interactive **eBook** inside

Business Management

for the IB Diploma

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Pearson

Business Management

for the IB Diploma Programme

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How to use this book

Throughout this book you will see different highlighted features within the main text and margins of each unit. These include the following.

Learning outcomes

Learning outcomes appear at the start of each section. They contain the learning outcomes for the section you are about to read and set out which aspects of learning will be covered.

Learning outcomes

At the end of this section, you will be able to:
- understand the nature of business
- distinguish between primary, secondary, tertiary, and quaternary sectors
- analyze the challenges and opportunities in starting up a business.

Conceptual understandings

Conceptual understandings contextualize your learning within the four key concepts of business management: ethics, creativity, sustainability, and change.

Conceptual understandings

- **Change** is essential for businesses to achieve their desired aims.
- **Creative** business planning can lead to organizational success.
- **Ethical** business behavior improves business image as well as customer loyalty.
- **Sustainable** business practices can enhance a business existence.

IB learner profile

Learner profile boxes identify links to the ten IB learner profile traits and encourage you to become:

- Inquirers
- Knowledgeable
- Thinkers
- Communicators
- Principled
- Open-minded
- Caring
- Risk-takers
- Balanced
- Reflective

IB learner profile

Reflective

Select a company of your choice and evaluate and reflect how creativity and innovation helps that company to achieve its objectives.

Case studies

Globally inclusive case studies reference real-world examples and demonstrate the concept being taught. It is important to remember that Paper 1 requires real-world examples to be at the center of your discussion.

Case study – Sole traders and rising prices

Millions of sole proprietors are having to prepare for rising costs caused by high (and increasing) energy and fuel prices, even though their customers may be willing to pay more. According to a *Sydney Morning Herald* article, a survey of sole proprietors revealed that most felt overburdened by paperwork and bureaucracy. Those surveyed reportedly spend a combined 12 million hours per week on administration.

Research and inquiry

Inquiry questions appear at the start of each unit, to encourage critical and creative thinking within the unit. Throughout the book, Research and inquiry boxes highlight areas for further research and inquiry.

Research and inquiry

Research the vision statements and mission statements of five companies. Using these statements, explain how a vision statement differs from a mission statement.

The term 'non-governmental organization' first appeared in Article 71 of the UN Charter, which was published in 1945.

Interesting information

These boxes provide more information related to a concept in the main text.

Worked examples

Worked examples show you how to carry out detailed calculations.

Worked example

Lestari Lights is a social enterprise providing efficient solar lighting in Indonesia. Financial information for Lestari Lights is shown below.

	Year 1 (Rp 000s)	Year 2 (Rp 000s)
Non-current assets	10 000	10 000
Sales revenue	22 000	24 000
Cash	1 200	1 000
Stock	4 800	5 200
Debtors	2 900	3 200
Cost of goods sold	8 400	8 900
Total current liabilities	3 200	3 400
Retained earnings	6 700	7 900
Expenses	4 400	5 000
Share capital	2 000	2 000
Non-current liabilities	7 000	6 100

Questions

1 Construct a profit and loss account for Year 1 and Year 2.
2 Prepare a balance sheet for Year 1 and Year 2.

Theory of knowledge (TOK)

These short questions stimulate thought and consideration of TOK issues as they arise within the context of each unit.

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

Online resources

These boxes point you to websites that provide more information about the topic being discussed.

Practice questions

At the end of each unit, there are practice questions in a format and with a marking scheme similar to those you will encounter in the examination papers.

Practice questions

Lebanon is facing its worst socioeconomic crisis in decades. It hosts the highest number of refugees per capita worldwide. The government estimates that the country currently hosts 1.5 million Syrian refugees, 90 per cent of whom are living in extreme poverty, and 13,715 refugees of other nationalities.

SUDO Consultants is a cloud consulting firm started in 2020 that focuses on AWS Cloud Consultancy and security. SUDO's vision is to be the leading digital company that is elevating businesses around the world. Its vision would be incomplete if the company wasn't also socially responsible. One of SUDO's core values is integrity: 'We are honest and we show a consistent and uncompromising adherence to strong moral and ethical principles and values. We are always truthful and accurate in everything we do.'

SUDO worked with a telehealth provider to deploy telehealth kiosks in Lebanon.

The telehealth kiosks allow refugees to access doctors and medical support. On-the-ground nurses help refugees to use the kiosks properly.

The kiosks connect with the SUDO's backend cloud services. SUDO utilizes its best engineers to deploy this critical solution to ensure the solution works all the time and is as secure as it can be to protect patient data.

1 Identify one key internal and one external stakeholder for the company. (2 marks)
2 Explain the interest of SUDO's stakeholders and the likelihood of conflict between them. (4 marks)
3 Evaluate the impact that differing stakeholder objectives have on SUDO's behavior and decisions. (6 marks)

HL

Icons identify HL only material.

HL end

Online resources

This Forbes article looks at digital innovation in these sectors in more detail.

Conceptual understandings

The concept-driven curriculum frameworks of the International Baccalaureate Diploma Program (IBDP) are designed to help you to develop a deep understanding of key concepts and ideas within each subject area. These frameworks are based on the idea that you will learn best when you can connect new ideas to concepts that you already understand, and when you are able to apply your knowledge to real-world situations.

Concepts are used as the organizing principles for each subject, and are integrated throughout the curriculum. You are expected to learn about specific concepts within each subject, and to understand how those concepts relate to each other and how they can be applied in different contexts.

By focusing on key concepts and ideas, the IBDP aims to encourage you to think critically, creatively, and independently, and to develop the skills and knowledge you need to succeed in further study and in your future career.

Concepts are broad, powerful, organizing ideas that have relevance both within and across subject areas.

Concepts in the business management course

Conceptual understanding is an important aspect of the IBDP business management course, as it will help you to make connections between different topics and ideas within the subject. This will enable you to see the bigger picture, and to understand how different concepts and ideas fit together.

Having a strong conceptual understanding of the material covered in the course can help you to perform better in the external assessment, as it will enable you to synthesize and evaluate different pieces of information in a more meaningful way. It can also help you to better understand and apply the content of the course, and to help you succeed in your studies and future career.

Key concepts

The four key concepts in the business management course are: creativity, change, ethics, and sustainability. The course empowers you to explore these interdisciplinary concepts from a business perspective.

Change

Change refers to the process of becoming different or making something different. In the context of business management, change can refer to changes in the market, changes in technology, or changes in an organization's strategies or structure.

Change is an important concept in business management because it is a constant part of the business environment, and organizations must be able to adapt and respond to change in order to remain competitive. Managing change effectively allows businesses to respond to new opportunities and challenges, and to stay ahead of the competition.

In the course, you will study change in several ways. You may learn about the different types of change that organizations can experience (for example, incremental change, disruptive change, and transformational change), and about the ways in which businesses can manage these changes. You may also study different approaches to managing change (for example, top-down, bottom-up, and participative), and about the pros and cons of each approach.

Studying change will help you to develop the knowledge and skills you need to understand the role that change plays in business, and how to manage change effectively in different contexts.

Ethics

Ethics refers to the principles and values that guide the behavior of individuals and organizations. In business management, ethics is concerned with questions of right and wrong, and with the moral implications of business decisions and actions. Ethics is an important concept in business management because it helps to ensure that organizations operate in a responsible and transparent way, and that they take into account the needs and interests of stakeholders. These can include customers, employees, shareholders, suppliers, and the community.

In the field of business management, you need a solid grasp of ethical behavior in the context of decision-making, which involves distributing value fairly among various stakeholders. It is crucial to develop a critical perspective on socially responsible organizations (for-profit and non-profit) and to analyze their decisions. This will help you to determine whether such decisions are genuinely socially responsible, or merely a way for companies to cultivate a positive image in society.

By studying ethics in business management, you will develop the knowledge and skills you need to make informed and ethical decisions in a variety of business contexts. This can help you to build trust and credibility with stakeholders, and to contribute to the overall well-being of the community.

Sustainability

Sustainability refers to the ability to meet present needs without compromising the ability of future generations to meet their own needs. In business management, sustainability is concerned with the environmental, social, and economic impacts of business activities, and with finding ways to operate that are sustainable over the long term. Sustainability is an important concept in business management because it helps an organization to balance its short-term goals with its long-term responsibilities, and to contribute to the well-being of the planet and its people.

In the course, you will learn about sustainability in different ways. You may study the different types of sustainability (for example, environmental sustainability, social sustainability, and economic sustainability) and the ways in which businesses can contribute to each of them. You may also learn about the challenges and opportunities that businesses face in trying to operate sustainably, and about the various tools and strategies that can be used to manage these challenges.

Through the study of sustainability, you will acquire the knowledge and skills required to understand the role of businesses in society. You will become capable of making informed decisions based on the degree to which organizations contribute to the long-term welfare of the Earth.

Creativity

Creativity refers to the ability to generate new and innovative ideas. In business management, creativity allows organizations to develop new products, services, and strategies that can help them to stand out in the market and to adapt to changing conditions. Creativity also helps organizations to solve problems and to find new ways of doing things.

Creativity is an important concept in the course, as it will help you to develop the ability to generate new and innovative ideas and to think creatively about business problems and opportunities.

You will learn about creativity in different ways. For example, you may study the different types of creativity (for example, divergent thinking, convergent thinking, and lateral thinking), and the ways in which these types of creativity can be used to solve business problems. You may also learn about the factors that contribute to creativity (for example, motivation, expertise, and environment), and about the ways in which businesses can foster creativity within their organizations.

By studying creativity, you will develop the knowledge and skills you need to think creatively and to come up with new and innovative solutions to business challenges. This can help you to stand out in the job market and to succeed in your career.

These four concepts – change, ethics, sustainability, and creativity – are all important in the field of business management, and they are interconnected in various ways. Understanding the definitions and relative importance of these concepts can help you to better understand the subject of business management and to make informed decisions in a variety of business situations.

The concepts in context

Course content

The table shows how the key concepts relate to specific sections of the business management course.

Concept	Content
Change	1.3 Business objectives 2.1 Introduction to human resource management 2.2 Organizational structure 3.2 Sources of finance 3.7 Cash flow 4.2 Marketing planning 4.3 HL Sales forecasting 4.4 Market research 5.7 HL Crisis management and contingency planning 5.8 HL Research and development

Concept	Content
Ethics	1.1 What is a business? 1.2 Types of business entities 1.3 Business objectives 1.4 Stakeholders 1.5 Growth and evolution 2.3 Leadership and management 3.4 Final accounts 4.1 Introduction to marketing 5.1 Introduction to operations management
Sustainability	1.2 Types of business entities 1.4 Stakeholders 1.5 Growth and evolution 1.6 Multinational companies (MNCs) 2.1 Introduction to human resource management 2.2 Organizational structure 2.3 Leadership and management 2.4 Motivation and demotivation 2.5 HL Organizational culture 2.7 HL Industrial/employee relations 4.2 HL Marketing planning 4.6 HL International marketing
Creativity	1.5 Growth and evolution 1.6 Multinational companies (MNCs) 2.3 Leadership and management 2.5 HL Organizational culture 3.2 Sources of finance 3.8 Investment appraisal 4.4 Market research 5.3 HL Lean production and quality management 5.8 HL Research and development

TOK questions

The TOK course centers on the exploration of knowledge questions. Knowledge questions are crucial to effective TOK discussions, as they help to ensure that you are focusing on questions about knowledge, and about how we know things. Knowledge questions will help you to move beyond subject-specific questions or real-life situations into the realm of TOK.

The table on the following page has some examples of knowledge questions. They are divided according to the four business management concepts. You should evaluate each knowledge question and discuss it in relation to the given concept, and to other concepts as well.

Change	• How do changes in the world bring about changes in knowledge? • What is the role of individuals in bringing about major changes in the theory and practice of business management? • If employees are so diverse in their thinking, personalities, and behavior, what exactly is 'human nature'? • How have perspectives regarding the rationality of human decision-making in economic matters evolved throughout history?
Ethics	• Do the concepts of globalization and ethics have any role in deciding on the optimal span of control for businesses? • Does the study of business management steer people toward ethical decision-making? • How can your own ethics and the promotion of certain products compromise each other? • What ethical questions does a business face when making job cuts or closing factories?
Sustainability	• To what extent does incorporating sustainable practices into business operations align with the ethical responsibilities of a business? • How do we create a more sustainable society? • How does knowledge influence sustainability? • To what extent do cultural and societal perspectives influence a company's approach to sustainability? • How can a business engage with its stakeholders to ensure its sustainability practices align with stakeholders' needs and expectations? • In what ways can a business measure the effectiveness of its sustainability efforts?
Creativity	• Concepts such as 'creativity' are difficult to define. Can we have shared knowledge of concepts that are difficult to express through language? • How much of a role does creativity play in business success? • What is the relationship between advances in technology and creativity? Does technology control what is possible to know? • How do differing management styles impact the ability of a business to be creative and innovative? • In what ways can a business foster and encourage creativity among its employees? • How does the understanding of creativity differ across different areas of knowledge?

Applying the concepts to a case study

After having looked at the case study on the transportation company Uber, for example, you might consider the following questions:

Change: How has Uber revolutionized the taxi industry by using disruptive technologies?

Ethics: Is disregarding compliance with local laws and regulations, and bypassing authorities to approach providers or customers, just a business decision or is it also an unethical decision?

Creativity: How has Uber leveraged the innovative and disruptive technologies of complex data analysis algorithms and artificial intelligence to generate revenue?

Economic sustainability: Can Uber's strategy of rapid and aggressive expansion be considered sustainable in the long term?

Cultural/social sustainability (people): How is Uber's organizational culture of not involving its providers in pricing, and there being a distance between the main platform and the providers, affecting its success?

Social sustainability: How can customers influence companies using social media? How have social campaigns against Uber affected its bottom line?

Developing understanding

To develop your own understanding of the four concepts used in the business management course, try the following activity.

Consider the prompt: 'Using the four key concepts of the business management course, analyze how entrepreneurship affects the economy'.

- Think: What do you think you know about the above question? Write three ideas.
- Pair: Find a partner. Discuss your ideas with your partner. Which of their thoughts were interesting?
- Share: How has your thinking changed?

The Internal Assessment

The concepts will be explicitly assessed in the Internal Assessment (IA), specifically in Criterion A. The IA for both SL and HL is a business research project that allows greater analysis and evaluation of content, concepts, and context. In the IA, you will be required to use a concept as a lens through which to analyze your research project. This will help you to develop a deeper understanding of the topic you are studying.

Possible tasks

Change: What are the innovative changes in your chosen company?

Ethics: What are the ethical considerations in the operations management of your chosen company?

Creativity: In a group, investigate crowdfunding and its role in finance. Choose one investment and prepare a presentation about it. In your group, role play a meeting where different types of investment are discussed and chosen.

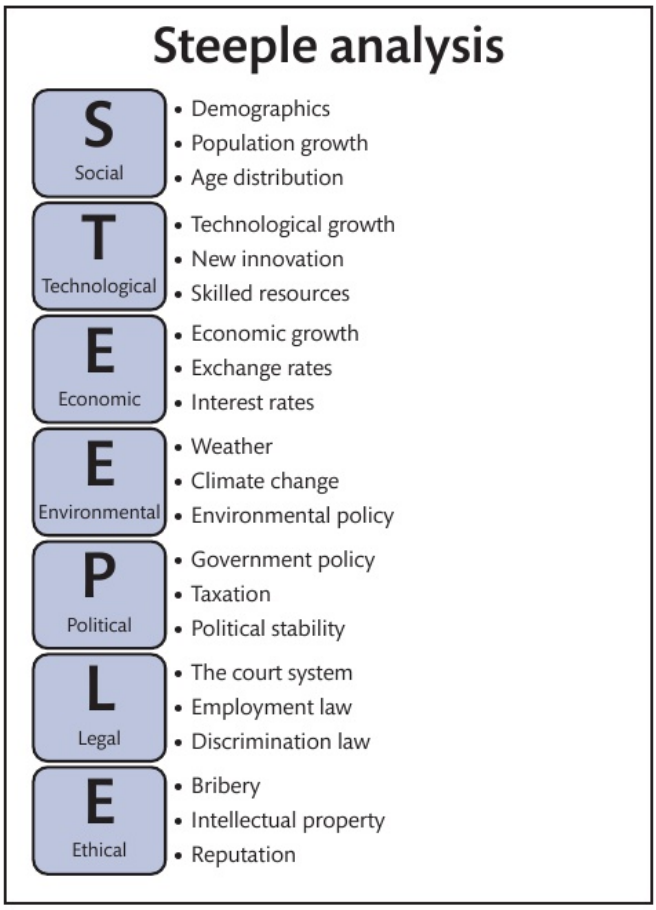
Sustainability: Why was Target's expansion into the Canadian market not sustainable? Analyze those factors for a company of your choice. What strategies could the company adopt to be sustainable?

Concepts	Possible case studies for research tasks
Change	• Coca-Cola's new product launch failure • Duncan Bannatyne turned one ice cream van into a £280m fortune
Ethics	• The business case for responsible AI • Fee rises at private schools • The future of the finance function at Pakistan International Airlines
Creativity	• Creative ways to crowdfund your business • The failure of the Daimler-Benz and Chrysler merger • The simplification of KFC's menu
Sustainability	• The failure of Target in Canada • Starbucks entrance into the Italian market

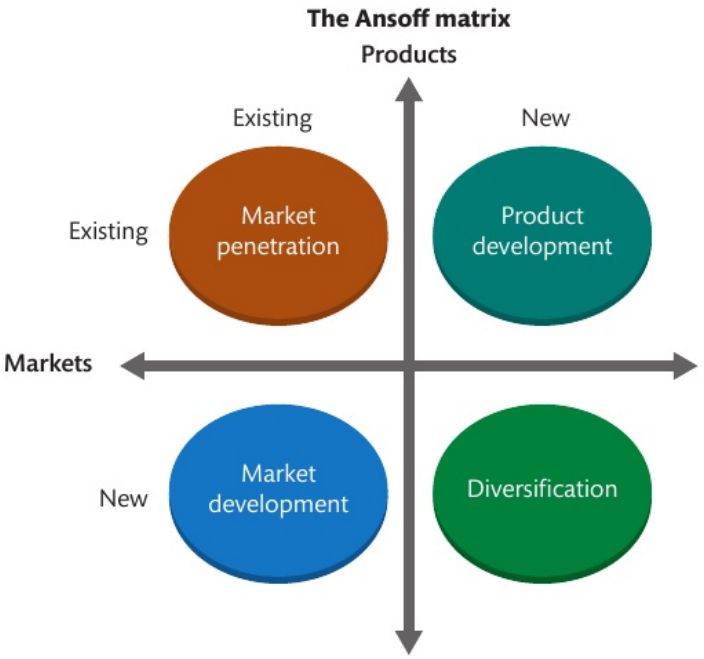
Business management toolkit

The table below is a toolkit for business management and lists a range of tools that will assist you in situation analysis, planning, and decision-making. Learning these tools will help you to examine and evaluate the syllabus content. Your teacher will also incorporate these tools into their instruction to ensure that you know how to apply them effectively.

Business management tools	Description
SWOT analysis	SWOT analysis is a framework for identifying and understanding the strengths, weaknesses, opportunities, and threats within an organization. A SWOT analysis can be used to understand the current position of the business and design a strategic plan for the future. Strengths and weaknesses are internal factors over which the company has control. These can be related to the four key business functions of marketing, human resources, operations, and finance. **Strengths** are those things that are beneficial for the business and have a positive effect on the organizational objectives. For example, a strength can be a strong brand image that allows a firm to charge premium prices for its products. Moreover, low labor turnover shows a motivated workforce willing to work for a business for a long time due to satisfaction with working conditions, opportunities, and benefits. **Weaknesses** are those things that have negative effects on the company. For example, a weakness could be a company's unstable financial position, such as declining revenues or declining profit margins. Opportunities and threats are factors of the external environment over which the company has little control but are important for the company's strategic decision-making. **Opportunities** are external circumstances beneficial to the company. New legislation in the country could be an opportunity: a reduction in income tax rates would mean consumers have more disposable income for purchasing goods and services. An expanding and growing economy increases employment and income levels, meaning people can purchase more goods and services, thus providing opportunities to businesses. **Threats** are those characteristics of the external environment that can have a negative impact on the business. External factors can be related to the macroeconomic environment, technology, social changes, and legislation. An unstable political situation may threaten the investment that a business might have made in a country. War in a country where a business

	operates may be a threat as it could lead to international sanctions or embargoes, which reduce or end the supply of parts and materials from abroad, as well as sales to other countries. SWOT analysis can be applied in different strategic contexts: it can help identify competitive advantage; inform location, relocation, outsourcing and offshoring decisions; and it can present growth opportunities and methods. SWOT analysis can be used to match strengths with opportunities when building a strategy for a business: this is called the matching approach. The converting approach eliminates weaknesses and avoids threats.
STEEPLE analysis	STEEPLE analysis is a situational tool which helps to assess the external factors impacting an organization. STEEPLE analysis helps organization to make informed decisions.  Social: Social factors include demographics, population growth, age distribution, lifestyle, and attitudes towards products and services. These factors impact marketing strategies, as changes in the social factors can influence the consumer preferences and demand.

