

STUDY GUIDE:

BUSINESS HL



ib-academy.nl



Business and Management HL Study Guide

Available on www.ib-academy.nl

Author: Miloš Drezga, Bella Kelly Contributing Authors: Susan Abbas Nejad, Alex Barancova

Rational

Typesetting

LATEY guru

Special thanks: Andjela Tričković

This work may be shared digitally and in printed form, but it may not be changed and then redistributed in any form.

Copyright © 2023, IB Academy Version: BaMHL.3.2.230308



This work is published under the Creative Commons BY-NC-ND 4.0 International License. To view a copy of this license, visit creativecommons.org/licenses/by-nc-nd/4.0

This work may not used for commercial purposes other than by IB Academy, or parties directly licenced by IB Academy. If you acquired this guide by paying for it, or if you have received this guide as part of a paid service or product, directly or indirectly, we kindly ask that you contact us immediately.

Daltonlaan 400 3584 BK Utrecht The Netherlands www.ib-academy.nl contact@ib-academy.nl +31 (0) 30 4300 430

Welcome to the IB Academy guide for Business and Management HL.

Our Study Guides are put together by our teachers who worked tirelessly with students and schools. The idea is to compile revision material that would be easy-to-follow for IB students worldwide and for school teachers to utilise them for their classrooms. Our approach is straightforward: by adopting a step-by-step perspective, students can easily absorb dense information in a quick and efficient manner. With this format, students will be able to tackle every question swiftly and without any difficulties.

We distinguish between two aspects: *skill* and *understanding*. Skill is fostered when students practice the syllabus material and can identify variations within the steps even if the same general principle may be applied throughout. In doing so, understanding will soon follow since the student has applied the steps several times. It is a simple yet effective method that has helped many students and we hope it will aid you as well.

The best way to apply what you have learned from the guides is with a study partner. We suggest revising with a friend or with a group in order to immediately test the information you gathered from our guides. This will help you not only process the information, but also help you formulate your answers for the exams. Practice makes better and what better way to do it than with your friends!

In order to maintain our Study Guides and to put forth the best possible material, we are in constant collaboration with students and teachers alike. To help us, we ask that you provide feedback and suggestions so that we can modify the contents to be relevant for IB studies. We appreciate any comments and hope that our Study Guides will help you with your revision or in your lessons. For more information on our material or courses, be sure to check our site at www.ib-academy.nl.

IB Academy Team

If you would like to consider supporting our materials and be recognised for it, send us an email to contact@ib-academy.nl.

TABLE OF CONTENTS

	1. Business organisation and	7
	environment	
	 Introduction to business and management - Types of organisations - Organisation objectives - Stakeholders External environment - Growth and evolution Organisational planning tools 	
	2. Human resource	33
	management	
	 Functions and evolution of human resource management Organisational structure - Leadership and management Motivation - Organisational (corporate) culture Employer and employee relations 	
	3. Accounts and finance	65
	 Sources of finance - Costs and revenues - Break even analysis - Final accounts - Profitability and liquidity ratio analysis - Efficiency ratio analysis - Cash flow - Investment appraisal - Budgeting 	
	4. Marketing	91
•	 The role of marketing - Market planning - Sales forecasting - Market research - The four Ps - The extended marketing mix - International marketing - E-commerce 	
	5. Operations management	117
	- The role of operations management - Production methods	
	 Lean production and quality management - Location Production planning - Research and development - Crisis 	
	management and contingency planning	



TABLE OF CONTENTS



BUSINESS ORGANISATION AND ENVIRONMENT



and n	nanagement
of a busi – Entrep starting	ole of a business in combining resources — Functions ness — Business sectors — Sectoral change oreneurship vs. intrapreneurship — Reasons for up a business — Steps in the process of starting up a
	 Factors to consider when starting up a business ms that a new business might face – Elements of a plan
1.2.	Types of organisations
organisa	vs. private sectors – For profit (commercial) tions – For-profit (social) enterprises – Non-profit terprises
1.3.	Organisation objectives
Vision objective ethics	Organisation objectives and mission statements – The need for change in es – Corporate social responsibility and business – Purpose of ethical objectives – The evolving role are of CSR – SWOT Analysis – Ansoff matrix
 Vision objective ethics and natu 	and mission statements – The need for change in es – Corporate social responsibility and business – Purpose of ethical objectives – The evolving role



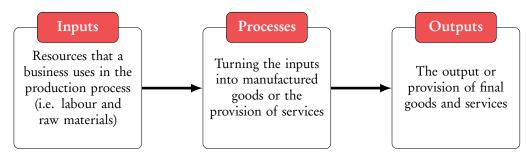
1.6. Growth and evolution	23
 Economies and diseconomies of scale – Small vs. big businesses – Internal vs. external growth – External growth methods – The impact of globalisation on the growth and evolution of businesses – Reasons for the growth of multinational companies – The impact of MNCs on the host countries 	
1.7. Organisational planning	27
tools	
Decision treeFishbone diagramsForce-field analysisGantt chart	



1.1 Introduction to business and management

1.1.1 The role of a business in combining resources

The role of business is to combine human, physical and financial resources to create goods and services.



1.1.2 Functions of a business

Human resources

- Manages personnel of the organisation.
- Deals with: workforce planning, recruitment, training, appraisal, dismissals and redundancies, and outsourcing human resource strategies.

Finance and accounts

- Manages the organisation's money.
- Deals with: reporting and recording financial records, abiding by legal requirements (e.g., tax), produces final accounts.

Marketing

- Identifies and satisfies the needs and wants of customers.
- In charge of ensuring that a firm's products sell.
- Deals with: market research, test marketing, advertising and branding.

Operations (management)

- Converts raw materials and components into finished goods.
- For a service this can be the process of giving that service.

1.1.3 Business sectors

Primary sector

- The extraction, harvesting, and conversion of natural resources.
- Most prevalent in LEDCs. Primary sectors in MEDCs use more automated methods.
- The primary sector has little added value.



• Examples: coal mining, vegetable harvesting.

Secondary sector

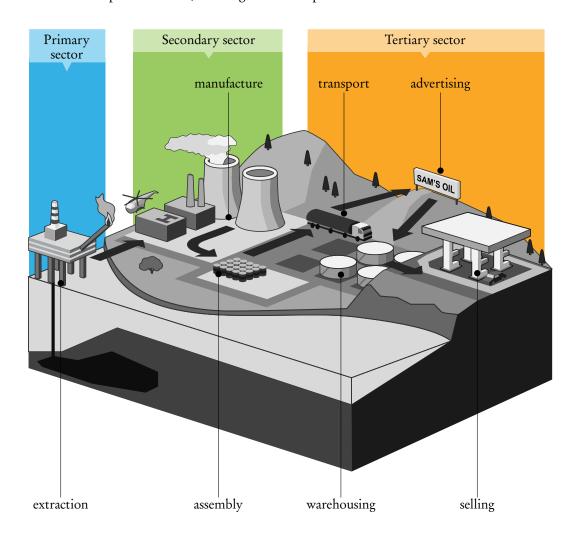
- Manufacturing or construction of products by transforming the raw materials produced in the primary sector.
- Economically developing countries tend to dominate this sector.
- Examples: clothing production, car manufacturing.

Tertiary sector

- Provides services to the general population.
- Tend to be dominant in MEDCs.
- Examples: haircuts, taxi service.

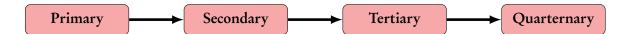
Quaternary sector

- A subcategory of the tertiary sector.
- Involved in intellectual, knowledge based activities that generate and share information.
- Requires a highly educated workforce, and therefore is most prominent in MEDCs.
- Example: law firms, training and development firms.





1.1.4 Sectoral change



A shift in the relative share of national output and employment that is attributed to each business sector over time.

As countries become more developed, they move towards secondary sectors, and eventually tertiary and quaternary sectors.

Primary sector production yields low added value, in order to develop economically, a shift in business activity must occur to ave higher added value.

Reasons for sectoral change

Higher household income: higher demand for services as people have available money to spend on 'wants'.

More leisure time: with higher standards of living, people have more time/money to do recreational activities.

Greater focus on customer service: firms realise the importance of customer service. Increasing reliance on support services: businesses use more sophisticated services such as subcontractors and specialists to help the business grow.

1.1.5 Entrepreneurship vs. intrapreneurship



Entrepreneur an individual who plans, organises and manages a business, taking on financial risks in doing so.

Intrapreneur the act of being an entrepreneur but as an employee within a large organisation.

Entrepreneur

- Owners/operators.
- Takes substantial risks.
- Rewarded with profit.
- Failure incurs personal costs.
- Visionary.
- Responsibility for the workforce.

Intrapreneur

- Employees of the organisation.
- Takes medium- high risks.
- Rewarded with pay.
- Failure absorbed by the organisation.
- Innovative.
- Accountable to the owner.



1.1.6 Reasons for starting up a business

- Growth.
- Earnings.
- Transfer and inheritance: used for something that they can pass on (transference) to their children (inheritance) to give them a sense of security.
- Challenge: drive to have personal satisfaction, being successful boosts self-esteem.
- Autonomy: being your own boss, making decisions about the business, work hours, holidays etc.
- Security: if you are your own boss, you cannot be made redundant, dismissed, or be replaced with technology.
- Hobbies: just for fun, or because you are passionate about something.

1.1.7 Steps in the process of starting up a business

- 1. Write a business plan.
- 2. Obtain startup capital.
- 3. Obtain business registration.
- 4. Open a bank account.
- 5. Marketing.

1.1.8 Factors to consider when starting up a business

- Business idea.
- Sources of finance.
- Human resources: who will you hire, will they need training, etc.
- Enterprise: who will lead, organise and manage the business.
- Fixed assets: land and machinery needed.
- Suppliers.
- Customers.
- Marketing.
- Legal issues: do you have all of the patents, legislations, and documentation needed.

1.1.9 Problems that a new business might face

- Lack of finance.
- Cash flow problems.
- Marketing problems.
- Poor location.
- External influences: competition in the area, economic recession.



- Unestablished customer base.
- People management problems: poor choice of employees or leadership.
- Legalities.
- Production problems.
- High production costs.

1.1.10 Elements of a business plan

- Details of the business and the owners.
- Information about the product.
- A preview of the market.
- Finance.
- Personnel and the workforce.
- Marketing of the firm/product.

1.2 Types of organisations

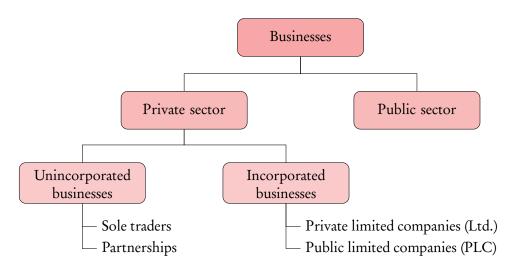
1.2.1 Public vs. private sectors

Private

- Owned and controlled by private individuals.
- Can be owned by one person or by many.
- Aim is to make profit.
- E.g., H&M and Walmart.

Public

- Owned by the government.
- Provide essential goods and services that would be otherwise inefficiently provided by the private sector.
- Organisations wholly owned by the government are state owned enterprises.
- E.g., electricity and water companies.





1.2.2 For profit (commercial) organisations

Types of for-profit organisations



Unincorporated businesses businesses where there is no legal distinction between the owner of the business and the business itself-everything is carried out in the name of the owners.

E.g., sole traders and partnerships.

Incorporated businesses businesses that have a separate legal entity from their owners.

E.g., private limited companies and public limited companies.

- Unincorporated.
- Individual who owns a personal business.
- Responsible for success or failure.
- May work alone or employ others.
- Startup capital usually includes personal savings and borrowing.



Sole trader an individual who runs and owns his own business.

Advantages

- Fewer legal formalities.
- Profit goes directly to one owner (direct).
- Autonomy.
- Personalised service.
- Privacy of financial accounts.
- Setup costs are inexpensive and time-saving.

- Unlimited liability (unincorporated).
- Limited sources of finance (hard to obtain bank loans).
- High risk.
- Workload and stress.
- Limited economies of scale.
- Lack of continuity.





Partnerships a profit-seeking business owned by multiple people (at least two).

- Unincorporated.
- Ordinary partnerships have a maximum of 2–20 people.
- Money can be pooled from partners' personal funds which have financial stake but don't actually make decisions (silent partners).
- At least one partner must have unlimited liability.

Advantages

- Set up costs are inexpensive and quick.
- Financial strength (more partners means more personal funds).
- Specialisation and division of labour due to multiple partners.
- Financial privacy (no need to publish accounts).

Disadvantages

- Unlimited Liability (unincorporated).
- Prolonged decision making.
- Lack of harmony.
- Profits must be shared among multiple partners.



Private Limited Company (Ltd.) a company that cannot raise share capital from the general public. The shares are sold to private family members and friends.

E.g., IKEA, Lego, Rolex, Chanel, etc.

Advantages

- Limited liability.
- No limit on the number of owners.
- Shares can only be sold privately.
- Better decision making.
- Easier to raise additional funds.

- Profits have to be shared among much larger number of members.
- Setting up business takes time and it's costly.
- Company's financial accounts are public.
- No member has full control of the company.
- Firms are not allowed to sell their shares to the public.





Public Limited Company (PLC) Often big, multinational companies boasting large numbers of employees that are able to advertise and sell its shares to the general public via the stock exchange.

E.g., China mobile, HSBC, Samsung, Nike, etc.

Flotation occurs when a business first sells all or part of its business to external investors (shareholders). This process is known as an initial public offering (IPO).

Advantages

- Shares can be sold to the public.
- Efficient sources of finance are more available (bank loans).
- Limited Liability.
- Possibility of market dominance.
- Economies of scale.
- Tax benefits.

Disadvantages

- Takes time due to bureaucratic nature of big companies.
- Communication issues due to size.
- Final accounts are public.
- Less able to offer personal services to customers.
- Compliance costs.
- Loss of control.

1.2.3 For-profit (social) enterprises



Social Enterprise revenue generating businesses with social objectives at the centre of business operations. These run according to business principles but do not aim at making profit. Their surpluses from trading may be shared with employees and customers, passed on to a third party, used to buy resources, raise finance, employ staff etc.

Cooperatives businesses owned and run by their members, including employees and customers. The common goal is to create value for the members by engaging in socially responsible business activities.

- All employees have a vote.
- Profits earned are shared between members.

Advantages

- More incentive to work.
- Employees have decision making power.
- Social benefits (CSR).
- Public support.

- Disincentive effects.
- Limited sources of finance.
- Slower decision making.
- Limited promotional opportunities.





Microfinance providers a financial service aimed at financing disadvantaged members of society and helping to stop the poverty cycle.

E.g., small businesses, women, minority groups.

Advantages

- Disadvantaged people have access to this.
- Job creation.
- Social well-being incentives.

Disadvantages

- Immorality (micro-finance providers benefit from the poor/unemployed).
- Limited finance.
- Limited eligibility (not everyone qualifies).



Public-private partnerships when the government works together with the private sector to jointly provide certain goods or services.

1.2.4 Non-profit social enterprises



Non-profit social enterprises businesses run in a commercial manner but without profit being the main goal. These companies use surplus revenues to achieve social goals.

Non-Governmental Organisations (NGOs) non-profit social enterprise that operates in the private sector, (i.e., it is not owned or controlled by the government). Set up to benefit society.

E.g., UNICEF.

Charities provides voluntary support for good causes (from society's point of view), such as the protection of children, animals and the natural environment. Reliant on donors, endorsements, promotion etc. E.g., WWF.

Advantages

- Social benefits.
- Tax exemptions.
- Tax incentives for donors.
- Limited liability.
- Public recognition and trust.

- Bureaucracy.
- Disincentive effects.
- Charity fraud.
- Inefficiencies.
- Limited sources of finance.



1.3 Organisation objectives

1.3.1 Vision and mission statements



Vision statement specifies the long term aspirations of a business; where it ultimately wants to be. It often describes how the organisation wants to be perceived. They aim to influence the consumers' perception of the business.

Mission statement a declaration of the underlying purpose of an organisation's existence and its core values. This statement is updated more frequently than a vision statement.

Three levels of objectives can be distinguished:

Strategic objectives: the senior leadership sets the long-term goals, determines the actions necessary to achieve the goals and mobilises resources to execute the actions. (affects: whole company) How will the goals/aims be achieved by the resources?

Tactical objectives: middle management develops medium-term action plans to achieve the strategic objectives of an organisation. (affects: department)

Operational objectives: lower management develops short-term, day-to-day action plans to achieve the tactical objectives of the organisation as efficiently as possible. (affects: teams)



1.3.2 The need for change in objectives

- Changing corporate culture.
- Type and size of the organisation.
- Private vs. public organisations.
- Age of the business.
- Finance available.

- Risk Profile.
- State of the economy.
- Government constraints.
- Presence and power of pressure groups.
- New technologies.



1.3.3 Corporate social responsibility and business ethics



Corporate social responsibility (CSR) the consideration of ethical and environmental issues relating the business activity, towards all stakeholders and not just to owners or shareholders.

E.g., the treatment of employees or how local communities would react to new projects.

CSR aims to:

- Treat customers and suppliers fair and equally.
- Compete fairly (i.e., not engaging in predatory pricing).
- Treat the workforce with dignity and listening carefully to their needs.

1.3.4 Purpose of ethical objectives

Altruistic attitude: the company genuinely does it for social benefits, they actually care about the impact of the company.

Strategic attitude: businesses ought to be socially responsible only if such actions help them to become more profitable.

Self-interest attitude: the belief that it is the government's job to protect society.

1.3.5 The evolving role and nature of CSR

- Becomes more important as companies become more competitive.
- Because of globalisation we have so much choice, meaning that companies need a competitive edge, social responsibility might be this.
- More and more governments are imposing penalties on socially undesirable or unethical behaviour (e.g., carbon tax).
- Increase in education means people are more aware.
- Pressure groups raise awareness and affect consumer perceptions.



1.3.6 SWOT Analysis



SWOT analysis aims to identify the key *internal* strengths & weaknesses and *external* opportunities & threats, seen as important to achieving an objective.

