

# AQA AS Business Studies

## Unit 1: Planning and Financing a Business

### Student Workbook

# Teacher Notes

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## Introduction

The 15 topics in these teacher notes match the topics in the workbook for AQA AS Business Studies Unit 1: Planning and Financing a Business. Each section of the workbook is designed to complement the learning process taking place in the classroom. You must decide whether to be guided by the workbook or to use it when it corresponds to your own teaching programme.

Each topic is preceded by summary notes which are intended to reinforce learning and to prompt students when responding to the questions set. Most questions are designed not to reflect the structure of a real-life examination, but to help students to develop skills that assist them in their examinations.

These teacher notes are designed to be helpful but not fully comprehensive in their coverage. They include some guidance about what to expect from students' responses, although you might expect different and/or more detailed answers from your students.

In order to provide more comprehensive responses, students should be encouraged to use their class notes, textbooks and other relevant sources.

# Starting a business

## Enterprise

- 1 a** Almost any business or organisation can be called an enterprise, but the term usually refers to the process by which new businesses are formed and new products and services created and brought to the market.
  - b** Enterprise skills are abilities that allow an individual or organisation to respond effectively to changing market situations. They include problem-solving skills, thinking and acting innovatively and creatively, understanding the importance of risk and uncertainty.
  - c** Individuals with an idea that they develop by setting up a business and encouraging it to grow. They take the risk and profits that come with success or losses that come with failure.
- 2** Possible answers are: Richard Branson, Alan Sugar, Anita Roddick, Richard Green.
  - 3** Social enterprises use business skills to solve social and environmental problems. They are usually charitable trusts, are founded for a social purpose, reinvest their profits in the company or the community and attempt to change lives for the better. Examples are *The Big Issue* magazine and Jamie Oliver's 'Fifteen' restaurant.
  - 4** Determination and persistence; passion; the ability to spot and take advantage of opportunities; relevant skills and expertise; vision, creativity and innovation; motivation to succeed and not be daunted by failure; willingness to take risks.
  - 5** Evaluating risk and uncertainty is an integral part of business decision making and thus important in developing a successful business. Having researched the idea and the market to minimise the probability of failure and ensure that there is a good probability of success, most entrepreneurs are happy to take risks if the subsequent reward might be great enough. The outcome of successful risk taking will be a profitable venture.
  - 6** Opportunity cost is the 'real cost' of taking a particular action or the next best alternative forgone, i.e. the next best thing that could have been chosen. The opportunity cost that William Chase of Tyrrells faced in deciding to remain independent was the guaranteed sales that he would have made if he had entered into a contract with Tesco.
  - 7** A desire for independence; an individual wanting to use particular skills that they possess or to follow a passion or interest; increasing affluence, which means that people start their own business to give meaning to their lives.
  - 8** Government believes encouraging enterprise is crucial for productivity to improve. A strong entrepreneurial base is essential for encouraging growth and prosperity in a modern economy. New and more dynamic businesses increase competitive pressures and facilitate the introduction of new ideas and technologies, and more efficient working practices.
  - 9** Reducing business taxes; reducing the regulatory burden on enterprises; reducing barriers to raising finance for small businesses; improving the support for small and new businesses;

promoting a change in the UK's enterprise culture; encouraging business start-ups in economically deprived regions of the UK; introducing legislation to promote competition; funding projects to raise awareness of enterprise amongst under-represented groups of people and reviewing how to encourage unemployed people to move into self-employment; giving financial support to successful voluntary and not-for-profit organisations.

- 10** Local city councils; the Prince's Trust; university enterprise centres.