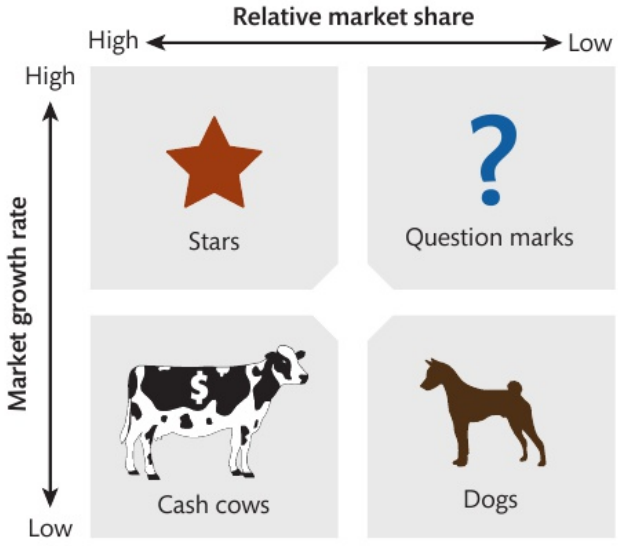
	Technological: This component of STEEPLE analysis examines how technical improvements affect a firm. It covers innovation, automation, and the effects of digitization. A company's capacity to compete and meet customer expectations may be impacted by technological improvements, thus it is important to take this into account when making strategic decisions. Economic: Economic factors assess the impact of economic growth, interest rates, exchange rates and GPD on an organization. A company should consider all of these when making decisions about investment, pricing, and expansion. Environmental: This element examines how environmental factors affect a business. It encompasses pollution, resource depletion, and climate change. When deciding on sustainability and corporate social responsibility, an organization must consider environmental factors. Political: This component examines how political factors affect a corporation. It consists of laws, rules, and government policies. Political factors must be taken into account by businesses when making decisions about taxation, compliance, and market entry. Legal: Legal factors consist of legizlation governing employment, consumer protection, and intellectual property. When making decisions concerning compliance and risk management, a corporation must take legal considerations into account. Ethical: The effect of ethical factors on a corporation is examined in this component. Corporate governance, social responsibility, and ethical conduct are all included. When making decisions about its reputation and stakeholder interactions, a corporation must take ethical considerations into account.
Ansoff matrix	The Ansoff matrix is a strategic framework that allows executives to consider possibilities for business growth. It covers market penetration, market development, product development, and diversification strategies. Each of the growth strategies in the matrix can be described in terms of product/market and risk associated with each growth strategy.



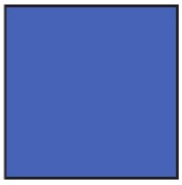
A **market penetration strategy** is where the business offers an existing product to an existing market by encouraging more frequent purchases. A business can achieve this by improving its distribution processes, increasing marketing efforts, or decreasing prices. This is a low-risk strategy as the business already knows the preferences and tastes of existing consumers; the market is familiar, the product is familiar, and the business knows how to market it to appeal to consumers.

Market development strategy is where a business seeks to grow by offering its existing products to new markets. It may target a different consumer segment in the host country or target new customers abroad. It is a medium-risk strategy, with the risk mainly coming from the necessary investment to build infrastructure and advertise in the new market. Despite those risks, the business is offering an existing product, which lowers the risk as the product has already had some success with similar target markets elsewhere.

A **product development strategy** pursues growth through offering new products to an existing market. This is a medium-risk strategy, with the main risk coming from the investment in research and development (R&D) to produce a new product that appeals to the existing target market. This type of strategy exploits customers' brand loyalty.

	Diversification strategy is where the business seeks to sell new products in a new market. This is the riskiest strategy as the product is new and requires a substantial amount of investment in R&D; there are also risks (and costs) involved in entering a new market. The business needs to invest in advertising and infrastructure for the delivery of the product, as well as in the other elements of the marketing mix. At the same time, it must establish relationships with potential new customers and persuade them to buy the product. The Ansoff matrix can be used to identify opportunities for revenue growth, it is simple to use, and it can indicate to stakeholders the level of risk. However, it ignores competition. It should not be used without other tools as predictions are not always accurate.
Boston Consulting Group (BCG) matrix	The Boston Consulting Group (BCG) matrix, or growth-share matrix, can be used by managers to help prioritize and make decisions about their products and different business units. The 2 × 2 matrix allows firms to classify their products into one of the four quadrants according to two key variables: market share and market growth.  Each quadrant has distinct characteristics: **Star**: These products experience increasing sales, profit, and cash flow. A firm will want to continue to invest in such products to develop awareness and interest as they move into the mass market. **Cash cow**: Sales for cash cow products are starting to peak, as profits and cash flow continue to be strong. A firm will want to harvest these high levels of profits for as long as possible by developing brand loyalty and value. The income from these cash cows can be used to develop question marks.

	Question marks: Question mark products generally experience low sales with the potential to grow with the right level of investment. As a result, question mark products are rarely profitable and can cause cash flow problems. A firm will need to choose wisely and either invest or discard these products. If it chooses to invest, it will want to build product awareness so that the product can gain market share and move into the star category. **Dog**: These products tend to experience decreasing sales, profit, and cash flow. Unless a firm can produce an innovative extension strategy, most dogs will need to be phased out through a divestment strategy. In some rare situations, a company may choose to keep a dog because it is closely tied to its history and brand, or because a few loyal customers depend on the product. After a business classifies and plots its various products within the BCG matrix, it can assess the overall health of its portfolio. An unbalanced portfolio would have too many dogs or question marks and too few stars and cash cows. To minimize risk, a business will want to have products within multiple categories of the BCG matrix.
Business plan	A business plan breaks down the goals of a company and outlines the methods to achieve those goals. It should include a vision and a mission statement. A business plan presents a suitable strategy for growth for a business, determining the business' future direction, and allowing the business to raise finance from suitable sources, such as banks. The main elements of a business plan are: • an overview of the organization and its objectives • the company's legal status (type of organization), its vision and its mission statement, the key personnel within the business, and an organizational chart • market analysis – details of the industry in which the business operates, the main competitors in the industry, predicted sales figures and marketing opportunities, and possibly a SWOT analysis with an emphasis on strengths and opportunities • product analysis – the main products to be offered, and the planned operation facilities • financial analysis – operational and administrative costs, projected cash flows, and projected investment costs • marketing strategy – details of the marketing mix, such as pricing strategy, distribution network, and promotional strategy.

	Businesses need a business plan because it: • supports strategic planning and decision-making • reassures investors, especially if the business is seeking external sources of finance, such as bank loans • measures the success of the business • informs employees of the strategic direction of the business.
Decision trees	A decision tree is a visual tool to support decision-making. It is presented in the form of a tree with branches and nodes. The main components of a decision tree are:  a square, also called a 'decision node' circles, representing 'chance nodes' two vertical lines drawn across a branch to show rejected decisions. Decision trees present all of the options that an organization's management is considering, with the chance of success/failure of each option and the potential financial outcome if success or failure occurs. The estimated overall financial outcome can then be calculated from the individual outcomes for each option. The management can choose the option with the best estimated financial outcome. Decision trees are easy to understand and interpret. They help to determine the estimated financial outcome of different scenarios. However, the estimated outcomes of different options are only as accurate as the predictions of success/failure or the numbers, and often these change. Decision trees can easily become overly complicated. In spite of this, decision trees are a useful decision-making tool that can complement the output of other tools.

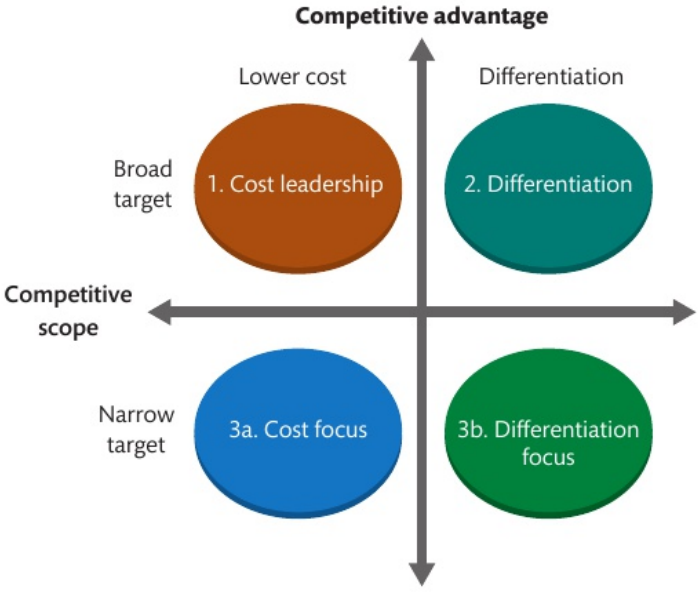
Descriptive statistics, including: • Mean • Mode • Median • Bar charts • Pie charts • Infographics • Quartiles • Standard deviation	Descriptive statistics can assist a business in its decisions regarding a particular venture or strategy. Calculating, creating, and analyzing descriptive statistics can help business leaders to make informed decisions. Descriptive statistics fit into three categories: • Measures of central tendency: mean (or average), median, and mode • Measures of dispersion (or spread): quartiles and standard deviation • Data visualization: bar charts, pie charts, and infographics Measures of central tendency focus on the average or the middle value of a data set: • Mean (average): calculated by adding all the numbers in a data set together, then dividing by the number of values in the set • Median: the middle value when the numbers in a data set are arranged from the lowest to the highest • Mode: the number that occurs most frequently in a data set. Measures of dispersion include: • **Standard deviation** measures how dispersed the numbers in a data set are in relation to the mean • **Quartiles** represent a section of a data set. The data set is divided into four equal parts where each part (quartile) represents one quarter of the data. Quartiles allow managers to see the distribution of the items in a data set. Using quartiles also allows managers to see the spread of values below or above the mean. Numerical data can be used to create bar graphs, pie charts, and infographics, which provide a visualization of the data.
Circular business models, including: • Circular supply models • Resource recovery models • Product life extension models • Sharing models • Product service system models	Circular business models aim to reduce the extraction of resources and the generation of waste. They aim to use already existing materials so that an organization's carbon footprint is minimized. **Circular supply models** use renewable or recovered materials, reducing demand for the extraction of new resources. Reduced extraction benefits the business and society in several ways, including reduced waste and lower energy use. There are some risks that need to be considered: there should be strict controls in place to ensure that material recovery and reuse does not expose living beings or ecosystems to harmful chemicals; if the increased production of bio-based material involves repurposing land, this may place pressure on ecosystems and biodiversity.

	The **resource recovery model** focuses on the end stages of a product's life cycle and the recovery of materials, energy, and resources from a product once it is no longer in use. Manufacturers can design products in a way to make recovery of materials easy and efficient. The resource recovery model and reuse are relatively mature in some industries, such as the metals industry. However, in other industries, recycling results in the degradation of materials rather than in usable materials. A business using the resource recovery model has incentives to produce products that can be disposed of safely or reused: this will lower costs, be more environmentally friendly, and can build a positive reputation for the business. **Product life extension models** aim to extend the use of a product, make the flow of materials through the economy slower, and thus reduce resource extraction and waste generation. Businesses following this model create products that can be repaired, upgraded, reused, disassembled, or recycled. **Sharing models** facilitate the sharing of products, reducing demand for new products. The aim is to maximize the use of idle assets while providing customers with affordable and convenient access to products and services; the asset provider's expensive assets will see more use throughout their lifespan. The **product service system model** focuses on the marketing of services rather than products. The provider retains ownership of the product and is responsible for ongoing maintenance, upgrade, and disposal at the end of the useful life. Consumers can use the product for a limited time (for example, it could be a car-sharing service). The provider will focus on performance rather than sales numbers and will aim to maximize the useful life of the product. The provider benefits from contact with customers and their insights into how the product is used, which can reveal opportunities to access new markets or widen the project range.
HL Force field analysis	Force field analysis is a framework created by Kurt Lewin for exploring the influences on a situation through driving forces for a change and restraining forces against a change. The driving and restraining forces are given a weighting (usually on a scale from 1 to 5), indicating the importance of each force. This analysis enables managers to discuss and assess a proposed change. Force field analysis can be used in a range of different scenarios. The numerical weighting for each force helps managers to carefully consider their importance. A limitation is that the weights may be subjectively determined. Moreover, not all forces may be included, due to bias or lack of knowledge.

HL Gantt chart	A Gantt chart is a visual organizational planning tool that shows the sequence and schedule for all the tasks in a project. The tasks are organized chronologically and those that can be carried out concurrently are identified to minimize the time needed for the completion of the project. A Gantt chart helps managers to have an overview of an entire project; identifies the minimum time needed for completion of the project; highlights tasks that can be completed at the same time, thus making efficiency gains; and clearly shows the progress of each task. However, a Gantt chart is only useful if the information used is accurate. It may be suitable for simple projects but it may not be possible to accurately present complex projects.
HL Hofstede's cultural dimensions	Geert Hofstede developed his cultural dimensions theory as a result of research into the various aspects of the cultures within and between organizations. The defined cultural dimensions help managers to understand what motivates employees in different cultures, why employees behave in a certain way, what they value, and how they make decisions. The tool helps managers of international companies to understand the similarities and differences between different cultures, and to develop appropriate human resources (HR) strategies to conduct operations in different settings. The tool can also be used by marketing teams to develop appropriate marketing strategies to appeal to customers in different countries and cultures. Knowledge and consideration of Hofstede's cultural dimensions can reduce the risk of culture clashes and stakeholder conflicts within and between organizations, especially when a business pursues international growth through mergers and acquisitions. Hofstede's cultural dimensions are: **Power distance**: the extent to which a culture respects authority and status. Organizations with a hierarchical structure and centralized decision-making, such as in the military, will have a high degree of power distance. People in such an organizational culture respect authority and accept inequalities. In Japan, employees do not leave their workplace before their managers. Such a culture might frustrate young, ambitious employees who work hard in the hope of quick promotion. Organizations with decentralized decision-making, a flatter organizational structure, delegation, and job empowerment tend to have a low degree of power distance.

	Individualism versus collectivism: the degree to which societies are integrated into groups. An individualistic culture indicates that greater importance is placed on attaining personal rather than collectivist goals. Collectivist culture puts more emphasis on the group and social cooperation. This cultural dimension affects people at work and their preferences for certain working patterns. In some cultures, people prefer to be self-employed or to work from home in order to better balance their work and life obligations. In other cultures, group working is highly valued. **Masculinity versus femininity**: the attitude in society (or corporate culture) to achievement, equality, and values. It focuses on the stereotypical male and female roles (which many now consider to be outdated). Cultures considered masculine are more focused on competition, status, and achievement, are highly competitive, and are driven by material rewards. Cultures perceived as feminine are more focused on cooperation, caring, and quality of life, and are more intrinsically motivated. **Uncertainty avoidance:** the tolerance in society of ambiguity and uncertainty. Cultures with high uncertainty avoidance tend to be structured and rigid, and have a low tolerance for risk-taking. Cultures with low uncertainty avoidance are more open to change, have a higher tolerance to risk-taking, and have a more relaxed attitude. **Long-term versus short-term orientation**: how society views its time horizon. Long-term oriented culture is more focused on the future and is willing to sacrifice a lot today in order to benefit from gains in the future. Such a culture is focused on perseverance and long-term growth. Short-term orientation is more focused on the present and seeks quick results. **Indulgence versus restraint:** the extent of a society to fulfill its desires. Indulgent cultures indicate that society allows people to enjoy life and have fun. A culture characterized by restraint suppresses individuals' needs and freedoms through strict social norms and self-regulation.
HL Porter's generic strategies	Porter's generic strategies assist businesses with considering various factors before deciding whether to progress a particular venture or strategy. The tool outlines the different strategies an organization can take to succeed in the long term.

	Dr. Michael Porter of Harvard Business School outlined three 'generic strategies': differentiation, cost leadership, and focus strategies. These strategies are 'generic', in the sense that they can be applied to almost any type of business organization. Dr. Porter argued that an organization that does not clearly choose one of these three strategies will struggle to survive in the long term. It will face competition from companies with lower costs and possibly superior products, which may eventually drive them out of the market. **Cost leadership** In this strategy, an organization seeks lower costs than its competitors. Having lower costs can allow the organization to achieve higher profit margins than its competitors. Alternatively, it can allow an organization to charge a lower price than its competitors and increase its market share. Cost leadership is about minimizing the cost of running a business, not the price a customer pays for the product or service. There are many ways an organization can lower its costs, including: greater efficiency, economies of scale, lean production, outsourcing, proprietary technology, and access to distribution channels. **Differentiation** There are numerous ways that an organization can distinguish itself from its competitors; many of these revolve around unique selling points (USPs) and the marketing mix. Some examples of how a business can differentiate itself from competitors include: • having a unique product feature or range of products to offer (product) • applying different pricing strategies compared to competitors (price) • selling its product in convenient or unique locations (place) • offering exceptional customer service and developing relationships with its customers (people) • attaching a unique story or image to its product(s) (promotion or brand) • packaging its product(s) in a unique or sustainable manner (product) • utilizing other innovative practices and/or operations (process and/or physical environment).

	Focus This involves operating in a narrow competitive scope. Organizations that use this strategy target a small, niche market. Customers in niche markets have very specialized needs or wants. Organizations utilizing a focus strategy focus on meeting these needs and building customer loyalty. The same competitive advantage strategies (lower cost and differentiation) can also be applied within the niche market by providing cheaper or well-specified products. A **cost focus** is when a business aims to achieve the lowest cost in order to be able to offer the lowest price to niche market customers (such as in discount stores). A **differentiation focus** is when a business targets a specific segment of the market. It can be a highly profitable strategy due to the high prices that can be charged and the lack of competition in the market segment. However, the market can be limited, which limits potential growth opportunities. Because of these two types of focus, many explanations of Porter's generic strategies show four strategies, as shown in the following matrix. 
HL Contribution, including: • Make or buy analysis • Contribution costing • Absorption costing	**Make or buy analysis** is a quantitative analysis conducted when a business has to choose between producing a component in-house or purchasing it from an external supplier. In-house production means the business is in control of the quality of materials and costs, and has better control over the production process. Outsourcing production to an external supplier provides the business with more flexibility in case of unexpected fluctuations of demand. External suppliers might also be more cost-efficient.

	When comparing the cost to make (CTM) with the cost to buy (CTB), a business must compare the direct costs of production with the price quoted by the external supplier. CTM = total cost of production = total fixed costs (TFC) + total variable costs (TVC) CTB = price × quantity If the CTM is greater than the CTB, then the business will choose to purchase from the external supplier. If the CTM is less than the CTB, then the business will produce in-house. Some other factors to consider when making the decision to produce in-house or to purchase include: • the capacity of the business to produce in-house • the expertise of the business to make the product in-house • the reliability of the external supplier and whether their production capacity is sufficient for the needs of the business • the degree of control that the business wants to have over the production process, which may be closely related to the image of the business. **Contribution costing** is a quantitative technique used to calculate how many units have to be produced and sold in order to cover all costs (both direct and indirect). Contribution costing assumes that each product will contribute to covering indirect costs (overheads) but does not apportion the indirect costs between different products. It is a useful technique when the business must decide which products should be continued, which should be removed from production, or whether to accept a new production contract for a product or component depending on the 'contribution' of the contract toward indirect costs. Contribution measures how much is being contributed toward the indirect costs. Total contribution = sales revenue − direct costs When the total contribution exceeds indirect costs, a profit is made. When the total contribution is lower than the indirect costs, a loss is incurred. For example, a fast food restaurant sells burgers, pizza, sandwiches, and scrambled eggs.

