they suspect might not be entitled to work in the UK, they might face a claim for discrimination. Copies of the documents must also be made.

However, legislation is there for a reason. In the absence of regulation, it is possible that some businesses would neglect the needs of certain stakeholders. Some might go further and exploit vulnerable stakeholders. Some people might argue that, in this case, workers are not treated particularly well. Although Padwell Electronics is a large employer, people often see jobs there as a 'last resort'. This is mainly because the pay is low, the work is very boring and working conditions are harsh. The factory is said to be noisy, cold and poorly lit. Staff turnover is 39 per cent.

Perhaps the CEO at Padwell Electronics should recognise that, although complying with health and safety legislation imposes costs on businesses, there are considerable benefits that result from compliance. For example, a good health and safety record will help to improve the image of a business. This will make it easier to attract and retain high-quality staff – especially in industries with 'hostile' working conditions where health and safety issues are of the utmost importance. Also, if businesses are genuinely committed to maintaining high standards of health and safety, workers will feel protected and more secure. As a result, they may be better motivated and more loyal. This will benefit the business, as workers will be more productive.

However, it is important for the government to find the right balance. Too much regulation will discourage enterprise and deter foreign investment in the UK. This might stifle growth in national income, reduce job creation, decrease tax revenues and reduce consumer choice.

43 THE COMPETITIVE ENVIRONMENT

ACTIVITY 1

CASE STUDY: BOLT

1. Calculate the expected revenue in 2016 if sales targets are achieved.

Expected revenue in 2016 is given by:

$$350 \times 12 \times \text{INR } 1599 = \text{INR } 6\,715\,800$$

2. What evidence is there in the case to suggest that Bolt is a small business?

Bolt currently employs just five people. Consequently, the business would be classified as small by most countries in the world. For example, if EU definitions of size are used, Bolt would be defined as a micro business because it employs fewer than 10 people. According to revenue, Bolt would also be defined as a micro business. This is because its revenue (€92 746) is less than €2 million.

3. Explain two ways in which small businesses like Bolt can compete in the market.

The vast majority of firms in many countries are small. The number of small firms, along with self-employment, has also grown in the last 30 years. Governments in many countries have encouraged the development of small businesses. Although many industries are very competitive and often dominated by large companies, it is possible for small firms to succeed. One way they can survive is to develop a market niche. A niche market is a small market segment – a segment which has sometimes gone ‘untouched’ by larger businesses. Niche marketing involves selling to a small customer group, sometimes with specific needs. In this case, Satyajeet Mohanty and Ronak Kumar Samantray invented and developed a device for charging mobile phones while riding a motorbike. The device, called the Bolt Red Streak, is a compact water-proof mobile charger designed to charge any mobile safely and fast on the bike. The unique removable design makes it easy to un-plug and carry around when not riding. The device also tracks the entire ride on a route map and calculates total distance, average speed, etc., using the Bolt Riders App. By serving this niche market, Bolt is able to compete in the market. Mobile phone companies sell hundreds of millions of battery chargers to customers, but Bolt targets motorcyclists with their special device.

Another way small firms can compete in a very competitive market is to offer personal customer service. As firms get bigger it often becomes difficult to offer customers an individual personal service. Some people prefer to deal with the owner of a firm directly and are prepared to pay a higher price for the privilege. Owners are far more accessible in small firms than larger ones. They are more likely to take a personal interest in their customers and develop strong relationships with them over time. In this case, Bolt communicates directly with its customers. It currently employs five people with primary focus on production quality and aftersales service with customers.

EXAM PRACTICE

TESLA

(a) Define a competitive environment. (2 marks)

Businesses generally operate in a highly competitive environment. This means that each business has to sell goods and services to customers knowing that there are other businesses doing exactly the same. Businesses have to ‘win’ customers. They may try to do this by offering better quality or cheaper products than their rivals. They might use superior

materials, have more efficient production processes or market products with superior functionality or a more impressive appearance. Businesses also compete in the marketing of their products. They attempt to develop better adverts, more original promotion campaigns, more efficient distribution methods or create differences in their products which might be real or perceived. The majority of markets are competitive and some are extremely competitive.

(b) Explain one way in which Tesla aims to compete in the global car market. (4 marks)

In the first quarter of 2017, Tesla sold 25 418 cars globally. In comparison, two of the largest motor car companies, VW and Toyota, sold 2 532 744 and 2 338 146, respectively. The difference in market shares is enormous with each of these two companies selling around 100 times more units than Tesla. However, Tesla can compete in the market because it concentrates on a market niche – electric cars. Only about 0.2 per cent of all passenger cars sold around the world are electric. However, in 2017, Tesla sold more electric cars than any other car manufacturer in the world. Sales of electric cars are expected to rise significantly in the coming years and Tesla hope to benefit considerably from this change in consumer taste. Unlike most of their rivals in the motor industry, Tesla is focused entirely on the production and marketing of electric vehicles. With this level of focus on such a small niche, Tesla is currently able to survive.