## Generating and protecting business ideas

- 1** Spotting trends and anticipating their impact on people's lives (e.g. Innocent smoothies); spotting gaps in the market and identifying market niches (e.g. Red Letter Days, Bigger Feet Ltd, Glasses Direct); copying ideas from other countries (e.g. Starbucks); taking a scientific approach and inventing original new products (e.g. Dyson).
- 2** A franchise is when a business (the franchisor) gives the right to supply its product or service to another business (the franchisee).
- 3** Less risk and more likely to succeed; established brand names have a proven track record of success; finance is easier to obtain; lower costs as the business benefits from national advertising and promotion by the franchisor; exclusive rights in their local area and thus less competition; established relationships with suppliers; help, support and training.
- 4** Costs may be higher than expected — initial costs of buying the franchise, on-going royalties to the franchisor; ability to earn high profits may be limited because of the need to pay royalties and other payments to the franchisor; other franchisees could give the brand a bad reputation; a franchisee may not be able to use their initiative in making decisions as much.
- 5** Copyright is legal protection against copying for authors, composers and artists. The Copyright, Designs and Patents Act 1988 allows the copyright holder to decide whether material can be copied and allows them to charge a royalty or licence fee.
- 6** Musicians only get royalties on the songs they create for 50 years. Therefore musicians who are still alive but whose earliest recordings were made in 1960 will no longer receive royalties after 2010.
- 7** If an individual invents a new process, piece of equipment, component or product, they may apply for a patent to prevent other people copying their invention without permission. The Copyright, Designs and Patents Act 1988 gives patent holders the monopoly right to use, make, license or sell the invention for up to 20 years after it has been registered.
- 8** Trademarks are signs, logos, symbols or words displayed on a company's products or on its advertising, including sounds or music, which distinguish its brands from those of its competitors. Trademarks can be powerful marketing tools helping customers to distinguish the products of a business from those of competitors and building brand loyalty.
- 9** Benefits: allows the product/process to be developed further and to be positioned in the market; the invention becomes the property of the inventor — a useful bargaining tool when trying to persuade manufacturers and investors to help the business; the business has a monopoly of supply, which should help it to gain high sales and charge a high price.

Problems: obtaining a patent can be expensive; there is no agency for enforcing patents; the holder has to be willing to take to court those who infringe the patent, which is costly.

Evaluation: patents are very beneficial for an entrepreneur but the costs involved in defending a patent and in exploiting the idea fully often lead to the business selling them to a larger firm.

- 10** Risk: franchises are lower risk as a result of the established brand and support provided by the franchisor. Reduced risk is confirmed by the greater willingness of banks to lend money to someone wishing to buy a franchise with a proven reputation.

Growth potential: the ability to earn high profits and thus to grow may be limited by the need to pay royalties and other payments to the franchisor. The franchise agreement usually includes restrictions on how the business should be run and non-competition clauses. An independent business is under the control of its owner and growth is limited by the entrepreneur's ability to raise finance and market potential.

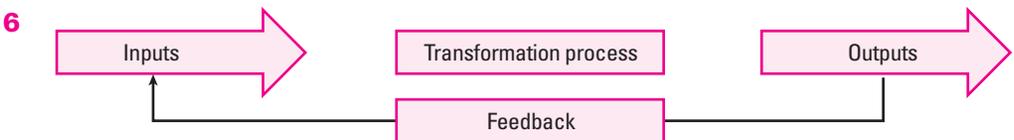
Evaluation: franchises offer the least amount of risk for a start-up business, but the potential for an individual franchisee to grow their business is more limited.

## Transforming resources into goods and services

- Adding value is the process of increasing the worth of inputs by changing them in a way that appeals to consumers.
- Figures in bold print show the gaps that have been filled.

Stage of production/transformation	Value at beginning of stage (£)	Value added (£)	Value at end of stage (£)
<b>1</b> Components purchased	20	0	<b>20</b>
<b>2</b> Framework assembled	20	<b>10</b>	30
<b>3</b> Basic product completed	30	15	<b>45</b>
<b>4</b> Extra features added	<b>45</b>	<b>30</b>	75
<b>5</b> Product transported to shop	75	12	<b>87</b>
<b>6</b> Shop displays and sells product	<b>87</b>	<b>38</b>	125

- Two possible reasons are: the displays may make the product look better or more interesting; customers save the cost of travel or delivery in getting the product from source.
- Possible answers are: increasing the fertility of the land by fertilisation; training the workforce so that they work more quickly; replacing labour with capital equipment, which operates more quickly.
- Land, labour, capital, enterprise.



- Examples are call centres, strawberry picking and hairdressing.
- Examples are farming and fishing.
- Examples include power stations, brewing and telecommunications.

## Developing business plans

- A business plan is a report describing the marketing strategy, operational issues and financial implications of a business start-up.
- It helps Taki to clarify his objectives, thus improving the likelihood of success; it enables Taki to know precisely what needs to be done to meet his business objectives; it is an essential document in persuading lenders to invest capital in the business by demonstrating why it is likely to succeed.

