Business Studies

Using and managing resources to produce goods and services

Type of Production	Definition	Examples
Job	Produces a single, one-off product to customer requirements	Wedding dress, house extension, birthday cake
	Advantages: • Products are high quality • Designed to customer specification • High job satisfaction for workers	***Disadvantages:*** • High cost of production • High labour costs as staff likely to be highly skilled
Batch	Manufactures groups of products before changing to a different size/style	Shoes, clothing, furniture
	Advantages: • Able to meet needs of different customers • Batches may not need storing so reduce costs • Can use specialist machinery to automate parts of production and therefore reduce costs	***Disadvantages:*** • Time taken to switch between batches increases costs of production • It may be necessary to keep stock of ingredients/components which can increase costs • Increased automation may make work boring for staff
Flow	Manufactures large quantities of identical products	Chocolate bars, canned drinks, cars, baked beans
	Advantages: • Large quantities of products can be made • Costs per unit are low due to economies of scale	***Disadvantages:*** • Very expensive to set up due to capital costs of equipment • Large stocks of components/materials may need to be stored • Highly automated production can be very repetitive and boring for workers • Goods are mass produced and have little variation – may put customers off buying
Process	A series of automated processes	Petrochemicals, cement, paint
	Advantages: • Large quantities of products can be made • Production costs are low due to high levels of automation • Suited to products which need consistent quality	***Disadvantages:*** • Very expensive to set up due to high levels of mechanisation • Problems in one part of the process will halt all production until resolved resulting in increased costs and reduced output

Added Value = when the production process increases the value of the raw materials by changing them into something the customer wants to buy. This means that the revenue earned from the sale of is higher than the costs involved in their production.

Economies of Scale: These arise when the unit costs fall as output increases.

Type of Economy	Explanation
Technical	Using better production equipment and technology saves production costs
Managerial	Managers who have specialist skills improve efficiency
Financial	Larger businesses find it easier to raise finance as they are considered less risky by investors
Risk-bearing	Larger businesses usually produce a range of products/services, so are less dependent on the success of individual items
Purchasing	The ability to buy in bulk reduces the unit cost
Marketing	Advertising/marketing costs are spread over a greater number of units of output

Diseconomies of Scale: eventually every business will find that its unit costs start to increase as it is impossible to become infinitely efficient. Main reasons for diseconomies are **poor communication** (arising as a result of increases in the size of a firm), **poor morale/motivation** (arising because staff feel they are not listened to) and **poor co-ordination** of functions (arising due to difficulties with decision making in large firms).

Production and Quality

Production measures business output. Productivity measures output against the factors of production (capital, enterprise, land, labour) that create it. Productivity is important because it affects the costs and competitiveness of a business. ***Productivity can be raised by increased use of technology, training staff to be more efficient and improving staff motivation***.

Many businesses use technology to increase productivity. Examples include **CAD** (computer aided design) which allow cost-effective designs, **CAM** (computer aided manufacture) which uses robots to produce output efficiently and to a consistent standard of quality, **CIM** (computer integrated manufacture) where the whole factory is computer controlled.

Quality assurance ensures that quality standards are set and applied throughout the business.

Quality control checks that quality standards are being maintained and identifies defects before the products reach consumers.

Total quality management (TQM) is a system of quality management that replaces the old-style quality control (which occurred at the end of production).
TQM …

- seeks to get it right first time every time
- believes that every employee has a responsibility to ensure quality, not just those involved directly with production
- aims to ensure full customer satisfaction
- expects that all staff take responsibility for quality improvements