	Burgers	Pizzas	Sandwiches	Scrambled eggs
Sales revenue ($)	6 000	7 000	4 000	3 000
Direct costs ($)	1 400	700	2 800	1 100
Indirect costs ($)	10 000			
Contribution	$6 000 − $1 400 = $4 600 46%	$7 000 − $700 = $6 300 63%	$4 000 − $2 800 = $1 200 12%	£3 000 − $1 100 = $1 900 19%

$$\text{Total contribution} = \$4\,600 + \$6\,300 + \$1\,200 + \$1\,900 = \$14\,000$$

$$\text{Profit} = \$14\,000 - \$10\,000 = \$4\,000$$

Some products contribute more than others to the indirect costs. A business may decide to continue only with products that contribute more significantly toward covering indirect costs.

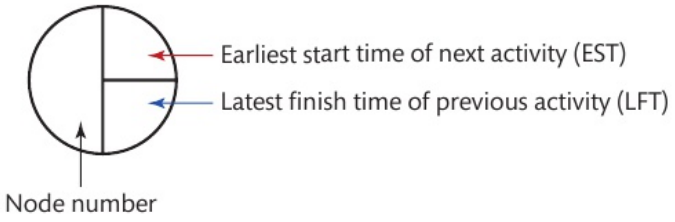
Contribution costing allows a business to decide whether to accept a production contract or reject it depending on the contribution to the indirect costs and the availability of production capacity. Even if a contract does not generate a profit for the business, it can still contribute to covering indirect costs and may be accepted if there is unused production capacity.

Contribution costing is useful for businesses producing multiple products as the contribution of each product toward indirect costs can be considered.

However, managers may not know which product incurs the largest proportion of indirect costs and could stop production of something that has low contribution and also low indirect costs. When managers decide which products to discontinue based on contribution and profit, they may discontinue products that positively influence the firm's image or that have loyal customers. Thus, qualitative factors also should be considered when making those decisions.

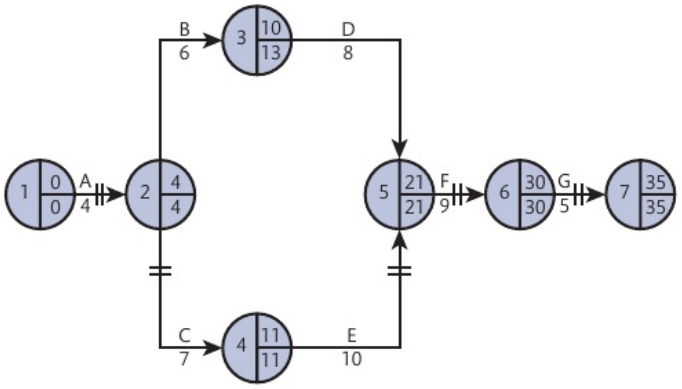
Contribution costing also plays a role in pricing decisions, especially in cost-plus pricing, as it enables managers to calculate the minimum price that must be charged in order to make any positive contribution toward the indirect costs.

Absorption costing is a quantitative technique that calculates the cost of a product by taking into account direct and indirect costs. The overheads are apportioned to each product, cost, or profit center, according to criteria such as floor space, sales revenue, and number of employees.

	For example, the rent for production premises can be allocated to the different products according to the production area each product requires. If the production area is 1,000 m^2, three products are produced, and the rent for the premises is $10,000, Product A takes half of the premises and will be allocated half of the rent ($5,000). Product B takes 300 m^2 and is allocated 30 per cent of the rent ($3,000); Product C takes the remaining 200 m^2 and can be allocated $2,000 of the rent. In this way, the entire rent has been 'absorbed' according to the production area used by each product. Absorption costing accounts for all indirect costs and apportions them appropriately as they need to be covered. The way in which indirect costs are apportioned can still be arbitrary and lead to discrepancies. Absorption costing is also more time-consuming to calculate than contribution costing.
HL Critical path analysis, including: • Completion and analysis of a critical path diagram (drawing of the diagram is not expected) • Identification of the critical path • Calculation of free and total float	Critical path analysis (CPA) is a technique that maps out all key tasks necessary to complete a project. It includes identifying all necessary activities, the duration of time needed for each activity, and the dependences between activities in the project. The **critical path** is the sequence of activities that ensures that the project will be completed in the shortest possible time. CPA identifies those activities that have no 'float time': they cannot be delayed as that will delay the entire project. 'Float' (a project management term) defines the amount of time that an activity can be delayed without causing a delay in the entire project (**total float**), or without causing delay in subsequent activities (**free float**). Any activity or task on the critical path has 'zero float'. It is critical that these activities are finished within the set time. In critical path network diagrams, nodes are used to indicate ordering and timings:  EST is the earliest time that the next activity can start. LFT is the latest finish time of the previous activity The node number is the number of the activity in the sequence.

The following table is an example of the tasks in the production of an advertising campaign.

Task	Order/Dependency	Estimated time
A: plan the advertising campaign	Must be done first	4 hours
B: make a video for TV	Can only start when A is completed	6 hours
C: design a poster	Can only start when A is completed	7 hours
D: test market the TV video	Can only start after B is completed	8 hours
E: test the poster	Can only start after C is completed	10 hours
F: present campaign to the board	Can only start when D and E are completed	9 hours
G: communicate the campaign to the company's staff	Can only start when D, E, and F are completed	5 hours



On the network diagram for the advertising campaign given here, the EST for each activity is in the upper right portion of each node: if the EST for A is 0, B and C cannot start for 4 hours as it takes 4 hours to finish A, as shown in node 2.

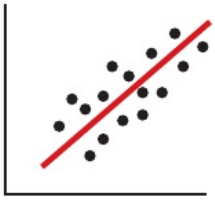
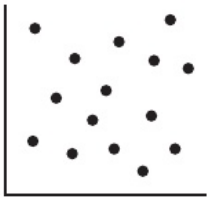
To estimate the LFT without delaying the project, the calculation is made backward from node 7 and the time is marked in the lower right portion of the node.

We can see that B and D can be delayed without affecting the entire project.

The total float is calculated by subtracting the EST and the task duration from the LFT, so for task B it would be 3 (13 − 6 − 4). This is the total float up to that activity.

The free float is calculated by subtracting the EST at the start of the task and the duration of the task from the EST of the next task, so for task B it would be 0 (10 − 6 − 4). This is the free float and shows that any delay to B will interfere with task D.

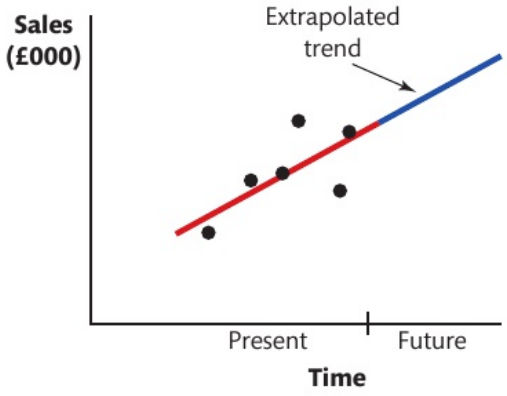
The critical path for this example project is A, C, E, F, G.

HL Simple linear regression, including: • Scatter diagrams • Line of best fit • Correlation/ Extrapolation	Linear regression models are statistical techniques used to show the relationship between two variables, such as promotion expenditure and sales revenue, or the impact of seasonal factors on sales revenue. A **scatter diagram** is a visual tool showing the relationship between two variables, for example, household income and spending on certain goods and services. The values for each variable are plotted on a different axis. The scatter diagram can then help determine the degree to which one variable affects the other. A positive correlation exists if the two variables move in the same direction: an increase in income will result in an increase in expenditure on certain goods/services. A negative correlation exists when the two variables move in different directions: a decrease in outside temperature results in an increase of demand for warm clothes. No correlation is when the data set suggests that there is no relationship between the two variables.  **Positive correlation** As one variable increases, so does the other variable. **Negative correlation** As one variable increases, the other variable decreases.  **No correlation** There is no relationship between the two variables. The **line of best fit** is a statistical technique that shows the relationship or correlation between variables on a scatter diagram. The line of best fit, also known as the regression line, is drawn through the different data points on a scatter diagram and thus smooths out the variations in the data set. It can only be drawn if there is a positive or negative correlation between the two variables (as shown on the scatter diagrams).

If all the points are very close to the line of best fit, then the correlation between the two variables is strong (positive or negative). Hence, the line of best fit illustrates the strength of the correlation.

The line of best fit can also be used to show the trend in a data set, such as a firm's sales revenue over a long period of time. However, the line of best fit is only an approximation from the given data set.

Correlation/extrapolation: Correlation determines the relationship between data sets, whereas extrapolation is a statistical technique used to make future predictions of sales based on trends determined from past data. A line of best fit is used in a scatter diagram to determine the trend from past data, and then this line is extended in order to make predictions, for example, for future sales revenues. Extrapolation is only useful when a clear line of best fit can be established between the two variables.



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KEY (t – top, c – center, b – bottom, l - left, r – right)

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UNIT

1

Introduction to business management

1 Introduction to business management

Conceptual understandings

- **Change** is essential for businesses to achieve their desired aims.
- **Creative** business planning can lead to organizational success.
- **Ethical** business behavior improves business image as well as customer loyalty.
- **Sustainable** business practices can enhance a business existence.

1.1 What is a business?

Learning outcomes

At the end of this section, you will be able to:

- understand the nature of business
- distinguish between primary, secondary, tertiary, and quaternary sectors
- analyze the challenges and opportunities in starting up a business.

Inquiry questions

These are questions based on themes within this unit that you could conduct some independent research about. You could explore:

- What is business activity?
- What are the functional areas of a business?
- What is the role of innovation in promoting enterprise/entrepreneurship activities?
- Why do businesses fail?
- How does organizational structure shape behavior?
- How does ethical behavior contribute to business sustainability?
- How can corporate social responsibility (CSR) impact business creativity?
- Why could change cause conflict between stakeholders?
- How might the use of new communications technologies encourage collaboration, communication and empowerment in the global workplace?

The nature of business

From the moment you wake up until you go back to sleep, you are constantly in contact with different businesses. When your alarm goes off, you probably have a look at your phone and check whether you have any messages. You are already interacting with a business – your telephone provider. When you get your breakfast ready, you interact with the businesses that produced the food you eat, the fluids you drink, or the power you use to heat up your breakfast. This continues all day. Understanding how you interact with different businesses will allow you to understand how important business is and how it works.

Before we proceed, let's understand the difference between business as an activity and a business as an organization.

What is business?

Business is any activity to provide goods and services to consumers to make a profit.

Figure 1.1 A diagram showing the nature of business: identifying inputs, following business processes, and creating outputs

What is a business?

A business is an entity or organization that produces goods and services. The organization adds value to resources to create products that meet the needs and wants of consumers.

Businesses are often successful because they identify a **need** or **want** in the market that is not already being exploited by other businesses.

Needs are human requirements that must be met for survival, and they are limited. Examples include food, warmth, shelter, clothing, and healthcare.

Wants are human desires that are unlimited. They are not essential for survival, for example, entertainment, travel, gym memberships, etc.

Figure 1.1 shows the nature of business. The nature of a business refers to its legal structures, business objectives, industry, resources, business processes, and products. Businesses transform inputs through different production processes to provide goods or services to fulfill the needs and wants of consumers.

For example, a bakery business produces and sells products such as bagels, buns, rolls, biscuits, breads, cookies, cakes, etc. The bakery offers the product to meet the needs and wants of the households in its neighborhood. However, a business may find an innovative way of providing a product that is different to what current businesses are offering. The bakery may sell its products online to widen its customer base and grow its business.

A bakery provides bread, which satisfies the basic need for food

TOK Are there laws of business in the same way that there are laws of nature?

Resources

The resources used to produce goods and services are called **inputs** and can be categorized into four major types:

- **Capital** refers to the manufactured goods needed to operate a business, such as machines, buildings, vehicles, and equipment. Capital goods need to be distinguished from consumer goods. Capital goods are used in production, while consumer goods are sold to the public to meet their needs and wants.
- **Land** includes the raw materials and natural resources needed to produce goods and services.
- **Labor** is the effort/work done by people. The quality of the work depends on their skills, knowledge, and experience.
- **Enterprise/entrepreneurship** involves making a profit by identifying an opportunity, starting a company, arranging business deals and taking risks, and efficiently using the other three inputs (capital, land, and labor). Today's competitive business environment is based upon knowledge and learning. The companies that succeed are those that learn fast, use knowledge efficiently, and develop new insights.

The quality of products depends on the quality of inputs. Disruption in the availability of resources can affect the entire production process, which can result in high costs and delays in the production of goods and services.

Products

Products are the output of a business activity. Products sold by businesses can be divided into two main categories:

- **Goods** are physical products.
- **Services** are intangible products. These are the tasks performed by labor.

A grocery shop sells goods (for example, bread, meat, pasta, oil, dairy, etc.), whereas other businesses provide services.

A medical clinic is a service business, providing the service of medical care to its clients. Other service businesses include banks, taxi firms, law firms, and airlines.

Many businesses provide both goods and services. For example, Apple sells goods (for example, Mac, iPhone, iPod, iPad) and provides services (for example, AppleCare, Apple Music, iCloud).

Table 1.1 The differences between goods and services

Goods	Services
Goods are physical products	Services are not physical products
Businesses producing goods have lower customer contact	Businesses providing services have higher customer contact
Production of goods can require large facilities	Provision of services usually requires small facilities
Production of goods is capital intensive	Provision of services can be labor intensive
Quality of goods produced can be easily measured	Quality of services provided is difficult to measure

Based on the type of product, a business can be a manufacturing organization or a service organization. A manufacturing organization produces goods, whereas a service organization provides services. A business that provides goods and services is categorized as a manufacturing organization as well as a service organization.

Activity

Identify the resources (inputs), business processes, and products (outputs) for the following businesses:

- Retail clothing store
- Medical clinic
- Automotive manufacturing company (for example, Tesla)
- Transportation company (for example, Uber)
- Beverage business (for example, Nestlé bottled water brands).

Business process and functional areas

A business process is any activity performed to add value to basic resources to produce the product. A business process converts inputs into goods and services to generate profit for the business.

All businesses, regardless of size, have different functional areas that perform different business processes.

These main functional areas and their roles are:

- **Human resources (HR)** manages the labor and workforce. HR deals with the recruitment, compensation, and motivation of the workforce. The HR function ensures that people with appropriate skills are employed, trained, and rewarded suitably for their work. The role of the HR specialist or department is to hire, train, dismiss, and determine the appropriate compensation for employees. The specific HR objectives will be different in each business, as some businesses require a bigger or smaller intervention of this department depending on their nature. For example, the relevance of HR in a firm with just one employee will be very different to that in a firm with operations in different countries and thousands of employees.
- **Finance and accounts** manages the organization's capital and assets. It deals with identifying, recording, and communicating the economic events and transactions of a business. The finance and accounts function is to ensure there are sufficient funds to produce the goods or services. To achieve this, the finance and accounts department oversees forecasting the financial requirements, keeping accurate records, procuring the necessary finance, and ensuring proper payments for goods and services.
- **Marketing** is involved in understanding the needs and wants of consumers. The marketing function considers buyers' needs and wants, and conducts research into where and how consumers will buy a product and how much they will be willing to pay for it. By identifying these factors, the marketing department makes sure the business produces goods and services that consumers are interested in buying.

- **Operations** manages the activities involved in production of the product. The operations function oversees all the aspects of the production process. The operations department is responsible for the quality of materials, the production methods used, and the control of stock to ensure that production is uninterrupted.

As we will see throughout this course, each of these areas is responsible for key activities that are essential for the organization to achieve its goals. All the functional areas work together to make the business successful.

A business can gain a competitive advantage by strategically focusing on one or more functional areas. Functional area strategies are based on chosen competitive priorities such as cost, quality, delivery, flexibility, or innovation. For example, if a competitive priority is to be the lowest-cost producer, then a business will focus on operations, maximizing efficiency and reducing costs by implementing smart operation management systems.

Business sectors

Businesses are categorized into business sectors depending on the main activities they undertake. There are four major business sectors. Some businesses can operate in more than one sector.

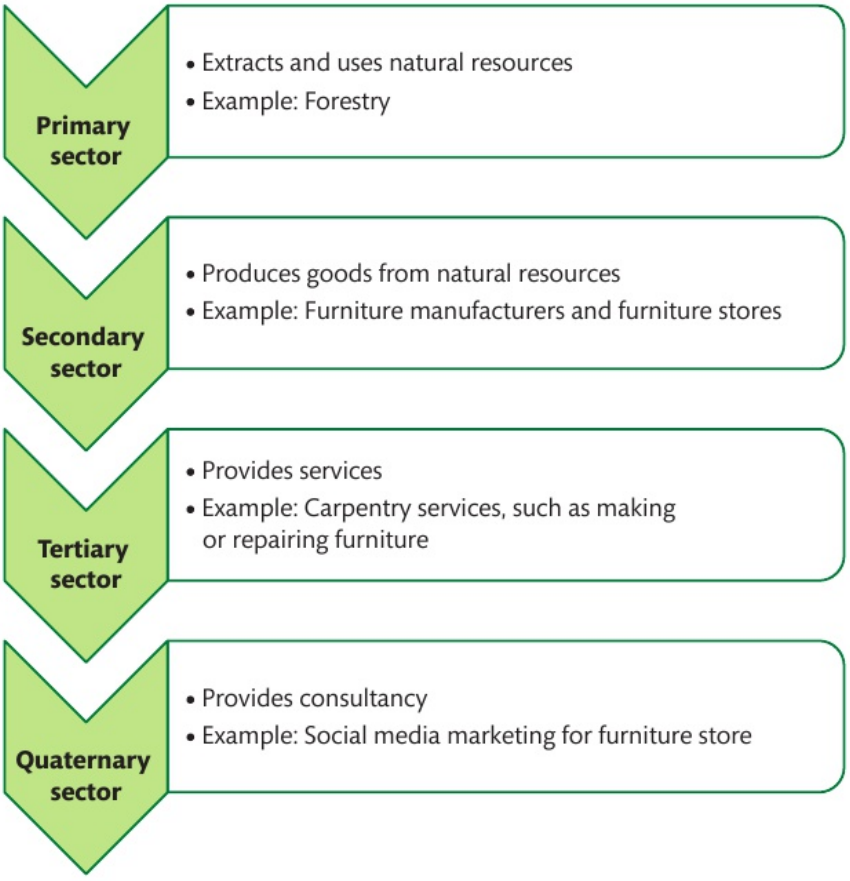


Figure 1.2 The four business sectors in the economy: primary, secondary, tertiary, and quaternary

Primary sector

Businesses involved in primary sector activities extract and use natural resources to produce raw materials used by other businesses. These include businesses like

farming and mining. These businesses often employ a large amount of labor in developing economies (labor intensive), while in more developed economies, they make more use of machinery to extract the materials (capital intensive). The type of products produced by primary sector businesses have lower **value added** (the difference between the cost to extract the natural resource and the price at which it is sold). Natural resources or raw materials are sold, without any modifications, to other businesses or consumers. In the primary sector, there is not much difference between the cost and price of the product sold.

Figure 1.3 Fishing is an example of a primary sector business

Secondary sector

The secondary sector consists of businesses that manufacture goods using natural resources and raw materials provided by the primary sector. For example, a business that buys oranges from the primary sector and transforms them into bottled orange juice is a secondary sector business.

These products have more value added as they have been transformed before being sold to customers. These customers might be local or international. Globalization has made it common to trade these goods with different parts of the world.

Figure 1.4 An orange juice manufacturer is an example of a secondary sector business

Conceptual understanding: Ethics

An ethical business is one that tries to minimize any negative impact on the environment, its workforce, and society. Ethical behavior can improve a business' image as well as customer loyalty. Using an online search engine, find some examples of ethical businesses.

Tertiary sector

A business that sells services to consumers or other businesses, such as a bank, transportation company, or insurance company, belongs to the tertiary sector.

In developed economies, the tertiary sector is more significant because people specialize in the provision of services that have higher value added.

The tertiary sector tends to employ a larger proportion of labor in developed economies than in developing economies. According to the International Labour Organization (ILO), in Europe, more than 60 per cent of the jobs created in 2021 were created in the tertiary sector, while this figure falls to less than 35 per cent in Africa.