- 3** An overly optimistic view of the potential of a business may underestimate how much it will cost to get the business off the ground, leading to financial problems later on. Overly optimistic sales forecasts may mean that sales are much lower than expected. Unrealistic expectations about when the business can expect payment from customers will have significant impact on cash flow.
- 4** The marketing plan should include: the gap in the market it intends to fill; the results of market research; the type, size and location of the market; a description of potential customers; a comparison of the firm's products/services with those of its competitors; details of promotion and selling techniques; how the product or service will be priced.
- 5** The production plan should detail: how goods and services will be created; the practical details of activities involved, including materials, staff and equipment; and capacity.
- 6** Financial documents should include: sales and cash-flow forecasts, projected profit and loss accounts and balance sheets together with details of pricing and breakeven level; details of the finance needed from the lender or investor and the forecast speed of repayment or rate of return on the investor's capital; and the collateral to be offered.
- 7** The personal and staffing section should include: information about the owner and managers, including their business skills, experience and financial commitments; details of support they are receiving (e.g. mentors and other advisory agencies); any training they have received or are undergoing; and details of key staff and staffing requirements.
- 8** Objectives and SMART targets; fixed assets (e.g. premises and equipment) and how these are to be financed; long-term forecasts and plans; a SWOT analysis.
- 9** Business Link; local enterprise agencies; chambers of commerce and local trade associations; the Prince's Trust; PRIME; small business advisers; accountants and bank managers.

Small businesses do not have big management teams. Most entrepreneurs do not have the skills necessary both to plan and to run a business, and need specialist advice on a range of issues, including drawing up a business plan and financial advice. The above sources provide this as well as opportunities to meet and network with people with similar business interests and concerns.

- 10** A business plan helps to clarify objectives, thus improving the likelihood of success. It is an essential document in persuading lenders to invest capital in the business, and thus in ensuring that there is sufficient finance available to fund business activities. To be a persuasive and valuable document, a business plan needs to be accurate and realistic.

Evaluation: a business plan is an essential tool in improving the possibility of success for a new business and for developing an existing business. By reviewing it regularly, it allows a business to benchmark its progress and take appropriate action when required, thus improving the likelihood of success.

## Conducting start-up market research

- 1** Qualitative market research gathers information about the market based on subjective factors, such as why consumers buy a product. Quantitative market research gathers numerical data on the market, such as how many products consumers will buy.
- 2** The internet because: she will reach people who use computers; internet surveys are cheaper to conduct and she can ask more detailed questions.

Or a personal survey because: it is a local shop and can target local residents; the person asking the questions can clarify any uncertainty about the questions.

- 3** Qualitative market research would be useful to find why people prefer certain types of food; quantitative market research could be useful to find how many people eat certain food.

Alternatively, primary market research can find out what people like; secondary market research can be used to find out current consumer tastes in food.

- 4** It is cheaper because it has already been published; it is quicker to collect because it is immediately available and therefore is more suitable for quick decision making.
- 5** Random sampling is quicker to conduct; it is cheaper because it requires less planning; Phil's business is new, so he may have no awareness of his target market segments.
- 6** Quota sampling improves the accuracy of the findings by getting opinions from the target market segments; the national chain of restaurants should know its target market segments, so quota sampling can avoid irrelevant questionnaires.
- 7**
- Time: how soon is the business opening? Random sampling is quickest.
  - How well does she know her market segments? If she has a good understanding of her potential customers, quota sampling may be more appropriate.
  - Finances: quota sampling is more expensive — can Jackie afford it?

Evaluation: Jackie is unlikely to know her target market and has little cash. Random sampling is probably the best, as it is cheap and quick.

## Understanding markets

- 1** A market is a place where buyers and sellers come together.
- 2** Consumers want convenience and local markets give easier access.
- 3** Better telecommunications have helped people to use non-physical markets; greater internet use has increased the customer base for non-physical markets; greater security through the internet has encouraged customers to use online payment systems.
- 4** Price; consumer incomes; competitors' actions; seasonal factors; advertising; consumer tastes.
- 5** The arguments will depend on the product chosen. Possible arguments for the Apple iPhone are: innovative new product; competitors have not kept pace with Apple; consumer incomes have increased demand for luxuries; heavy promotion.

Evaluation: arguably it is the uniqueness and versatility of the product that is its main selling point, although the lack of immediate competition helped sales initially.

- 6** Age: Ali should target people aged 18–30 because they are the main users of nightclubs, although a different age group might provide her with a niche market.
- Lifestyle: outgoing people who enjoy music and dance are more likely to be targeted than people who prefer quiet or outdoor activities.
- 7** It can be difficult to reach some market segments; it may limit the overall demand by ignoring some market segments and reducing the number of potential customers.
- 8** It can help her to know: whom she must target; what messages or methods she should use; the media to use; how to design the right features for her nightclub.

Evaluation: market segmentation would help Ali to provide a club with the right facilities and enable her to increase the effectiveness of her advertising.