Lean Production and Stock Control

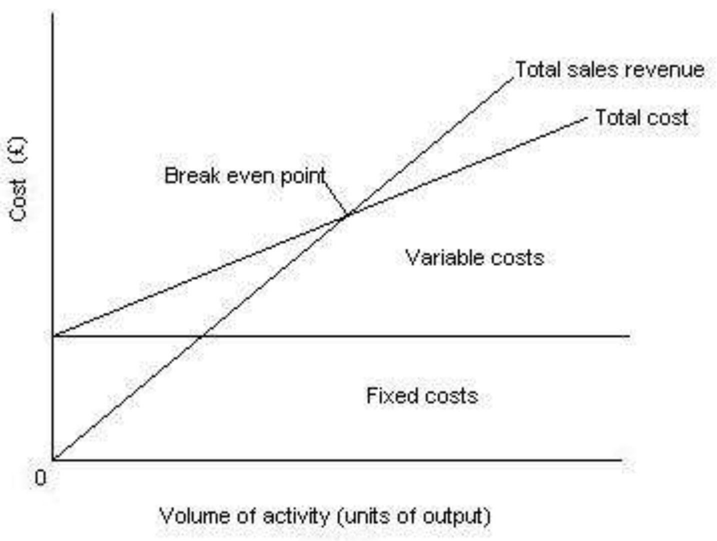
Lean production is a Japanese approach to making products which aims to use as few resources as possible. Waste and stocks of raw materials are kept to a minimum and workers are encouraged to think about ways to improve their productivity. Traditional stock control used a method known as **Just in Case (JIC)** where buffer stocks are stored in case there is a supply shortage or sudden increase in customer demand. This can require a lot of storage space and runs the risk of holding stock that will never be used. More recently businesses have chosen to use **Just in Time (JIT)** where stock arrives in the factory immediately before it is required for use. This reduces the costs of stock storage, but makes close relationships will suppliers essential to avoid running out of stock.

Types of Business Costs

Type of cost	Explanation	Example
Fixed costs	Costs which do not change with the amount of output	Rent, salaries, insurance
Variable costs	Costs which increase proportionally with output Total variable cost = quantity produced x variable cost per unit	Raw materials, machinery costs, production workers wages
Average costs	How much each product costs to make	Total cost / output
Total costs	All the costs of production	Fixed costs + variable costs

Break-even Analysis

Break-even analysis shows a business when **total revenue is equal to total costs**. At this point they do not make either a profit or a loss.



The **margin of safety** is the gap between the expected level of output and the break-even point and shows how many units sales can fall by before the firm starts to make a loss.

The triangle to the left of the break-even point shows the **area of loss** and the triangle to the right shows the **area of profit**.

Break-even can also be calculated using a formula:

$$\frac{\text{Fixed Costs}}{\text{Contribution per unit}}$$

where contribution is **Selling price per unit – variable cost per unit**.

<u>Remember, always round up to the next whole number when calculating break-even.</u>

Break-even analysis is useful as it shows how many goods need to be sold before the business will start to make a profit. It can also be used to model 'what if?' scenarios so that the business can see what would happen if sales levels fall or costs increase, for example.

Advantages	**Disadvantages**
• Calculations are usually quick and easy to do • Helps firms forecast hope much to produce in order to meet sales targets • Can support applications for finance • May highlight a need to increase prices or reduce costs • Allows a calculation of the margin of safety	• It is based on forecasted figures which may be inaccurate • Can only be produced for one product at a time (therefore can be time consuming for a firm with a range of different products) • It assumes that all output produced will be sold • It assumes all costs remain the same for the period being looked at (in reality variable costs often reduce as output increases due to economies of scale)

Break-even is more valuable as a planning tool than as a decision-making tool due to the disadvantages shown above.

Sources of Finance

Reasons finance is required	**Example**
Starting a new business	A new start-up will require purchase of equipment and stock as well as premises and perhaps staff
Internal business growth	Buying new equipment in order to increase scale of production
Takeover or acquisition of another business	Money is required to buy out a business
Replacement of equipment/premises	Businesses need money to replace old or obsolete items
Relocation	Business may have outgrown existing site or want to move to be closer to suppliers/ customers
Cash-flow problems	Seasonal businesses such as hotels may suffer from cash-flow problems outside of peak seasons
Research and development	Development of new products can be very expensive and with no guarantee of return

Sources of finance can be either **internal** (coming from inside the business) or **external** (coming from outside the business).

Internal sources of finance will often have an **opportunity cost**, that is, the money will not be available for other projects once it has been spent or allocated.

Sources of finance can also be classified as **short-term** (up to 12 months), **medium-term** (1-3 years), or **long-term** (over 3 years) and the source should be matched with the designated purpose, eg. short-term sources of finance should be used for short-term cash needs.