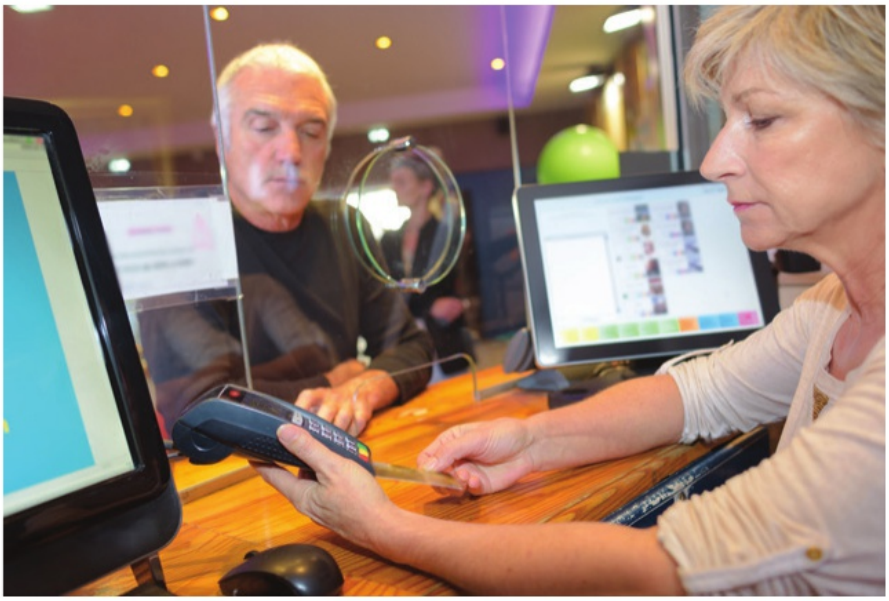


Figure 1.5 A bank is an example of a tertiary sector business

Quaternary sector

The quaternary sector is composed of businesses that provide services like consultancy, research and development (R&D), information services, or technology services. This sector requires a highly educated workforce because these services require deep knowledge of the areas in which businesses operate.

One example of the type of activity these businesses deal with is the creation of vaccines. This sector has experienced significant growth in recent years.

Case study – Repsol

Repsol is a global energy company that operates in more than one sector across different countries.

The company extracts crude oil from the ground (primary sector) in places like South America and North America.

It then processes the oil and transforms it into fuel (secondary sector) in operations fields like the Shaw field located in the United Kingdom's North Sea.

Finally, it sells the fuel in its own fuel stations (tertiary sector) in countries like Spain and Peru.

1 Define the following terms:
   a. primary sector
   b. secondary sector
   c. tertiary sector
2 Identify the key differences between different business sectors.

Activity

Select a newspaper or magazine article that discusses an ethical business problem or issue.

Reflect on the events and issues mentioned in the article.

- How did the information in the article connect with what you already understood?
- How did this extend your thinking? What new ideas or insights did it give you?
- What questions did this raise for you? What was challenging, or what would you challenge, and why?

Write a short essay on possible solutions to the ethical problem or issue.

Challenges and opportunities in starting up a business

Entrepreneurs have certain characteristics and skills that allow them to start a business. Entrepreneurs can be considered risk takers since they risk their capital and time to try to create goods or services that fulfill consumer wants and needs.

i The International Labour Organization (ILO) is the only tripartite UN agency. Since 1919, the ILO has been bringing together governments, employers, and workers of 187 member countries to set labor standards, develop policies, and devise programs promoting decent work for all people.

TOK Consider the following questions within the context of the ethics of business management:

- What is an ethical organization?
- Are ethical companies more likely to be profitable in the long term than unethical ones?
- 'Span of control' is the number of people a manager is responsible for within a company. Do ethics have any role in deciding the optimal span of control for a business?

Entrepreneurs are proactive, and they take the initiative when required. In addition, entrepreneurs understand the market within which their business operates, and are committed and motivated to the business that they have set up.

Nevertheless, when starting a business, entrepreneurs can face different challenges that can put their companies at risk. These are discussed below.

Financial challenges

When starting a business, entrepreneurs need money to invest in machinery, premises, and raw materials, and to pay for services, such as registering their company, or a phone line and internet connection, etc.

This is the initial investment. Entrepreneurs also need to have the financial resources to cover these outgoings when the business starts operating. If the entrepreneurs hire people to work for them, they need to make sure they have enough money to pay the wages of their employees.

Entrepreneurs may need to ask for loans from banks or financial institutions to get their business started. Loans can be very difficult to get when a business is new as there is no record of the business being able to pay back a loan.

The entrepreneur may be required to provide the bank with collateral, usually property, that the bank will sell off if the business is not able to repay the loan. Once the business is running, the entrepreneur needs to make sure they have enough money to pay for the everyday expenses of the business.

This means they need to know what needs to be paid and when, and forecast whether this will be something the business can pay with the money they get from selling their goods and services. If not, then the entrepreneur needs to ask banks for loans or credit to cover those expenses until they sell the goods or services.

Marketing challenges

One of the main challenges associated with marketing is the products or services themselves. Sometimes, a business offers a good or service that doesn't meet the needs of consumers.

Sometimes, the issue is with the price of the good or service, which might not be in line with the price set by competitors, making it less attractive for consumers.

Another common challenge is product/brand awareness. Consumers might not be aware of the existence of the good or service and, as a result, do not consider it when deciding what to buy. Finally, another challenge is the location of the product. A product might not be available for the target consumer to buy in their area.

Human resources challenges

It might be difficult for a business to hire the right people to do the work. This could be caused by a lack of suitable candidates, or a lack of appropriate skills among the applicants. This can be a result of the economy being in an **expansion cycle**, so suitable people are already employed and not looking for a job. The working conditions and salary that a business offers might not be attractive enough, which makes it even more difficult for a business to find the right people.

Production balance

Deciding the right level of production when a business starts is a significant challenge for entrepreneurs. If entrepreneurs are cautious and do not produce much, they might find that demand is higher than expected. This could lead to a shortage in supply, which might have a negative impact on the business' image.

On the other hand, if a business is too optimistic in its sales forecasts, this could generate an excess in supply, meaning the business has made an inefficient use of resources, particularly money, and might have to drastically reduce its prices to sell the available stock. This could have negative implications for its profits, making it difficult for the business to survive.

External factors

The success of a business not only depends on what the business does, but it also depends on many factors it cannot control. These factors are known as external or exogenous influences. Examples include natural disasters, the economic situation of a country or region, or a pandemic.

An earthquake or flooding represents a challenge for a business located in the area where the natural disaster took place, because it has to struggle with the problems of the natural disaster, as well as trying to make the business succeed.

If an entrepreneur decides to start a business when the country or region where the business is located is going through a period of economic crisis, consumers' willingness to buy its products or services might be lower than expected. This happens because consumers' incomes are usually reduced during an economic crisis. This is because many people lose their jobs, or the number of hours they work is reduced.

In the event of a pandemic, such as COVID-19, businesses may have to face the challenge of temporarily closing their doors. This results in them not being able to sell their goods and services, which is a key requirement for a business to survive, especially when it is a new business that has no profits saved from previous years.

On the other hand, new businesses can thrive thanks to opportunities.

Case study – Online learning: pivoting to face challenges during COVID-19

During the COVID-19 pandemic, students were not allowed to attend in-person classes because of a worldwide lockdown. The education industry had to change to meet new requirements as schools were forced to adapt to online teaching.

The pandemic highlighted the importance and potential of technology within the education sector.

Even after schools and universities were allowed to re-open, they are still using online resources to enhance the teaching and learning experience for educators and students.

Investment in the technology supporting education (sometimes called EdTech) has been increasing, and many businesses continue to offer new and exciting ways to learn online. This drastic worldwide change presented opportunities for innovation in the EdTech world, which continue to support students and teachers.

Conceptual understanding: Change

The COVID-19 pandemic is an example of an external factor that caused rapid and widespread change.

The COVID-19 pandemic meant many schools had to rely on technology for online teaching

Identifying a gap in the market: When a business identifies that a good or service that consumers are willing to buy is not available in the market, this presents an opportunity for them. If the business is able to meet that demand with the goods or services they produce, they are presented with a chance to succeed by being the first to produce these goods or services. An example is when pharmaceutical companies started producing vitamins in a form aimed at children because of parents asking companies to develop them to complement their children's nutrition.

Operating in niche markets: Some new businesses are created because the entrepreneurs behind them understand a specific market. If the business decides to operate in a market that is relatively small, and where there are few competitors, its chances of succeeding are greater if the entrepreneur has the specific knowledge needed regarding the goods and services sold.

Acting as innovators: Bringing innovative products or services to the market will ensure the future success of the business. This could be done by innovating on products that already exist in the market or by creating totally new products.

Practice questions

Atelier2two

Hussaina is a founder and designer at Atelier2two. Atelier2two is a garment and apparel manufacturing company. It was founded with the idea of providing effortless, luxury modest wear. Hussaina invested her own money into her business.

Atelier2two's production processes include designing, material selection, cutting, stitching, ironing, and packaging. Hussaina has outsourced shipping and delivery to a courier company. She uses social media platforms for marketing and distribution.

Social media platforms allow her to develop her brand and interact with customers to understand their needs and wants.

1 Identify the resources needed for a garment and apparel manufacturing business. (4 marks)
2 List the business functional areas involved in operating a garment and apparel business. (4 marks)
3 Explain how Atelier2two adds value to the final product and has a competitive advantage. (6 marks)

1.2 Types of business entities

Learning outcomes

At the end of this section, you will be able to:

- make the distinction between the private and public sectors
- identify the main features of the following types of organizations:
  - sole traders
  - partnerships
  - privately held companies
  - publicly held companies
- identify the main features of the following types of for-profit social enterprises:
  - private sector companies
  - public sector companies
  - cooperatives
- identify the main features of the following type of non-profit social enterprise:
  - non-governmental organization (NGO).

This section focuses on different kinds of business entities. It discusses the different types of sectors and organizations, and examines their features and differences.

Economic sectors

Economies all around the world are divided into the public sector and the private sector. These sectors are used to organize the economy and differentiate between different firms.

Sector: A business sector (primary, secondary, tertiary, etc.) is one in which businesses engage in similar or related business activities.

Public sector: Public sector organizations are under the control of regional and/or national governments.

Private sector: The private sector is the economy's commercial sector, mostly owned and operated by private individuals and organizations with a profit incentive.

The private sector

The private sector consists of households, businesses, and a range of organizations. These companies operate in a wide range of fields. All private sector organizations are privately owned by individuals or businesses, not by a government.

Private sector businesses can be large or small, such as Target, Walmart, Amazon, or your local corner store. If one of your friends runs a small bakery from their house, then they're the owner of a private business.

The primary goal of a private sector business is to generate enough income so that it can make profits for its owners or shareholders. These businesses take risks to provide jobs that will ultimately generate profits for them. Private sector companies use resources efficiently to reduce costs and increase profit. Governments have some legal authority over private businesses (the extent of which varies from country to country, sometimes from region to region), but otherwise do not interfere with private sector operations.

The public sector

The public sector consists of industries and services that are owned and controlled by governments.

Federal government, state governments, and local governments are part of the public sector. The public sector offers services to the general population, such as social welfare, transport services, education, and healthcare services.

▲ Hospitals are typically part of the public sector. This is a public hospital in New Delhi, India

In contrast to the private sector, the main purpose of the public sector is not to make profit. The main goal of the public sector is to ensure the supply of essential services to the general population.

Public–private partnerships

Governments can outsource projects to private sector companies. This enables the government to use private sector expertise to reduce the cost of providing services to the public. However, sometimes the private sector dominates the service, and the role of the public sector diminishes.

Case study – Public–private partnerships in the healthcare sector

The private sector has tremendous potential to assist governments in achieving their public health goals.

In order to find ways of working with the private sector that can be scaled up across regions and different healthcare needs and issues, governments need to develop strategies that define and enforce best practice for private sector involvement based on the lessons learned from past and current collaborations.

Tuberculosis (TB) presents a variety of healthcare issues, but also provides insights into potential solutions that could reduce the risk of TB and other diseases.

An article in the online newspaper Mint explains that, in India, nearly half of all TB patients seek treatment in the private sector. Private-Provider Interface Agencies (PPIAs) were established in Mumbai, Patna, and Mehsana by the Indian government. The government collaborated with a network of private physicians, pharmacies, hospitals, and laboratories to make sure that TB diagnosis and treatment practices followed the established 'Standards of TB Care'.

As a result, there was a 351 per cent and a 532 per cent rise in TB case registrations from the private sector between 2014 and 2018 in Mumbai and Patna, respectively. Accurate case reporting leads to better diagnosis and treatment. Since 2018, the PPIA programs have been scaled up and introduced in more than 170 districts across India, but there is more work to be done to guarantee smooth implementation throughout the country.

The main differences between the private and public sectors

The private sector is currently undergoing rapid growth, with the public sector in many countries shrinking due to reduced government spending and increased privatization (where a public organization is sold to the private sector). Private sector salaries and benefits are, in places, perceived as superior to those on offer in the public sector, so there has been a noticeable number of public sector employees moving to the private sector. Change and innovation is harder in the public sector due to the size and history of the organizations (for example, the UK's National Health Service (NHS) is the largest employer in the country). Long-term employees may also struggle to deal with change (see Unit 2 for more on employees' resistance to change).

Both sectors contribute substantially to the economy of a country.

Table 1.2 The differences between the public sector and the private sector

Public sector	Private sector
Owned and controlled by the government	Owned and controlled by individuals or private companies
Generally non-profit organizations	Generally profit-making organizations
Taxpayer capital, in the form of taxes, is used to finance public sector services	Shares and loans are used to raise capital
Public sector organizations are able to get approval from the relevant government departments	It is more difficult for businesses to manage regulatory issues and compliance
Jobs in the public sector have a high level of security, with various retirement benefits	The private sector does not offer retirement benefits; private sector jobs may be highly paid, but there is no job security
What is included in the public sector varies by country; it can include the armed forces, healthcare, utilities, education, public transport, the central bank, social housing, waste management and disposal	What is included in the private sector varies by country; it can include banking, manufacturing, mining, retail, housing, media, farming

i The public sector appears to be slower in undergoing digital innovation than the private sector.

Online resources

This Forbes article looks at digital innovation in these sectors in more detail.

TOK Organizations always run more efficiently in the private sector, where they are free of government control. To what extent do you agree or disagree with this statement?

Types of organizations

There are three main types of firms:

- sole traders
- partnerships
- limited companies or corporations
  - privately held companies
  - publicly held companies.

Sole traders

Sole trader or sole proprietorship is a legal form of company owned by a single individual, with no other shareholders. Owners have complete control over all the functions of the business. They make their own decisions and are not accountable to any partner or board of directors. In sole proprietorship, business and owner are not recognized as separate legal entities. All profits go to the owner: they reap the rewards of the hard work they put into their business. However, the owner also faces unlimited liability: they are responsible for paying the complete cost of any damage or liability incurred by the business.

These businesses often have limited capital and resources. It is easy to set up as a sole trader, but business growth is limited because of the inability to generate large amounts of capital. If a firm expands excessively, a single individual may not be able to oversee and manage all its operations.

The nature of the business, along with its functions and scope, is highly dependent upon the owner's discretion. The owner is also directly responsible for making decisions that could either enhance or stop the business' growth.

If an individual is running a business on their own, they may not have all the required expertise. This can cause problems for the business. For instance, if a business owner does not know how to handle the finances, then they might face some serious losses. With limited financial resources, they may not be able to hire a financial advisor or an accountant. Therefore, the possibility of losses due to lack of skilled staff or professional management is typically greater for sole traders.

Case study – Sole traders and rising prices

Millions of sole proprietors are having to prepare for rising costs caused by high (and increasing) energy and fuel prices, even though their customers may be willing to pay more. According to a *Sydney Morning Herald* article, a survey of sole proprietors revealed that most felt overburdened by paperwork and bureaucracy. Those surveyed reportedly spend a combined 12 million hours per week on administration.

The Reserve Bank of Australia anticipates that, by the end of 2022, inflation will reach 7 per cent, the highest rate in 20 years. The survey of more than 500 business owners showed that over 80 per cent of traders and 45 per cent of freelancers had been affected by high fuel prices, while 57 per cent said that business had slowed. A large number (around 82 per cent) of respondents were trying not to take loans or use credit cards to cover business expenses.

The owner of a sole trading company might have to use their personal finances or assets to pay the debt a business owes, if the business cannot pay on time. This could limit the opportunities to expand the business.

Partnerships

A partnership consists of two or more owners who decide to operate a business together and share the profit and loss.

Partners establish a partnership agreement. A partnership agreement is a legal document that outlines the details about the partnership, including each partner's obligations and profit-sharing percentage.

Partners must have common business goals. Common business goals allow them to earn profits and enhance their business operations.

It is important that the partners collaborate to make mutually beneficial decisions. Partnerships are very similar to sole traders in that the owners and the business are not recognized as separate legal entities, and all the partners share unlimited liabilities and responsibilities.

Limited companies or corporations

A limited company or corporation is a company where the shareholders will lose only what they have invested if the company goes bankrupt. They will not lose their personal assets.

While corporations represent a small percentage of the total number of businesses, they dominate in terms of assets and monetary value of sales. Corporations are not as easy to establish or maintain as proprietorships or partnerships. They are formed by filing documents with the appropriate government agency. Companies decide where to incorporate based on where they do business and the relevant regulations within a country.

Unlike proprietorships and partnerships, corporations are recognized as separate legal entities that can enter legal contracts and own property. Profits are taxed at the corporate tax rate. A distinguishing feature of corporations is the separation of ownership from management. Corporations are owned by individuals who hold shares in the company but are run by employees.

Advantages of being a limited company

- Corporate tax laws may be more attractive in some circumstances, thus allowing tax deferral and avoidance.
- The separation of ownership from control allows corporations to obtain the best available management team.
- Limited liability makes ownership more attractive to shareholders and investors.
- Transfer of ownership is relatively easy, so shareholders can 'cash out' if they need access to their money or are unhappy with the company's direction.
- The ability to access the capital market allows corporations to grow.

Limited companies can be privately held companies or publicly held companies.

Privately held limited companies

The shares in a privately held company are not openly traded and can only pass to another person with the agreement of other shareholders.

Private companies are owned by individuals or privately operating corporations. Stock shares of the company are not traded on a public stock exchange.

The number of privately held companies is greater than the number of publicly held companies. Although many large private corporations have become publicly held companies to induce investment, there are still numerous companies that operate privately.

To successfully run a privately owned company, it is important to have complete autonomy over the decisions regarding operations and functions. Privately held companies do not have to adhere to as many regulations as those that are publicly held, so they can think about long-term benefits and concentrate on the processes that might bring benefit to the company.

Disadvantages of privately held companies

- Shares cannot be traded via public exchange so there is a lack of liquidity.
- It is hard to value such companies due to a lack of information.
- A lack of corporate governance structure (like those in public companies) may hinder operations.
- Selling shares can take a long time.

Publicly held limited companies

A publicly held company is owned by at least two people, and its shares are freely sold and traded on stock exchanges. Shares can be bought by anyone.

While company management usually own some shares in the company, there are also usually many shareholders who do not have any direct involvement in the management of the business. These shareholders exert their influence over the corporation (at least, in principle) by electing the board of directors. The directors, in turn, determine the firm's strategic direction, pick its management team, and monitor their actions. Owners can sell their shares to another investor. This contrasts with proprietorships, which must sell the entire business. With partnerships, if one or more of the partners wants to get out, a new business must be established, and a new partnership agreement drawn up.

A publicly held firm is distinguished from a privately held one in several ways.

Stockholder ownership

Most publicly held corporations have majority investor ownership, but many privately held companies are controlled by a small number of people in a partnership (or one person). These stockholders may choose to purchase or sell securities to increase the value of their investment.

Board of directors

The board of directors represents individual investors. The key decision-makers who direct the company's operations are hired by this group. People who possess the most shares in the company may be on the board.

TOK

Do CEOs have different ethical obligations and responsibilities compared to their employees?

Corporate leadership

Most publicly traded corporations are managed by a chief executive officer (CEO), who oversees the whole business team. The CEO oversees vice presidents, managers, and executives.

Public financial information

Public corporations are required to comply with transparency requirements and financial reporting standards according to the regulatory rules set out by the government(s). As a company's financial data is easily accessible, its investors can calculate the business' value.

Purchasing shares in a publicly traded firm has numerous advantages for investors, but it also has certain disadvantages.

Advantages of a publicly held company

Transparency: A corporation must publish financial documents that explain the business model it is using before it launches an **initial public offering (IPO)**. These documents cover cash liquidity and the corporate finance structure.

Ongoing reporting requirements: Different regulatory agencies watch over publicly listed corporations' activities. These agencies request yearly reports outlining corporate structure, budget, and financials. Such procedures increase openness, strengthen corporate legitimacy, and keep shareholders informed of business operations.

Portfolio diversification: An investor can create a diverse financial portfolio by investing in various public companies that offer a range of products.

Access to capital: Companies that go public can raise substantial funds for their operations as well as for essential expenses like staff wages. If investors are happy with the general direction of the company's success, this increased cash flow enables the company to take risks and cultivate a devoted client base, though it may initially result in losses.