**9a** The missing figures are shown in bold in the table below.

Nightclub	Number of customers per week	Market share (%)
Ali's	450	<b>15</b>
Guy and Toni's	750	<b>25</b>
St Elmo's Fire	1,200	40
Stephen Fry experience	600	20
<b>All nightclubs</b>	<b>3,000</b>	<b>100</b>

**b**  $400/2,600 \times 100 = +15.4\%$

**c**  $\pounds 11,000/\pounds 52,000 \times 100 = +21.2\%$

**d** price in 2007:  $\pounds 52,000/2,600 = \pounds 20$  average price  
 price in 2009:  $\pounds 63,000/3,000 = \pounds 21$  average price  
 although in 2008 the average price had risen to  $\pounds 22$  ( $\pounds 48,400/2,200$ ).

**10** The data suggest that Ali's nightclub is increasing in popularity and therefore she should maintain her current strategies.

She could use the data to help set price. The 10% increase in price in 2008 led to a major fall in customers. However, in 2009 the slight price cut of  $\pounds 1$  led to a significant increase in the number of customers and a large increase in sales revenue.

## Choosing the right legal structure

**1a** An incorporated business has a legal identity separate from the individual owners. As a result, these organisations can own assets, owe money and enter into contracts in their own right.

**b** Private limited companies; public limited companies.

**2a** In an unincorporated business there is no distinction in law between the individual owner and the business itself. The identity of the business and the owner is the same.

**b** Sole traders; partnerships.

**3** Unlimited liability means the owners of a business are liable for all the debts that the business may incur. As a result they may be forced into bankruptcy.

**4** Limited liability means the liability of the owners of a business is limited to the fully paid-up value of the share capital. If a business with limited liability goes into liquidation, the shareholders' personal assets cannot be used to pay the debts of the business.

**5** Sole trader advantages over a partnership: easy to set up, no need for a partnership agreement; able to respond quickly to changes in circumstances, no need to consult anyone else; Simon takes all of the profit; Simon makes all the decisions.

Sole trader disadvantages compared to a partnership: collateral to support loans is limited; capital for investment and expansion is limited; more difficult to take holidays or have time off due to illness; skills limited.

**6** An ordinary partnership is a form of business in which two or more people operate for the common goal of making a profit. Partners normally have unlimited liability, which means that each partner is liable for the debts of the other partners.

The limited liability partnership enables partners to limit their liability for the partnership's debts. Such partnerships lose the privacy enjoyed by ordinary partnerships in relation to their financial affairs and must register with Companies House.

- 7** A private limited company is a small to medium-sized business. It can keep its affairs reasonably private. It is funded by shares that cannot be sold without the agreement of the other shareholders. The share capital of private companies may be less than £50,000. It must have 'Ltd' after the company name to warn people that its owners (shareholders) have limited liability.

A public limited company is a business with limited liability and a share capital of over £50,000. Its shares are traded on the Stock Exchange and its performance and financial affairs are available for public scrutiny. Public limited companies must have 'plc' after their name.

- 8** Advantages: more privacy than a plc; less pressure from outside investors and more able to focus on long-term strategy; more flexible than a plc; lower costs of meeting the regulatory requirements than a plc.

Disadvantages: shares cannot be traded on the Stock Exchange hence could be difficult to sell; less flexible if expansion needs finance; less likely to gain positive publicity because its shares are not traded on the Stock Exchange; difficult to assess the value of a person's shares.

- 9** The need for finance in order to expand; the size of the business, and the level and type of investment; the need for limited liability; the degree of control desired by the original owners; the nature of the business and the level of risk involved.

- 10** The amount of finance they might need in the future; the degree of control and privacy desired by the owners; how affected they may have been by media scrutiny of plcs.

Evaluation: the decision will depend on the extent to which the owners wish to remain in control and not to have the business constantly scrutinised by the media. It will also be based on whether the business is sufficiently successful to be able to raise the finance it needs from private sources rather than offering shares to the public.

## Raising finance

- 1a** Ordinary share capital is money given to a company in return for a part ownership of the company. Shareholders get a share of any profits.
- b** Venture capital is finance that is provided to small or medium-sized firms that are seeking growth, but that may be considered too risky by typical share buyers or lenders.
- c** Personal sources of finance describes money that is provided by the owner(s) of the business from their own savings or personal wealth.
- 2** A bank loan is a sum of money provided by a bank for a specific agreed purpose, to be repaid over a period of time. A bank overdraft occurs when the individual or organisation is allowed to overspend their current account in the bank, up to an agreed amount.
- 3** The table has been completed by showing one advantage and one disadvantage of each method. Other valid answers could be presented.

Method of raising finance	Advantage	Disadvantage
Ordinary share capital	Limited liability reduces the risk to shareholders and therefore encourages people to buy shares.	The original founders may lose their majority shareholding and therefore lose control of the business.
Venture capital	Venture capitalists often provide finance when other organisations refuse to provide backing.	Venture capitalists may want a major share and a say in running the business.