	Short-term	**Medium-term**	**Long-term**

Internal Sources	Cash at bank	Retained profit Sale of assets	Retained profit Owners' investment
External Sources	Overdraft Trade credit	Bank loan Lease Hire purchase Grants	Bank loan/Mortgage Investment from new owners Share issue* Lease Hire purchase

***Remember this option is only available to limited companies.**

Type of Finance	Use	Cost	Internal/External
Overdraft	Used for short-term cash-flow problems	Interest payable	External
Trade credit	Allows a delay between receipt of goods from suppliers and payment for these	None	External
Retained profit	May be used for many items including purchase of equipment	Opportunity cost	Internal
Sale of assets	May be used to help finance purchase of new equipment	Opportunity cost	Internal
Bank loan	May be used for start-up costs or business development costs	Interest payable	External
Lease*	Used to buy vehicles, machinery and buildings	Monthly payments	External
Hire purchase*	Used to buy vehicles, machinery and equipment	Monthly payments	External
Grant	Used for a specific purpose (conditions will be attached to the money)	None	External
Owners' investment**	Used to fund major developments (assuming the owner has the funds)	None	Internal
Cash at bank	Used to fund day-to-day expenditure	Opportunity cost	Internal
Mortgage	Used to fund the purchase of property	Interest + capital repayment	External
Share issue	Used to fund major business developments (takeovers, expansion, etc)	Dividends	External

***Remember – the difference between leasing and hire purchase is who owns the item. When the final hire purchase payment has been made the item belongs to you. With a lease, the ownership of the item is never transferred.**

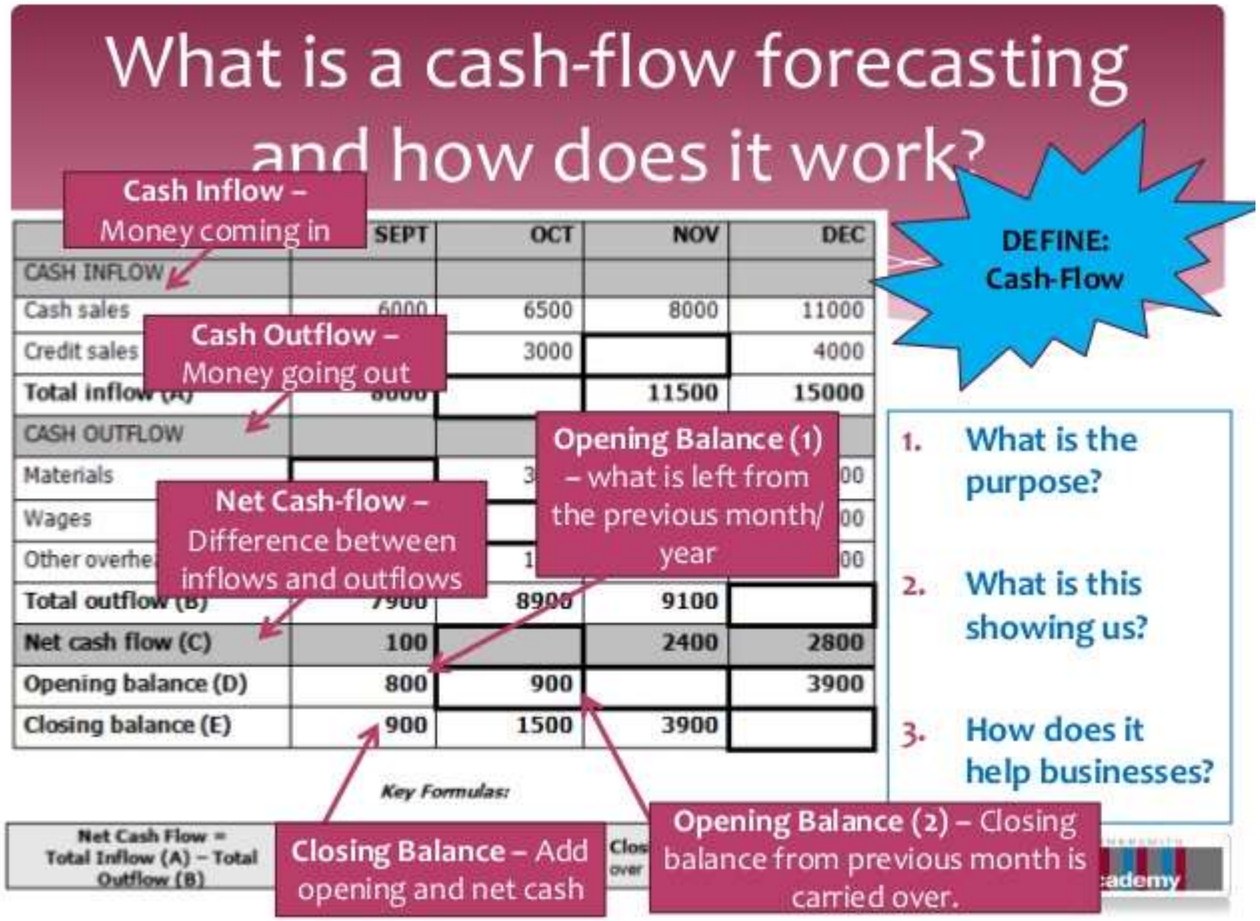
****Refers to additional investment by existing owners (partners/sole traders)**