(c) Discuss how the size of competitors in the car industry might affect Tesla. (8 marks)

The pie chart in Figure 1 shows that Tesla's rivals are huge in terms of market share. The four largest companies sell around 100 times more cars each than Tesla. The size of rivals can have an important influence on the level of competition in a market. Running a business in the shadow of a large multinational is clearly going to be challenging. Large businesses can be very powerful. They can exploit economies of scale and lower their costs. They have the resources to recruit the best staff in the world, take risks, dominate suppliers and other stakeholders, change prices in markets and influence political decision making. However, it is not impossible for smaller businesses to survive profitably in markets alongside much larger rivals. The size of competitors though can have a number of effects on a business. For example, in markets that are dominated by large rivals, smaller businesses, such as Tesla in this case, have little control over price. In many markets dominated by large firms, the strongest, or the lowest cost producers, will tend to set the price. Other firms in the market are often happy to copy these prices. However, if a business is able to differentiate its product, there may be scope for higher prices. In this case, Tesla is focused on the production of electric cars. Therefore, its pricing policy may not be heavily influenced by rivals – although this could change in the future.

Larger firms will tend to enjoy both higher levels of profits and higher profit margins. Smaller firms may not be able to exploit economies of scale so their costs will be higher and their margins lower. Also, the level of profits made by smaller firms in the market will be lower. This is because they will have a much smaller share of the market compared to their much larger rivals. With their larger profits, companies like VW, Ford, GM and Toyota, for example, may be able to use some of their profits to develop superior products and technology in the future. This might pose a threat to Tesla, particularly if their competitors begin to focus more sharply on the production of electric vehicles.

(d) Assess how the behaviour of competitors in the car industry might affect Tesla. (10 marks)

Businesses are likely to be directly affected by the behaviour of their rivals. In a competitive environment, businesses will try to develop strategies to 'outcompete' their rivals. They might use a wide range of tactics to win a larger market share at the expense of their business opponents. For example, in the car industry, marketing plays a very important role and many companies invest heavily in advertising. Figure 2 shows the amounts spent by five of the

largest operators. For example, GM spent a massive US\$3500 million on advertising in 2015. It is unlikely that Tesla could match this level of advertising. Also, businesses usually monitor the marketing activities of rivals such as the methods of promotion and advertising they use. If a rival introduces a new and effective promotional strategy, or places an imaginative advert on television, for example, this might boost their sales and market share. This will affect the sales of others in the market and is likely to draw a response from them. Quite often businesses will adapt, copy or imitate the successful marketing campaigns of their rivals. In the motor industry television advertising is used by most of the large firms and many would argue that one television car advert is much the same as all the others.

One way a business will be affected by the behaviour of a competitor is when they change prices. Most consumers are sensitive to price changes and will buy the cheapest products on the market (assuming that quality is the same). If one of the big motor companies lowered prices this might force others in the industry to do the same. However, because Tesla operates in a market niche, and is also committed to supplying affordable cars, this may not be a problem for the company.

Many businesses will try to differentiate their products from those of rivals. If they can do this effectively they may hold a more prominent position in the market and charge a higher price. Once a business has 'broken away from the pack' this puts pressure on rivals to make their own attempts at product differentiation. If they are not able to do so they are likely to lose market share. Product differentiation is an important feature of the car industry and firms make efforts to launch products that are different to rivals. However, Tesla has its own differentiated product, so it may benefit from this practice.

In a minority of industries, a number of firms might work together and behave like a monopoly. They might form a cartel and fix prices or share out the market. This behaviour can have a very damaging effect on the remaining firms in the industry. It is very difficult to compete with a monopolist because of the power they have over the market. In this case, collusion has been suspected in the car industry. In 2017, three German car-makers, VW, BMW and Daimler, were accused of colluding for many years. It was alleged in a report that the three companies may have secretly worked together on technology, forming a cartel that could have led to the emissions-test scandal. However, since Tesla produces electric cars it is not likely to be affected by the nature of the collusion described here.

Finally, businesses may try to build barriers to entry. One way of doing this is to spend huge amounts of money advertising products and developing very strong brand loyalty. If this is carried out effectively it is difficult for new businesses to break into the market. Figure 2 shows that some motor companies do spend very heavily on advertising and this could pose a threat to any car maker – including Tesla.

Although the motor industry is very competitive it is possible that Tesla may not be too influenced by the behaviour of others in the market. This is mainly because Tesla operates in a tiny market niche. However, in the future, when the electric car market expands, the larger car companies are likely to pose a considerable threat to Tesla. They have huge resources and will not want to see their domination undermined.