Disadvantages of a publicly held company

Minimal investor control: Most ordinary investors have little influence on how a publicly listed company conducts business. When choosing board members, they may be able to cast a single vote, but the board retains ultimate authority. Some publicly traded corporations grant their founders a veto-proof majority over corporate board decisions.

Risks: There are numerous risks associated with establishing a publicly listed company. There is the possibility that a publicly listed company may be valued far higher than its real value, even considering all its assets. If a business is not profitable for an extended length of time, the share value will fall, and the business may eventually fail.

Regulations: When a company goes public, it needs to comply with a wide range of regulations, including the ones that require significant investment in staff and vendor services.

An initial public offering (IPO) is the first time a private company goes public through listing its shares on one or more stock exchanges. It allows a company to sell shares to investors as a way of raising capital. This process is also known as 'floating on the stock market'.

For-profit social enterprises

Private sector companies

A for-profit social enterprise is created with one aim in mind: the generation of revenue but with ethical practices. It is a profit-making business with social objectives at the heart of its operations. Revenue is generated in ways that are ethically responsible, and then the profits are used to improve the business' activities and benefit

the community. These enterprises do not rely on charities or donations. A for-profit social enterprise may have environmental goals among its objectives.

Social enterprises do not differ from for-profit commercial organizations in terms of their products. They can produce goods or provide services, and must choose a legal structure for their business activities. These enterprises can operate nationally, as a limited company, or as a cooperative, which is a small local enterprise. For-profit social enterprises also use business principles to achieve social goals and to compete with other businesses in the market.

Social enterprises commonly have three main objectives:

1 **Economic**: to make a profit from their operations and reinvest it back into the business.
2 **Social**: to provide employment opportunities for the local community while also supporting disadvantaged or marginalized members of the community.
3 **Environmental**: to protect the environment and manage the business in a way that is environmentally sustainable and ethically responsible.

For-profit social enterprises hope to achieve social objectives while earning revenue and making profit so that they can keep operating and expand their business. No business can deliver social benefits if it is unable to manage its own financial health.

Case study – Rivian

Rivian is a US company founded in 2009 that manufactures electric vehicles and technology. While the company initially started with the idea of creating electric sports cars, it later changed its focus to trucks and vans.

The company's founder, RJ Scaringe, says that 'Rivian exists to create products and services that help our planet transition to carbon-neutral energy and transportation'.

When the firm started trading in November 2021, its shares increased by 30 per cent, boosting its market value to $100 billion. Amazon owns 20 per cent of Rivian and has said it will buy 100,000 electric delivery vans from the firm once they are available.

Despite the firm being compared to Elon Musk's Tesla, the brand wants to have distinct products. It has beaten rivals to design and produce a premium 'All-American' pickup truck that is both effective and powered by electricity.

Public sector companies

A public sector company is a legal organization established by a central government to engage in commercial operations on the government's behalf. Such an organization may have the government as its sole owner or as its partial owner.

These businesses have independent legal identities. This means they can sue or be sued for infractions even if they are owned by the state or working on its behalf nationwide. The government has the authority to appoint new directors and to make other crucial decisions.

These companies can also be called government-owned corporations (GOC). They are state-owned organizations, and are not to be confused with publicly traded businesses whose stock is partially held by the government. Therefore, these businesses are genuine public corporations that serve the interests of the general public. One of their stockholders just happens to be a government organization.

The United States, South Africa, Norway, and New Zealand are just a few countries that have for-profit state-owned businesses. Most of these businesses will be legally categorized as business entities. Therefore, these companies must abide by the laws and rules that govern how they conduct business, and they risk being held liable for any illegal actions.

Even though these businesses are inherently for-profit ones, some of them do not generate a profit. For instance, several nations' postal services have been losing money for a long time. While some businesses are allowed to collapse, those that are seen as essential to a nation's infrastructure may receive public funds so that their operations don't fail. In these situations, the businesses may cost the government a significant sum of money rather than making money. Governments in some countries, for example, Australia, have frequently been charged with creating 'zombie businesses' that virtually never generate any income.

Public corporations

Public corporations and private businesses are found in many countries. Public corporations are under government management and ownership. Serving the general public is one of the key goals of public sector enterprises, while making a profit is not. The primary social goal of most nations is to satisfy the basic needs of the general population.

A government minister will appoint the management of a public corporation. The general population can access the essential services provided by public businesses for free or at a very low cost. The government oversees the corporations and ensures they are run appropriately. By controlling public sector organizations, a government can influence a country's employment rates, wages, and productivity.

Cooperatives

A cooperative is an organization that is owned and controlled by an association of people to meet their common economic, social, and/or cultural needs and aspirations through a jointly owned and democratically controlled business (enterprise).

All members of the cooperative have an equal share, control, and ownership of the organization, and can contribute to the decision-making process.

Cooperatives operate in almost all industries, including agriculture and farming, financial services, and housing. There are three main types of cooperatives:

- producer cooperatives, which produce goods
- consumer cooperatives, which purchase goods in bulk or in large amounts to benefit from economies of scale
- worker cooperatives, which provide services and sell goods.

All cooperatives are democratically owned and controlled.

Cooperatives provide benefits to a group of people with a common goal: they are owned and run by their employees and customers to carry out an economic activity for mutual benefit. They operate in a socially responsible way. The profits are equally shared between members as dividends.

The term 'non-governmental organization' first appeared in Article 71 of the UN Charter, which was published in 1945.

Non-profit social enterprises

Non-governmental organizations

A non-governmental organization (NGO) is a non-profit group that works independently with support from a government body. They work on national, international, and community-based levels to address problems. NGOs work for the betterment of society and to tackle political and environmental concerns.

TOK

To what extent are ethical considerations involved in the operations and activities of NGOs, and how do they ensure accountability and transparency?

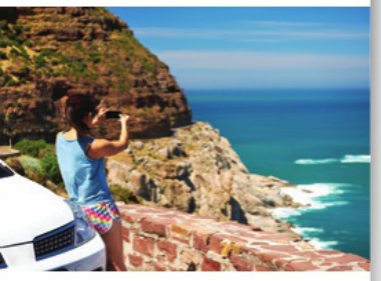
There is no fixed definition of an NGO. They are generally defined as non-profit groups that operate without the influence of the government, although they do receive funds from the government.

There are also non-profit organizations (NPOs). There is a narrow difference between NPOs and NGOs. Different countries interpret these types of organization differently. In the US, NGO is not applied to non-profit organizations, but to organizations operating internationally. Some countries classify their own civil society groups as NGOs.

Conceptual understanding: Creativity

Discuss the critical importance of creativity and innovation in today's organizations.

NGOs perform various activities to bring social or political change on a large scale. They play a vital role in the development of society, improving communication and allowing citizens to participate.



Practice questions

Nicolás and Loura want to start a vehicle rental business in Punta del Este, a seaside resort in the Southern Hemisphere. The business will operate as a partnership and be called Bip Bip (BB). The beach and water sports attract many tourists during the summer (December to February). BB will rent out convertible cars, electric cars, and minivans. BB will purchase these vehicles through a leasing scheme.

1 Identify two features of a partnership. (2 marks)
2 Identify two reasons why a lending institution might be reluctant to fund BB's expansion plans. (4 marks)
3 Explain two problems that BB might have in building a customer base in new markets such as Punta del Este. (6 marks)

1.3 Business objectives

Learning outcomes

At the end of this section, you will be able to:

- distinguish between vision statement and mission statement
- explain common business objectives, including:
  - growth
  - profit
  - protecting shareholder value
  - ethical objectives
- examine strategic and tactical objectives
- evaluate corporate social responsibility.

What are business objectives?

This section looks at what the short-term and long-term goals of a business might be. Let's say that you are establishing a business. As one of the first steps, you will set certain goals you want to achieve. These are business objectives, and they provide a company with the direction in which to grow and move. Business objectives are a range of measurable results that a company or a business hopes to achieve and/or maintain to ensure its growth and success.

Business objectives provide a company with guidelines regarding decisions related to its operations. The business objectives of a company tend to stay the same unless the organization goes through a drastic change. Possible business objectives could be ensuring that the quality of the product remains the same, or that a business engages with more online customers, leading to increased sales and turnover.

Business objectives are specific and measurable. This allows for easy accountability and periodic checks regarding growth. When setting objectives, a company also needs to make sure that they are relevant and attainable. Objectives should follow a schedule that is regularly monitored and allows for achievement of the goals.

A company will have two types of goals: long-term ones and short-term ones. Long-term goals often consist of several short-term goals. They require a lot of time and considerable planning. Short-term goals tend not to require much time or many resources.

Vision statement

A vision statement describes what a company wants to become in the future. It outlines the present and future business objectives or goals. A coherent and pragmatic vision statement is key when establishing a business. The vision must align with the core values of the company. It should link to the business' strategic planning and the environment and culture in which the business is functioning.

Vision statements can be reviewed and updated according to the needs of the business. Changes should be minimal so that there is no confusion or miscommunication. The purpose of a vision statement is to direct the strategic plans of the business. It can also motivate employees and help the business stand out from its competitors.

IB learner profile

Reflective

Select a company of your choice and evaluate and reflect how creativity and innovation helps that company to achieve its objectives.

Toolkit connection

A business plan breaks down the goals of a company and outlines the methods to achieve those goals. It should include a vision and a mission statement.

A business plan presents a suitable strategy for the growth of a business, determining the future direction of the company.

Here are the vision statements of a few well-known companies:

> IKEA: Our vision is to create a better everyday life for many people.

This mission statement is short and aspirational. It clarifies the objective while setting the tone for the company.

> McDonald's: To be the best quick service restaurant experience. Being the best means providing outstanding quality, service, cleanliness, and value, so that we make every customer in every restaurant smile.

This vision statement is multifaceted and provides a roadmap for the company to follow. It covers different aspects of the business and gives the customers a clear idea of what they should expect.

> Google: To provide access to the world's information in one click.

This statement is succinct and demonstrates Google's customer-centered approach.

Mission statement

TOK

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

A mission statement is a short statement made by an organization, intended to communicate its aims to customers, employees, shareholders, and other stakeholders. Such a statement should be aligned with the vision statement.

A mission statement provides a company with a plan that allows it to define the purpose of the company and its functions. A mission statement defines the culture of a company as well as describing its long-term objectives. A good mission statement indicates the business' ideal customer and leads to an ideal customer profile based on thorough market research. It also highlights the key points of a business that add unique value to it, differentiating it from the competition. Mission statements can be customer-oriented, socially conscious, environmentally responsible, or product-oriented.

Here are some examples of mission statements of multinational companies:

> Microsoft: To empower every person and every organization on the planet to achieve more.

This mission statement is inclusive, short, and memorable. It identifies the purpose and vision of the company.

> Forbes: To deliver information on the people, ideas, and technologies changing the world to our community of affluent business decision-makers.

Such a mission statement sets out the company's agenda. It touches on the different services and products of the company while remaining short and memorable.

Research and inquiry

Research the vision statements and mission statements of five companies. Using these statements, explain how a vision statement differs from a mission statement.

Differences between vision and mission statements

A vision statement is the long-term goal or objective that a company hopes to achieve. A mission statement outlines the actions that a company will take to achieve that long-term goal or objective.

Table 1.3 The differences between a mission statement and a vision statement

Vision statement	Mission statement
Discusses ultimate goals and talks about where the company is headed	Outlines the activities and plan of actions that must be followed to accomplish the goal
Provides motivation and serves as an inspirational tool that contributes to achieving goals	Provides guidance and helps a company recognize its exact functions
Allows employees to understand why they are doing specific tasks	Helps employees in carrying out particular tasks
Focuses on the future	Mainly focuses on present operations
Vision comes before mission: it has a long timeline and several short-term goals that help to achieve the final objective	Is secondary compared to the vision and has a short timeline; it can be changed according to the present circumstances
Has a wide scope	Has a narrow scope

Common business objectives

While being established, a company sets different objectives that it hopes to achieve in the short or long term. These goals allow the business to continue growing. Business objectives are specific and are established through analysis and assessment. Different businesses have different objectives, depending on the market(s) they interact with. However, there are some objectives that are common to all businesses.

Growth

Achieving a substantial amount of growth is one of the top objectives of any business. Growth is a term that may refer to profits, revenues, enhanced working conditions for employees, or increased capacity for business. Growth could also include increasing the business' market share in the short term or its size in the long term.

Profits

Earning profits or enhancing profitability is also one of the top priorities for a business. Generating profits is often the main reason why a business is set up. The business must make sure that it performs well so that its shareholders, creditors, and owners benefit. However, there are certain legal restrictions on how a business can operate. For example, a business must not exploit the community or its workforce to achieve profits.

Stability

For a business to continue to operate at an optimum level, its management must have certain objectives in place that will ensure its stability. A business can achieve stability through gaining the loyalty and confidence of its customers. It should also have sustainable practices in place that account for employee satisfaction and improve the

TOK To what extent do emotions motivate stakeholders to pursue an organization's goals?

business' reputation. Moreover, a business needs to be well-equipped to survive market fluctuations.

Efficiency

Economic efficiency is the ability of a business or process to produce goods at the lowest cost possible so that they can be sold at a comparatively low price and the business can still make a profit. A business can use innovative methods and techniques to achieve its desired results and keep costs down. Efficiency includes the lowest possible energy consumption (and other overheads) and high productivity, while ensuring the best quality product possible. A business can achieve this by employing skilled individuals, training them appropriately, and motivating them.

Survival

To achieve long-term survival, a business must utilize certain techniques. A business will survive if it remains ahead of its competition. A business may aim to improve its market standing and enhance its capacity, ultimately enabling it to focus on other objectives. A company will focus on recognition, a good public image, and on building a loyal customer base to ensure its survival. Every business must focus on survival as this directly leads to growth and expansion.

Protecting shareholder value

A business needs to make sure that the interests of its investors, creditors, and shareholders are protected. This can be achieved through periodic and assured returns on investments. A company can increase its shareholder value through targeted goals and growth. Satisfying the shareholders is one of the top priorities of a business as this leads to increased investment and the achievement of other objectives.

Ethical objectives

Ethical objectives allow for the application of moral principles when interacting with stakeholders. The ethical objectives of a business are applicable to both tactical and strategic actions. They include complying with existing laws and regulations, and ensuring that the company's actions do not cause conflict. Companies in different regions may have different ethical objectives. Such goals lead to a positive relationship with the consumer and enhance the value of the brand in the market. They can also attract more investors, feeding into the business' success.

Developing technology, such as drone delivery, may lead to different regions having a more cohesive set of laws

Case study – Lloyds Bank

The UK's 2022 cost of living crisis was caused by high inflation, high fuel and energy costs, and tax increases, without increases in wages or benefits. Prices in the UK were increasing at their fastest rate in 40 years, with inflation hitting 9 per cent in June 2022 and expected to rise higher.

In August 2022, Lloyds Bank employees received a one-off £1,000 payment to help with the rising cost of living in the UK. This payment was the result of a campaign by trade union Unite.

Unite is a British trade union formed in 2007 to protect workers' rights, equality, and diversity in the workplace.

'Unite members' collective action has put desperately needed money into the pockets of staff on the front line', said Sharon Graham, Unite's general secretary. 'Staff will welcome the £1,000 bonus, but there is still a long way to go to eradicate low pay in one of the economy's most profitable sectors.'

Lloyds Bank said it expected the economic environment to remain a key feature in pay negotiations with its employees in 2023.

TOK

Many businesses are including metrics about their environmental, social, or ethical performance alongside their financial information.

- Can well-being, or other social variables, be measured?
- Does all knowledge impose moral obligations on those who know it?

Strategic objectives

Strategic objectives are long-term objectives that define the purpose of a business and impact its survival and success. Strategic objectives could take decades for a business to achieve. They are made by the executives and are aligned with the vision statement.

Strategic objectives are the big-picture goals of a company. They may include launching new products, growing a company's market share, and attracting more profits. For example, Walmart hoped to capture market share in e-commerce by performing better than its main competitor, Amazon. To fulfill this strategic objective, Walmart improved its online presence and enhanced its product range by buying other companies (such as Shoebuy, ModCloth, and FlipKart).

Tactical objectives

The tactical objectives of a business break down its long-term strategic goals into several short-term clear deliverables. This allows a business to achieve its targets in a shorter period. Tactical objectives are often flexible and can be changed as required. Tactical planning helps a business to break down its strategy into small, easily achievable goals and provides a more efficient way of achieving them.

Tactical objectives are not risky and are mostly action-oriented. The results from such objectives are desired immediately. These goals are often intermediate steps taken to achieve bigger and more executive goals. These objectives range from performance targets to meeting sales quota. Although they do not seem that important in isolation, when combined, they make a substantial contribution to the performance of a company.

If tactical objectives are not achieved, this may not harm the company. They are applied in middle management departments, and tasks are further broken down for specific teams.

Corporate social responsibility

Businesses have different responsibilities toward their stakeholders, including social responsibilities. By fulfilling their social responsibilities to different stakeholders, a company hopes to be viewed as a good employer, credible, responsible, and aware of its impact on the society in which it operates.

Corporate social responsibility (CSR) establishes that business organizations are part of society, and they have a responsibility to reduce their negative impacts on society and maximize their positive impacts. CSR is more than a set of policies incorporated into business objectives out of goodwill.

CSR implementation by a business is influenced by several factors. These include the evolving corporate culture, which now includes more focus on ethical practices and a more socially aware agenda than ever before. However, generating profits and increasing cash flow is the priority for most businesses. This means that CSR decisions need to align with the needs and priorities of each company. CSR decisions also reflect the perspectives of the board of directors or executive management. Incorporating such policies may set a company apart from its competitors, and potentially raise its profile.

A company may change its CSR policy if advised to do so by government or regulating bodies. Activists and pressure groups may also encourage changes to certain practices. Government regulations and pressure group actions have forced many businesses to take climate change and biodiversity damage seriously.

CSR plays an integral role when it comes to establishing a positive relationship with the public. A company may organize charity events, donate a percentage of its profits, or ask its employees to volunteer for different social programs. Such actions can improve a company's brand image and its reputation in the community. Any charity connections should be carefully explored before implementation to ensure that the company's and the charity's objectives and priorities align.

CSR can also foster a stronger and more positive bond between the business and the people it employs. It can increase morale and help employees feel more connected with their community.

Figure 1.6 There are many factors to consider when looking at corporate social responsibility

To promote CSR, a business must be transparent and accountable. This allows stakeholders and shareholders to feel more empowered and engaged when it comes to the decision-making process.

Companies often adopt CSR policies once they have reached a certain size and profitability. This increase in business activity allows the company to give back to the community. The larger a business has become, the more impact it will have on the world; thus, it should be more socially responsible. A company then hopes to achieve ethical and social objectives to lessen its negative impact and increase positive perceptions of it.

CSR policies and schemes should also benefit the company. When developing CSR policies, it is important for the business to keep clear objectives in mind and ensure that the company is fully able to achieve those goals.

The Net Zero Asset Managers initiative is an international group that was set up in December 2020. It is made up of 273 investors who manage $63 trillion in assets, and who are committed to supporting the goal of net zero greenhouse gas emissions by 2050 or sooner.

Advantages

- CSR enables companies to protect the environment through a comprehensive series of actions. These can lead to a reduction in a company's carbon footprint and waste. It can also lead to a reduction in packaging, which has the additional benefit of cutting costs for the business.
- CSR can lead companies to establish new safety measures. This allows the business to enhance its quality and develop safety mechanisms. This then enables it to market its products effectively and provides a competitive advantage.
- CSR can improve the working conditions of employees. This can make the company a more desirable employer for existing and potential employees.

Case study – TC Transcontinental

TC Transcontinental is a pioneer in flexible packaging in the US, Canada, and Latin America. It is also Canada's largest printer. In its attempt to build a socially responsible company, TC Transcontinental has set five major goals as part of its 2025 prospectus:

Greener growth: TC intends to change its operations such that it cuts down extensive consumption of natural resources and production of greenhouse gases, and recovers non-hazardous waste.

An inclusive and safe environment: TC aims to contribute to employees' development and well-being by reducing the incident frequency rate (IFR), increasing women representatives in various job positions, and increasing ethnic diversity among front-line supervisors.

Innovative and sustainable products: Packaging and printed products will be 100 per cent recyclable.

Consolidated with its community: TC intends to invest in areas such as health, education, and local communities by providing sponsorships and donations totaling $5 million.

Governance and responsible practices: TC is revising its policies and training, and providing better controls to protect its data. Employees will be asked to read and sign agreements about ethical behavior, and they will receive anti-corruption training. Enterprise risk management programs must be annually reviewed, including climate change risks, and the board of directors or one of its committees will endorse each program.