The analysis of the *internal* strengths & weaknesses helps business owners determine their current market position, which is crucial to know before planning and implementing SMART objectives. A useful tool for:

- competitor analysis;
- assessing opportunities;
- risk assessment;
- reviewing corporate strategy;
- strategic planning.

Examples of strengths

- Products X is market leader in terms of sales.
- Customers are loyal to the brand.

	Helpful to achieving the objective	Harmful to achieving the objective
Internal origin attributes of the organization	Strengths	Weaknesses
External origin attributes of the environment	Opportunities	Threats

Examples of weaknesses

- Workers are striking demanding higher wages.
- Machinery is obsolete, lowering production output.

The analysis of the *external* opportunities & threats provides businesses with the information needed to respond to external factors that can impact the ability of the business to achieve its strategic goals and objectives.

1.3.7 Ansoff matrix

Market penetration: selling an existing product in an existing market, with the aim of increasing the market share of said product (e.g., promotions).

Product development: changing or creating new products for the same market.

Market development: selling the same products to a new market.

Diversification: selling new products to new markets.

	Existing products	New products	
Existing markets	Market penetration	Product development	HICICAS
New markets	Market development	Diversification	Increasing risk



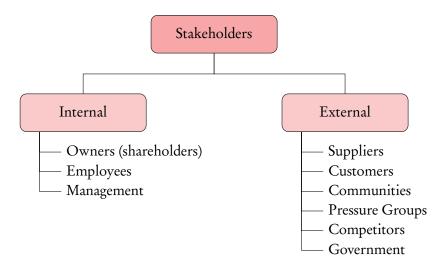
1.4 Stakeholders



Stakeholders individuals or groups that may hold interest in the business or may be affected by its decisions.

We distinguish between two groups of stakeholders:

Internal stakeholders who are directly involved in the running of the business; External stakeholders who are indirectly involved in the running of the business or are simply affected/interested in its activity.



The interests of internal stakeholders

Owners or shareholders put up the capital which runs the business. The reward is the gain they make from owning the business. If there was no reward, no one would bother to invest.

Directors and senior management in small businesses, the owners are quite likely to be involved in the daily running of the business. This is not in case in bigger companies, where a board of directors may be involved and monitor the business' activities. The performance of the business has a direct impact on them — if the business performs poorly, they might be made redundant. If the business performs well, they might be promoted or receive bonuses.

Employees are involved in daily activities and bring projects to life. If the business underperforms, employees are often the first to fall victim and get dismissed. If the business performs well, they might be promoted or receive bonuses.



The interests of external stakeholders

Suppliers: businesses depend on suppliers for resources otherwise production may be reduced.

Customers: one of the most important external stakeholders. Businesses need customers to sell goods and services in order to remain operational. Additionally, many customers depend on the goods and services provided by businesses.

Communities: businesses could play important roles in a community's development by supporting charities, collaborating with schools or expanding projects to create jobs.

Pressure: groups they are interested in the business as they attempt to influence its decision making processes (e.g., forcing the local council to act against industrial pollution).

Competitor: other firms operating in the same market want to observe their competitors in order to predict future activities and to react accordingly.

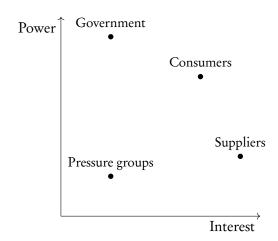
Government: legal institutions are interested in a company's lawful conduct. For example, they could inspect a business' licenses or tax records.

Mutual benefit and conflict between stakeholders' interests

Conflicts may arise when there are many stakeholders, each with different objectives. For example, there might be a conflict between customers and shareholders as customers want the highest quality products for more affordable prices. Spending more on research and development to create new products might lower the amount payable in dividends to shareholders. Improving quality might also lead to higher costs and lower profits, directly affecting shareholders.

As it is impossible to satisfy all stakeholders simultaneously, businesses need to focus on the ones that are important to them. In order to determine which stakeholders need to be satisfied, businesses compile a **stakeholder analysis**: visualising which stakeholders have the most interest in the company's activities, and which have the most influence over the company.

Example of a stakeholders analysis showing the interest and power of four stakeholders: government, pressure groups, consumers and suppliers.





1.5 External environment



External factors outside influences that can impact a business such as laws, market trends or political changes.

A civil war for example could significantly harm businesses selling luxury goods as the demand will drop severely.

In order to monitor all these changes in the external environment, businesses conduct a combined SWOT and PEST analysis. These analyses take external factors into consideration that may affect economic activities, so that businesses are able to set SMART objectives.



PEST analysis evaluates opportunities & threats on Political, Economic, Social and Technological factors.

Examples of opportunities

Political: political situation in the country is very stable.

Economic: the economy is booming and

people have growing income. **Social:** increasing average living

conditions means more people can afford

luxury items.

Technological: faster 4G mobile internet network allows development of more complex apps like voice recognition.

Examples of threats

Political: stricter employment laws increases business risk.

Economic: high competition in particular market segment.

Social: healthier lifestyle of consumers

reduces sale of soft drinks.

Technological: the invention of a better

medicine obsoletes the current.



STEEPLE the same analysis as is done in PEST, but also includes Legal, Environmental and Ethical.

Note: If the exam asks you to design a SWOT analysis, this automatically means you will need to do a PEST analysis as well in order to be able to properly analyse the external environment. Application is key – you have to look carefully through the case study in order to be able to create a SWOT analysis *explicitly applicable* to the company in the case study, *and* justify your answers at all times! You have to explain *why* something is a strength, weakness, opportunity or a threat. Without arguments your answer will not be considered complete.



1.6 Growth and evolution

1.6.1 Economies and diseconomies of scale

Growth and evolution refers to the expansion of sales and the increased scale of production. Growth is an important factor for businesses to consider due to the costs involved – these can increase or decrease.



Economies of scale as the production output of an enterprise increases, the cost per unit output decreases as fixed costs are spread out over more units of output.

Diseconomies of scale as the business expands and the scale of its operations is beyond the minimum efficient scale, the average costs per unit output rises.

Diseconomies of scale may occur when:

- Communication becomes more complicated and coordination more difficult because a large firm is divided into departments.
- The control and coordination of large businesses is very demanding; more supervision leads to more costs.

1.6.2 Small vs. big businesses

Small business

- Closer to its customers: ability to offer more personal services.
- Less competition: small businesses can create a monopoly in a niche market.
- Greater focus: they do not offer products to mass markets.

Big business

- Economies of scale: larger production output = decreased cost per unit.
- Market leader status: big firms tend to be more influential.
- Survival: greater capacity is used to spread the risk.



1.6.3 Internal vs. external growth



Internal/organic growth a business grows using its own resources to increase the scale of its operations and sales revenue.

External growth a business grows by collaborating with, buying up or merging with another firm.

Organic growth can be achieved by selling new products, increasing production and sales through marketing or finding new markets. For most businesses internal growth is slow, but it does so at less risk than external growth and can be financed through internal funds. External growth is a much quicker alternative to organic growth. External growth can be a quick way to reduce competition in a market, gain economies of scale, gain entry into foreign markets or achieve synergy.

1.6.4 External growth methods

The terms mergers and takeovers both describe the situation when firms join together and operate as one organisation, albeit with one important difference. The term mergers is used to describe two businesses that join to create a third new company, whereas the term takeover refers to the purchase of one business by another.

There are few different types of mergers:

Horizontal integration: firms are in exactly the same line of business and at the same stage of production.

Backward vertical integration: firms are at different stages of production. The merger occurs with a business which is in the previous stage of production.

Forward vertical integration: firms are at different stages of production. The merger occurs with a business which is in the next stage of production.

Lateral integration: merging of firms with related goods which do not compete directly with each other.

Diversifying merger (conglomerate): merging of firms in completely different lines of business.



Joint venture a type of external growth strategy that combines the contributions and responsibilities of two firms to a shared project by forming a separate legal enterprise.

The reason why firms form a joint venture is to enjoying the advantages of mergers, such as economies of scale and reduced competition, without losing their identity. Most joint ventures are friendly, allowing businesses to share their areas of expertise.





Strategic alliance an agreement between parties to pursue shared objectives while remaining independent organisations, and without forming a legal partnership entity. These are often formed to share costs and risks, information and expertise.

E.g., sharing R&D costs, manufacturing capabilities, distribution channels etc..

Franchising an arrangement where the franchisor sells the rights to sell their products or use the company name or brand to the franchisees.

1.6.5 The impact of globalisation on the growth and evolution of businesses

Globalisation worldwide movement toward economic, financial, trade, and communications integration.

- Increased competitiveness.
- Increased difficulty of meeting customer expectations (because of high competitiveness).
- Larger customer base.
- Economies of scale.
- Broader choice of location.
- More external growth opportunities.
- More opportunities for sources of finance.

1.6.6 Reasons for the growth of multinational companies

- Increased customer base.
- Cheaper overseas production costs (e.g., China, India, Bangladesh).
- Economies of scale.
- Companies can avoid protectionist policies.
- Spread risks by being in multiple markets.

1.6.7 The impact of MNCs on the host countries

Advantages

- Creates jobs.
- Can boost GDP.
- Introduces new skills and technologies.
- Introduces competition.

- Profits are sent back to home country.
- Can push local companies out of business causing unemployment.
- Low CSR: exploits the country's natural resources.



1.7 Organisational planning tools

1.7.1 Decision tree

Everyday business decisions in any department involve risks. This can be because the business has limited information on which to base the decisions or the outcome of a certain decision is uncertain. In such situations, the business will make a decision that minimises risk with the greatest possible return. Decision trees are used to quantify the alternative outcomes of any decision, combining the likelihood of an outcome and the loss/gain.

Every decision tree co	onsists of:	
•	(represented by squares) n needs to be made between	certain courses of action.
Chance nodes: decisions have o	(represented by circles)	
•	likely each outcome is. The	every outcome branch of the tree, e sum of all the possible outcomes of

Expected values: the financial outcome of each decision.

Steps to completing a decision tree

- 1. Based on the information given to you, draw the layout of the tree diagram.
- 2. Fill in the nodes with numbers.
- 3. Write the forecasted costs on the first branch.
- 4. Write the successful revenue and the unsuccessful revenue on each final branch.
- 5. Write the probability of success or not success on each final branch.
- 6. Complete the calculations for each strand:

 (probability of success × forecast revenue if successful) +

 (probability of not success × forecast revenue if not successful) forecast costs.
- 7. The strand with the highest expected earnings is the one that yields the highest forecasted returns.
- 8. Based on your choice, put a line through the strands not taken.
- 9. Draw a key, this is necessary for full marks.
- 10. Label your decision tree.



Advantages

- The visual nature of constructing a decision tree diagram may show possible courses of action not previously considered. For example, the management of ABC Ltd. could have thought of another course of action (e.g., modifying the current advertising campaign), which could have been examined as well.
- It is a numerical model it involves placing numerical values on decisions, which improves results, as only the most profitable course of action will be taken. In our example, ABC Ltd. chose to retain the current advertising campaign because it is the most profitable choice.

Disadvantages

- All figures are estimated which means that businesses might make a decision that is not as profitable in reality.
- Do not take into account the dynamic nature of business. For example, a sudden change in the economic climate might render a decision based on a decision tree obsolete. For example, due to the economic crisis, the profit and loss figures have to be re-estimated to take into account the decrease in demand, which means the whole new decision tree needs to be made.

kample

Example exam question

Lights and Co. is a mass-market lighting company. The company is concerned about their falling market share and profits, so they are conducted market research.

Managers are considering two options:

Option 1: research and develop new, automated lights.

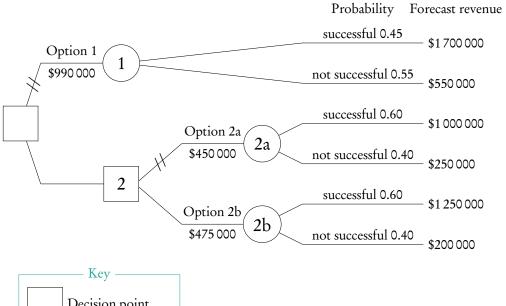
Option 2: buy new machinery to produce more of the current products.

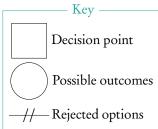
The probabilities and forecast costs and revenues of each option are given:

Options		Forecast costs	Forecast revenue if successful Probability: 0.45	Forecast revenue if not successful Probability: 0.55
Option 1	Research and develop new, automated lights	990 000	1 700 000	550 000
Option 2	Buy new machinery without training	450 000	100 000	250 000
	Buy new machinery with training	475 000	1 250 000	200 000









$$\begin{split} EMV1 = & (1700\,000\times0.45 + 550\,000\times0.55) - 990\,000 = \$77\,500 \\ EMV2a = & (1\,000\,000\times0.60 + 250\,000\times0.40) - 450\,000 = \$250\,000 \\ EMV2b = & (1\,250\,000\times0.60 + 200\,000\times0.40) - 475\,000 = \$335\,000 \end{split}$$

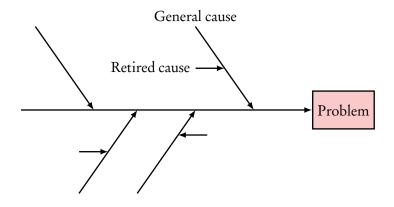
Best option: 2b, buy new machinery with training to produce more of the current products.



1.7.2 Fishbone diagrams



Fishbone diagram a visual tool that identifies successive layers of causes that could potentially contribute to an effect or problem.



As presented, the main problem is identified. Once the main problem has been identified, its causes can be defined. Each cause is represented as an arrow that feeds into the *main problem*. As you can see, the refined causes are fed into the general causes. To use this method, first the main issue needs to be identified and then, its general and refined causes. This way you will be able to visualise the sources of the main problem. There are *general sets of causes* that decision makers can use:

Manufacturing: the 6Ms – machine, method, materials, measurement, man, mother nature.

Marketing: the 8Ps – price, promotion, people, process, place/plant, policies, procedures, product.

Service: the 4Ss – surroundings, suppliers, systems, skills.

Advantages

- Very visual and simple to use in order to pinpoint the key causes of a particular problem a firm is facing.
- Could represent a good way to bring several different stakeholders together (e.g., workforce). This could make them feel part of the decision-making process which can prove to be motivating.

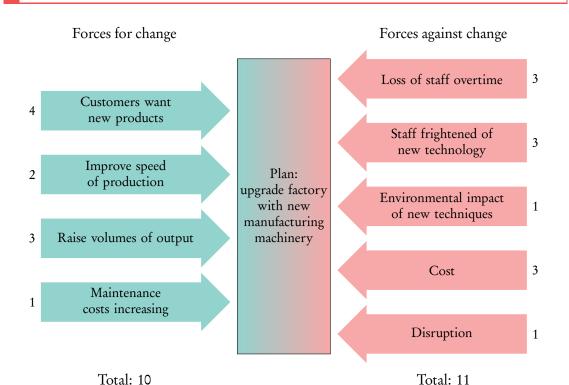
- Do not show how to fix the problem.
- Problems as different stakeholders may view different causes as the most important ones, which causes disputes.



1.7.3 Force-field analysis



Force-field analysis a framework for looking at the factors (forces) that influence a movement toward a goal. Forces that promote movement toward a goal are called *driving or helping forces*, those blocking movement toward a goal are called *restraining or hindering forces*.



Advantages

- Helps identify key factors affecting a particular decision according to their importance.
- Could represent a good way to bring several different stakeholders together (e.g., workforce). This could make them feel part of the decision-making process which can prove to be motivating.

- The numbers assigned to different forces are very arbitrary they only reflect how a certain force is important in the eyes of the decision maker.
- Different decision makers might include different forces – the forces that will be identified highly depend on the interpretations of the issue different decision.



1.7.4 Gantt chart



Gantt chart a bar-chart showing how tasks in a project or production process can be sequenced over time.

In order to construct a Gantt chart all the tasks or steps of the process have to be known, including when each will be completed. Once the Gantt chart is constructed, it can be used to figure out the most efficient ways to use resources. Here is an example of a Gantt chart showing all the necessary steps in the production of a T-shirt:

Task	M	on	Tue	Wed	Thu	Fri	Sat	Sun
Choosing materials								
Drawing the design								
Cutting								
Putting together								
Packing								

Advantages

- Very visual allowing the management to clearly set out the timeline of a particular project. This could help set deadlines or even look at which processes can be done faster.
- Useful to look at in order to allocate resources efficiently (as explained earlier).

- Based on estimates some actions may take longer to complete and the management did not predict that.
- Becomes very difficult to present when a project consists of many steps.



HUMAN RESOURCE MANAGEMENT



2.1. Functions and evolution	35
of human resource	
management	
 Human resource planning – Internal and external factors that influence human resource planning – Common steps in the process of recruitment – Types of training – Types of appraisal – Dismissal, termination and redundancy – Common steps in the process of dismissal – Changing employment patterns and practices – Outsourcing, offshoring and re-shoring 	
2.2. Organisational structure - Changes in organisational structures	4
2.3. Leadership and	4
management	
 Key functions of management – Management vs. leadership – Leadership styles 	
2.4. Motivation	4
 Taylor - Maslow's hierarchy of needs - Herzberg's motivation-hygiene theory - Adam's equity theory Pink - Types of financial rewards - Types of 	



2.5.	Organisational	59
(cor	oorate) culture	
culture - Orga	nisational culture – Determinants of organisational (NORMS) – Four types of organisational culture nisational cultural clashes – Individuals and sational culture	
2.6.	Employer and employee	6
	ions	
reiai		



2.1 Functions and evolution of human resource management

2.1.1 Human resource planning



Human resources (HR) all the people working in a business.

Workforce/HR planning a process that identifies current and future HR needs to ensure that staffing is sufficient, qualified, and competent enough to achieve the organization's objectives.

There are four key parts of HR planning (which will be further examined later):

Recruitment hiring the right person for the right job.

Training ensuring an employee receives proper professional development (i.e., acquires the necessary set of skills needed to complete the tasks efficiently).

Appraisal evaluating an employee's job performance.