Personal sources	There is no interest payable, so it is a cheap way of raising finance.	The sum of money available is likely to be limited.
Bank loan	The repayment schedule is fixed in advance, helping accurate budgeting.	The size of any loan may be limited by the security provided.
Bank overdraft	Interest is only paid on the amount of the overdraft used.	Interest rate charges are usually higher than for a loan.

- 4a** capital                                      **c** revenue                                      **e** capital  
**b** revenue                                        **d** capital                                        **f** revenue

- 5a** Ordinary share capital should only be used as a long-term source because it is not repaid and dividends are paid for as long as the business exists.  
**b** A bank overdraft should only ever be used as a source of short-term finance, as it may need to be repaid at very short notice.

A strong case can be made for venture capital as a long-term source of finance, and some bank loans also fit this description.

Personal sources are provided by the owner, so they are very flexible and could be a short-term and a long-term way of raising finance.

- 6** Although there is some flexibility, the recommended methods and their reasons are outlined below.

Situation	Recommended way of raising finance	Reasons for your choice
<b>a</b> A taxi company wants to buy a new taxi which should pay for itself after 4 years.	Loan capital (e.g. bank loan)	A bank loan will allow the company to pay for the taxi and use it to make enough profit to repay the loan.
<b>b</b> A start-up owner wants to be independent. She has high levels of savings. Interest rates are quite high.	Personal sources	Using her savings will avoid her having to pay high interest rates on a loan and will maintain her independence.
<b>c</b> A sole trader business has seasonal sales and his customers expect to be given 90 days to pay for their purchases.	Bank overdraft	The sole trader will be short of money, but only for a period of about 90 days, and so an overdraft will enable them to keep trading until this money arrives.
<b>d</b> A newly formed private limited company wants to develop a new invention. It is unlikely to make much profit for a few years but is then expected to make a lot of profit. The current owners do not have very much money.	Ordinary share capital	Ordinary share capital would give the business the money needed to develop this invention. By delaying dividends the business can survive and the shareholders will eventually get good dividends.
<b>e</b> A small limited company wants to develop an idea that is risky. The owners feel that they might need some advice on marketing.	Venture capital	Venture capitalists would be prepared to back a risky idea, and welcome the chance to advise a business.

## Locating the business

- 1** Teleworking is popular with start-ups because it keeps costs (e.g. rent) low and provides flexibility, enabling staff to work outside normal hours.

- 2** A newsagent would want to locate at the least-cost site in order to make a larger profit. Given a certain level of sales, the least-cost site would provide the highest profit margin.

The newsagent might not want to locate at the least-cost site because, although its poor location reduces costs, it may also reduce the number of customers.

- 3** A small textile manufacturer would want good transport links and might prefer to locate close to a motorway system or close to a port if the textiles were imported.

As an employer, the manufacturer may want to be close to good public transport for the workers to get to work, or have good parking nearby.

Good training facilities and training in the local area may help improve workers' productivity.

- 4** For many services, customers want convenient access. Therefore a firm must locate close to the consumer. In the primary sector the main locating factor is the cheapest place for production. The farmer would need to grow crops on suitable land, probably away from populated areas where rents are expensive.

- 5** Four examples are: closeness to amenities (e.g. shops); convenience to the owner's home; pleasantness of surroundings; closeness to good schools or other public facilities.

- 6** Each location is ranked 1st to 3rd to give an overview of its desirability.

Feature	Locations		
	Allen Avenue	Carty Close	Star Street
Footfall: passers-by per hour	1st	2nd	3rd
Parking spaces nearby	1st	2nd	3rd
Parking costs (per hour)	3rd	2nd	1st
Number of competitors within 200 metres	3rd	2nd	1st
% of people aged 20–30	3rd	2nd	1st
% with above average incomes	1st	3rd	2nd

Carty Close is not the 'best' location for any of the desired features and should be rejected.

Allen Avenue has the highest footfall, but is this important for a hairdresser? It has plenty of parking spaces but costs more. It is in the area with the highest wealth but the lowest number of 20–30-year-olds. There are many competitors within a small area.

Star Street is less likely to catch passing trade but is in an affluent area with a relatively high number of 20-somethings. Parking is free and there are no competitors.

Evaluation: the lack of competitors in Star Street is arguably the most telling factor. Furthermore, 15% of the local population (60% of 25%) are potential customers, compared to only 6% in Carty Close (30% of 20%) and 12% in Allen Avenue (80% of 15%). With nobody competing for this significant target market, prospects would appear to be much better in Star Street.

## Employing people

- 1** Employees will be needed to ensure that it can meet demand; the entrepreneur setting up a new business may not have all the skills required to run the business; seasonal businesses need to ensure that they can meet demand during the peak season by employing additional staff.
- 2** A and D.