Research and inquiry

Select a company of your choice.

Conduct a CSR assessment on the company and determine if CSR contributes to corporate environmental and social sustainability.

- Should the company retain its CSR strategy?
- If not, what actions would you recommend the company takes?

Practice questions

Copper Health (CH) was the market leader in the production of anti-venom vaccines to treat venomous snakebites. CH's mission – influenced heavily by CSR – is to put customers first and profits second in the treatment of snakebites.

Despite 100,000 deaths worldwide each year from snakebites and 400,000 serious injuries, CH has announced that it will no longer produce anti-venom vaccines. Several large Mexican, Brazilian, and Indian pharmaceutical companies have entered the market, selling anti-venom vaccines at a much lower price than CH.

A spokesperson for CH said: 'We will remain a private limited company where CSR remains an important driving force for our mission. Our medical research is only financed from retained profit. When the lower-priced competition arrived, our sales and profits of anti-venom vaccines decreased significantly. Treating snakebites no longer makes financial sense. Instead, the technology used to produce anti-venom vaccines will be used to research and develop other life-saving vaccines.'

A non-governmental organization (NGO) has demanded action. 'CH is the largest manufacturer of anti-venom vaccines in the world. Although CH's competitors are increasing their production of anti-venom vaccines, they will not be able to produce enough to satisfy demand for the next two years. There will be a major shortage. This will result in many life-threatening injuries and deaths.'

The NGO has urged CH to seek new sources of finance to continue the production of the anti-venom vaccine.

1 Explain one advantage and one disadvantage for CH of having a mission statement. (4 marks)
2 Distinguish between objectives, strategies, and tactics, and describe how these interrelate. (6 marks)
3 Evaluate the impact that different objectives have on the behavior and decisions of the firm. (10 marks)

1.4 Stakeholders

Learning outcomes

At the end of this section, you will be able to:

- identify and understand different types of internal stakeholders
- identify and understand different types of external stakeholders
- discuss possible areas of conflicts between stakeholders.

This section looks at what stakeholders are and their importance, and the role they play in a business and its management. It looks at internal and external stakeholders, and possible conflicts that might arise between stakeholders.

Understanding stakeholders

Suppose a friend discusses her planned business venture with you. She believes that she has a product that will change the market, but to take it to market she needs capital. She asks you to invest in her business. As you believe that her business is unique and will yield high profits, you decide to invest a substantial amount of your savings in her business. Whatever decisions your friend takes regarding her business will affect you as well. By investing your money in the business, you have a say in the way things are managed. This allows you to make sure that you do not end up losing your money. You are now a stakeholder!

A stakeholder is not always someone who has money invested in the company or the business. Stakeholders also include any individuals who are positively or negatively affected by the decisions a business makes. These parties have an interest in the business activities and should be allowed to advocate their interests to the business.

Stakeholders can encompass a variety of people belonging to different social groups. For instance, a business' stakeholders could include its customers, members of the local community, suppliers, investors, government, and other businesses. These parties have their own goals and objectives. They may make decisions that could ultimately have a huge impact on the business. However, the decisions taken by the business will also affect these parties. Stakeholders form a network that has a lot of interests in the operations and functions of the business.

Stakeholders are immensely important for all businesses. They have a huge amount of impact on the business undertakings and may also directly influence the future of the company. Therefore, it is important for all organizations to ensure that the key demands of their stakeholders are being met. A responsible business ensures that its strategic goals, operations, and decisions are in line with the needs and wants of the stakeholders.

It may not always seem beneficial for a business to listen to its stakeholders. Some stakeholder decisions and objectives may not be lucrative or profitable in the short term. However, engagement, management, and prioritization of stakeholders are key to a business' performance and may prove critical in the long term. Involving stakeholders in the decision-making process allows a company to build long-term and sustainable relationships. It also enhances its credibility in the market, which allows it to develop mutually beneficial bonds with important parties. Research by McKinsey & Company (a management consulting company) shows that through increased engagement of stakeholders, companies can perform well and gain more support from the parties involved. This allows for effective risk management and enables an enhanced understanding of people's needs.

Let us now define the word 'stakeholders'. Stakeholders consist of various people, social groups, or other businesses that are directly impacted, either financially or physically, by the operations and functions of a business. Because of this, they have a say in how a company conducts its business.

There are two types of stakeholders: internal and external.

IB learner profile

Balanced and Open-minded

In a small group, choose a significant business decision to discuss (such as, whether to launch a new product, whether to invest in a new market, whether to downsize the workforce, etc.) and then create a mind map to list potential stakeholders who would be affected by your decision (e.g. employees, customers, suppliers, investors, local communities, etc.).

Think about different perspectives on the decision you are making, including the potential impact on each stakeholder group. Discuss why it is important to consider different perspectives and evaluate the impact of business decisions on various stakeholders before making a final choice.

Finally, reflect on what you have learnt about the importance of being balanced and open minded when making business decisions.

Internal stakeholders

Internal stakeholders refers to those individuals who have a direct involvement in the workings of the company. They can be characterized as the members of the business. Each of these stakeholders has varying interests and objectives when it comes to the business. The business also has certain responsibilities toward these parties.

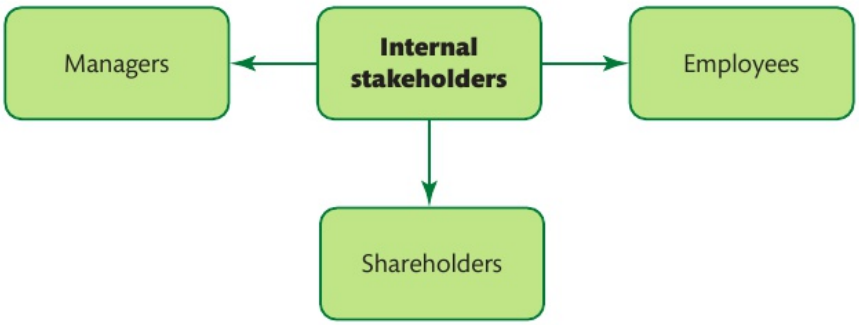


Figure 1.7 Every business has internal stakeholders

Employees

Employees are individuals hired by the business to carry out its operations. As their salaries and working conditions are directly dependent on how the business is performing, they have a direct interest. For example, if a business performs poorly, it may downsize its staff, resulting in job losses. If a business performs well, employees may be given incentives and bonuses. This impacts them positively and can lead to raised morale and increased motivation.

The interests of employees in a business include job security, a good salary, opportunities for growth, and better working conditions.

Managers

Company management includes individuals belonging to the executive management and the board of directors. This group has different interests from the employees or the shareholders. Management tends to focus on taking decisions that help them achieve the organization's goals and maximize profits. Different departments that cover a range of operations are present in management. Management works to increase the financial gains of the business, but also makes sure that their own working conditions are optimal.

The interests of management in a business include increased financial performance, meeting strategic and tactical goals, satisfying shareholders, and ensuring smooth functioning.

Shareholders

Shareholders are people or organizations that invest in a business. This is often done by buying shares that allow them to 'take a stake in a business'. Shareholders invest in businesses that are likely to generate maximum return on their investments. Through capital investment or buying shares, they receive capital gains or dividends.

Capital gain means that profit is generated as the value of a share rises. Share value rises when a business' performance improves. Such a gain allows shareholders to sell their

shares for a value greater than their initial investment, leading to a profit. Dividends refer to the profits made by the company that are divided among the shareholders.

The interests of owners and shareholders in a business include growth of profits, unique long-term vision, efficient workflow, and liquidity.

External stakeholders

External stakeholders are not employed by the business and do not have any direct involvement, but they still have an interest in business operations and undertakings. Their indirect stakes in the business can be through an agreement between different businesses, community welfare, or an interest in the product being produced.

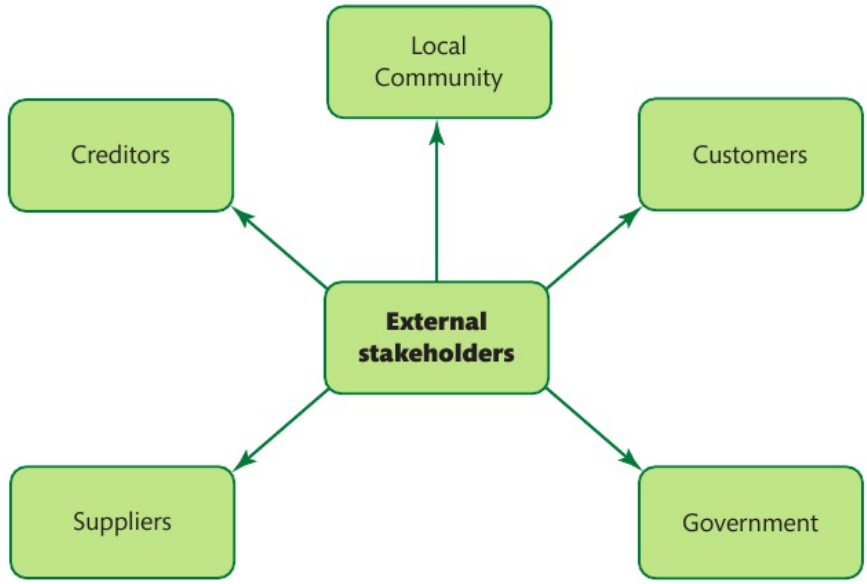


Figure 1.8 Every business also has external stakeholders

Customers

Customers are one of the most important groups of stakeholders. Any sort of business decision, particularly regarding pricing and distribution, will affect a customer's decision to buy a product. The quality and quantity of a product will also have a major impact on a buyer's decision. For example, if a business is unable to produce high-quality products, a customer may not buy its products. It is the responsibility of the business to provide its customers with the best product and high-end customer service.

If there is no market for a product, then investors will not invest their capital, and the business will have to cease trading. Thus, customers are a priority for every business.

The interests of customers in a business include services, quantity, quality, distribution, and pricing.

Creditors

Creditors are also external stakeholders. They invest in a business or provide capital in the form of loans. Creditors can be banks or financing companies. If the business fails, then creditors will be unable to receive their benefits, or their finance will be lost. They are the financiers of the business whose priority is to receive adequate returns on investments.

The main interest of creditors in a business is the repayment of money loaned and payment of any interest due.

Government

National or regional governments are interested in how businesses operate. Although they are indirect stakeholders, their interests include collection of taxes and evidence that all relevant regulation and legislation requirements are being met. A government will have methods to ensure that businesses are meeting their requirements, and they may take action if a business fails to comply. Governments are also concerned about businesses' ethical practices. They are interested in the wider impact that business activity has on society, and with how beneficial it is for the community.

The interests of government in a business include employment and taxes, appropriate business practices, and protection of the environment.

Competitors

Competitors are also external stakeholders. They are affected by the business' decisions. Competitors want to be informed about the business in order to improve and adjust their own strategies.

Local community

The local community could include groups interested in the ethical practices of the business and/or its impact on the community. If a business is creating high pollution, causing deforestation, raising traffic levels, or destroying wildlife or ecosystems, then the local community is being adversely affected. However, if a business is providing good working conditions, increased employment, and environmentally responsible business practices, then the community will be positively impacted.

The interests of the local community in a business include environmental impact and the creation of job opportunities.

Suppliers

The interests that suppliers hold in a business are primarily financial. Suppliers provide materials to businesses. If a business is performing well and the product is in high demand, its suppliers will receive more orders. A considerable proportion of a supplier's revenue might come from a particular business, and if that business performs poorly, it will reduce its orders. Purchasing practices and the quality of a product can directly impact suppliers.

The interests of suppliers in a business include profits and increased demand for their goods.

Conflict between stakeholders

It is very difficult for any business to listen to and act on demands from all their stakeholders. The decisions a business takes may reflect the majority of their stakeholders, but not all of them, which can cause some parties to feel overlooked or unsatisfied. This could create conflicts among stakeholders.

If stakeholders have goals that do not align with each other, we say that these stakeholders are in conflict. This ends up affecting the performance of the business as well as how successful it is. A conflict among stakeholders could also affect the public image of the business.

Shareholders might fall into conflict with the community as shareholders want the business to take decisions that will increase profits. However, this might result in increased production, which could have harmful effects on the environment.

Employees could have a conflict with management if they request better working conditions and increased salaries. Addressing that demand may reduce the company's profits. If employees are not performing well, they may end up in conflict with management. During the COVID-19 pandemic, several companies picked efficiency over employees. This resulted in downsizing and job losses. Such actions created an unfavorable image of the business in the public eye.

Some businesses might compromise on the quality of their product to maximize profits. This option may keep the creditors and shareholders happy, but the customers and local community will not be happy with such a decision.

A common source of stakeholder conflict is when businesses relocate overseas due to cheaper prices for raw material and labor. This might be a good decision for the business and its shareholders but negatively impacts the community and the government left behind, as it leads to a reduction in employment.

These different examples and types of stakeholder conflicts allow us to understand how multifaceted this issue is. Every company must be vigilant and efficient in solving such problems so that the success of its business is not adversely impacted.

TOK

TOK questions about interpreting different pieces of information include the following.

- Are some types of information less open to interpretation than others?
- Why do facts sometimes not change our minds?
- How can we decide between the views of experts when they disagree with each other?

Practice questions

Lebanon is facing its worst socioeconomic crisis in decades. It hosts the highest number of refugees per capita worldwide. The government estimates that the country currently hosts 1.5 million Syrian refugees, 90 per cent of whom are living in extreme poverty, and 13,715 refugees of other nationalities.

SUDO Consultants is a cloud consulting firm started in 2020 that focuses on AWS Cloud Consultancy and security. SUDO's vision is to be the leading digital company that is elevating businesses around the world. Its vision would be incomplete if the company wasn't also socially responsible. One of SUDO's core values is integrity: 'We are honest and we show a consistent and uncompromising adherence to strong moral and ethical principles and values. We are always truthful and accurate in everything we do.'

SUDO worked with a telehealth provider to deploy telehealth kiosks in Lebanon.

The telehealth kiosks allow refugees to access doctors and medical support. On-the-ground nurses help refugees to use the kiosks properly.

The kiosks connect with the SUDO's backend cloud services. SUDO utilizes its best engineers to deploy this critical solution to ensure the solution works all the time and is as secure as it can be to protect patient data.

1 Identify one key internal and one external stakeholder for the company. (2 marks)
2 Explain the interest of SUDO's stakeholders and the likelihood of conflict between them. (4 marks)
3 Evaluate the impact that differing stakeholder objectives have on SUDO's behavior and decisions. (6 marks)

1.5 Growth and evolution

Learning outcomes

At the end of this section, you will be able to:

- understand internal and external economies and diseconomies of scale
- distinguish between internal and external growth
- discuss the advantages and disadvantages of growing a business
- discuss the advantages and disadvantages of a business staying small
- examine external growth methods, including:
  - mergers and acquisitions (M&As)
  - takeovers
  - joint ventures
  - strategic alliances
  - franchising.

Toolkit connection

The Ansoff matrix is a strategic framework that allows business executives to consider possibilities for business growth. It covers market penetration, market development, product development and diversification strategies.

Over time, businesses grow or reduce in size as they adapt and respond to changes in the external environment and pursue their business objectives. Businesses need to stay relevant and up to date with what is happening around them. The growth and sustainability of a business is directly linked to how it evolves or develops. Businesses need to focus on expansion to ensure a sustainable business model. Amazon, Google, Nike, and Apple have been able to expand by using effective and productive growth-related strategies.

Economies and diseconomies of scale

A company's or industry's growth can be affected by economies and diseconomies of scale. In order to understand economies and diseconomies of scale, it is important to understand what **average cost** means. The average cost of an item is the ratio of the total cost of production to the number of items produced. As an organization grows and production increases, the average cost will decrease.

Economies of scale occur when there is a decrease in the average cost due to growth. The business can charge lower prices than its competitors. In those industries with high set-up costs, economies of scale enable larger firms to undercut smaller firms and drive them out of business. In the long term, economies of scale can decrease competition and cause a **monopoly**.

Diseconomies of scale occur when there is an increase in the average cost due to internal or external inefficiencies. Companies increase prices and are then less competitive in the market.

Economies of scale lead to a reduction in the average cost; diseconomies of scale result in an increase in the average cost. These concepts help us to understand the cost structure and pricing strategies of different organizations and industries.

If a business is developing and growing while its production costs decrease, the business has economies of scale and a healthy rate of growth.

There are two types of economies and diseconomies of scale: internal and external.

Internal economies of scale

Internal economies of scale assist businesses in reducing minor expenses or lowering the average cost per unit. They allow a business to be efficient and productive.

Internal economies of scale can be achieved in various ways.

Managerial economies

These arise from employing better qualified and trained employees and managers who can make quicker and more profitable decisions. Management professionals may apply innovative approaches to enhance organizational management and save operational costs.

Financial economies

Many businesses depend on borrowed capital. The 'creditworthiness' of the borrower is considered by lenders when determining the rate of interest to be applied to their loans. In general, bigger firms enjoy greater creditworthiness than smaller ones, and can borrow funds at lower interest rates. They may also have more opportunities to raise funds through equity capital.

By-products

Higher output results in greater quantities of production waste. When waste production exceeds a certain threshold, a business may be able to manufacture specific by-products or sell the waste to other businesses to increase revenue. A company will be unable to use this waste to generate revenue if it doesn't produce enough waste.

Technical economies

Large companies can utilize complex machinery more efficiently, resulting in increased productivity and reduced average costs. Different inputs, specifically machines and equipment, require periodic maintenance and repairs. A small-scale business may not be able to quickly locate a replacement for a machine that breaks down or is unable to function, which negatively affects production.

Economies of inventory management

A larger company is better able to alter its input and finished product inventories so that any discrepancies between flows of production and sales are reduced.

Marketing economies

A big corporation benefits from bulk purchasing and sales. As a result, it can procure its inputs at discounted prices. Similarly, on account of bulk selling, its average selling costs come down. In addition, its size gives it better bargaining strength.

Advertising

An uncompetitive business must engage in several actions to increase sales, with advertising playing a key role in these efforts. A small firm may not be able to afford advertising because advertising must be repeated to be successful. An increased advertising budget means that a firm can use the most effective media in the right proportions to target customers. As a result, its per-unit advertising expenses come down.

Risk economies

A large company can diversify its product lines to lower the average risk it faces. This is because not all product lines are likely to experience losses at the same time. The firm can compensate for losses from some lines with profits from other lines.

Internal diseconomies of scale

Internal diseconomies of scale result in an increased average cost of production.

Organizational diseconomies

There are many causes of organizational diseconomies of scale. Managing a large workforce can result in a decline of effective communication: it becomes challenging for management to communicate and give directions within the growing organization. Larger organizations run the risk of isolating staff members and making them feel unappreciated and demotivated, which can reduce productivity. Lack of communication, control, and motivation cause diseconomies of scale by increasing the average cost of production in large organizations.

Technical diseconomies

Technical diseconomies of scale are caused by inefficiencies in the production process. Overcrowding in a manufacturing facility can result in poor work conditions and thus reduces productivity. A lack of equipment and resources may also result in reduced production. A new facility may have a less efficient production process, with employees needing training and time to familiarize themselves with new tools or equipment.

External economies of scale

External economies of scale are caused by factors external to the company and which impact all the firms in an industry.

Skilled workforce

The availability of a skilled workforce in the local community improves productivity and reduces the costs of production for a growing company.

Improved connectivity

Well-connected infrastructures and transportation systems improve the logistics around receiving raw materials and delivering finished products. It helps increase productivity and decrease the average cost.

Business regulations

Favorable business laws support the growth of a company and can increase the productivity.

External diseconomies of scale

Diseconomies of scale can be caused by external factors that are not under a company's control. They negatively impact productivity and increase the cost of production.

Competition for scarce resources

Competition for resources increases the cost of materials as well as labor costs. A limited supply of suitable business properties will result in increased rent and will increase the cost of production.

Traffic congestion

The growth of a large company can increase the size of the local community, resulting in increased traffic. It disrupts mobility in the labor and delivery markets. It reduces production while increasing the cost of production.

▲ Traffic congestion negatively impacts the supply chain

Internal growth

Internal, or organic growth, occurs when a business decides to expand its activities by launching new products and/or entering new markets. Businesses expand by internal growth to improve their chances of increasing their customers, revenues, and profits. Internal growth allows an organization to have control of its business.

Opening new stores

A company might open new stores locally or globally. If the company can find an appropriate location and has the capital to invest in a new store, this is a relatively low-risk option.