Termination or dismissal managing the situation of employee's voluntary or involuntary leave.



Labour turnover a measure used in HR planning of how many people leave a business over a given period of time, usually expressed as a percentage of the total labour force.

Labour turnover = $\frac{\text{number of staff leaving over a year}}{\text{average number of staff employed in a year}} \times 100$

High labour turnover

- This means that there is a reason why staff do not stay in the firm for a long period of time.
- Perhaps there is an aspect of the business that demotivates the workforce and lowers
 their productivity (resulting in extra costs for the business as it constantly needs to be
 on a lookout for new staff).
- High labour turnover suggests that staff may only be staying for a short time for a certain reason.
- There may be a key factor such as motivation, packages etc. that are affecting retention.
- Staff hired may be incompetent.
- Remuneration packages might not be competitive.



Low labour turnover

- Fresh blood may encourage innovation and new ideas.
- Existing employees are loyal to the business, and likely more motivated to work.
- Managers have recruited the right people for the right job.
- A very low labour turnover means that the business is stable but also lacks progress; 'fresh blood' in the business is important to stimulate innovations and new ideas.

2.1.2 Internal and external factors that influence human resource planning

External factors impact the size and availability of the pool of potential employees for the business.

These can include:

Technological change: e.g., better technology can lead to more working from home.

Demographic change: e.g., an aging population, reduced birth rate or migration etc.

These factors affect the size of the labour pool and the skills they have to offer.

The state of the economy: e.g., in a recession, the unemployment rate is higher which allows business to 'pick and choose' people with right skills and experience (also they are willing to accept lower wages).

Demographic change

- Changes in demographic populations.
- Ageing populations: Increased dependent population, reduced labour mobility, changes in consumption patterns, change in employment patterns.

Changes in labour mobility

- Friends and family affect geographic mobility.
- Relocation costs.
- Cost of living.
- Language and cultural differences.

New communication technologies

- Electronic/online recruitment.
- Online meetings.
- Flexitime and teleworking.
- Online training courses.





Internal factors changes from within the business itself.

These can include:

Changes in business organisation: businesses change the way they are organised in order to better meet their strategic objectives.

Changes in labour relations: labour unionisation causes businesses to give in to some of their requirements in order to keep the business running and the workforce motivated.

Changes in business finance: financial difficulties cause businesses lay off some workers to minimise the costs.

2.1.3 Common steps in the process of recruitment

Due to changes in internal circumstances (e.g., higher demand, introduction of a new job etc.), a business may need to start the process of recruitment. Recruitment can be divided into 3 steps:

- 1. **Identification:** recruitment starts with defining the **job description**: details the basic roles and responsibilities of a job, and a **person specification**: to communicate what skills, qualifications and experience candidates need for the job. The business also needs to decide whether it is best to **recruit internally**: find a current employee that could carry out the new job or **recruit externally**: find a completely new person from outside the business.
- 2. **Application:** to find the best applicants, businesses make a **job advert**: communicating the job description and person specification to inform potential candidates. The job advert should be placed so that it reaches its target audience. The business can decide to **process the applications externally**: hire a recruitment agency to handle the application process for them.
- 3. **Selection:** after some time the applicants may be shortlisted based on how well they fit the job, interviews may be scheduled in order to select the best applicant for the job.



Internal recruitment hiring people from within the firm to fill a new position.

External recruitment the process of hiring people from outside the organisation.



2.1.4 Types of training



On the job training done while the employee is doing their normal job while at the workplace.

E.g., a senior employee helps the junior employee comprehend all the tasks and acquire new skills needed to carry out the job efficiently.

Advantages

- Cost effective: using in-house specialists.
- Training is more relevant as it is specifically for the firm.
- Reduces disruption to daily operations as it is on site.
- Helps establish relationships and promote teamwork.
- The location is convenient for workers and trainers.

Disadvantages

- Trainees may pick up bad practices.
- Internal trainers may lack up to date training.
- Trainers cannot complete their own work whilst training new workers.
- May be incomplete due to a lack of resources.
- Productivity may be low until all skills are learnt.



Induction training the training received when first starting a job, this is a type of on the job training.

Advantages

- Establishes expectations and good working habits from the start.
- Helps new workers understand the corporate culture.
- Speeds up settling in process.
- Morale is boosted when new recruits feel more confident.

Disadvantages

- Can be time consuming.
- Key staff need to be freed from their duties.
- Information overload for new recruits.
- Induction can be lengthy in large firms.



Mentoring another type of OTJ training involving a dyad of a mentor and a mentee. The mentor shares their experiences with the mentee to help them gain skills and knowledge.

Advantages

- Synergy is created as it shares personal experiences.
- Mentoring can be informal/formal.
- Good mentors create a positive environment for mentees to act without fear of punishment.

- Time consuming for mentors.
- Mismatched pairings can be stressful.
- Requires long-term commitment which can disrupt business operations.
- Training mentors might be costly.





Off the job training happens outside working hours, where the employees are being trained away from the job. This could involve workshops, conferences etc.

Advantages

- Experts who may not exist internally are able to be used.
- A wider range of training can be provided.
- There are no distractions from colleagues at an offsite venue.
- Networking can take place, so employees can meet new people.

Disadvantages

- There is a potential loss of output whilst workers attend the offsite training course.
- Hiring specialist trainers can be very expensive, and transport/accommodation costs may add cost.
- It is debatable whether all skills are transferable to the business.
- Finding time for staff to get off work can be difficult.



Cognitive training focuses on helping employees develop their thinking and processing skills. This type of training is of crucial importance for businesses that require their employees to make quick, wise and effective decisions, link investment banking, marketing departments of companies etc.

Advantages

 Helps workers improve their mental processes acquire new knowledge, aid decision-making and solve work-related problems.

Disadvantages

- May not cater for workers with different goals.
- Can be expensive.
- Might not meet the needs of an organisation.
- Difficult to measure effects of the training.



Behavioural training focuses on helping employees develop certain interpersonal skills such as stress management, communication, dealing with emotions etc.



2.1.5 Types of appraisal



Staff appraisal is the processes of reviewing the performance of employees against pre-set objectives.

There are four different appraisal strategies:

- **Formative appraisal:** an ongoing process that focuses on giving the employees recognition for what they have done well and indicating possible mistakes so that they can learn from them.
- **Summative appraisal:** measures an employee's performance based on standards set by the business, making it easy for the business to sum up how a particular employee performed against the standards. Usually done at the end of a particular project.
- 360 degree appraisal: feedback on the employee's performance is not only received from the manager, but also from co-workers (appraisal from multiple perspectives). This type of appraisal is usually combined with one of the previous two to give another perspective on the performance.
- **Self-appraisal:** employees reflect on their own performance by rating themselves on various performance indicators. This type of appraisal is usually combined with those explained earlier.

2.1.6 Dismissal, termination and redundancy

Business can deal with voluntary or involuntary leave of employees in several ways:

- **Termination:** happens when employees leave the business at the end of their contract because they want to work on their professional development, change career, retire etc. These employees expect to receive a reference from their ex-employer.
- **Dismissal:** happens when an employee has broken some of the terms of their contract, which could be due to missing work, poor discipline, dishonesty etc. These employees do not receive a reference from their ex-employer.
- **Redundancy:** happens when a job is no longer required, making the employee redundant through no fault of her own. Causes can be, e.g., a drop in production, a merger or takeover, automation etc.



2.1.7 Common steps in the process of dismissal

Evidence must be gathered during all stages of the dismissal process. Managers must effectively communicate the message to avoid rumours spreading.

- 1. Verbal Warning
- 2. Official written warning if misconduct is repeated
- 3. Dismissal

2.1.8 Changing employment patterns and practices

New technologies and new social trends have influenced work practices in many countries. Some examples are:

Teleworking: employees work a set amount of hours at the office and the remainder from home.

Flexitime: employee has to work a set amount of hours per week, the allocation of time spent completely depends on employee's preferences.

Migration for work: due to better infrastructure and better connectivity of the whole world, people can easily migrate daily, sometimes even great distances, for work.

Portfolio working: a person employed in a number of different jobs, carried out simultaneously, usually on a part-time or temporary basis.

Part-time employment.

Migration of workers: a person who works in a country or state of which he/she is not a national.

2.1.9 Outsourcing, offshoring and re-shoring



Outsourcing the process of transferring internal business activities to an external firm in order to reduce costs.

Advantages

- Outsources may carry out work to higher quality standards.
- Outsourcers will bid for work (i.e., try to give you the best price).
- Reduces labour costs when workers are outside the business.
- Allows the business to concentrate on core functions.

- To cut costs, subcontractors may 'cut corners' (unethical).
- Quality management can become more difficult.
- Subcontractors must be monitored to ensure quality standards are being met.
- Outsourcing may cause redundancies.
- May be unethical due to the exploitation of workers in LEDCs.





Offshoring relocating business activities and processes abroad.

Advantages

- Companies can benefit from external factors such as currency exchange.
- Cheaper wage costs overseas.
- Overseas locations may have better access to raw materials.

Disadvantages

- To cut costs, subcontractors may be 'cutting corners' (unethical).
- Quality management can become more difficult.
- May be unethical due to the exploration of workers in LEDCs.
- Companies have been seen to evade tax by doing this.



Reshoring the transfer of business operations back to their countries of origin.

Advantages

- Improves quality management.
- Transporting goods from overseas to home countries is expensive.

- Can be more expensive.
- Provides a USP.



2.2 Organisational structure



- Levels of hierarchy the level of responsibility in the business. Each level means that there is a senior and a junior.
- Chain of command the formal route that a decision in an organisation must follow. Traditionally, this means that decisions travel from the top (CEO) to the bottom (workers) of the hierarchy.
- **Span of control** the number of subordinates directly under the authority of a manager and whom managers are responsible for.
- **Delegation** giving one's subordinate the authority to make a particular decision or carry out a particular task while still keeping the responsibility for the outcome of that task or decision. This usually happens when the span of control is wide.
- **Centralisation** indicates that all major decisions in the business are made by a small group of employees (usually managers) that work closely with the head of the business (CEO).
- **Decentralisation** the opposite of centralisation. The core strategic decisions made by senior managers, while middle managers have other decision-making responsibility.
- **Bureaucracy** the relative importance of rules and procedures. If a business is relatively bureaucratic, there are many rules, regulations and set ways of doing things; this means that personal initiative or delegation is not expected.
- De-layering removing a layer in the hierarchy of the business. It means the removal of a layer of management. It is intended to make the business less bureaucratic, which increases the decision-making capability of middle managers. Also, it reduces costs as not so many managers need to be employed.



Types of organisational structures



- Tall organisational structure common in well-established businesses; it is characterised by many levels of hierarchy, narrow spans of control, long chains of command, centralised decision-making and limited delegation.
- **Flat organisational structure** the opposite of the tall structure; it is characterised by few levels of hierarchy, wider spans of control, shorter chains of command, decentralised decision-making and increased delegation.
- Organisational structure by hierarchy a traditional way of representing structure of a business. It shows the chain of command in a particular business.

E.g., senior managers > middle managers > junior managers > workers.

- Organisational structure by function an organisational structure where employees are grouped by departments they belong to (marketing, finance, HR). After that has been determined, employees are then organised by seniority.
- Organisational structure by product an organisational structure based on what a particular business produces. This involves dividing workforce based on what a company produces.
- Organisational structure by region present in businesses that carry out certain aspects of the business activity in different parts of the world. E.g., they have departments in Europe, America, Australia etc.

Note: When asked to analyse any of these organisational structures on the exam (i.e., advantages and disadvantages), you will need to (1) use the specific terminology outlined in the syllabus point but also (2) refer to leadership in the organisation and motivation of the workforce — how does a particular organisational structure affect motivation of the workforce compared to another.



2.2.1 Changes in organisational structures

Along with the basic organisational structures, some businesses have attempted to adapt their structure in accordance with the changes in the business environment. Two different ways to deal with changes in business environment are project-based organisation and shamrock organisation.

Project-based organisation a market structure in which employees are organised around different projects that a firm carries out.

Project-based organisation is supposed to be more flexible and responsive to market demand (therefore more typical of market-oriented businesses). There are project managers that delegate and are responsible for a particular project. After the project is done, the team is split up and reassembled to begin another project. Each team "borrows" members of different departments to complete the projects such as accountants, operations managers etc.

Advantages

- Higher level of delegation: the project manager delegates tasks to different team members, which tends to be motivating for those workers as they feel empowered.
- Each team member will do their part of the job efficiently since they are specialists in their field.

Disadvantages

- Increased training costs.
- Not all members of the workforce will be able to fit into this organisation structure.



Shamrock organisation a market structure in which a business trims its workforce to retain only multi-skilled core, which is concerned with the creation of a product. All other supporting, non-central functions are outsourced to the periphery.

This model suggests that businesses can reduce costs and gain competitive advantage by trimming their workforce.

Thus, on the shamrock, we have 3 leaves:

- 1. Core managers: employees that are essential for the business
- 2. Contractual fringe: activities that are outsourced to specialist businesses
- 3. **Flexible workforce:** made up of part-time, temporary or seasonal workers that are employed when necessary



Advantages

- Allows for complete specialisation of the core: they will concentrate on innovations and gathering new ideas.
- The flexible workforce will be easier to hire and fire.
- Can save on staffing costs.
- Can hire experts in certain fields due to outsourced workers.

Disadvantages

- The insourced workers will suffer from lack of job security which might lead to decreased motivation and lower productivity.
- Not all members of the workforce will be able to fit into this organisation structure.

2.3 Leadership and management

2.3.1 Key functions of management

There are 5 major functions of management:

Planning: managers need to set strategic, tactical and operational objectives that affect different parts of the organisation.

Organising: managers need to make sure the business has sufficient resources to achieve objectives, which requires good organisation.

Commanding: managers need to make sure all individuals know which duties they are to perform and to provide instructions if needed.

Coordinating: managers must bring together the various resources to achieve objectives. Since many different tasks happen at the same time, managers need to make sure that all these are done at the specific time and place they are supposed to be done.

Controlling: managers have power to control for quality of different processes and change them if necessary. They also have the power to increase or decrease the scale of operations depending on the circumstances in the market.



2.3.2 Management vs. leadership

Management

Time and devotion

• Management is more 9–5.

Roles and responsibilities

- Administer day to day operations.
- Deal with how and when.

Influence on others

- Adhered to due to power.
- Focus on tasks.

Risk taking

- Follow predetermined rules.
- Tackles tasks by abiding by policies.
- Vision

• Deal with stable environments.

Leadership

- 24 hours a day.
- Handles strategic decisions.
- Accountable for more.
- More innovative.
- Deal with what and why.
- Inspire and motivate by example.
- Focus on people.
- More radical.
- Take risks to move the organisation forward.
- Create a culture of hope.
- Shine during times of change.

2.3.3 Leadership styles



Autocratic

- Leader holds as much power and decision-making authority as possible.
- Consults minimally with the senior management.
- Typical for companies that have a lot of unskilled and untrusted workers.
- Close supervision and detailed instructions.
- Usually associated with the tall organisational structure.

Advantages

 Authority is clear; decisions are made quickly.

Disadvantages

• Employees do not develop decision-making skills and cannot operate independently.





Paternalistic

- Leader aims to assume the role of a 'father' figure, where the employees are his or her family.
- Has great concerns for the employees and provides them with a sense of safety.
- Extreme loyalty and trust with employees and their full commitment.

Advantages

• Employees take great pride in the organisation, and do whatever is necessary so they don't let the leader down.

Disadvantages

• Leaders might not have an objective eye when assessing the performance of workers.



Democratic

- Employees are usually involved in the decision-making process, but the leader still has the final say.
- One of the most popular leadership styles since it is motivating for employees and they feel empowered and part of a team.
- Usually associated with the flat organisational structure and with project-based and shamrock organisation.

Advantages

 Workforce is motivated since they are consulted in the decision-making process.

- Since the workers are involved, decision-making process is longer.
- Not efficient when it comes to making quick decisions.





Laissez-faire

- In French: "to leave alone".
- A lot of freedom is given to the employees.
- Extremely democratic form of leadership.
- Tends to work when the workforce is extremely motivated, skilled, educated and open-minded.
- Usually associated with the flexible forms of organisational structures.

Advantages

• Employees enjoy the freedom this leadership style provides; they are more innovative and creative.

Disadvantages

- Interests of individuals might differ from the interest of the organisation.
- Reduced productivity if the workforce is not in the same 'mental state' as the leader.



Situational

- No leadership style is deemed the best.
- The type of leadership that will be pursued will depend on the situation.

Advantages

 In emergency situations, businesses might switch the leadership style to the most convenient one.

Disadvantages

 Changing leadership style too often might result in confusion of the workforce.



2.4 Motivation

Theorist	Theory	Findings
Taylor	Scientific management	Pay, above all is the main source of motivation
Maslow	Hierarchy of needs	Levels of human needs, from physiological to self actualisation
Herzberg	Two-factor theory	Hygiene factors (which do not motivate alone) and motivators
Adams	Equity theory	Workers are motivated if there is fairness in remuneration packages
Pink	Drive theory	Autonomy, mastery and purpose are the drivers of motivation in modern societies of the 21 st century

2.4.1 Taylor

- Employees are primarily motivated by money.
- Productivity can be improved by aligning output and efficiency targets with remuneration.
- Division of labour (scientific management): breaking down different aspects of a job or task and assigning different people to each particular part of the work.
- Piece rate system: workers are paid a standard level of output and receive a higher rating they exceed that level.

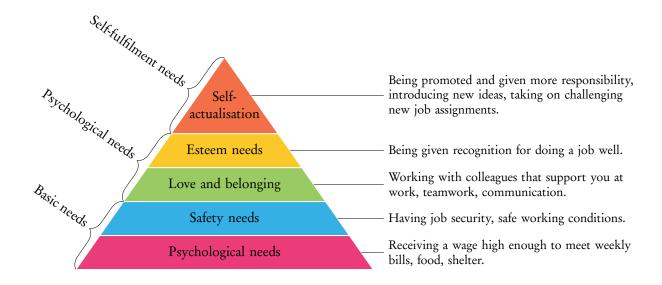
Drawbacks

- Ignores the non-physical contributions of workers.
- Hard to measure in some professions.
- Ignores non-financial factors that motivate people.
- Fails to acknowledge that workers can be innovative and independent.
- Entails monotonous tasks, leading to employee dissatisfaction.
- Sets clear goals for the workforce and the consequences of their work are transparent.
- Gives workers a sense of target.
- Does not take into account individual differences.
- Views workers as machines with only financial needs.