- 3** Permanent staff are important when the business needs people who have good knowledge of the business and where continuity and consistency are important for customers., e.g. factory operatives, managers, sales team.
- 4** Possible advantages are:
- Where additional staff are needed to meet seasonal demand for goods or services (e.g. fruit farmers employing fruit pickers, toyshops in the busy run-up to Christmas).
  - When a business needs someone to cover the specific job of an employee who is ill, on holiday or on maternity leave.
- 5** An efficient way to keep costs down in areas where full-time cover is not necessary; a way of building in flexibility, allowing a business to respond to changes in demand more easily; if part-time work suits employees, they may be more motivated and productivity may increase; the availability of part-time work may create a wider pool of candidates for recruitment; the opportunity to work part time may mean the business is able to retain valued employees.
- 6** A zero-hours contract allows a business to have people on-call to work whenever necessary and mutually convenient. Generally, a business is not obliged to offer work; nor is there a responsibility for the worker to accept any work.
- 7** Benefits: can be used as and when required.  
Drawbacks: lack knowledge of the business; no loyalty to the business; can be more expensive than if hiring staff directly.
- 8** If she is planning to expand, she will be able to meet demand. She will be able to introduce division of labour to improve efficiency.
- 9** Drawbacks are:
- the cost of employing people
  - meeting employment and health and safety legislation requirements
  - managing staff
  - employee absence
- 10** As external consultants are self-employed or belong to a separate company, this is a useful way of taking advantage of specialist skills without taking on many of the responsibilities of an employer (e.g. hiring specialist trainers). If additional work is regularly available, an on-going relationship is likely to develop, which will result in greater knowledge and trust between the parties. This might improve effectiveness while also reducing costs.  
Evaluation: hiring consultants brings financial benefits and the advantage of specialist skills. However, there need to be systems in place to monitor and quality assure their work.

## Financial planning

### Calculating costs, revenues and profits

- 1** Examples are: rent for the building; furnishings; restaurant fittings; delivery vehicles; ovens.
- 2** Wages for waiters; ingredients for the meals.
- 3** Total revenue = price × quantity = £6 × 42,000 = £252,000.
- 4** Quantity = total revenue/price = £38,500/£22 = 1,750 units.

5

Units of output	Total revenue (£)	Fixed costs (£)	Variable costs (£)	Total costs (£)	Profit (£)
0	0	4,000	0	4,000	(4,000)
1,000	6,000	4,000	4,000	8,000	(2,000)
2,000	12,000	4,000	8,000	12,000	0
3,000	18,000	4,000	12,000	16,000	2,000
4,000	24,000	4,000	16,000	20,000	4,000
5,000	30,000	4,000	20,000	24,000	6,000

6a New technology takes the form of equipment, thus causing a rise in fixed costs. Where new technology can replace workers, wage costs (a variable cost) can be reduced.

b

Units of output	Total revenue (£)	Fixed costs (£)	Variable costs (£)	Total costs (£)	Profit (£)
0	0	12,000	0	12,000	(12,000)
1,000	6,000	12,000	2,000	14,000	(8,000)
2,000	12,000	12,000	4,000	16,000	(4,000)
3,000	18,000	12,000	6,000	18,000	0
4,000	24,000	12,000	8,000	20,000	4,000
5,000	30,000	12,000	10,000	22,000	8,000

7 On purely financial grounds there are two main factors to recognise. The higher fixed costs in Table 2 mean that 3,000 units are now needed to break even, rather than 2,000 units. Once the business has produced 4,000 units, the profit will be higher from the new technology, but 5,000 is the maximum output. There is a risk because at zero output the loss is £8,000 higher.

Quality is another factor that could be considered. Are the new machines likely to produce high-quality products? How flexible is the technology? What is the view of the workers? Will replacing workers with technology have negative effects on the morale and productivity of the workforce?

On balance, if the business is looking to grow, arguably it should introduce the new technology because it gives greater potential for high profits and better quality, although there is limited scope for more profit.