E-commerce

E-commerce involves sales of goods and services online. The COVID-19 pandemic led to a surge in e-commerce. Almost all established businesses have an online presence. Selling online allows a company to reach new customers in different countries and increase its market share.

Outsourcing

Outsourcing is when a company uses workers from outside the company to do a job. This allows the company to grow its capacity quickly and cheaply. For example, a cereal manufacturer could meet an increase in demand by asking another cereal manufacturer to produce its products. However, the business will not have as much control, and its reputation could be damaged if the products aren't the same quality.

Advantages of internal growth include:

- It is relatively low risk.
- A business can maintain its vision and mission.
- Higher output enables the company to take advantage of economies of scale and reduce average cost.

Disadvantages of internal growth include:

- It is relatively slow.
- The time between an investment and the investment's return may be considerable.
- Growth could be constrained and will depend on the accuracy of the growth method's sales projections.

External growth

External growth (also known as inorganic growth) occurs when a company increases its capacity by buying other companies, rather than from its own operations.

Internal growth and external growth are not mutually exclusive. The primary benefit of external growth over internal growth is that it offers a quicker means of business

expansion. However, organic growth is often thought to be a stronger indicator of a company's performance.

A company might choose a merger, an acquisition, or a strategic alliance as a way to grow. The main difference between mergers and acquisitions (M&As) and strategic alliances concerns a change of ownership. M&As transactions move the ownership from one company to another. A strategic alliance enables companies to work toward shared goals while continuing to exist as separate entities.

Mergers and acquisitions

M&As refers to transactions between business entities that involve a change of ownership. A financial transaction known as a merger occurs when two businesses combine into one new business with the consent of both boards of directors. In a merger, the companies may create a completely new entity (under a new brand name), or the acquired company may become a part of the acquiring company.

An acquisition is a financial transaction in which the acquiring company (the bidder) purchases a controlling stake in a target company. It may be carried out with the approval of the target company's management and shareholders (a friendly takeover), or without their consent (a hostile takeover). In general, M&As transactions can offer the participating firms significant advantages and prospects for growth. However, integrating companies following a merger or acquisition is a complex process. Companies must evaluate the future benefits of carrying out mergers and acquisition. After M&As, companies may need to be reorganized, and new responsibilities will be assigned. It might impact the culture of the organization and the motivation of existing employees.

Case study – Spirit Airlines merger

In June 2022, a *New York Times* article reported that Institutional Shareholder Services (ISS) had advised Spirit Airlines' investors to vote in favor of a proposed merger with Frontier Airlines over a competing bid from JetBlue Airways. Many large US corporations value ISS's opinions on corporate issues.

JetBlue had increased its all-cash offer earlier to a total of about $3.7 billion. This was followed by Frontier increasing its cash offer to around $2.7 billion. Though initially less valuable, Frontier offered a rise in share when the combined company generates higher profits, making it more likely to win regulatory approval.

Airline analysts favored a merger between Spirit and Frontier due to their similar low-cost business models with different geographical strengths. US President Joe Biden's revised administrative reforms on antitrust binds both proposals to offer a $350 million 'reverse termination fee' to Spirit, and an upfront cash payment to shareholders.

Spirit and Frontier announced their merger in February 2022. JetBlue's counter bid was criticized by Spirit and Frontier, with the expectation that it wouldn't be approved by antitrust regulators and is a 'cynical attempt' to disrupt the merger.

Case study – Clif Bar & Company

Mondelez International, the owner of Oreo, Toblerone, Milka, and Cadbury announced plans to acquire Clif Bar & Company, a US manufacturer of energy bars, for $2.9 billion. Mondelez plans to continue manufacturing Clif's products in Idaho, Indiana, and California.

Mondelez believes this acquisition will bring its snack bar worth to over $1 billion. Mondelez, which also owns international brands Daim, Ritz, and Belvita, recorded a net income of about $29 billion in 2021. Clif CEO Sally Grime believes this is the best time for the Mondelez partnership to help Clif grow.

However, Mondelez has warned of higher production costs. It has reduced the size of Cadbury chocolate bars, without lowering the price, to absorb some cost increases. Other food manufacturers, such as Nestlé, KitKat, and Nesquik, have also seen rising manufacturing costs for their products.

Takeovers

A takeover typically occurs when one business acquires control and interest in another organization by purchasing the majority of that company's shares. Takeovers of smaller companies are usually carried out by larger corporations. A mutual agreement between two corporations makes a takeover voluntary. In some cases, offers might be turned down, in which case, the larger organization could take control by force.

Takeovers occur frequently in the corporate sector. Because takeovers integrate two businesses, they are comparable to mergers. A merger involves two equal companies. A takeover is typically a larger corporation pursuing a smaller one.

There are a few reasons why businesses might start a takeover. In cases where an acquiring corporation believes the target is reasonably priced, it will try an opportunistic takeover. Some businesses might choose a strategic takeover, which enables the acquirer to enter a new market without investing more time, money, or risk. A strategic takeover may also allow the acquirer to reduce competition.

A friendly takeover usually works because all parties agree. In such cases, the deal has the support of the target firm's management. However, when one party is not a willing participant, it can result in an unwelcome or hostile takeover. The purchasing company may use undesirable strategies, such as a 'dawn attack', whereby it purchases a sizable stake in the target company as soon as the markets open, taking control before the target is even aware of what is happening. When more than 50 per cent of shares are purchased, control of the organization will pass to the purchasing company. The target company's management and board of directors have the power to thwart takeover efforts by using strategies like a 'poison pill'. This enables target company owners to purchase additional shares at a reduced price, diluting the acquirer's stake and raising the cost of a takeover.

Joint ventures

A joint venture is a business activity in which two or more companies have invested together for a finite time. Participating companies agree to share revenue, expenses,

and assets. Joint ventures are helpful for businesses that want to start a new project with low economic risks. Joint ventures happen usually for small projects, but large corporations can use this method to diversify.

Working with individuals from various firms requires trust to achieve joint objectives. When the possibility of a collaboration first presents itself, all parties need to research each other and determine whether trust can be achieved and maintained.

The advantages of this kind of business partnership revolve around the acquisition of resources (shared) without a (excessive) capital investment. This resource pooling makes it easier for businesses to enter new markets, enabling scalable, low-risk business growth.

Joint ventures offer a great deal of flexibility. To produce the venture's collaborative product, participants do not need to establish new corporate entities. The partners are not obligated to work together after the initial partnership agreement expires; each company maintains its individuality and autonomy, and is free to engage in independent economic ventures. Joint venture agreements streamline company innovation while lowering its risks.

A joint venture is a good way to enter a new geographic market or increase awareness among a particular target demographic. Joint ventures can also be helpful for gaining technical know-how or intellectual property, or for enhancing the advertising and marketing plans of each business.

Joint ventures can be the only way for some companies to enter overseas markets due to government regulations. Conflicts between the companies may arise if there are different management styles and company cultures.

Case study – Volkswagen and Horizon Robotics

According to a 2022 article by Macau Business, Volkswagen, the German auto giant, is investing $2.3 billion in a joint venture with The People's Republic of China's Horizon Robotics. Both companies want to speed up the development of automated driving solutions for the Chinese market.

Volkswagen has long invested in The People's Republic of China as part of its shift to electric cars and has already established several joint ventures there, notably in the battery industry.

Strategic alliances

Strategic alliances are formed as part of a formal agreement between two or more organizations to work together to achieve common business objectives. Strategic alliances, unlike M&As deals, don't include any transfer of ownership between the participating businesses. Instead, businesses work together for a defined period to share their resources and knowledge in order to increase their competitiveness in an industry while maintaining their independence. The two main types of strategic alliances are equity and non-equity alliances. Equity alliances are formed when separate businesses join forces and create a new company that is co-owned by the participating partners. An equity alliance's most typical manifestation is a joint venture.

Non-equity relationships are established through contracts. License agreements are examples of non-equity alliances where one firm sells goods, services, or intellectual property to another company in return for a fee.

Strategic alliances, as opposed to M&As deals, are significantly simpler to carry out and do not require a high level of commitment from the parties involved. However, compared to the opportunities that an acquisition may present, the advantages and growth chances of strategic alliances may be constrained. A strategic alliance can fail because of diverging objectives and a changing external environment, or due to rivalry between the partners.

Case study – Oman Air

Oman Air will join the Oneworld airline alliance in 2024. After an announcement at IATA's 78th annual meeting at Doha, Qatar Airways was chosen to sponsor the airline and mentor it to help integrate with Oneworld. In May 2021, Akbar Al Baker, the group CEO of Qatar Airways, was appointed by Oneworld to lead the governing board of the airline alliance.

After Oman Air joins the alliance in 2024, users of the carrier's Sindbad frequent flier program will be able to accrue and use points on any member airline of the alliance. Oman Air brings three new locations to Oneworld: Khasab and Duqm in Oman, and Chittagong in Bangladesh. Oman Air lounges will be available to Oneworld Emerald, Oneworld Sapphire, and premium cabin passengers in Muscat, Salalah, and Bangkok. Akbar Al Baker welcomed the alliance's new members in a press conference mentioning that Oman Air will provide seamless travel arrangements for its passengers, connecting them to more than 900 locations in 170 nations.

Franchising

Franchising is a method of external growth where one business sells the right to use its brand name and sell its products to another business. The product and process need to be scalable. In exchange for a fee and royalties, a franchisor sells a franchise. A franchisee is someone who purchases a franchise and can use an established brand name and its products.

Advantages of franchising

Benefits for franchisors include:

- **Increased growth with less risk**: Faster expansion, reaching more customers in competitive markets, is possible with a lower level of risk than other ways of expansion.
- **Economies of scale**: The business can achieve cost savings by expanding.
- **Increased revenue**: The franchisor receives an upfront fee as well as a portion of the profits generated by each outlet.
- **Fostering motivation**: Each store owner will be running their own business and keeping most of the profit, meaning they are more motivated than if they were just the manager of the store.

For the franchisee, an existing brand, training from the franchisor, shared marketing expenses, access to suppliers, and access to a network of other franchisees are all benefits of purchasing a franchise. Franchisees also benefit from ongoing support, and brand and product development.

Disadvantages of franchising

By selling a franchise, franchisors risk losing control of the company and the possibility that the reputation of the brand could be harmed.

Franchisees must pay substantial setup costs and split the earnings (in the form of royalties). They have less control over what they sell and how much they charge for it than if they weren't running a franchise.

Advantages of external growth

- It is a quick way to grow and access new markets and customers.
- It can quickly increase a company's market share.
- It can reduce costs and achieve economies of scale faster.

Disadvantages of external growth

- External growth can dilute the ownership and result in loss of control.
- It can be costly.
- Managers might not have the expertise in and knowledge of external growth methods, which can lead to business failure.

Reasons for growth

Growth may enable an organization to:

- take advantage of new opportunities
- expand products or services
- attract more customers
- increase sales
- employ more staff
- benefit from economies of scale to improve competitiveness
- respond to market demand
- increase market share
- capitalize on its growing brand.

Growth often also encourages innovation, enabling a business to stand out in its industry and become more competitive.

Advantages of growth

Growth and expansion of an organization has several advantages:

- **Increased profits**: Almost every business owner's ultimate goal is to increase profits, which they can accomplish by growing the company.
- **Economies of scale**: With an increase in business, the average cost of operations lowers, which is a competitive advantage in the market.
- **Larger market share**: The expansion in the business makes it possible to capture a larger share of the market.

Growth can also increase stability and earnings while expanding the supplier base and a company's credibility.

For growth to be effective and long-lasting, it must be purposeful and motivated by the appropriate factors. Companies should evaluate whether their business model is scalable before deciding to grow the company. Most firms expand to grow larger, whether because of rising sales or market share, but size isn't always the primary factor.

Growth can give an organization:

- greater sustainability or resilience in the market
- greater buying and bargaining power
- the ability to reduce commercial risks (for example, through diversification)
- the ability to reduce the threat of competition
- the ability to survive market fluctuations and downturns
- the ability to recruit top talent.

However, business owners must remember that taking steps that promote growth may not be feasible or pragmatic for all businesses. Some businesses have failed to reach their desired outcomes and profits due to premature growth decisions. But, in most cases, not moving forward is more likely to lead to loss through missed opportunities.

Disadvantages of growth

Growth and expansion can, however, have disadvantages:

- Large companies have many layers of management, which can result in a loss of control and communication problems.
- Increases in production can reduce the quality of a product.
- Increased need for capital can result in cashflow problems.

Case study – Infosys

Infosys is the second-largest IT firm in India. Non-executive chair Nandan Nilekani states that inflation, rising interest rates, slow growth, and disrupted supply chains have been a post-pandemic challenge. However, the pandemic has also led to new opportunities to gain market share; Infosys grew by 19.7 per cent in 2022, with $3.1 billion of dividends and share buybacks transferred to shareholders.

To improve growth, Infosys has introduced five strategic elements:

- scale its cloud business
- maintain its intensity in current markets
- expand in Europe
- advance in new technology, such as the metaverse and Web 3.0
- advance automation and modernization.

CEO Salil sees plenty of opportunities in the digital and cloud spaces; he expects the well-positioned company to continue to grow its market shares and benefit its stakeholders.

Reasons for businesses to stay small

Although growth is important for many businesses, some businesses may decide to stay small.

Type of industry

Some business sectors or industries that provide services to the local market stay small for their entire existence, or for a long time. For example, hairdressers, convenience stores, and car wash services. These businesses usually offer personal services and don't want to offer their services beyond their local market.

Market size

The market size for expensive and specialized products is small. Therefore, companies that offer these products also stay small. For example, there are very few buyers of luxury cars around the world, so manufacturers of luxury cars have limited customers and a smaller market share than manufacturers of popular small and family-sized cars.

Business objectives

Sometimes a business owner doesn't want to increase the size of their business. They intentionally stay small. They might want to exert great control over the company or stay away from the pressures of large corporations. Owners may focus on staying close to employees and customers instead of increasing the size of their company.

Advantages of staying small

There are advantages to a business that decides not to grow:

- Smaller companies have more control and decision power.
- Smaller companies can customize the product according to the needs of customers and can target niche markets.
- Operating costs are lower, and companies have more control over their cashflow.

TOK

Does competition between companies help or hinder the production of knowledge?

Disadvantage of staying small

If a company decides to stay small, it may miss opportunities and will not have access to the advantages in the market than larger organizations have.

Conceptual understanding: Change and business

What is the relationship between advances in technology and change? How does technology influence change and growth in a business?

Activity

What ethical questions do businesses face when they make job cuts or close factories?

Review case studies of international companies reducing or closing factories in various countries, then evaluate those companies' business needs in a balanced manner.

By reflecting on the impacts of companies' decisions, evaluate the importance of running a socially responsible business.

Practice questions

In 2011, British Airways merged with Iberia, and Air France merged with KLM. Both mergers resulted in some significant benefits.

Ryanair is planning a £560 million takeover of the Irish airline, Aer Lingus, which has failed to deliver shareholder dividends. One shareholder, the Irish government, owns 25 per cent of the shares of Aer Lingus.

Ryanair's chief executive officer (CEO) said that the proposed takeover could create:

- revenue and a positive return for the Irish government by selling its shares
- a strong Irish airline capable of competing with major European airlines.

This form of external growth is also occurring in the US. American Airlines and US Airways will merge, forming the nation's biggest airline, to be called American.

Airline analysts argue that mergers are necessary to reduce financial uncertainty and restore stability to an industry that has lost about $60 billion in ten years. Large airlines with big networks can invest in new airplanes, new routes and better facilities, and provide passengers with more travel options. Mergers are likely to increase operational and financial efficiencies, and create economies of scale. Airline analysts, favoring airline mergers, emphasize that each merger must be approved by appropriate national and international regulatory agencies to ensure that the competitive nature of the industry is maintained.

Other analysts, however, argue that:

- large airlines make it difficult for smaller rivals to compete and, in the long run, reduce competition – this may lead to higher fares and a poorer service
- being larger may not make airlines globally competitive – some national governments restrict operation of foreign airlines within their countries, which allows a local airline monopoly to exist
- strategic decisions are difficult to implement as companies grow
- larger is not always better.

1 Describe one difference between a merger and a takeover. (2 marks)
2 Define the term 'economies of scale'. (2 marks)
3 With reference to the airline industry, explain two differences between external growth and internal growth. (6 marks)
4 Examine the Irish government's decision to own 25 per cent of Aer Lingus shares. (6 marks)
5 With reference to one internal stakeholder and one external stakeholder, discuss the statement that 'larger is not always better' from the perspective of the airline industry. (9 marks)
6 Discuss the merits of small organizations compared to large organizations. (10 marks)

1.6 Multinational companies (MNCs)

Learning outcomes

At the end of this section, you will be able to:

- evaluate the impact of multinational companies (MNCs) on their host countries.

Multinational companies (MNCs) are organizations that operate in more than one country. A host country is where a company based in another country has business activities. Globalization has resulted in the increasing expansion of operations of large organizations into more than one country.

MNCs are important to host countries for several reasons. MNCs influence economic development by providing capital investment, employment, and training opportunities for the local market. The presence of MNCs in host countries raises the GDP of host countries, which then positively impacts the local economy. MNCs may pay higher salaries to their employees than local companies, which makes them more attractive to the local labor force.

Local producers and suppliers also benefit economically from the presence of MNCs. They provide services, parts, finished goods, and raw materials, which increase employment and their revenue. MNCs also improve the knowledge and skills of the host labor force. Due to the large number of products they produce and sell, multinational firms usually need to invest in the transportation and communication networks of a host nation. Local companies and the workforce can take advantage of the latest and innovative technologies employed by MNCs.

MNCs entering the global market can lead to healthy competition among local companies in the host nation by boosting quality and/or efficiency. MNCs provide more product options in the local market. MNCs can also improve the global outlook of the host nations.

International enterprises prefer to enter countries with favorable market conditions and low market risk. If a well-known MNC enters a certain host market, then other global corporations may locate in the same host county.

Although there are huge potential benefits for host countries, there are some disadvantages. MNCs enter the global market for economic gain and may have little sense of corporate social responsibility in the host country. Some host nations'

Case study – Dubai International Chamber

To boost its status as a hub for international trade, Dubai has adopted a new strategy to attract 50 multinational corporations by the end of 2026. The Dubai International Chamber's three-year strategy will also assist 100 Dubai-based businesses in their international growth.

This strategy aims to improve the business climate in Dubai, and also aims to encourage and promote multinational corporations to list on the Dubai Financial Market (DFM) and boost Dubai's non-oil foreign trade to Dh.2 trillion.

The new strategy enables the Dubai International Chamber to market Dubai more successfully as a top international business hub and draw top multinational corporations to the emirate, which will then be able to increase its competitiveness in industries like trade, infrastructure, logistics, the digital economy, retail, and manufacturing.

limited natural resources have been severely depleted through the actions of large multinational corporations.

A host country government might relax environmental laws for MNCs, enabling MNCs to contribute to carbon emissions and to worsen the climate crisis. MNCs might manipulate the rules and regulations of the host country to gain economic advantages. Multinational corporations can invest hundreds of millions of US dollars in a host country, and may attempt to influence government policies in exchange for such investment. MNCs might buy products from local suppliers at a cheap rate and then sell their own products at much higher rates to the local community. MNCs might create a monopoly in the host country. Local businesses might not have enough resources and will not be able to compete with MNCs, resulting in the local organization's failure.

TOK

How can businesses find out about a country's culture?

How can multinational companies leverage knowledge of a host country's culture to increase their profit there?

Activity

The trend of globalization in the business world brings multinational corporations into more communities. New customer demands, new competitors, new technologies, new legislations, and other changes significantly impact local businesses. Evaluate how the change of external environment affects local communities ethically.

IB learner profile

Risk-takers

Utilize business knowledge and understanding to develop and present creative business conclusions/recommendations for a real-world organization of your choice about how that organization can leverage knowledge of a host country's culture to increase its profit in that country.

Summary

In this unit, you have learned:

- A business identifies a need (or want) in a market and then produces goods or services to meet that need.
- Businesses operate in either the private sector or the public sector.
- There are three main types of firms: sole trader, partnership, and limited company.
- A business uses vision statements, mission statements, and objectives to develop and grow.
- Internal and external stakeholders influence an organization's decisions and actions.
- Companies can take advantage of economies of scale to reduce costs and increase profits.
- Businesses can grow organically, or by merging with or taking over other companies.
- Multinational corporations are based in one country but have operations in others, often to take advantage of lower production costs.

UNIT

2

Human resource management

Conceptual understandings

- People play a major role in driving organizational **change**.
- **Creative** employees could be essential for business success.
- **Ethical** human resource systems may positively affect employee performance.
- **Sustainable** human behavior can bring positive change in a business.