2.4.2 Maslow's hierarchy of needs

Maslow's theory is based on the **hierarchy of needs**, where every level of that pyramid has a certain class of needs.



Needs at the bottom of the pyramid are the basic ones as they are concerned with survival. Once these are satisfied, the worker moves to the next level, and once a level is 'passed', the needs on that level become less important. In practice, very few manage to reach the top of the pyramid, because in order to do so, all other needs must be fully satisfied.

Advantages

- Based on the level an employee is on, business can see what rewards are suitable for him.
- Workers feel like they are being taken care of, which increases productivity and motivation.

- Difficult for business to decide on a specific reward.
- Difficult to determine when a particular level of needs has been satisfied.
- Not feasible for all jobs to provide all levels of the hierarchy
- The levels of the hierarchy are difficult to quantify.
- Freelance workers do not have many of these things, but can still be motivated and successful.
- The model neglects to suggest what happens to people with all of these things, such as Bill Gates.



2.4.3 Herzberg's motivation-hygiene theory

In Herzberg's motivation theory, there are *two sets of factors* affecting people's motivation:

Hygiene factors: these are factors that need to be in place in order to remove workers' dissatisfaction with their job. These represent pay, working conditions, company policies, relationship with higher levels of the hierarchy, treatment at work etc. Improving these factors should remove dissatisfaction, but it will not motivate the workforce. If these are not met however, there will be a fall in productivity.

Motivators: these are factors that give workers job satisfaction. They represent a sense of achievement, chance of promotion, recognition of effort, responsibility etc. Improving these will make the workers more motivated and will lead to increased productivity.

- Job enlargement: giving workers variety in what they do.
- Job enrichment: giving workers more complex, challenging tasks to exploit their potential.
- Job empowerment: delegating decision making to workers over their areas of job, helping to boost morale.

Advantages

- Job enrichment.
- Makes clear for the business what needs to be done in order to remove dissatisfaction and improve motivation.

- Job enrichment may be expensive and difficult to organise.
- Workers may get used to improved pay/conditions and take these things for granted.
- Does not apply to all occupations such as low skilled/ paid jobs.
- Research sample included only high skilled workers, therefore findings don't necessarily apply.
- Not all employees want extra responsibility or stress.



2.4.4 Adam's equity theory

- Workers will naturally compare their efforts or rewards to those of others in the workplace.
- The degree of equity in an organisation is based on the ratio of inputs (contributions made by the employee) to outcomes (financial and non-financial rewards).

Degrees of equity

Equity norm: workers expect an equitable remuneration for their contribution in their jobs.

Social comparison: workers determine what is fair based on comparisons of their inputs and outcomes with those of their peers.

Cognitive distortions: workers who feel undercompensated become demotivated so might withdraw any goodwill, resulting in altering their effort or outputs.

Drawbacks

- Equity is subjective.
- Some people may be more sensitive to equity.
- Neglects to include demographic, psychological, and cultural variables.
- Scale of equity can only be so useful.

2.4.5 Pink

Pink's motivation theory relies on what psychologists call the 'third drive'. This suggests that businesses need to stimulate the intrinsic motivation which occurs when someone gets satisfaction from an activity itself, without threats or rewards from the outside. He identified three factors of the self-determination theory that motivate people:

Autonomy: workers need to be autonomous in order to be more motivated, which means that businesses need to provide an environment that permits employees to shape their own professional lives. This is done through flexibility of businesses; flexibility on when, how, who and what their employees do.

Mastery: businesses need to provide learning opportunities for their employees, where they will be able to be innovative. Employees will gain mastery when they are given tasks that matter to them and are neither too easy nor too difficult.

Purpose: people are motivated when they are able to see benefits of their work. In order to achieve this, businesses need to emphasise their purpose, and show the workers that they contribute to this purpose, which will in turn increase their motivation.



2.4.6 Types of financial rewards



Salary Regular fixed lump-sum payment to staff, typically paid monthly.

Advantages

- Provides job security.
- Workers know that they will receive a regular income.

Disadvantages

- Employees might not always be maximally motivated and productive.
- They know that if they do more or less the same amount of work every month, they will receive their fixed salary; this can reduce productivity.



Wages (time based) Staff is paid per hour of work (daily or weekly).

Advantages

- In case workers need to stay over hours, they will receive extra payment.
- workers feel their work is being valued.

Disadvantages

• The pay workers receive is not linked to the amount of output they receive; therefore, they might 'go slow' in order to make sure they work over hours to receive more income.



Wages (piece rate) Staff is paid per unit/batch of output.

Advantages

- Workers know that if they are more productive, they will be rewarded for that.
- They see that their work has a monetary value.

- Workers might concentrate more on quantity produced and less on quality.
- This might increase costs for the business as quality check/assurance systems would need to be put in place.





Commission Staff is paid with respect to their sales results – an employee gets a percentage for each unit sold.

Advantages

- The very nature of the financial reward is the advantage.
- Workers will try to achieve the best sales results possible, which would result in a higher financial reward, while the business benefits from higher sales.

Disadvantages

- External factors affecting sales (recession, inflation) affect the income of the workers, which is demotivating; there's nothing they can do in case they can't sell more goods because of recession or inflation.
- Financially oriented, staff might make arrangements with customers that put the organization in a disadvantageous position. (a banker might give out a short-term loan to a business without previously checking whether the business can pay for it, which is disadvantageous for the bank).



PRP (profit-related pay) The income of the employee depends on the profitability of the company.

Advantages

- It can be motivating for the workforce.
- If the business shares the profit of the whole organization with the staff, this gives them a sense of ownership over the business and belonging. The success of the company = their success.

Disadvantages

• External factors affecting sales (and thus profitability) of the business automatically affect employees, which can prove to be demotivating as they have no power over the factor causing decreased sales.





Performance Related Pay Rewards employees (in individual, teams or as a workforce) who meet certain goals

- Pay rise
- Performance bonus
- Gratuity

Advantages

- Creates incentives.
- Fair, since hard work is rewarded.
- Helps to develop a performance culture.

Disadvantages

- Targets can be unrealistic.
- Can be stressful.
- Inappropriate for jobs where quality overrides quantity (e.g., doctors).
- Non-financial motivators may be neglected.



Employee share ownership schemes Rewards employees by giving or selling them (at a discounted rate) shares in the company. This works well because that way, success of the company has a direct financial benefit to shareholders.

Advantages

- Keeps employees engaged.
- Helps retain staff.
- Makes employees feel responsible.

Disadvantages

• Might not yield direct profits.



Fringe payments (perks) Financial benefits to employees in addition to their wage or salary (e.g., health insurance, housing allowance).

Advantages

- Encourages employee loyalty.
- Help meet an employee's safety needs.
- Make workers feel valued as employers provide extra benefits to enhance wellbeing.

- Costly.
- People high up in the company will receive very expensive benefits.



2.4.7 Types of non-financial rewards



Empowerment Usually takes the form of managers giving their employees more responsibility and involving them in (or giving them) decision-making (powers).

Advantages

- Employees see empowerment as motivating.
- Giving them more responsibility and involving them in the decision-making process usually makes them feel motivated, as they are glad to see that their contribution is valuable to the business. They also see the opportunity for promotion in the future as a result of empowerment.

Disadvantages

 There is a danger of the employee making decisions that can put the business in a disadvantageous position.



Teamwork Involves putting employees in groups where employees are encouraged to work collaboratively with each other in order to fulfil a task.

Advantages

- Workers might feel stimulated by others in the group, which increases their productivity.
- Working in a group also initiates feeling of belonging and common effort which can also be motivating (refer to Maslow's theory).

- When teams fails, the whole organization suffers.
- Disputes between employees in a team can reflect on the whole of the organization. Not every organization can use this non-financial reward (consider different corporate structures).





Job enrichment (type of job enlargement) This is an attempt to give employees greater responsibility and recognition by expanding their role in the production process; involves giving an employee more work to do of a similar nature.

Advantages

 Having more recognition for their work motivates the workers (check different motivation theories).

Disadvantages

- This non-financial reward cannot be used in all contexts.
- Not all employees feel motivated by this. In some organizations, low-skilled workers that do repetitive jobs would not usually be interested in this type of reward.



Job rotation (type of job enlargement) This involves an employee changing jobs and tasks they do from time to time, in order to give them a greater sense of the whole production process.

Advantages

 This can be very motivating for the workforce, as they are able to see how the tasks they work on everyday are important for the whole of the business.

- Job rotation might be costly for the business.
- In order to allow workers to work in different departments, they will need training.



2.5 Organisational (corporate) culture

2.5.1 Organisational culture



Organisational culture the values, attitudes, beliefs, meanings and norms that are shaped by people and groups within the organisation

2.5.2 Determinants of organisational culture (NORMS)

Nature of the business the purpose and direction of the business, declared in the aims, mission, and objectives.

Organisational structure the tallness or flatness of the structure can create a certain culture.

E.g., authoritative, democratic etc.

Rewards proper remuneration can create a strong and united culture, without fair remuneration it can create workforce hostility.

Management styles the degree of centralisation in an organisations affects how workers deal with issues, and in what way.

Sanctions few sanctions can cause slack workers. However too much rigidness can cause resentment towards the organisation.

2.5.3 Four types of organisational culture

Power cultures

- Dominant individual group holding decision making power.
- Usually flat, with a wide span of control.
- Formal job titles are less regarded since real power lies with few.
- Decision making is quick.

Task culture

- Focus is on getting work done.
- No single source of power.
- Individuals are empowered and have direction.

Role culture

- Exists in structured organisations.
- Jobs are clearly stated in formal job descriptions.
- Clear accountability.

Person culture

- When staff in similar culture form groups to share knowledge and skills.
- Found in larger organisations with various branches.



2.5.4 Organisational cultural clashes

Reasons for organisational cultural clashes

Growth: internal growth may lead to a more formal hierarchical organisational structure. Bigger companies also have to deal with bureaucracy and power orientation.

Mergers and acquisitions: external growth may cause one of the firm's culture to prevail, or to develop a new hybrid culture.

Change in leadership: leaders drive the strategic direction and define organisational culture (NORMS).

- Different comfort levels with diversity.
- Different degrees of formality.
- Different languages.
- Different leadership styles.
- Different orientation to tasks and to people.
- Different practices.
- Different sense of time.

Consequences of organisational cultural clashes

Misunderstandings and miscommunication: cultural clashes may be issues if there are language barriers and foreign concepts.

Unhappy Staff: cultural clashes and the potential conflict can cause job dissatisfaction. **Compromises** must be reached in order for businesses to move forward.

Resistance to change may occur when staff are too accustomed to the current culture. Training/hiring costs if new staff are needed.

National culture clashes: firm may find it difficult expanding overseas due to the norms of different countries.

2.5.5 Individuals and organisational culture

Individuals changing culture

- Managers/directors have bigger influences on culture
- Workforce diversity can shape culture
- Making the vision/mission clear ensures the workforce stands for the same values.
- Motivation/engagement can lead to a motivated and committed culture.
- Role modelling can help develop the desired organisational culture.

Culture changing individuals

- The culture created by CEO's is able to change individuals within the organisation as they are influenced by what surrounds them at work.
- Power distance can affect the characteristics of workers (e.g., develop initiative, have leadership qualities etc.)
- Organisational culture also affects the ethical business behaviour of workers.



2.6 Employer and employee relations

2.6.1 Employee/employer representatives



Trade union a group of employees who unite to protect their rights and welfare. It is effective because there is strength in numbers.

Employer representatives individuals or organisations that represent the management team in collective bargaining processes. This can be an internal (e.g., a member of the management team) or an external party (a hired individual).

2.6.2 Industrial/employee relation methods used by employees

Collective bargaining: the term collective bargaining is used to describe the negotiation process between the employer and employee representatives on the terms and conditions of employment in a particular business.

Work to rule: this occurs when workers do not carry out any duties that are not in their employment contract. In other words, the staff only carries out tasks explicitly stated in their contract, which results in the tasks not being carried out efficiently.

Go slow: this approach involves workers deliberately slowing down production while still working within the terms of their contract.

Overtime ban: this ban limits workers' hours to the agreed contract of employment for normal hours. It is usually used by employee representatives to demonstrate to management that the workforce is determined to take further collective action, such as strikes, if their demands are not met.

Strike action: this is the ultimate sanction used by the workforce, involving a stoppage in the production process, which can prove disastrous for a business.

Walkout: a type of strike action where employees collectively or independently leave the workplace as a disapproval to something.



2.6.3 Industrial/employee relation methods used by employers

Lock-outs: this involves employers closing the factory for a period of time. Employees' wages may not be paid during this period. This action might adversely affect the public image of the company.

Dismissal: in some cases, employers might threaten employees with dismissal. Each country usually has laws that set out the criteria under which it is unfair to dismiss employees for taking industrial action.

Changes of contract: If possible, contracts can be changed, and those who disagree with the new terms are denied the opportunity to prolong their employment. This may be seen as coercion.

Closure: In response to strike actions, managers can close the business. This is extreme, but necessary when other approaches have been exhausted.

2.6.4 Sources of conflict in the workplace

- Varying needs and wants.
- Different perceptions of how things occur and what is considered fair.
- Values.
- Power: exploitation of authority.
- Feelings and emotions.

2.6.5 Approaches to conflict resolution

Conciliation and arbitration: conciliation involves inviting an independent third party, the arbiter, to come in to conciliate the dispute. Both sides outline their positions and provide evidence, which will be assessed and the arbiter will make a judgement. Conciliation does not require a third-party.

Industrial democracy: running an organisation with the participation of the workforce. For example, sharing ownership of the means of production or having trade union representatives in company boards and governing bodies.

No-strike agreement: this happens when a trade union agrees not to undertake industrial action unless procedural steps have first been undertaken. This usually happens when the management team has agreed to certain conditions of the employee representatives.

Single-union agreement: recognising one union as the only representative of employees. This saves managers the difficulties of negotiating with several unions.



2.6.6 Reasons for resistance to change

Self interest: people might worry about the implications for themselves as opposed to the beneficial changes for the organisation.

Low tolerance for disruption and uncertainty.

Misinformation causes misunderstandings because the purpose of change has not been properly communicated.

Interpretations of circumstances: different interpretations of the situation can lead to varying perceptions.

2.6.7 Dealing with resistance to change

Education and communication: give good, clear forewarning and maintain transparent.

Participation and involvement: making employees feel a part of the process will avoid resistance.

Facilitation and support: helping employees to deal with the changing situation.

Negotiation and agreement: using incentives to reduce resistance, or make compromises.

Manipulation and co-option: use a representative of those resisting change into the process and they can help resistors to accept change.

Coercion: force staff into accepting change (e.g., threatening dismissal or transferring employees). This occurs implicitly, for legal reasons.





ACCOUNTS AND FINANCE



3.1. Sources of finance - Internal sources of finance - External sources of finance	67
3.2. Costs and revenues - Revenue Streams	70
 3.3. Break even analysis - Contribution - Break even analysis - Determining the break-even point - Causes for changes in break-even - The benefits and limitations of break-even analysis 	71
 3.4. Final accounts - The purpose of accounts to different stakeholders - ACCA's 5 ethical principles of accounting - The profit and loss account - The balance sheet - Types of intangible assets - Depreciation 	74
3.5. Profitability and liquidityratio analysis- Profitability ratios - Liquidity ratios	78
3.6. Efficiency ratio analysis	80
 3.7. Cash flow - Profit vs. cash flow - The working capital cycle - Cash flow forecasts - The relationship between investment, profit and cash flow - Dealing with cash flow problems 	83



	3.8. Investment appraisal	85
	 Payback period - Average rate of return (ARR) - Net present value (NPV) - Qualitative factors influencing investment decision 	
	3.9. Budgeting	90
_	Importance of budgets - Cost and profit centresVariance analysis	



3.1 Sources of finance

Note: Never use vague terms such as "money" in your exam! "Money" can refer to many different concepts like investment, profit, cash etc. The examiner assumes that you studied for the exam — when they read "money" instead of "profit" it could really lower your grade by showing that you are not familiar with the terminology.

Businesses have different types of expenditures:

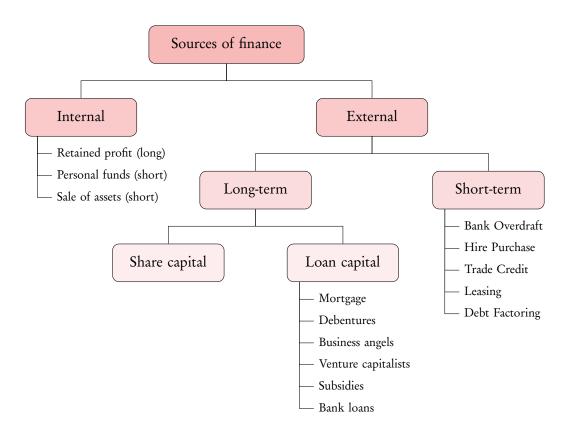


Capital expenditure finance spent on fixed assets. Items of monetary value that have a long-term function so can be used repeatedly. E.g., land, buildings, machinery.

Revenue expenditure payments for the daily running of a business.

E.g., wages, raw materials, rent, etc.

It also includes the indirect costs such as insurance and advertising.





3.1.1 Internal sources of finance



Personal funds using the money that you personally own. Most commonly used for sole traders and partnerships.

Retained profits the profits (after tax and dividends) that the organisation keeps to use for the business.

Sale of assets firms can sell their dormant assets that have been replaced to raise capital. Examples include: old machinery, unused land or buildings etc. Sometimes, fixed assets can be sold to survive liquidity.

3.1.2 External sources of finance



Share capital the money raised from selling shares of the company. The main sources of finance for a limited liability company. This can provide lots of finance.