Key Terms

Term	Description	Formula
Revenue	Money received from sale of goods	Quantity sold x selling price
Profit	Money left after all costs have been paid	Sales revenue – total costs
Contribution	Amount of revenue going towards fixed costs from each sale	Selling price – variable cost
Break-even	Amount of sales required so that total revenue = total costs	Fixed costs/contribution
Cash-flow	The movement of money into and out of the business	n/a

Cash-Flow Forecasting

This is a forecast which shows the ***movement of money into and out of a business over a specific period of time*** (usually 1 year). Most business failure is due to poor cash management (remember you can be unprofitable and still survive – like Ocado! – but if you have no cash you will quickly go under). If a business does not have enough money coming it, it will not be able to meet its day-to-day expenses. A cash-flow forecast allows a business to identify periods when they may need additional cash injections and decide what source of finance will be the most appropriate. A negative cash-flow balance may not necessarily indicate a major problem; it may be temporary and easily resolved, perhaps due to seasonal variations. It is important for the business to look at the reasons for the cash-flow problems so that they can find the most suitable solution.



External Influences on Business

The competitive Environment

The amount of competition in a market varies. Markets with no competition are known as **monopolies**, whereas markets with a lot of competition are called **perfect competition**. The key features of each are shown below:

	Monopoly	Perfect competition
Definition	A market with one firm	A market with many firms
Main features	• One main product available • May charge high prices for products/services as only provider • Advertising may be used to stop competition • Patents are used to prevent other firms from copying a product or process • High start-up costs restrict other firms from entering the market	• Many different products available • Usually charge low prices for products/services in order to remain competitive • Advertising is used to attract customers away from other businesses • Branding is used to build customer loyalty and retain customers • Usually located in places which are convenient for the customer

Ways to increase competition	Ways to decrease competition
New firms entering market	Merging or taking over competitors
Privatisation	Increasing market share
Selling new products	Patents and copyrights
Reducing prices	Collusion (working together with other firms) *
Increasing advertising	Internal growth (increasing sales volume)

*Please note that collusion is illegal in the UK.

Government and competition

In general the government encourages competition as it is good for consumers (lower prices, greater choice, better service, production efficiencies). Monopolies may exploit customers by charging high prices. However sometimes monopolies can achieve benefits such as economies of scale which allow them to charge lower prices than would otherwise be the case. Organisations such as the Office for Fair Trading and the Competition Commission investigate firms to ensure that their practices are good for the economy.

Environmental influences and business ethics

Both businesses and consumers use the environment as a resource. This can result in what is known as the **social costs** of production which include using up non-renewable resources, spoiling the appearance of natural environments, causing congestion, pollution (noise, air, chemical) and global warming. As consumers are becoming more aware of the damage being done, firms are responding by making their production sustainable. This means they are increasingly using green products and resources, recycling and offsetting carbon emissions.