## Using breakeven analysis to make decisions

1 Rent; administration costs.

2 Raw materials; wages paid to operatives; power to operate the machinery; delivery costs.

3 contribution per unit = selling price – variable costs per unit  
= £40 – £25 = £15 per unit

4 total contribution = contribution per unit × no. of units  
= £15 × 800 = £12,000

5 breakeven output =  $\frac{\text{fixed costs}}{\text{contribution per unit}} = \frac{£6,000}{£15} = 400 \text{ units}$

6 profit from 800 units = total revenue – total cost

total revenue = £40 × 800 = £32,000

total costs = fixed costs + total variable costs = £6,000 + (800 × £25) = £6,000 + £20,000 = £26,000

profit = £32,000 – £26,000 = £6,000

Using the contribution method:

$$\text{profit} = \text{total contribution} - \text{fixed costs} = \text{£}12,000 - \text{£}6,000 = \text{£}6,000$$

**7** profit from 300 units = total revenue – total cost

$$\text{total revenue} = \text{£}40 \times 300 = \text{£}12,000$$

$$\text{total costs} = \text{fixed costs} + \text{total variable costs} = \text{£}6,000 + (300 \times \text{£}25) = \text{£}6,000 + \text{£}7,500 = \text{£}13,500$$

$$\text{loss} = \text{£}12,000 - \text{£}13,500 = -\text{£}1,500$$

Using the contribution method:

$$\text{profit} = \text{total contribution} - \text{fixed costs}$$

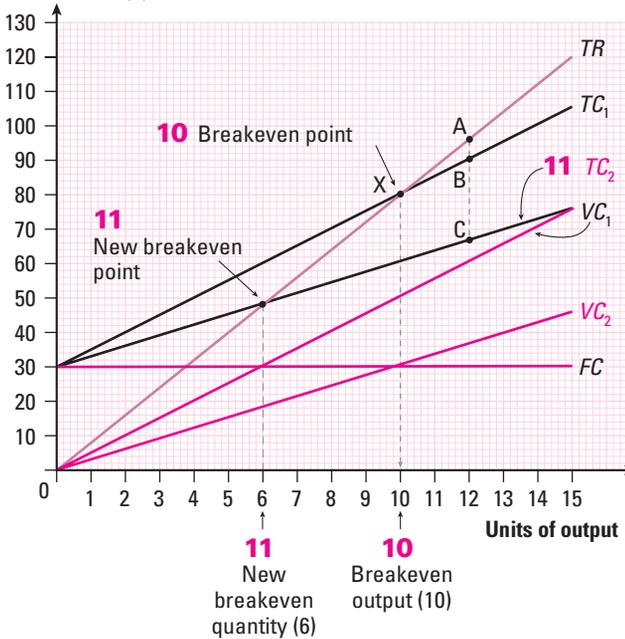
$$= (\text{£}15 \times 300) - \text{£}6,000 = \text{£}4,500 - \text{£}6,000 = -\text{£}1,500$$

**8** margin of safety = actual output – breakeven output

$$= 800 \text{ units} - 400 \text{ units} = 400 \text{ units}$$

**9, 10, 11**

Costs/revenue (£)



**10** AB = profit level at 12 units of output

**11** AC = profit level after the change in variable costs

**12 a** 12 units      **b** £5 per unit      **c** 8 units      **d** £20      **e** £120

**13** Breakeven analysis is useful because: he can use it in order to see if the business is viable; he can use it to persuade a bank manager to provide financial support; he can use ‘what if?’ analysis to predict the impact of possible changes in costs or price on his business; he has completed an apprenticeship and gained 6 years of experience, so he should understand the market and the cost structure.

It is not useful because: breakeven charts are always forecasts of the future, which can be very unpredictable; he was an employee before, so his knowledge will be limited; Manchester is much bigger than Mansfield; his knowledge is based on Mansfield, which may be a very different community to Manchester.

Evaluation: his experience should help him to compile a reasonably accurate breakeven analysis which would help his planning, but he might be wise to stay in Mansfield rather than enter an unknown marketplace.

## Using cash-flow forecasting

- 1 A cash-flow forecast is an estimate of the expected cash inflows and cash outflows for a business over a period of time.
- 2 Sales revenue from selling products; rent received on property owned.
- 3 Consumer research; previous cash-flow forecasts; study of competitors.
- 4 Two from: wages; raw materials purchased; rent paid; loan repayments.
- 5 To identify potential cash-flow problems in advance (e.g. seasonal sales); to provide evidence to a bank manager that the business is financially stable.
- 6 There might have been inadequate market research into the number of likely customers, so the potential sales revenue is incorrect; there may be sudden increases in the costs of raw materials that were not anticipated.

7

	Quarter 1	Quarter 2
Opening balance	6,800	10,900
Sales income/total inflows	36,000	40,000
Raw materials	9,000	10,000
Wages	10,700	10,700
Other costs	12,200	3,800
Total outflows	31,900	24,500
Net quarterly balance (or flow)	4,100	15,500
Closing balance	10,900	26,400

## Setting budgets

- 1 A budget is an agreed plan establishing, in numerical or financial terms, the policy to be pursued and the anticipated outcomes of that policy.
- 2 The first stage is to set the budget objectives.