Selling Shares: private limited companies cannot sell their shares to the general public. If they want to they can 'go public' by floating their shares on the stock exchange. This is known as initial public offering (IPO). Existing companies can raise further finance by selling more shares in a share issue. However by issuing shares, ownership and control of the business becomes diluted.

Loan capital

Overdrafts: allows a business to temporarily overdraw on its bank account, i.e., to take out more money than it has in its account.

Debentures: the holder of a debenture is a creditor of the company, not an owner. This means that holders are entitled to an agreed fixed rate of return, but have no voting rights and the amount borrowed must be repaid by the expiry date.

Mortgages: only limited companies can raise funds from the sale of shares and debentures. Smaller firms need long-term finances to purchase the premises, a purpose which mortgages are designed for. It is usually a long-term loan from a financial institution (like a bank) and the lender must use land or property as security on the loan. (*Note:* Mortgages are specialised long-term loans **only** for the purchase of premises, not machinery for example)

Grants: governmental financial gifts to support business activities. These tend to be offered to eligible business in one-off payments.



Subsidies: governmental grant to reduce costs of production, generally to provide benefit to society. This tends to be done for essential products and services such as agricultural goods, public transport etc. Subsidies do not cut into profit margins of the producer.

Debt factoring: when a firm sells its products, it issues an invoice stating the amount due. Debt factoring involves a specialist company (called a factor) providing finance against these unpaid invoices. So, when a debtor fails to pay its bill in time, the company turns to the factor and asks for the return of these funds, which the factor does immediately. However, when a customer pays the bill in full, the factor would usually keep 20% of the value of the invoice.

Venture capital: high risk capital invested by venture capital firms usually at the beginning of a business idea. They find small businesses with high growth potential. These firms seek businesses with convincing and coherent plans to make the risk of investment worthwhile. They then receive profit in return from their investment.

Business angels: usually wealthy individuals who invest their money in businesses with high growth potential. They provide funding and in return tend to take a proactive role in the business and receive profits until the business can buy out the stake owned by the business angel.

Advantages

Hire purchase

• Quick and easy to acquire equipment.

Trade credit

• An interest free source of finance.

Leasing

- No large sums of money need to be allocated for the purchase of the equipment.
- Useful when equipment is used occasionally.
- Maintenance is not the responsibility of the user.

- Interest rates are higher.
- The good can be taken away from the buyer if their payment is late.
- The cost of goods can be higher if paid for at a later date.
- Delaying the payment can result in a poor relationship between the firm and its suppliers.
- In the long term, it is more expensive than the outright purchase.
- Interest rates are higher.
- Not able to secure any loans with another institution on assets that are leased.



3.2 Costs and revenues



Fixed costs cost of production paid, regardless of production levels. Fixed costs can change, but this is independent of output levels. E.g., rent, bank loans, lighting, market research, salaries.

(Total) Variable costs the costs of production, that change in proportion with the level of output or sales.

E.g., raw materials, labour cost per item.

Total variable $cost = Average variable cost \times Quantity$

Total costs the sum of the fixed costs and the total variable costs to produce a product.

Total cost = Fixed costs + Variable costs

Semi-variable costs contain elements of fixed and variable costs. They tend to change only when production or sales exceed a certain level of output.

E.g., Wi-fi up to 20 GB, when you exceed 20, there is extra charge.

Direct costs costs specifically related to a certain project or output of a product, without which the costs wouldn't exist.

E.g., raw materials.

Indirect costs (overheads) costs that can't be clearly linked production or sale of a single product.

E.g., lighting, admin staff salaries, stationary.



3.2.1 Revenue Streams



Revenue streams the locations in which money can come from.

Sales revenue = $\frac{\text{Price} \times \text{Quantity sold}}{\text{Quantity}}$ Average revenue = $\frac{\text{Total revenue}}{\text{Quantity}}$

Average revenue = Price

- Advertising: e.g., Google or YouTube ads.
- Transaction fees: e.g., credit card companies.
- Franchise costs and royalties: the amount paid to a brand to use its name and image.
- Sponsorship revenue.
- Subscription fees.
- Merchandise: e.g., football kits.
- Donations.
- Interest earnings: bank interest.
- Subsidies.

3.3 Break even analysis



Break-even analysis used to determine what quantity of a particular good a business needs to produce in order to cover all the costs of production (to "break-even").

3.3.1 Contribution



Total contribution the amount of money left over after variable costs have been subtracted from revenue. The money contributes towards fixed costs and profit.

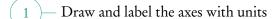
Total contribution = (Selling price – Average variable cost) \times Quantity

Total contribution = Total revenue — Total variable costs

Contribution per unit = Selling price — Average variable cost



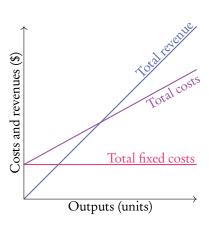
3.3.2 Break even analysis

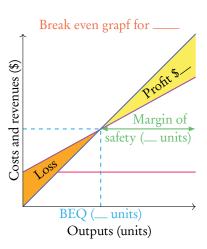


- 2 Draw the total fixed costs line (usually given)
- 3 Draw the total costs line
- 4 Draw the total revenue line



- 6 Label the margin of safety and units
- 7 Identify the areas of profit and loss on the graph
- 8 Title the graph





3.3.3 Determining the break-even point

Using the TR = TC rule

The break even quantity can be calculated by comparing total sales revenue with total costs. Therefore:

Total variable
$$cost = Average variable cost \times Quantity$$

Total revenue = $Price \times Quantity$

Using the contribution per unit rule

The quickest method

$$Break-even = \frac{Fixed costs}{Contribution per unit}$$

Interpretation of a break-even chart

Look at a chart and estimate the level of break-even.



Other uses of break-even charts include:

Target profit: how many units of output need to be produced to generate a certain level of profit?

$$Q = \frac{Fixed Costs + Target Profit}{Contribution per unit}$$

Break-even price: how much do we need to charge for out product in order to break-even?

Break-even price =
$$\frac{\text{Total Cost}}{\text{Output}}$$

Price needed to reach a target profit: what price does a business need to charge in order to reach a target rate of profit?

$$Price = \frac{Profit \ Target + Total \ Cost}{Output}$$

Margin of safety

The margin of safety is the range of output between the break-even output and the current level of output (assuming this level of output is above the break-even point), over which profit is made. Business would want to calculate their margin of safety in order to know by how much sales could fall before a loss is made. Naturally, the larger the margin of safety the better. We calculate it by subtracting the break-even output from the current level of output.

Margin of safety = Current level of output — Break-even output

3.3.4 Causes for changes in break-even

- Level of demand may change.
- Reducing prices to increase demand may at fist be effective, but it is unsustainable.
- Profit depends on the level of risk involved.
- Innovation and the introduction of new technologies can easily affect break-even.
- Luck.



3.3.5 The benefits and limitations of break-even analysis

Advantages

- Works well for businesses with standardised products.
- Works well for businesses in one single market.
- Works well for pre-order products.

Disadvantages

- Assumes cost functions are linear but in reality economies of scale affects costs.
- Assumes that no discounts will be made.
- Assumes all output is sold.
- Static.
- Garbage in garbage out.
- Qualitative factors can affect break-even.
- Only suitable for single product firms.

3.4 Final accounts

3.4.1 The purpose of accounts to different stakeholders

Shareholders: share owners are interested to see where money was spent, and the return on investments. They can then decide whether to hold, sell or buy more shares.

Employees: staff might want to assess the likelihood of pay increase and job security.

Managers: use financial accounts to judge the operational efficiency of their organisations. It can be useful for target setting and strategic planning.

Competitors: rivals are interested in the final accounts to make comparisons of financial performance.

Government: tax authorities examine accounts of businesses, especially large multinationals to ensure they pay the right amount of tax.

Financiers: financial lenders such as banks or business angels scrutinise the accounts before providing any funds.

Potential investors: private institutional investors use accounts and ratio analysis to assess whether investments would be financially worthwhile.

3.4.2 ACCA's 5 ethical principles of accounting

- Integrity.
- Objectivity.
- Professional competence and due care.
- Confidentiality.
- Professional behaviour.



3.4.3 The profit and loss account

Profit and loss account for the ______ for the year ended 1 April 20___

 \rightarrow OS

→ P

 \rightarrow NPBT = NPBIT - interest

 \rightarrow NPAIT = NPBT - tax

Sales revenue: 450Opening stock: 200

Purchases: 100Closing Stock: 100

Expenses: 150Interest: 8

Sales revenue $450 \rightarrow SR$ Cost of goods sold $\rightarrow COGS$

Opening stock 200
Purchases 100

Closing stock 100 \rightarrow CS \rightarrow COGS = OS + P - CS

Gross profit $250 \rightarrow GP = SR - COGS$

Less expenses 150 \rightarrow E

Net profit before interest and tax $100 \rightarrow NPBIT = GP - E$ Less interest 8

Net profit before tax 92

Less tax (10%) 9.2

Net profit after interest and 82.8 tax

 Dividends (30%)
 24.84

 Retained profit (70%)
 57.96

Trading account
Shows the difference
between revenue and
production costs, thus
showing gross profit

Profit and loss account Shows the net profit of a business at the end of a trading period. This shows the surplus made

Appropriation account Shows how the net profit after interest and tax is distributed

- Shows historical performance, there is no guarantee that future performance is linked to past performance or success.
- Window dressing can occur (i.e., legal manipulation of accounts to make them look financially more attractive).
- There is no internationally devised formula, therefore its not completely transferable.



3.4.4 The balance sheet

Balance Sheet for		as at
Со	mpany	Date :
	\$	
Fixed assets		
Premises	1500	
Machinery and equipment	500	
	2000	→ Total fixed assets
Current assets		
Cash	250	
Debtors	30	
Stocks	200	
	480	→ Total current assets
Current liabilities		
Short term loans	15	
Trade creditors	250	
Taxation	35	
Dividends	20	
	320	→ Total current liabilities
Net current assets	160	→ AKA Working capital = current assets — current liabilities
Total assets <i>less</i> current liabilities	2160	→ Fixed assets + current assets - current liabilities
Long term liabilities		
Mortgage	500	
Debentures	500	
Bank loans	100	
	1100	→ Total long term liabilities
Net assets	1060	$\rightarrow \begin{cases} \text{Net assets} = \text{fixed assets} + \text{working capital} - \text{long term liabilities} \\ \text{Net assets} = \text{total assets} - \text{total liabilities} \end{cases}$
Financed by:		
Share capital	1000	
Retained profit	60	
Equity	1060	→ Equity = Net Assets
Equity	1000	→ Equity = Net Assets

- Balance sheets are static, and so the financial position of a firm may be largely different every day.
- Figures are not completely accurate, the value of fixed assets can only be known once they are sold.
- Since there is no specific format globally, it may be difficult to compare balance sheets with competitors.
- Not all assets are included in balance sheets, including intangible assets and the value of human capital.



3.4.5 Types of intangible assets

- Brand.
- Patents.
- Copyright.
- Goodwill.
- Registered Trademarks.

3.4.6 Depreciation

Depreciation indicates how much of fixed asset's value has been used up. Machinery the business bought a year ago will not have the same value now. This is because the asset is used in production. Two methods of calculating depreciation:

Straight line method

This method assumes that a fixed asset depreciates by the same value every year.

$$Depreciation allowance = \frac{Original cost - Residual value}{Expected life (years)}$$

Thus, if a piece of machinery for ABC Ltd. originally costs €28 000 and the residual value is estimated at €4 000 and expected life at 4 years, depreciation allowance would be:

Depreciation allowance =
$$\frac{\text{€28000} - \text{€4000}}{4} = \text{€6000}$$

So, how do we see what the value of a fixed asset will be in those 4 years? We make a table, where following the idea of the straight line method, we subtract the same depreciation allowance each year.

This is how you should present it in your exam:

Year	Depreciation Allowance (euro)	Net book value (euro)
0	_	28000
1	6000	22000
2	6000	16000
3	6000	10000
4	6000	4000

Advantages

- Simple.
- Quick.
- Most common, especially in Europe.

- Assumes that the depreciation is linear.
- Not realistic for something to decrease at an equal amount each year.



Reducing balance method

This method assumes that the depreciation charge in the early years of an asset's life should be higher than in later years, which is more realistic. To do this, the asset must be written off by the same percentage rate each year.

Year	Depreciation Allowance (euro)	Net book value (euro)
0	_	28000
1	$=28000 \times 40\% = 11200$	16800
2	$= 16800 \times 40\% = 6720$	10080
3	$= 10080 \times 40\% = 4032$	6048
4	$=6048 \times 40\% = 2419$	3629

Advantages

• Can give a more accurate figure.

Disadvantages

- More realistic in representing the falling market value of a fixed asset over time.
- Not as straight-forward.
- Depreciation value is subjective.

3.5 Profitability and liquidity ratio analysis

3.5.1 Profitability ratios

Profitability ratios help show how well a business is doing and they are focused on profit, capital employed and total revenue. The profit figure alone is not a useful performance indicator because it is necessary to look at the value of profit in relation to the value of turnover or the amount of money that has been invested in the business.

Gross profit margin

Shows the gross profit made on sales turnover.

Gross profit margin =
$$\frac{\text{Gross profit}}{\text{Sales revenue}} \times 100$$

Higher gross margins are preferable to lower ones. It is possible to rise the gross profit margin by raising turnover relative to cost of sales, for example, by increasing price. *Note:* Businesses that have high stock turnover tend to have lower gross profit margin compared to those businesses whose stock turnover is lower.

Improving gross profit margin

- Raise revenue.
- Reduce direct costs.



Net profit margin

Measures how well a business controls its overheads and cost of sales. If the difference between gross margin and net margin is small, this suggests that overheads are low. This is because net profit equals gross profits less overheads.

Net profit margin =
$$\frac{\text{Net profit before interest and tax}}{\text{Sales revenue}} \times 100$$

Again, higher margin is better than lower.

Improving net profit margin

- Negotiate payment terms with creditors and suppliers. This may improve working capital.
- Negotiate discounts for paying creditors on time.
- Negotiate cheaper rent.
- Reduce indirect costs such as not playing for first class, or reducing advertising or stationary.

Return on capital employed (ROCE)

Compares the profit made by the business with the amount of money invested. If the return is high, this means that the business is profitable, which would yield high dividends that current shareholders and potential investors are on the lookout for.

$$ROCE = \frac{Net profit before interest and tax}{Capital employed} \times 100$$

The higher the ROCE, the bigger the return.

Improving ROCE

- Reduce the amount of capital employed (i.e., loan less money).
- Increase profitability of the company.

3.5.2 Liquidity ratios

Liquidity ratios illustrate the solvency of a business. In order to determine whether or not it is in a position to repay its day-to-day debts, the short-term assets and liabilities need to be focused on. The point of these ratios is to show whether the business always has enough current assets to cover any immediate bills that arise (current liabilities).



Current ratio

$$Current ratio = \frac{Current assets}{Current liabilities}$$

If the current ratio is equal to 1, it means that the business has the exact amount of current assets to cover the current liabilities. However, this is not a favourable state because if a sudden increase in current liabilities occurs, the business will not be able to afford it and might run into bankruptcy. Having too high of a ratio is also not good. For example, if the current ratio is 2, that means that the business has twice as many current assets to cover current liabilities, which means that the business is not using the resources efficiently. Managers should aim at a current ratio of 1.5.

Acid test ratio

This is a more severe test of liquidity as it excludes stock from current assets.

Acid test ratio =
$$\frac{\text{Current assets-stock}}{\text{Current liabilities}}$$

If the ratio is less than 1, this means that the business' current assets less stock cannot cover the current liabilities of the business. Checking this ratio is important because stock are not guaranteed to be sold and they may become obsolete or deteriorate, which means that business will no longer be able to rely on stocks to improve their working capital. Therefore, firms should aim to have an acid test ratio at around 1.

Improving Liquidity Ratios

- Raising the value of current assets.
- Reducing the value of current liabilities.

3.6 Efficiency ratio analysis

Efficiency ratios are used to measure how effectively a business employs its resources.

Stock turnover

Measures how quickly a business uses or sells its stock. It is generally considered desirable to sell stock as quickly as possible and we assess it by calculating how many days it takes the business to sell the stock.

$$Stock turnover = \frac{Average \ stock}{Cost \ of \ goods \ sold} \times 365$$



The number we get will be in days. Higher stock turnover means that profit on the sale of stock is earned more quickly, which allows these businesses to operate on lower profit margins. Lower stock turnover might be due to piling up of stock, slow moving stock, a lack of control over purchasing etc.

Improving stock turnover

- Holding lower stock levels, to replenish it more often.
- Divestment (disposal) of stocks which are slow to sell i.e getting rid of obsolete stock.
- Reducing the range of products being stocked by only keeping the best selling products.

Creditor days

This ratio measures how quickly a business pays its debts to its suppliers and other short term creditors.

$$Creditor days = \frac{Creditors}{Cost of goods sold} \times 365$$

Higher creditor days means that it takes the business longer to pay for its debts, which can be a benefit, but the business needs to be careful not to damage its relations with the supplier (he might not allow credits in the future). In general, creditor days should be higher than debtor days; this will improve cash flow.

Improving creditor days

- A too high creditor days ratio may incur financial penalties.
- Negotiate with suppliers.

Debtor days

Measures the efficiency of a business' credit control system. It gives the average number of days it takes to collect debts from customers.

Debtor days =
$$\frac{\text{Debtors}}{\text{Total sales revenue}} \times 365$$

The debtor days ratio should be as low as possible, as this would mean that it takes the business a very short period of time to collect its debts.



Improving debt collection

- Impose surcharges on late payers.
- Give debtors incentives to pay earlier such as giving a discount to those who pay their bills before the due date. Many firms may encourage direct debit or autopay to ensure that deadlines aren't forgotten.
- Refuse any further business with clients until payment is made.
- Threaten legal action, extreme but effective for common late payers.

Gearing ratio

The gearing ratio shows the relationship between the loan capital and share capital of the business. In other words, how much the company relies on internal and external sources of business when it comes to choosing the source of finance to invest in the business.