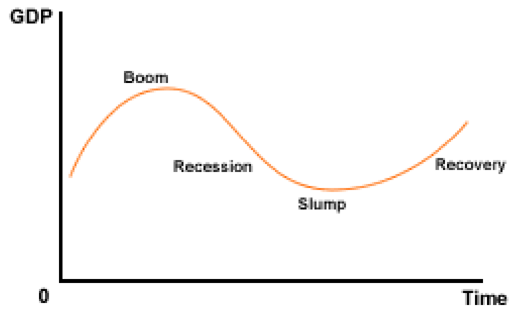
Businesses are also trying to act more ethically ('doing the right thing') in some of the following ways:

Area of business	Ethical issues
Human Resources	• Discrimination against workers based on age, gender, race, etc • Spying on workers • Preventing workers joining a trade union • Having poor health and safety practices
Marketing and Sales	• Fixing prices by colluding with competitors • Using sex in adverts • Selling to countries that violate human rights • Selling dangerous products (guns, nuclear material, etc)
Production	• Selling faulty or dangerous products • Causing pollution in the production process • Testing products or ingredients on animals • Using child labour • Buying at very low prices from third world producers • Using sweat shops

Not all business activity is harmful however. Sometimes there are **social benefits** to business activity such as provision of jobs, supporting community activities, beneficial design in local areas, creating new ideas and inventions.

Government and the UK economy

The economy naturally moves through the trade cycle moving between periods of economic boom and decline.



Interest Rates

Interest rates are the cost or reward of business depending on whether you are spending or saving:

- ***Cost to business of borrowing money*** – any borrowing for business growth will be subject to interest, which reduces the profits available. Rises in interest rates can cause businesses to delay expansion or planned purchases and may even make them reduce the number of staff in order to reduce costs
- ***Cost to consumers of borrowing*** money – most consumers will have some level of debt (student loans, credit cards, mortgages) and interest rates affect the amount of disposable income they have available to spend. If interest rates decrease, they may have more cash and therefore buy more luxury items.
- ***Reward for saving*** – when interest rates are high, consumers may choose to save their money rather than save it which can cause business sales and profits to fall.

Government Spending

The government spends money to:

- provide goods and services (street lighting, police, education, health care)
- help poor or unfortunate members of the community (social security benefits, pensions, disability benefits)
- help businesses (grants to encourage business activity or provision of infrastructure – roads, etc)

The money used to pay for government services comes from taxes. Taxation is also used to discourage purchase of items with high external costs such as tobacco, petrol and alcohol. There are two main types of taxation:

Taxes paid on Income	
Income tax	Paid by individuals (including sole traders and partners) on the money they earn as wages/salaries, interest on savings, profits received from shares, money taken from businesses they own
National Insurance Contributions	Workers pay this on their wages and salaries. It contributes towards health services, sick pay, state pensions and other social security benefits
Corporation tax	Paid by limited companies on their profits

Taxes charged on spending	
VAT	A tax on spending (currently 20%) charged on most goods and services
Excise duties	Special rates of tax on goods such as petrol, alcohol and tobacco
Business rates	A tax paid to the local council by businesses for services such as maintenance of local infrastructure (roads and transport etc)

Globalisation and UK business

Globalisation involves a number of different business activities:

- International trade – firms located in one country produce and sell goods/services to another country
- Production abroad – firms set up production facilities in another country
- Outsourcing – firms pay another business in a different country to produce goods/services on their behalf
- Multinational Corporations – firms that have factories/offices in different countries around the world
- Global branding – products become known and sold around the world
- Staffing – firms move staff around between locations in different countries

Benefits and problems of globalisation

Benefits	Problems
• Increased consumer choice and availability of products that cannot be produced locally (eg. chocolate, bananas) • Lower prices due to level of competition and lower production costs abroad • Cheaper labour if production takes place in developing countries • Larger market if trading worldwide • Economies of scale due to increased production output • More job opportunities due to large size of global firms	• Lower profits due to having to reduce prices because of increased competition from abroad • Lower sales due to level of competition • Business closure/loss of jobs if UK firms close because overseas production is cheaper

Whilst globalisation is generally good for consumers, it is not always a benefit to the developing countries who may be at risk of exploitation, pollution and damage to local culture as well as the environmental impact.

Exchange rates

This is the amount of a foreign currency you can buy with your own currency. High exchange rates are a problem for exporters as they make their products expensive for the buyer. However a high exchange rate is good for importers as they are able to buy more for their money.

If the exchange rate falls (pound weakens):		If the exchange rate rises (pound strengthens):	
Exporters benefit as they are able to sell more goods abroad	↑	**Exporters suffer** as their prices will be higher in comparison to local firms	↓
Importers suffer due to the increased price of imported goods	↓	**Importers benefit** as cost of imports will be lower	↑