The second stage normally involves research into the market, in order to gauge sales volume, and research into costs and expenditure.

The next stages are to complete the income budget, based on the market research, and the expenditure budget, based on the volume of sales expected and the costs discovered.

These two budgets then lead to the calculation of an overall profit budget.

Once an overall budget has been established, divisional/departmental budgets are drawn up by the managers responsible for each area. These details are summarised in the master budget.

- 3 It may encourage potential investors to back the company; it is an excellent way of controlling spending to make sure that the business does not get into financial difficulties; it can improve efficiency, as the owner must consider each item of spending and revenue carefully and is therefore likely to look for ways of improving performance.
- 4 It can be very expensive to gather the information needed to predict future income and expenditure accurately; there may be unforeseen changes, such as suppliers changing or customer tastes changing; the owner may also lack experience in budgeting.

**5****Annual income budget**

Source of income	Average price (£)	Number	Total (£)
Computer repairs	80	650	52,000
Software sales	30	300	9,000
Hardware sales	100	70	7,000
<b>Total</b>			<b>68,000</b>

**Annual expenditure budget**

Item of expenditure	Expenditure (£)
Wages, rent and other costs	22,700
Equipment/components	12,500
Hardware/software	8,000
<b>Total</b>	<b>43,200</b>

**Annual profit budget**

Income/expenditure	£
Income	68,000
Expenditure	43,200
<b>Profit</b>	<b>24,800</b>

- 6** On financial grounds, running her own business will bring in a profit of £24,800, which is £200 less than her current secure job in which she earns £25,000 a year. On this basis it might be considered too high a risk for her to move from a secure job.
- 7** Factors that Tahla might consider are:
- The level of enjoyment in her existing job compared to the personal satisfaction gained from running her own business.
  - Stress levels. Running a business can be quite stressful but following other people's instructions may also be less satisfying. Her current job is secure and this may reduce stress.
  - Whether she wants to be independent and run her own business or whether she is happy to follow other people's leads and instruction.
  - Future prospects. Is she likely to increase her current salary beyond £25,000? Is the business's first-year profit going to be lower than its profit in the future? In the long run she may be financially better off setting up her own business.

## Assessing business start-ups

- 1** A desire on the part of the entrepreneur to be independent and to be their own boss; to gain more freedom at work; to make money; to sustain a going concern such as a family business; to provide employment for the local community, sometimes in the form of social enterprises.
- 2** Its objectives; which product or service to provide and whether it can be produced profitably; which market segment to target; the possibility of competition and an appropriate pricing and selling strategy; finance, and the time scales between start-up and breakeven; who will be involved, and what expertise and experience they have; the risks involved.
- 3** If demand falls unexpectedly, revenue will fall and the business may be unable to meet its costs or break even. If demand rises unexpectedly, the business may have insufficient capacity to meet demand; it may eventually collapse due to cash-flow problems.

Unexpected increases in costs may mean the business is unable to break even quickly enough. Given its financial situation as a start-up, this may mean that it goes out of business.

- 4** The business may be unable to meet customer demand. This is more likely if the business does not carry large stocks of supplies. Given that holding large stocks simply ties up cash, it is vital

that a business establishes an appropriate minimum stock level and has a trustworthy supplier that can respond immediately to requests for supplies.

- 5** A new business has no 'track record' and is therefore much more of a risk.  
Finance is likely to be expensive, with high interest rates to balance the risk to the lender. Lenders may want collateral to support any loans.
- 6** A firm can be profitable but find it impossible to continue trading because it is unable to meet its current debts. This is likely to be the case if a business has insufficient cash available for its working capital needs and does not have access to overdraft facilities.
- 7** The ability to attract and retain customers will determine business success. To do this, a business must offer something more than any of its competitors. Larger competitors have more influence and resources. To manage this, a business start-up needs carefully and constantly to research the extent and type of competition in the market.
- 8** It can provide customers with service that is efficient and meets their expectations; it can provide a good after-sales service and deal effectively with complaints; it needs to understand customers' buying habits and ensure good stock and staff availability; it should ensure that contact between customers and staff is always friendly and efficient.
- 9** Regulations and legislation etc. can be very complex and costly to comply with. Small business start-ups tend not to have specialist human resources, legal and finance departments and thus lack the necessary technical expertise.
- 10** The most likely reasons are:
- poor cash-flow management
  - lack of effective market research
  - lack of skills needed to run a business and lack of business training
  - difficulties in acquiring affordable premises
  - external factors, including interest rates; business regulation and legislation; a large competitor

Evaluation: much will depend on the quality of planning and preparation that goes into setting up the business, the availability of finance, and how effectively it monitors progress and responds to external factors.



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