Gearing ratio =
$$\frac{\text{Loan capital}}{\text{Capital employed}} \times 100$$

If this ratio is high, we say that the company is **high geared**, which means that the business relies much more on loan capital than share capital when it comes to investing. When the number is low, we say that the company is **low geared** and it relies on share capital much more.

Improving gearing ratio

- A too high or too low gearing ratio is not good, it needs to be somewhere in between.
- For higher GR: depend on external sources of finance.
- For lower: repay creditors.

Advantages

- The burden of loan repayments is reduced (the business does not need to pay interest, because it is using share capital more).
- Volatile interest rates are not a problem anymore (if the interest rates increase, there is no issue as the business does not rely on loans that much.
- Ownership not diluted.
- Once loans have been repaid, the company's debt is much reduced (this is because dividends are signed off whenever there is profit).

- Dividend payments have to be met indefinitely (which might not be such a big disadvantage, as the shareholders can agree on lower dividends in order to increase retained profits and thus offer more investment in the business if it proves to be quite profitable).
- Ownership of the company can be diluted (selling shares puts the company at risk of being bought by an external party).
- Interest payments need to be met.
- Changing (volatile) interest rates can cause the repayments to increase, worsening the financial situation of the company, causing insolvency).



3.7 Cash flow

3.7.1 Profit vs. cash flow



Cash flow a continuous movement of cash in and out of the business.

Profit the positive difference between a firm's total sales revenue and its total costs of production. When a sale is made, this contributes towards paying the firm's costs. Any sales beyond breakeven is profit.

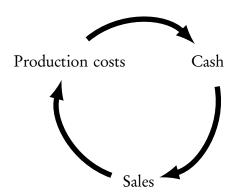
Be careful: cash is not just cash (i.e., physical banknotes and coins) but also everything that can be expressed in form of cash, such as sales, bank loans, over heads, tax, insurance etc.

Note: cash flow and profit is not the same thing! Profit is calculated as total revenue minus total costs. Cash flow represents all the cash going in and out of the business.

3.7.2 The working capital cycle



Working capital cycle shows the cash flows into and out of the business. As you can see, there are lags between the receipt of the cash and payments made by a business.







Cash flow forecast the prediction of all expected receipts (inflows) and expenses (outflows) of a business over a future time period, which shows the expected cash balance at the end of each month.

		July	Aug	Sept	Oct	Nov	Dec
Previous month's closing balance	Opening balance	5000	3000	300	(1400)	(2600)	(600)
	Cash inflows						
	Cash sales revenue	6000	5000	6500	6800	7500	9500
	Other income	0	0	0	0	4000	0
	Total inflows	6000	5000	6500	6800	11500	9500
	Cash outflows						
	Stock	2500	2200	2700	2700	3000	3300
	Labour costs	3500	3500	3500	3500	3500	3500
	Other costs	2000	2000	2000	1800	1800	2200
	Total outflows	8000	7700	8200	8000	8300	9000
Inflows — outflows	Net cash flow	(2000)	(2700)	(1700)	(1200)	3200	500
Opening balance + net cash flow	Closing balance	3000	300	(1400)	(2600)	600	1100



3.7.4 The relationship between investment, profit and cash flow

When investing there are major startup costs into a business that must be considered. A new business may be cash-rich, as in what it is selling is making profit, however profit may be low due to the costs of rent, fixed assets, training, recruitment, and supplies. Investment affects cash flow changes when it buys and sells investments, and when it obtains finance for investments.

Cash flow is vital for investment opportunities because poor cash flow results in missed opportunities for investment. Effective cash flow management and product portfolio management are therefore necessary prerequisites before the business can turn an investment into profit for the owners.

3.7.5 Dealing with cash flow problems

Reducing cash outflows

- Seek preferential credit terms.
- Seek alternative suppliers.
- Better stock control.
- Reduce expenses.
- Leasing.

Improving cash inflows

- Tighter credit control.
- Cash payments only.
- Change pricing policy.
- Improved product portfolio.

Seeking alternative sources of finance

- Overdrafts.
- Selling fixed assets.
- Debt factoring.
- Government assistance.

3.8 Investment appraisal



Investment the purchase of capital goods used in production of other goods (e.g., machinery, vehicles). It is an expenditure by the business that is likely to yield a return in the future.

Investment appraisal describes how a business might objectively evaluate an investment project to determine whether or not it is likely to be profitable. It also allows business to compare different investment projects.



3.8.1 Payback period

Payback period indicates the amount of time it takes for a project to recover or pay back the initial outlay.

How do I calculate and present it in the exam?

Table 3.1: Payback Period for Project A (\$)

Year	Payback	Net Cash flow
0	(1 000 000)	(1 000 000)
1	(900 000)	100 000
2	(750 000)	150 000
3	(500 000)	250 000
4	(200 000)	300 000
5	50 000	250 000
6	250 000	200 000
7	450 000	200 000

This is the official layout the IB wants you to follow. So, whenever you have to present payback period, present it like this!

Payback Period =
$$\frac{\text{Payback in last negative year}}{\text{Net cash flow in first positive year}} \times 12 = \frac{200000}{250000} \times 12 = 9.6 \text{months}$$

Thus, Payback in exactly 4 years and 9.6 months.

What do all these numbers mean?

Net cash flow column will be given to you in the case study. It is the cash flow the business over the years. Payback column is what you use to calculate in what time the project will be repaid. You start with 0 (year in which business purchased project A) and the number is negative as that represents expenditure. In this case, it cost \$500.000. We use brackets to indicate that it is a negative number. In year 1, it is expected that the business will have a cash influx of \$100.000 – so, what we do is simply add that to the initial expenditure. We repeat this over and over again until we reach a year under the 'payback' column that's positive or zero. This means that in that year, with the expected cash influx given, we have repaid investment in full (in our example, that is year 4). Now we know that we expect to repay project A in year 4, but we do not know in exactly how many months. So, we divide the 'payback' amount for that year by the expected cash flow for that year (in this case these are numbers 0 and 150). We then multiply all this by 12. In our case, the payback period is exactly 4 years and 9.6 months.

If we used this method to appraise different investment projects, we would choose the investment that pays back the fastest.



3.8.2 Average rate of return (ARR)

ARR measures the net return each year as a percentage of the capital cost of the investment.

How do I calculate and present it in the exam?

Table 3.2: Average rate of return for Project A (\$000)

Year	Net Cash flow
0	(50)
1	10
2	10
3	15
4	15
5	20
Net profit	70 - 50 = 20
Net profit per annum	$\frac{20}{5} = 4$
ARR	$\frac{4}{50} \times 100 = 8\%$

What do all these numbers mean?

Net cash flow column will be given to you in the case study. It is the cash flow businesses expected over the years. Again, you start with 0 and since the number is negative it represents expenditure (in our case \$50000). In the net profit section, all we did was add up all the expected cash influx in each year and then subtract the value of the investment. Then we calculated the net profit per annum — what the profit of the firm will be in those five years after subtracting the value of the investment (in our case \$20000/5 years = \$4000). Then we calculate the ARR using the formula:

$$ARR = \frac{\frac{\text{Total returns} - \text{Capital cost}}{\text{Years of use}} \times 100}{\text{Capital cost}}$$

We got that the ARR is 8%.

If we used this method to appraise different investment projects, we would choose the investment that has the highest average rate of return.

Again, this is what the examiner expects from you when it comes to presenting ARR, so present it this way.

Don't worry about memorizing this formula – it will be in your formula booklet in the exam.



3.8.3 Net present value (NPV)

The NPV method is very realistic, as it makes use of discount tables which show us how much the future earnings are worth in today's terms. So, this method makes use of the discounted cash flow, instead of the net cash flow we used in the previous 2 methods. Thus, it shows the effect of time on the rate of return of an investment project.

How do I calculate and present it in the exam?

Table 3.3: NPV for project A at 20% discount rate (\$000)

Year	Net Cash flow	Present value
0	(20)	(20)
1	5	$5 \times 0.83 = 4.15$
2	8	$8 \times 0.69 = 5.52$
3	10	$10 \times 0.58 = 5.8$
4	12	$12 \times 0.48 = 5.76$
Present Values	4.15 + 5.52 + 5.8	8 + 5.76 = 21.23
Net present value (NPV)	21.23 - 20 = 1.2	23

Net present value (NPV) = \sum Present values of return – Original cost

What do all these numbers mean?

The case study will tell you what discount rate to use (all the discount values will be provided in your formula booklet). So, what you need to do is multiply every year's net cash flow with the number from the discount table. After doing that, we sum up all the values and we get the present value of the predicted net cash flow for every year. Finally, to find the NVP, subtract the value of the investment from the present value cash flow.

If we used this method to appraise different investment projects, we would choose the investment with the highest NPV.



Advantages

Payback period

- Simple, cheap, not time consuming.
- Indicates when the investment will be paid off.

ARR

- Clearly shows the profitability of the project.
- More realistic.

NPV

• Very realistic.

Disadvantages

- Ignores the profitability of a project.
- Does not take into account figures for net cash flow.
- All the figures for net cash flow are predicted.
- Ignores the time dimension.
- Does not take the effect of time on the value of money into account.
- All the figures for net cash flow are predicted.
- Ignores the time dimension.
- Calculating is the most complex.

3.8.4 Qualitative factors influencing investment decision

Human resources: some investment projects might affect the staff greatly. For example, if a business invests in plant automation, it might mean mass redundancies or the workforce may become scared for their jobs, dropping their motivation.

Availability of funding: finding the appropriate source of finance is essential.

Government legislation: for example, a business may have to install anti-pollution equipment to bring down its emission levels, to conform to government laws.

Business confidence: entrepreneurs, managers and businesses tend to have different attitudes and cultures from each other. For example, cautious, non-confident entrepreneur may delay or abandon possible investment projects.

Ethical considerations: making unethical investments might affect business' brand image and profits.



3.9 Budgeting

3.9.1 Importance of budgets

- Planning and guidance.
- Coordination.
- Control.
- Motivation.

3.9.2 Cost and profit centres

Cost centre: a unit of a business that incurs costs but does not make any profit. These costs are clearly attributed to the activities of that department.

Profit centre: a unit of a business that incurs both costs and revenues.

3.9.3 Variance analysis



Variance exists when there is a difference between the budgeted figures and the actual outcome.

Variance = Actual outcome — Budgeted outcome

Favourable variance exists when discrepancies are financially beneficial to the organisation (i.e., when the actual figures are higher than the).

Adverse variance exist when the discrepancies are financially detrimental to the organisation. They occur when actual costs are higher than expected, or when actual revenue is lower than budgeted (i.e., underselling).



MARKETING



4.1. The role of marketing	9
 Marketing and the business functions - Differences between marketing goods and services - Market vs. product orientation - Commercial vs. social marketing Characteristics of a market - Market share - Market share and market leadership - Marketing objectives - Why marketing strategies change to suit customer preferences 	
4.2. Market planning	9
 Elements of a marketing plan - The role of market planning - The four Ps of the marketing mix - Target markets vs. market segments - Mass vs. niche markets How to target and segment markets - Product perception maps - Unique selling point - Differentiating products 	
4.3. Sales forecasting	9
- Time series analysis	
4.4. Market research	9
 Purpose of market research Secondary market research Ethical considerations of market research Qualitative vs. quantitative research Sampling methods 	
4.5. The four Ps	10
- Product - Price - Promotion - Place	
4.6. The extended marketing	11
mix	
- People - Processes - Physical evidence	



•. / .	ternational marketing
- Methods o	f entry into international markets
- Opportun	ities and threats of international marketing
- Organisati	onal/strategic implications of international
0	- Globalisation and international marketing

4.8. E-commerce

113

Common features of e-commerce — Technology and the
e-commerce marketing mix — Types of e-commerce
What are the costs and benefits of e-commerce to firms and consumers?



4.1 The role of marketing

4.1.1 Marketing and the business functions

Operations management

- Sales forecasts are necessary in order to prepare production schedules.
- Research, launching and development new products to meet the changing customer needs.
- May be conflict between the groups as production likes to test and develop, whereas marketers hope to launch quickly to maximise sales revenue.

Finance

- Budgets.
- Using credit facilities to entice customers (e.g., Afterpay).

Human resources

• Marketing helps HR to identify staffing needs such as recruitment, training, or firing to fit with the markets needs.

4.1.2 Differences between marketing goods and services

- Intangibility: you cannot touch a service like you can a product.
- **Inseparability:** Services are consumed at the time of purchase so you cannot separate production and consumption of services.
- Heterogeneity: not all services will provide the same experience for each customer.
- Perishability: services cannot be stored.
- **Product strategy:** services tend to need added value to be competitive (e.g., free wi-fi).
- Price strategy: services' prices tend to be based on effort levels or time.
- **Promotional strategy:** Services cannot be displayed like products can be, so you need to help the customer envision it.
- Place strategy: location needs to be important for services especially because it entices customers.

4.1.3 Market vs. product orientation



Product orientation business is focused on the production process and the product itself. They believe that a high quality product will satisfy customers and therefore will sell well.

Market orientation business is focused on continually identifying, reviewing and analysing customers' needs. They believe that once they identify the needs of the customers, they will be able to accordingly produce a product that will satisfy their needs.



4.1.4 Commercial vs. social marketing

Commercial marketing

- Using marketing strategies to meet the wants and needs of customers in a profitable way.
 Commercial marketing is usually value free (i.e., ethics is not the main focus).
- E.g., Promoting that smoking helps people relax, and it creates jobs.

Social marketing

- The implementation of mainstream marketing methods to bring about positive social change. It uses the methods of commercial marketing to advertise a social issue.
- E.g., Promoting that smoking is unhealthy and pollutes the environment.

4.1.5 Characteristics of a market

- Market Size: niche vs. mass, local vs. international.
- Customer base.
- Barriers to entry: obstacles that determine the number of suppliers in the market.
- Competition: degree of rivalry within the business (market saturation).
- Geographic characteristics.
- Demographic characteristics.
- Market growth rate.
- Seasonal and cyclical characteristics.

4.1.6 Market share



Market share an organisation's portion of the total value of sale revenue within a specific industry.

Market share =
$$\frac{\text{Firm's sales revenue}}{\text{Industry's sales revenue}} \times 100$$

4.1.7 Market share and market leadership



Market leadership the company holding the highest amount of market share in the industry.

- There is a positive correlation between market share and profits, though, the company with the largest market share is not necessarily the most profitable.
- Companies can be a dominant market player and gain a range of economies of scale.
- Firms with higher market share have better price setting ability and are less threatened by competition.



4.1.8 Marketing objectives

Marketing objectives for for-profit organisations

- Increased sales revenue.
- Higher market share.
- Increased market leadership.
- Improved product and brand awareness.
- Developing new products.
- Enhanced brand perception.

Marketing objectives for not-for-profit organisations

- To build membership and to connect with new donors.
- To generate awareness of the NPO's cause.
- To improve brand recognition.
- To create positive attention towards the NPO's operations.
- To demonstrate the value of the NPO to the local community or society in general.

4.1.9 Why marketing strategies change to suit customer preferences

Changing customer tastes.

Shorter product life cycles: marketers use different strategies at different stages of a product's life cycle. If successful, sales are strong during the introduction and growth stages.

Internet and mobile technologies: e-commerce has increased the choices available to customers therefore increasing transparency.

Competitive rivalry: competitors may initiate marketing strategies that threaten profitability and survival of other companies.

Globalisation: globalisation has made companies more interdependent with consumer tastes more integrated.

4.2 Market planning

4.2.1 Elements of a marketing plan

- Marketing objectives that are SMART.
- Methods of market research to be used to identify target markets.
- An assessment of the strengths and weaknesses of competitors in the market.
- Outline of the marketing mix.
- Details of the marketing budget.
- Outline of the anticipated difficulties and strategies to deal with these problems.



4.2.2 The role of market planning



Market planning the systematic process of devising marketing objectives and appropriate marketing strategies to achieve these goals. It requires the collection and analysis of information about a particular market, such as market research data on existing and potential customers.

4.2.3 The four Ps of the marketing mix

Product: a physical good or an intangible service, such as motor vehicles or motor insurance. In the eyes of customers, products serve one purpose — to fulfil their needs or wants.

Price: the amount that customers pay for a particular good or service. Pricing can be one of the most difficult decisions to make in the marketing mix.

Place (distribution): the methods of distributing products to customers. Promotion: strategies used to attract customers to buy a firms products.

4.2.4 Target markets vs. market segments

Market segments

A distinct group of customers with similar characteristics and similar wants or needs. By dividing the market into different segments, it is easier for a business to analyse which groups of customers buy the product and then to target these customers more distinctively.

Target markets

The market segment that a company aims to sell its product to, each with different marketing mixes.

4.2.5 Mass vs. niche markets



Niche markets targets a specific and well-defined market segment. An example is businesses that provide high-end speciality goods.

Mass markets refers to undifferentiated marketing, (i.e., a strategy that ignores targeting individual market segments). Instead, different market segments are targeted to maximise sales volume.

Exam tip: One syllabus strand is also to be able to identify who the target market is, and what market segments a company might have in a case study.

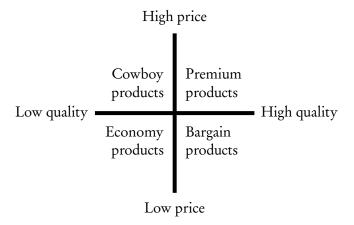


4.2.6 How to target and segment markets

- Demographics.
- Geographic factors.
- Psychological factors.
- Market segments must be DAMAS (differential, actionable, measurable, accessible, substantial).

4.2.7 Product perception maps

A visual tool that reveals customer perceptions of a product or brand in relation to others in the market.



4.2.8 Unique selling point



Unique selling point any aspect of a business, product or brand that makes it stand out from those offered by competitors. The USP explains why customers buy the product over rival ones, such as its distinctive features or appealing packaging.

Advantages

 Can be a major source of competitive advantage and therefore businesses want to emphasise their USP to attract customers.

Disadvantages

• Difficult to find a USP.



4.2.9 Differentiating products

- Methods of the Ansoff matrix.
- Offer exclusive services.
- Find holes in the market.
- Create a USP.
- Fix any of the Ps (price, promotion, place, product, packaging, physical evidence, people).

4.3 Sales forecasting

4.3.1 Time series analysis

This technique attempts to predict sales levels by identifying the underlying trend from a sequence of actual sales figures recorded at regular intervals.

Includes three variables:

- Seasonal Variations: fluctuations throughout the year.
- Cyclical Variations: fluctuations in economic patterns.
- Random variations: unpredictable fluctuations.

3 Point moving average:

Month	Sales	3 point moving average	Variation
Jan	100,000		
Feb	110,000	110,000	0
Mar	120,000	108,333	11,667
Apr	95,000	115,000	-20,000
May	130,000		

- 1. Work out the mean for the first three months (e.g., $\frac{Jan + Feb + Mar}{3}$).
- 2. Using the same process, complete this for all possible months. *Note:* you will not be able to fill all of the boxes because an average can't be made of the first and last box.
- 3. Calculate the variation between the actual sales and the 3 point moving average (e.g., Feb sales Feb 3 point moving average)





4 Point moving average:

Month	Sales (\$)	4 point moving average	Centred trend	Variation
 Jan	100,000			
Feb	110,000			
		106,250		
Mar	120,000		110,000	10,000
		113,750		
Apr	95,000		115,625	-20,625
3.6	422.222	117,500	440.500	44.500
May	130,000	440.500	118,500	11,500
т	125 000	119,500		
Jun	125,000			
Jul	128,000			

- 1. Using the first four months, calculate an average, since there are four months, the average will be at 2.5. (e.g., $\frac{Jan + Feb + Mar + Apr}{4} = 106,250$)
- 2. Then, using the averages you just calculated, calculate an average between the months. (e.g., $\frac{106,250 + 113,750}{2} = 110,000$)
- 3. Then calculate the variance between the final column and the first column. (e.g., 120,000 110,000 = 10,000)

Advantages

- Improved working captial and cash flow.
- Improved stock control.
- Improved productive efficiency.
- Helps to secure external sources of finance.
- Improved budgeting.

Disadvantages

- Limited information.
- Inaccuracy of predictions.
- Garbage in, garbage out.
- External influences (unpredictability).

4.4 Market research

4.4.1 Purpose of market research

- Provides up to date information, important for fast paced industries.
- Allows improvement of marketing strategies.
- Assesses customer reactions by testing products on them.
- Gives a business an understanding of the activities and strategies used by rivals.
- Helps predict future trends to maximise opportunities.



4.4.2 Primary market research

Primary market research involves collecting primary data. This data needs to be collected by the researcher since it was non-existing before the primary research was conducted. Some companies don't have the capacity to carry out primary research, so they hire market research agencies, which are experts in conducting such studies.

- Surveys.
- Interviews.

- Focus groups.
- Observations.

4.4.3 Secondary market research

Secondary market research means that simple collection of data needs to be carried out. The data collected can be both internal and external.

Market analyses: reveals the characteristics of markets for a particular industry or product. These come from market research firms, competitors etc.

Academic journals: these are journals produced from educational and research institutions, they conduct studies and experiments into different markets.

Government publications: governments produce lots of data about the general population and its demographic characteristics, as well as economic information.

Media articles: e.g., books, TV, documentaries, magazines.

4.4.4 Ethical considerations of market research

Damage: harming participants mentally/physically. **Deceit:** distorting data, being untrustworthy etc.

Plagiarism: not citing work.

Deception: misleading participants or secret cameras.

Disclosure: privacy and confidentiality. **Detachment:** research cannot be biased.

4.4.5 Qualitative vs. quantitative research

Qualitative

- Gets non-numerical answers.
- Helps understand behaviours and deeper opinions/attitudes.
- Lengthier/time consuming.
- Provides richer data.
- Inexpensive due to smaller number of participants.

Quantitative

- Relies on large numbers of responses.
- Tend to be closed ended or using Likert scales.
- Participants may give random answers.
- Bigger sample size increases generalisability.



4.4.6 Sampling methods

The target population of our primary research might be very big, therefore businesses decide to sample their target population. Samples should be representative: they should have the same characteristics as the target population. This means that we want the customers in our sample to have similar opinions on our product as all the customers that buy that product. There are different types of sampling businesses can use:

Random sampling: gives each member of the target population equal chances of being chosen.

Stratified sampling: also a random sampling method. However, before the samples are drawn, the sample population is divided into groups (called strata) based on the previous knowledge about the target population. Once those groups are set, researchers choose customers at random that fit in those strata.

Quota sampling: researchers divide the population into groups that share similar characteristics (e.g., age, gender) and then have pre-set number of people in each group they have to interview.

Cluster sampling: involves separating the target population into 'clusters' usually in different geographic areas. A random sample is then taken from each cluster.

Snowball sampling: used in special occasions, when firms are looking for specialists in a particular field they want to employ. This is based on pre-existing network of these specialists that the firm approaches and asks to work for them.

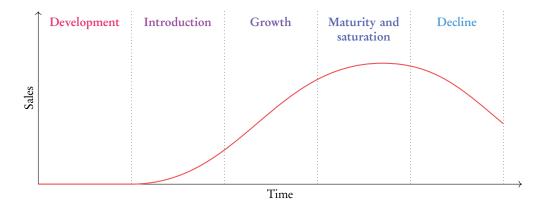
	Advantages	Disadvantages
Random	• Representative	 Time-consuming and costly. Assumes that all the members of the target population are homogeneous.
Stratified	Representative.Each subgroup provide quality results.	• Time-consuming and costly.
Quota	• Cheap and not time-consuming.	• Not representative.
Cluster	 Useful when results are needed quickly. Useful for results about how the opinions vary geographically. 	 Representativeness of the sample is assumed. Assumes that all the members of the target population are homogeneous.
Snowball	• Firms will get the results they are looking for.	• Not representative.



4.5 The four Ps

4.5.1 Product

The Product life cycle (PLC) shows the different strategies in the life of a product and the sales that can be expected at each stage. There are a few stages in this cycle:



Development: the product is being researched and designed. Prototypes and models are made and these undergo a series of tests so that the business can see how it will behave once it is in the hands of a customer. A large number of products at this stage will fail. At this point, costs are very high and no revenue is generated as the product is still not available at the market.

Introduction: the product is launched. Sales are slow-growing and promotional and distributional costs rise. Prices might be set high in order to cover for these costs, or they might be set low in order to break the market.

Growth: sales begin to grow as the product is established and the customers are fully aware of the product, and the costs are likely to decrease. At this stage, the product becomes profitable, and it is likely the competitors will try to launch substitutes, thus business needs good promotion and pricing strategy.

Maturity and saturation: the growth in sales gradually levels off. The market slowly becomes saturated as new competitors enter the market. This will force some companies to exit the market or extend the life of their product.

Decline: for the majority of products, sales eventually decline, usually due to the change of customers' tastes, new technology or introduction of new products. The product at this point can still be profitable, if little is spent on promotion and production, and a relatively high price can be charged.



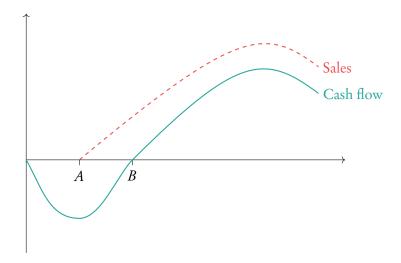
Extension strategies

Extension strategies are used by businesses to extend the life cycle of their products. This is because the product is most profitable during the mature period. In order for them to keep the product in that stage as long as possible, businesses launch an extension strategy as soon the product enters the saturation stage and the sales start declining.

Extension strategies can involve:

- Finding new markets for existing products.
- Developing a wider product range.
- Gearing the product towards specific target markets.
- Changing the appearance/packaging/format/design of a product.

The relationship between PLC and cash flow



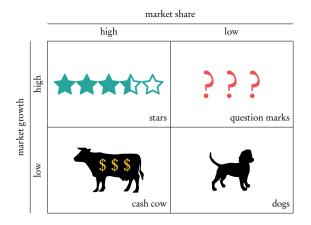
Before product launch, a business will spend to develop the product while no money is coming into the business from sales, therefore making cash flow negative. At launch, at point A, a product begins to sell. Cash flowing into the business is likely to be smaller than the cash flowing out since the business might be spending a lot on promotion and distribution. In the growth period, as the product becomes more established, the revenue will be greater than the spending of the business, which is the point B. The sales rapidly increase, making the gap between the revenue and spending bigger and therefore making cash flow positive. Cash flow will be at its highest during the mature period, as the revenue the product earns will be the highest. During the decline period of PLC, the sales decrease and so does the cash flow.



BCG Matrix

Boston Consulting Group Matrix (BCG Matrix) is used in order for businesses to analyse their product portfolio better. The model takes two things into consideration when analysing how well managed the product life cycle is:

- 1. Market growth: How fast is the market for the product growing?
- 2. Market share of the product: How strong is the product within its market?



Using these criteria, the products of a business can be positioned into one of these four categories:

Stars: this is a product with high market share in a growing market, therefore it is profitable. However, the business will need to invest further in the product as it needs to cope with the growing market and growing competition, which will increase promotion costs. Due to all these costs, the cash flow might be nearly zero with a tendency of increasing in the positive direction. Connecting this model to the PLC, we could expect to see this product in the growth period.

Cash cows: this is a product with high market share in a slow growing market, thus it is well positioned in the market. The customers are aware of the product, it is highly profitable and cash flow is positive, as there is no need for oppressive promotion strategies any more, and therefore costs decrease. However, due to the slow growing market, business needs to employ an extension strategy. The business wants to milk the cash cow, as this is when most of the profits are made. Connecting this model to the PLC, we could expect to see this product in the mature period.

Question marks: these products have low market share in a fast growing market. This product is not the market leader but rather a market follower. Therefore, the business has to decide whether or not such a product is worthwhile investing in and if it should be withdrawn from the market. At this point, the product is not profitable due to its low market share and the cash flow is likely to be negative. We would expect this product to be in the introduction period of the PLC.

Dogs: these products have a low market share in a slow growing market. This means that it is not likely that there will be an increase in sale of the product. The cash flow at this point is positive as not a lot is invested in a product. These products are in the decline period of the PLC.



Aspects of branding

Brand awareness: how much people know and identify the brand by its branding an products.

Brand development: The result of the efforts that the company makes to improve the branding.

Brand loyalty: the extent to which participants are tied to the brand.

Brand value: the extent to which participants consider the brand name when buying a product based on its reputation.

The importance of branding



A brand a name, term, sign, symbol, design or any other feature that allows consumers to identify the goods and services of a business and to differentiate them from those of competitors.

When developing a brand, it is important to find a **Unique Selling Point (USP)**. The USP is a feature of a product that makes different from other products in the market and what makes people want to buy the product.

There are several types of brand:

Manufacturer brands: brands created by the producer of goods and services (e.g., Gillette razors or Samsung laptops).

Own-label brands: these are products which are manufactured for wholesalers or retailers by other businesses, but the wholesalers and retailers sell the product under their name (e.g., Albert Heijn does not produce AH pasta or AH beans, but sells them).

Product (individual) branding: businesses can brand individual products and give them individual brand names (e.g., a large number of washing powder brands sold by the same producer Procter & Gamble: Ariel, Bold, Tide, etc.).

Family branding: family branding is when a business has a brand name which includes a number of different products (e.g., Mars chocolate bar has its own energy drink as well).

Company (corporate) branding: this is when a business' name is used as brand name. This is similar to the own-label brands, but in this case the business that sells and produce the products names the brand after the name of the company.

Branding is used in order to:

- Create brand loyalty.
- Differentiate the product.
- Gain flexibility when pricing.
- Help recognition.



Importance of packaging

- Has an effect on customer perceptions receiving the product in nice packaging.
- Differentiation (e.g., gift wrapping).
- Protects against damage during transportation.
- Labelling can be used to provide information.
- Packaging makes distribution easier (e.g., stacking).
- Can encourage impulse buying.
- Promotes the brand.

4.5.2 Price

Different pricing strategies

The main factors affecting pricing strategies are **costs**, **the market** and **competition**.

Cost-plus pricing: involves calculating the average cost of production of a product and adding a MARK-UP for profit.

Market-oriented pricing: deciding on the price based upon an analysis of the conditions in the market at which a product is aimed. These pricing strategies are suited for market-oriented businesses.

Penetration pricing: this is used by businesses trying to gain a foothold in a market, either with new or established products. The idea is to lower the price and thus encourage retailers and customers to purchase the goods in larger quantities. This is done as consumers become more encouraged to develop the habit of buying the product so that when prices eventually rise, they will continue purchasing the product. Because of its high costs, this strategy is used by well established businesses or by new businesses who are willing to make losses in short run.

Market skimming: involves charging high price for a new product for a limited period. The aim is to gain as much profit as possible for a new product while it remains unique in the market. It means usually targeting the most profitable segment of the market first, and then selling it to the wider market at a lower price. There are two reasons for market skimming: maximisation of revenues before competitors come up with substitutes and generating revenue in short periods so that investments in the product can be made later.

Loss leader: these are products priced at very low levels in order to attract customers (lower than the average costs of production). The company thus makes a loss on every product that is a loss leader. However, business expect that the loss made on loss leaders will be more than compensated by the additional profit from selling other products.

Price discrimination: this pricing occurs when a firm offers the same product at different prices when consumers can be kept separate. It can be time based (e.g., the price of train ticket may depend on time of the day) or market based (e.g., different prices for different market segments, like when students can get a discount on laptops).



Psychological pricing: a common example is charging just a little lower than a round figure (\$9.99 instead of \$10), believing that this will influence the customer's decision to buy the product.

Price leadership: occurs in markets where businesses are reluctant to set off a price war by lowering the prices and are concerned about a falloff in revenue if prices are raised. They examine competitor's prices and choose a price broadly in line with them. It also occurs that one business dominates the market and acts like a price leader, with other firms follow the pricing policy of that company. Companies following going rate will often be very frustrated that they cannot influence the prices of their product. Therefore, the strategy is fierce branding to differentiate the product create brand loyalty among consumers. Consequently they will have larger flexibility when determining prices.

Predatory pricing: the aim is to eliminate opposition, by cutting prices for a period of time long enough for the rivals to go out of business (in many countries it is forbidden by law).

4.5.3 Promotion



Promotion the attempt to draw attention to a product or business in order to gain new customers or to retain existing ones.

There are two different types of promotion: above-the-line and below-the-line promotion.

Above-the-line promotion

Promotion through independent media such as TV and newspapers. These allow a business to reach a wide audience easily. It is also called advertising, which is a form of communicating between a business and its consumers where the business uses images or sounds in the media to encourage the purchase of the products.

Types of advertising media:

Television: appropriate for big businesses that sell consumer goods to mass markets. **Newspaper:** appropriate for mass markets and for targeting a particular audience or market segment.

Radio: can be used for both, targeting a wide audience or a local audience (through a local radio station).

Posters and billboards: appear on variety of locations and carry small messages. The billboard grabs attention better if it is large and uses vivid imagery.

Internet: the cheapest form of advertising that helps target very large groups of people due to increased number of internet users nowadays.



Below-the-line promotion

Any promotion that is not advertising. It is carried out by methods over which the business has direct control, which allows the business to aim the message at consumers who are either known to them or who have been chosen in advance.

Types of below-the-line promotion:

- **PR** (Public relations): an attempt by a business to communicate with groups that form its public, such as government, shareholders, employees and customers. The aim is to increase sales by improving the image of the business and its products (through, e.g., press conferences, press releases, donations, sponsorships etc.)
- **Merchandising:** an attempt to influence consumers at the point of sale. The aim is to encourage sales of a product and speed up the rate of stock turnover.
- Sales promotion: the incentives offered to consumers to encourage them to buy goods and services. They are intended to give short-term boost to the sales of a product (through, e.g., coupons and loyalty cards, product endorsements, product placing, free offers etc.)
- **Direct selling:** also called personal selling, occurs when a company's sales team promotes a product through personal contact (e.g., over the telephone, meetings etc.)
- **Direct mailing:** Sending information about a product or product range through the post

Exhibitions and trades.

The promotional mix

- Advertising: developing awareness, perception, knowledge at attitudes.
- Personal Selling: Relying on sales representatives to directly persuade customers to buv.
- Public Relations: activities aimed at establishing and protecting the desired image of a company.
- Sales Promotion: short-term incentives created to stimulate demand for the product.
- Internet presence: social media, online advertisements etc.

Technology and promotion

- Viral marketing.
- Social media marketing.
- Social networking.



Guerrilla marketing

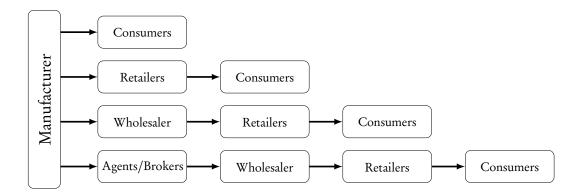
Achieving conventional marketing goals using unconventional methods.

Example

- Advertisements in odd locations: on buses, in the toilet, etc.
- Wearing extravagant outfits to attract attention.
- Shock tactics.

4.5.4 Place

Place involves both physical location (i.e., where the product could be bought) and how it gets there (i.e., distribution channels). The **distribution channel** of a product in a consumer market is the route it takes from the manufacturer to the consumer. The diagram below shows all possible routes a product can take during this journey.



As you can see from the diagram, these routes differ by the number and type of marketing intermediaries involved. These are businesses or individuals which acts as a link between the producer and consumer:

- 1. Manufacturers to consumers.
- 2. Manufacturer to consumer via retailer.
- 3. Manufacturer to consumers via wholesalers and retailers.
- 4. Manufacturer to consumer via agents and/or wholesalers and retailers.

How do businesses choose a particular distribution channel and what determines their advantages/disadvantages?

Costs: the longer the supply chain, the greater may the cost to the final consumer be. **Control:** some manufacturers want to control the distribution channels they use carefully.

Legal factors: the law may affect how a product is distributed.



Effectiveness of different distribution channels

Company

Wholesalers

Wholesalers are businesses that purchase large quantities of products from a manufacturer and then separate or 'break' the bulk-purchases into smaller units for resale, mainly to retailers. They act as the intermediary between producers and retailers.

Benefits of using wholesalers:

- Bear storage costs.
- Lower transaction costs as wholesalers are the customer.
- Time is freed up for manufactures to focus on production not distribution.

Distributors and Agents

Distributors are independent specialist businesses that trade in the products of only a few manufacturers.

Agents are negotiators who act on behalf of companies to sell the products. They are often experts, who are given a commission for their services.

Benefits of using wholesalers:

- Can use experts.
- Frees up time for producers to not spend on marketing products, rather producing.

Retailers Sellers of products to the final consumer, they are often refer to as 'shops'. Retailers have the ability to reach large numbers of consumers, especial those with global reach.

Independent retailers: small vendors, sole proprietors. Usually sell a small range of products.

Multiple retailers: chain stores.

Supermarkets: sell food stuff, tend to buy their produce and products from other manufacturers, cutting out wholesalers.

Hypermarkets: Huge outlets that stock a broad range of products and consumer durables (e.g. Sams club).

Department stores: sell everything.



4.6 The extended marketing mix

4.6.1 People

The people working in the business

Appearance: uniforms create a sense of togetherness and shows professionalism.

Aptitudes and attitudes: it is important that the staff deliver the service well, since services are inseparable, meaning that the production of the service is the product.

Efficiency: staff who don't make mistakes help the company to get a better reputation.

Sociability: having professional social skills makes people feel welcome, and associates positive experiences with the brand.

4.6.2 Processes

The way that a service is delivered.

mple

Examples of improved processes

- Varying payment methods.
- Short waiting time.
- Customer services.
- After sales care.
- Delivery processes.

4.6.3 Physical evidence

Tangible aspects of a service

ample,

Examples

- Lobbies.
- Groomed staff.
- Waiting rooms.
- Environment.



4.7 International marketing

4.7.1 Methods of entry into international markets

Internal methods

- Exporting.
- Direct investment.
- E-commerce.

External methods

- Joint ventures.
- Strategic alliances.
- Franchising.
- Licensing.
- Mergers.
- Acquisitions.

4.7.2 Opportunities and threats of international marketing

Opportunities

- Increased customer base.
- Economies of scale.
- Increased (global) brand recognition.
- Spread risks.
- Extend product life cycle (by taking it to a new place).
- Gain more profit.

Threats

- Legal issues: varying tax systems, intellectual property rights, consumer protection laws.
- Political issues: certain countries might make it hard to sell (e.g., North Korea).
- Social and demographic issues.
- Pressure groups.
- Economic issues (recessions).



4.7.3 Organisational/strategic implications of international marketing

Extending a business overseas requires changes in marketing strategies to suit different consumer groups. The following factors must be considered when expanding overseas:

- Language and cultural differences.
- Legal differences.
- Political environment.
- Economic environment.
- Infrastructure.

4.7.4 Globalisation and international marketing

Competition: globalisation introduces international brands all over the world, creating a highly competitive market with economies of scale.

Changing consumer tastes and expectations: globalisation introduces new styles, foods, etc. to different parts of the world causing consumers to change views, tastes etc.

Location decisions: many overseas companies choose to offshore to reduce manufacturing costs, this can result in unethical processes and labour.

Economies of scale: during overseas expansion, businesses can spread their fixes costs over an increased output.

4.8 E-commerce



E-commerce (Electronic commerce) is concerned with the buying and selling of products using electronic systems. E.g., over the internet.

4.8.1 Common features of e-commerce

- Global reach.
- 24/7 accessibility.
- Customisation.
- Universal standards:.
- Integration (audio, visuals, videos etc.).
- Access to information.
- Consumer reviews.
- Impersonal interaction.



4.8.2 Technology and the e-commerce marketing mix

Product

- Companies can give 360° views of a product.
- Comment sections help to boost the reliability of a brand.
- Interactive websites can allow for customisation of products.

Price

- Price transparency is much higher as you can just look at other websites for comparison products.
- Without physical stores and workers, many fixed costs are reduced.

Promotion

- Many companies use web banners to advertise on other websites.
- Social media marketing.

Place

- There is less spent on a physical store.
- This can be slightly impersonal and might stop buyers from buying.

4.8.3 Types of e-commerce

Business to Business (B2B): online transactions between businesses only. E.g., General Motors.

Business to Customer (B2C): online transactions between businesses and customers. E.g., PrettyLittleThing.

Customer to Customer (C2C): online transactions between customers only. E.g., eBay.



4.8.4 What are the costs and benefits of e-commerce to firms and consumers?

Benefits

Firms

- Enables the business to reach a global market.
- Businesses do not need to be physically close to their customers.
- They can benefit from 'longer opening hours' which may increase sales.
- A great reduction in costs.

Consumers • They can easily access goods and services.

Costs

- The competition is more fierce.
- The speed of delivery becomes more important.
- Choosing from the huge number of rival businesses can be very time-consuming and frustrating.
- Consumers need to have a credit/debit card to make payments.
- Some consumers find it frustrating to wait for delivery.





OPERATIONS MANAGEMENT



5.1. The role of operations	
management	
Operations management and the business functionsOperations management strategies and practices	
5.2. Production methods	
 Job production - Batch production - Flow production Cellular manufacturing - Which production method works best? 	
5.3. Lean production and	
quality management	
 What is lean production? - Methods of lean production Cradle to cradle design and manufacturing - Quality control and quality assurance - Types of quality management - The impact of lean production and TQM Importance of national and international quality standards 	
5.4. Location	
- Reasons for location choice - Reorganising production	
5.5. Production planning	
 The supply chain process Just in time vs. just in case Stock control charts Capacity utilisation 	
- Productivity rate - Cost to buy vs. cost to make	



	5.6. Research and	129
_	development	
	 Importance of research and development - Types of innovation 	
	5.7. Crisis management and	129
	contingency planning	
	- Key factors of effective crisis management	



5.1 The role of operations management

5.1.1 Operations management and the business functions

Marketing

- Production needs to know the quality and individuality of the product.
- The necessary output of a product.
- Packaging.

Human resources

- HR needs to know the necessary size and requirements for the workforce to produce the product.
- Production methods can affect motivation levels.
- Training and hiring implications
- Packages for different workers.

Finance Implications

- Capital intensive production requires high investment into machinery and equipment.
- Investment appraisal for different projects.
- Contingency funding.

5.1.2 Operations management strategies and practices

Ecological sustainability: the capacity of the natural environment to meet the needs of the current generations without compromising the ability to meet the needs of future generations.

Social sustainability: society's ability to progress in a way that meets social well-being needs of both current and future generations.

Economic sustainability: development that meets economic needs of the current generation using existing resources, without jeopardising the ability of future generations to meet their needs.



5.2 Production methods

5.2.1 Job production

- Production of a single product at a time.
- Used for small orders ("One-offs").
- Small number of units produced.
- Highly skilled workforce.
- Appropriate for start-ups.
- Labour intensive.

Advantages

- The organisation of this production method is simple.
- The workforce is motivated.
- Firms produce original and unique products according to the wishes of the customer.

Disadvantages

- High labour costs.
- Lead times can be lengthy.
- May become costly once the demand for the good rises.

5.2.2 Batch production

- Used when demand is higher and more regular.
- Production consists of a number of operations.
- Products are produced in "batches".
- Appropriate for manufacturing businesses.

Advantages

- Flexibility: each batch can be altered to meet customers' wishes.
- Skilled workers are not needed, which decreases costs.
- Machinery is more standardised, also decreases costs.
- Firms can respond quickly to changes in demand.

Disadvantages

- Machinery could be more complex to compensate for the lower skill levels required from the workers.
- The workforce is less motivated.
- Money will be tied up in work-in-progress, since an order cannot be dispatched until the whole batch has been finished.



5.2.3 Flow production

- Production is organised in a continuous sequence.
- Able to produce large quantities.
- Usually the product is simplified and standardised.
- Capital intensive.

Advantages

- Unit costs are reduced as firms gain economies of scale.
- The process is highly automated, which reduces the need for labour.
- No need to stock large quantities of goods.

Disadvantages

- Very high set-up costs.
- No possibility of producing a wide product range and meet different customers' needs.
- The workforce is not motivated.
- Breakdowns are costly.

5.2.4 Cellular manufacturing

- A set of tasks are prescribed to one group of people (cells) and they are responsible for one part of the production process.
- Complete units of work are then passed on to another group of people in the production process.

Advantages

- Allows for social connection within groups and helps to motivate employees.
- People have some degree of job rotation, which multi skills employees.
- Absenteeism is not as big of a problem since the other group members are multi skilled and can complete their job too.

Disadvantages

- Completing the same job can be boring.
- You aren't able to see the finished item, which may affect motivation.
- Teams are reliant on other groups to make sure final production targets are met.

5.2.5 Which production method works best?

- Target market.
- The state of existing technology.
- The availability of resources.
- Government regulations.
- The type of product.
- Specialisation of the product.

Exam tip: a strand of the syllabus requires you to be able to suggest which production method is most suitable for a certain product/company.



5.3 Lean production and quality management

5.3.1 What is lean production?

Lean production: streamlines operations and processes in an attempt to reduce waste and improve efficiency.

Principles of lean production

- Waste minimisation.
- Right first time approach.
- Flexibility of workers.
- Continuous improvement of processes, quality and efficiency.
- Supply chain management.

5.3.2 Methods of lean production

Kaizen 改善 (continuous improvement)

- The philosophy in an organisation that processes, people and an organisation can always be improved.
- These are small and frequent improvements rather than one large change.
- Helps avoid resistance to change.
- Focus remains on improving quality and reducing waste, doing so often reduces costs.

Just-in-time (JIT)

- Inventory management that involves stocks being delivered right when it is needed.
- This reduces stock holding costs (storage).
- Involves having very minimal 'buffer stock' which can be risky.

Kanban 看板

- A card based system which attaches tags to each aspect of the production process.
- This helps to identify different parts and shows where each component is at any given time.
- The system is based on actual orders rather than sales forecasts.
- You can visually see where things are to see where hold-ups are.



Andon アンドン

- A visual control system with audible sounds to alert a change in status or a problem.
- McDonald's uses this as the orders go through the machines to the back where the food is prepared, and then onto the board when the order is ready.

5.3.3 Cradle to cradle design and manufacturing

- A sustainable model of production in which its goal is to ensure no waste in nature.
- Encourages reducing, reusing and recycling of products.
- Cradle to grave: one time use products (most common).

5.3.4 Quality control and quality assurance

Quality control

- Inspecting, testing and sampling work.
- Products are made to specifications.
- Aims to detect poor quality output from the delivery of raw materials to the output of goods.

Quality assurance

- The management process of guaranteeing quality by ensuring that a 'right first time' approach is taken.
- Concerned with preventing faults rather than catching them.

5.3.5 Types of quality management

Quality circles

- Small groups of people who meet and share the responsibility of examining issues related to quality.
- Improves the morale of workers as they feel needed.

Benchmarking

- A business comparing its products, operations and processes to others within the same industry, most commonly the market leader.
- Market leaders are used as a point of reference for targets.



Historical benchmarking: comparing something to the past **Inter-firm benchmarking:** comparing to another firm.

Total quality management (TQM)

- A process requiring the whole company to commit to achieving quality standards.
- It is a general approach/philosophy to ensure that quality is the core focus in all functional areas.
- Includes: making workers accountable, monitoring processes, encouraging teamwork, customer reviews, zero defects.

5.3.6 The impact of lean production and TQM

- Reduces waste, which saves costs.
- Cuts down on inefficiencies.
- Boosts quality of products.
- Company appears socially responsible by cutting down on waste.

5.3.7 Importance of national and international quality standards

Quality standards: awards used to identify companies with certain quality standards. Once you receive an award you are able to use the logo or symbols as promotion.

Purpose

- Promote quality awareness within the organisation.
- Improve organisational performance.
- Recognise quality achievements.
- Motivate the workforce.
- Help attract high calibre employees.
- Strengthen competitiveness.



5.4 Location

5.4.1 Reasons for location choice

Quantitative reasons

- Availability, sustainability and cost of land.
- Availability, suitability and cost of labour.
 - Different countries have differently skilled labour (e.g., Germany has lots of engineers), low socio-economic countries have cheaper labour.
- Proximity to the market.
 - For heavy/large products it is inconvenient to have to transport them very far.
- Proximity and access to raw materials.
 - If the raw materials are the heavy part, then it's inconvenient to transport them very far.
- Government incentives and limitations.
 - Government may subsidise businesses opening in rural areas.
- Feasibility of e-commerce.

Qualitative reasons

- Management preferences.
- Local knowledge.
- Infrastructure.
 - Is the area supported by transportation, communication and support networks.
- Political stability.
- Government restrictions and regulations.
- Ethical issues.
 - Pollution, noise etc. may affect location.
- Comparative shopping (clustering).
 - As a grocery store, having a competitor right by your store can help/hinder sales.



5.4.2 Reorganising production



Outsourcing transferring internal business affairs to an external organisation.

Advantages

- Core activities can be focused on.
- Quality can occur, despite lacking certain skills.
- Helps cut production costs for contractors.

Disadvantages

- There must be mutual trust between the business and the subcontractor.
- Quality control is passed onto outside parties, therefore standards may not be met.
- Outsourcing requires effective communication and coordination
- Can cause uncertainty due to restructuring and staff redundancies.



Offshoring a type of outsourcing which involves relocation business functions and processes to an overseas organisation.

Advantages

• May be cheaper to operate in an LEDC.

Disadvantages

- Offshoring has been associated with unethical practices.
- Quality assurance becomes difficult.
- Susceptible to economic and political instability.



Insourcing using an organisations own workers and resources to complete tasks that would have otherwise been outsourced.



5.5 Production planning

5.5.1 The supply chain process



Supply chain process a sequence of activities that start from the extraction of raw materials, to production, to distributors and to the hands of consumers.

5.5.2 Just in time vs. just in case



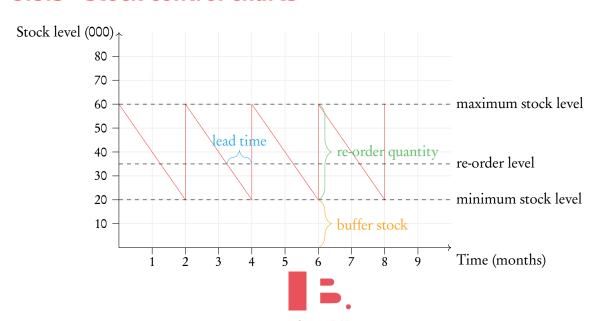
Just-in-time (JIT) a production technique highly responsive to customer orders, which uses very little stock holding.

Based on the orders of customers, the stock needed to produce the good for a particular number of customers will arrive "just in time" for the production. This means that no stock is held by the business, thus no money is tied-up in stock holding. This is the complete opposite of the "just-in-case" stock management.

Just-in-case (JIC) a production technique whereby more stock is stored just in case there is a sudden increase in demand.

Controlling stock is important in order to ensure the business holds the right amount. Managers determine the maximum and the minimum stock level the business can hold, including the level at which is necessary to reorder stock. Below is an example of stock control.

5.5.3 Stock control charts



5.5.4 Capacity utilisation



Capacity utilisation 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 (100%).

Capacity utilisation =
$$\frac{\text{Actual output}}{\text{Productive capacity}} \times 100$$

5.5.5 Productivity rate



Productivity rate measures the efficiency of workers by measuring the average output per worker.

Productivity rate =
$$\frac{\text{Total output}}{\text{Total input}} \times 100$$

5.5.6 Cost to buy vs. cost to make



Cost to buy

Cost to buy = $Price \times Quantity$

Cost to make

Cost to make = Fixed costs + (Average variable cost \times Quantity)



5.6 Research and development

5.6.1 Importance of research and development

- Continuously advances products.
- Vital to survival to remain competitive.
- Can generate first mover advantage (being the first firm to release a product).
- Helps to prolong products.
- Ensures that products are made to the taste of consumers.
- Reduces risk of releasing a product.

5.6.2 Types of innovation

- Product innovation: creating or developing new and existing products.
- Process innovation: changing the ways in which production or delivery occurs.
- Positioning innovation: changing the context of a product by repositioning it.
- Paradigm innovation: most radical method, changes the nature of a market (e.g., How e-commerce revolutionised the shopping industry).

Adaptive creativity altering and modifying something that already exists. E.g., when Apple comes out with a newer model of one of their iPhones.

Innovative creativity creating something new. E.g., if Apple to were release a range of cars.

5.7 Crisis management and contingency planning

Crisis management the systematic steps and efforts of an organisation to limit the damage from a sudden crisis (e.g., an accident on the premise, failure of machinery, power cuts etc.)

Contingency planning an organisation's attempt to put in place procedures to deal with a crisis, anticipating it through scenario planning.



5.7.1 Key factors of effective crisis management

Transparency: stakeholders will want to be kept informed of what is happening. They will want to know that safety is the priority.

Communication: senior managers will need to communicate in an objective way, despite the temptation to give biased reports to different stakeholders because they are concerned with the image and reputation of the business.

Speed: senior managers will need to act promptly. This can be a challenge because rushed and not well-thought-out decisions will not always be the best ones.

Control: the situation should be put under control as soon as possible. This is directly concerned with limiting the damage for different stakeholders.

Advantages

- Cost: The public can be forgiving, particularly if the crisis is not preventable. Being dishonest will only make it worse, acting responsibly can reduce negative reactions and cut financial losses.
- Time: Planning does take time but if there is no plan, it will take a lot more time to think of one.
- Risks: Ensures that in the event of a crisis, there is less risk as the damage can be contained and minimised.
- Safety: Immediate actions can help minimise risk of anybody getting hurt, or making the staff stressed.

Disadvantages

- Cost: Can be expensive to make plans for an event that never happens.
- Time: Contingency planning takes up lots of time and resource of the company.
- Risk: outdated contingency plans are quite useless.