2.1 Introduction to human resource management

Learning outcomes

At the end of this section, you will be able to:

- define human resource management
- HL outline the common steps in the recruitment and selection process
- identify the internal and external factors that influence human resource planning
- suggest reasons why employees may resist change in a business organization
- examine the human resource strategies to reduce the impact of, and resistance to, change.

Inquiry questions

These are questions based on themes within this unit that you could conduct some independent research about. You could explore:

- How could technological advancement help businesses to manage their human resources department in a more efficient way?
- Why are ethical and sustainable organizations more likely to recruit top talent and have higher employee retention?

The role of human resource management

Human resource management (HRM) fulfills an essential role in the modern business environment. It is the process of employing and training people, compensating them, developing policies relating to them, and developing strategies to retain them.

Although HRM often forms its own functional area, it is important to recognize that every manager has some role relating to HRM. For example, most managers will deal with motivation, compensation, and retention of employees.

The key functions of HRM are:

- Workforce planning
- Recruitment, selection, and induction
- Compensation and benefits management (financial and non-financial rewards)
- Professional development and training
- Performance management and appraisal
- Employee relations
- Worker health and safety
- Dismissal and redundancies.

Workforce planning

Workforce planning is the process of analyzing, forecasting, and planning workforce supply and demand, assessing gaps, and determining target talent management interventions to ensure that an organization has the right people (who have the right skills in the right places at the right time) to meet its strategic objectives.

Figure 2.1 The six phases of workforce planning

HL

Recruitment, selection, and induction

Recruitment and hiring new talent is one of the most important HR functions. It involves a number of crucial activities, outlined in Figure 2.2.

Job vacancies in the organization will be identified in the HR plan as a result of changes in internal or external factors. Following this, the HR department will conduct a job analysis and evaluation, before formulating the job description and person specification that will be shared with potential applicants.

The organization needs to decide on how to find and attract the best candidates for the job. This will involve careful consideration of where the job advert is placed, ensuring that the people they want to apply will see it. They may facilitate this process internally through the HR team or use an outside recruitment agency.

On receipt of applications, a screening process begins, and at this point, candidates are narrowed down through shortlisting. Shortlisted applicants will then be invited to interview. Candidates may be asked to complete some form of test alongside the interview. Aptitude tests (task oriented activities) and psychometric tests (personality questionnaires) are common. The interview can take a variety of forms: one-to-one, a panel (with multiple interviewers), video conference (online), multi-day (conducted over several days), or staged (where success in one stage leads to the next).

The recruitment process should be done with proper strategic planning

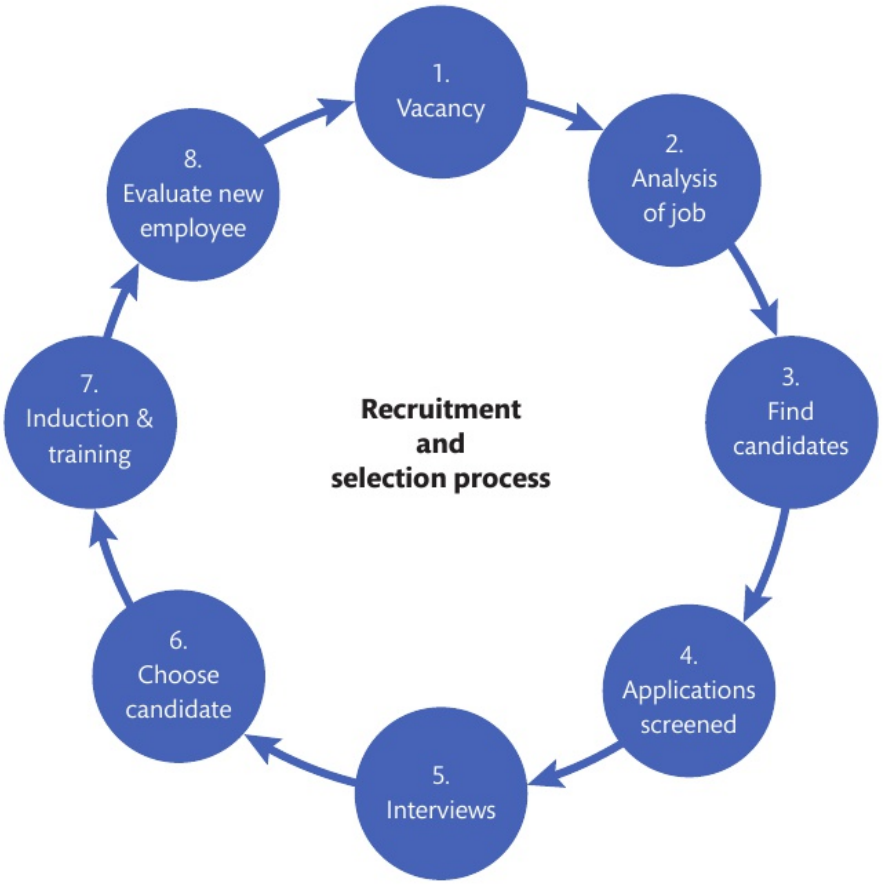


Figure 2.2 The recruitment and selection process

Once the successful candidate has been selected, they will be presented with a job offer and associated remuneration package. When new employees start at an organization, they undergo an induction and training program that helps orientate them with the workplace and expectations of the job role. The HR department may support employee evaluations at the end of the training period.

Performance management

Performance management describes activities that establish objectives through which individuals and teams can see their part in the organization's mission and strategy. It aims to improve employee performance, and to hold employees to account for that performance, by linking performance to reward, career progression, and continued employment.

An appraisal system can be used as the framework to manage performance. Often reviewed on an annual basis, targets will be set at the start of the appraisal cycle and progress against them monitored throughout the year. Appraisal can flow both ways in a business environment; it is not uncommon for employees to feed back on their managers' performance.

Common forms of appraisal include:

- **Formative**: Documented appraisal sessions at regular intervals throughout the term of an employee's contract, used to assess what is going well and how performance can be improved.
- **Summative**: A concluding appraisal at the end of a set period, summarizing the performance of the employee against their targets.

- **360-degree feedback**: An appraisal method that draws on feedback from colleagues and/or customers, given through a questionnaire.
- **Self-appraisal**: Employees self-assess their own performance and rate themselves against their key performance indicators.

HL end

TOK

Is it inevitable that the implicit biases of the interviewer will influence the outcome of interviews?

Compensation and benefits management (financial and non-financial rewards)

This function includes establishing salary ranges for job roles and placing employees in the relevant salary band based on their qualifications, experience, and achievements. The HR team will need to ensure they keep up to date with current labor market trends and benchmark the remuneration packages against the going market rate for similar job roles and responsibilities in the industry. The HR department is also responsible for monitoring the wider benefits package, such as annual leave entitlement and healthcare provision.

Professional development and training

The HR department oversees the organization and provision of training and development. Types of training and development include the following.

On-the-job training is delivered while an individual is performing tasks or processes related to their particular occupation. This type of training is typically used to broaden an employee's skill set and to increase productivity.

Off-the-job training refers to an education method where employees learn more about their job or the latest advancements in their field at a location away from their workplace.

Behavioral training is adopted by some businesses to develop skills and abilities that are interpersonal, regulatory, and task-related, and that ensure an individual's good performance in professional settings.

Communication	Conflict resolution	Self-improvement	Time management	Stress management
Patience	Balance between professional and personal life	Empathy	Decision-making	Problem solving

Figure 2.3 The top ten behavioral skills that employers like their employees to have

Cognitive training aims to improve the skills the brain uses to think, read, learn, remember, reason, and pay attention. Developing cognitive skills in the workplace helps employees to understand and process new information.

Research and inquiry

Choose a job role and explore what behavioral and cognitive skills are needed to work successfully in that industry/environment. Present your findings to your classmates, using real world examples of situations that would bring the behavioral and cognitive skills into play for your chosen job role.

Employee relations

Maintaining positive relationships with employees ensures that a pleasant work environment is created, which should lead to increased levels of productivity.

Worker health and safety

Providing a safe, healthy work environment is a critical function of HRM. It includes tasks such as creating safety guidelines, providing employee wellness programs, and conducting emergency planning. Many insurers provide discounts on workers' compensation and other business coverage to employers who implement safety programs. Wellness programs may reduce healthcare premiums.

Dismissals and redundancies

The HR department oversees dismissals and redundancies in the workplace. A dismissal happens when the employer terminates a contract due to the employee's actions. The HR department ensures the dismissal is fair, otherwise it can be challenged at a tribunal. A redundancy is a type of dismissal when the job role is no longer needed.

Internal and external factors that influence human resource planning

A variety of factors can affect an organization's HR plan. Changes within the business can mean **internal** factors are an influence, whereas **external** factors can affect the pool of labor available for employment.

Internal factors

Internal factors arise out of the business itself and can lead to a review of the HR plan.

- **Change in business organization**: The need to change how a business is organized in order to better meet its strategic objectives can impact on HR planning. Acquisitions and mergers will also influence organizational changes.
- **Change in business strategy**: The business environment is ever-changing, and businesses often need to review, revise, and implement new strategies in response to market conditions. The HR plan can be impacted by the identification of new roles needed, as well as the realization that existing roles may become redundant.
- **Change in business profitability**: Levels of profitability and the overall financial position of a business will be a key influence on the HR plan. Low levels of profitability will hinder a business' ability to offer competitive remuneration packages, which will affect recruitment and retention. Increasing profitability will allow the business to expand its workforce, offer better salaries, and attract high quality candidates.
- **Change in labor relations**: Relations between employer and employees can be influenced by the decision to unionize. This would require a reconsideration of the HR plan in line with union requirements and work conditions. If existing trade union power reduces, this could add a degree of flexibility to the business in dealing with the workforce.

External factors

External factors are things outside the business that can impact the HR plan and the functioning of the business.

- **Demographic change/immigration**: Falling birth rates, an aging population, or rising net migration levels can impact the number of potential employees available in the labor pool.

- **Technological change**: Improvements in technology can lead to more remote working. It has become increasingly common over recent years for businesses to add video conferencing and remote working technology to their everyday practices. The rise of social networking may also change the way businesses communicate with employees.
- **Government regulations**: Changes in government legislation or regulations in relation to health and safety in the workplace, weekly working hours, retirement age, pensions, and equality in relation to age, gender, ethnicity, or disability can all impact on HR planning.

Case study – UAE cuts working week to four-and-a-half days

An article in *The Guardian* newspaper reported that the United Arab Emirates (UAE) government had announced in December 2021 that it planned to cut the working week to four-and-a-half days and move the weekend from Friday–Saturday to Saturday–Sunday, in a move aimed at improving the country's competitiveness.

The 'national working week' came into force from 1 January 2022 and is now mandatory for government bodies, which goes against the norm for the region of a full day off on Friday for Muslim prayers.

Although the UAE became the only Gulf state not to have a Friday–Saturday weekend, the move brought the resource-rich and ambitious UAE into line with the wider world. In doing so, the UAE became the first nation to introduce a national working week shorter than the global five-day week.

At the time, WAM, the state news agency said, 'From an economic perspective, the new working week will better align the UAE with global markets, reflecting the country's strategic status on the global economic map.

'It will ensure smooth financial, trade, and economic transactions with countries that follow a Saturday–Sunday weekend, facilitating stronger international business links and opportunities for thousands of UAE-based and multinational companies.'

Analyze the likely impacts for the HR departments of UAE businesses following the decision to move to a four-and-a-half day working week.

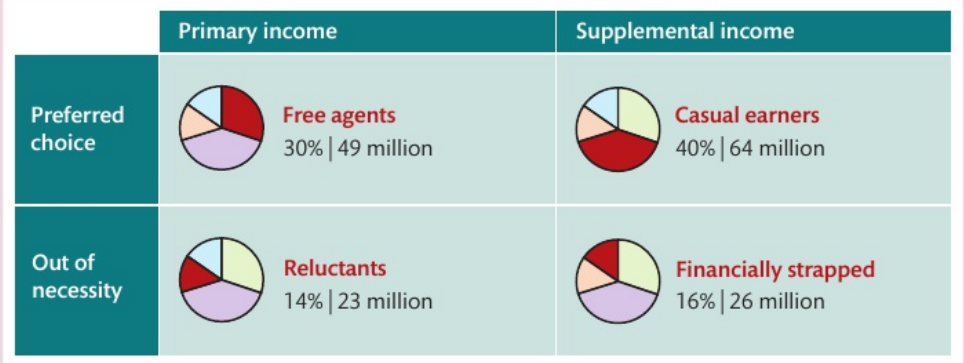
- **Socio-cultural trends**: Changes in society can impact on HR planning, including changing family structures and gender roles, increased emphasis on employee well-being and the value of leisure time, and the need for flexible working.
- **The state of the economy**: Fluctuations in the business cycle influence the number of people available for work. During times of recession, unemployment levels rise, increasing the supply of labor and putting a downward pressure on wage rates. Conversely, in times of economic growth, the demand for labor increases, and as firms compete for potential employees, wage rates are pushed up.
- **Labor mobility**: Occupational mobility refers to the ease with which people can change jobs. Geographic mobility refers to changing locations. Both factors influence the overall labor mobility of the workforce and significantly impact the labor pool of the country.
- **Emerging industries**: Industries experiencing above-average growth levels must hire additional staff at a rapid pace. In 2021, Forbes identified artificial intelligence, virtual reality, renewable and alternative energy, big data analytics, cyber security, and cloud computing as six of the biggest emerging industries for investment.
- **Gig economy**: The UK government describes the gig economy as one that 'involves the exchange of labor for money between individuals or companies via digital platforms that actively facilitate matching between providers and customers, on a short-term and payment-by-task basis'. Millions of people balance various income streams and work independently, job-by-job.

Toolkit connection

Descriptive statistics assist a business in its decisions regarding a particular venture or strategy. Numerical data can be used to create bar graphs, pie charts, and infographics to provide a visualization of the data.

Activity

Investigate the rise of the gig economy in your local context. McKinsey & Company have suggested that independent workers (a large part of the gig economy) fall into four main categories. The chart shows the share of the working-age population that is engaged in independent work.



Using the categories proposed by McKinsey & Company, what type of independent work has been on the increase and why? Which digital platforms are being used to facilitate this? What are the typical earnings that can be expected for the type of independent work you have chosen to explore?

Research and inquiry

Investigate the rise of the gig economy in your local context. What type of independent work has been on the increase and which digital platforms are being used to facilitate this? What are the typical earnings for the type of independent work you have chosen to explore?

Reasons for resistance to change in the workplace

Change can be unsettling for people, regardless of the scenario, and this is no different in the workplace. It is not uncommon for managers to come up against resistance from employees when looking to implement changes that may upset the status quo.

There are many reasons why employees may push back against change, including the following.

Loss of job security

If employees think that their job may be at risk because of the change in the current work situation, then this may cause fear and anxiety over their job security. In an organizational environment, this means that employees will resist change that will result in their role being eliminated or reduced, especially if they are not involved in the decision.

Prior change experience

Prior experiences will influence the way people respond to different situations. If employees have had negative experiences of change in the past, this can make them resistant to workplace change. In addition, if the organization has managed change poorly in the past, employees will struggle to get on board and are likely to resist.

Poor rewards systems

When faced with change, employees will ask 'How does this benefit me?' If the answer is unclear or no benefit is articulated, then they will resist the change. The business will need to reward them in some way for implementing the change. Without a reward or clear benefits to the change, employees will lack motivation to support the change over the long term.

Surprise and fear of the unknown

If there is a lack of transparency and timely communication to employees about changes being made and the impact of those changes, the more fearful employees will become. Resistance to change out of fear of the unknown can occur if employees are not adequately informed and prepared.

Loss of control

Employees often establish a familiar routine in the work environment, helping to establish a sense of control. Change can disrupt these routines and can lead to employees feeling confused and out of control, leading them to resist change.

Fear of failure

A radical change in a job's requirements may mean that employees start to question their ability to perform their duties. They are comfortable with what they know and may fear being unable to adapt to new requirements.

Not understanding the need for change

It is vital that employees understand why the changes are needed in the workplace. If they do not understand the reason behind the change or do not think the change is needed, resistance will occur. If the regular way of working has remained stable for an extended period or there is a strong belief among employees that the current way of doing things works well, then this is even more important to address.

TOK Thinking about what leads employees to resist change in the workplace offers an opportunity to ask whether we ever really know what motivates an employee.

IB learner profile

Reflective

Can you recollect a time when change has impacted your regular weekly schedule? Did you resist the change, and if so, why? What strategies would have made you more receptive to the change taking place?

Mistrust

Managers must establish the trust of their employees – this is vitally important and something that takes time to build up. However, when changes are instigated by a new leader who has not developed that same level of trust, mistrust may turn into resistance to change.

Human resource strategies for reducing the impact of change and resistance to change

Understanding why people resist change in the workplace is the first step to helping managers overcome it. Having an idea of the key reasons why employees may rebel against change means strategies can be developed to overcome this resistance. The following six strategies can help reduce the negative impact of change and resistance to it.

1 Communicating and educating on the change

Clear communication and education about the change should be initiated before the change begins. This communication will help employees to rationalize the change and ensure that they receive adequate information to make positive judgments.

It is important that a business clearly communicates the need for change to its employees

2 Participative strategy

There is likely to be more resistance if employees are not consulted, and change is forced upon them. Therefore, it is important that relevant stakeholders are involved in the design of the change. A collaborative effort will engage employees in the change, and in the identification of potential issues and solutions. Employees are far less likely to resist change that they have helped to create.

3 Support

Businesses can offer adequate support to employees throughout the change process. Even if people seem to be accepting of change, it may be that they are simply resigned to it. Support offered may help to ensure any new skills required are developed and change burnout does not occur.

4 Incentives

It may be appropriate for a business to offer incentives to its employees to implement proposed changes to overcome the resistance. Incentives may include extra pay, improved benefit packages, or structured career plans.

5 Co-opting

Co-opting is a strategy used to bring those employees most resistant to change into central roles in the implementation of change initiatives. Although this can gain the favor of the resisting employees, it may provide a platform for them from which to inspire greater resistance from a wider audience.

6 Coercion

If speed of change is critical, coercion may be the only viable option. Techniques for implementing change include the prospect of disciplinary action while insisting that people fall into line with required behaviors and actions.

A major disadvantage of this strategy is that it does not remove resistance to change, which may result in a destructive atmosphere later.

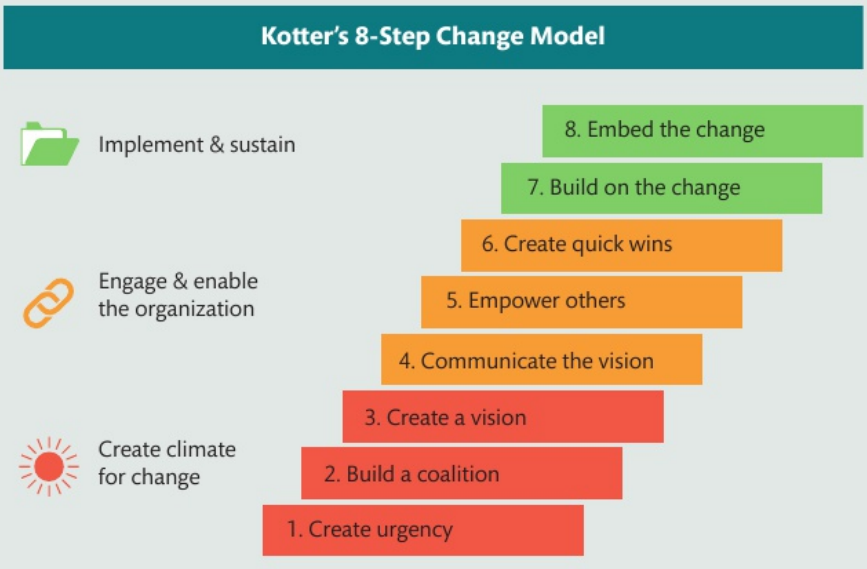
John P Kotter's eight-step change model

In his book *Leading Change* (1996), John P Kotter, a Harvard Business School Professor and renowned change expert, introduced an eight-step model of change. He developed the model through research on 100 organizations that were going through the process of change.

There are three phases to the Kotter change model:

1. **Create a climate for change**: This phase, which happens first, is about creating a shared understanding of the change you want to make and why you want to make it.
2. **Engage and enable the organization**: This phase is about engaging your team so that they are empowered and enthusiastic to effect change with the organization.
3. **Implement and sustain**: This phase is about pressing ahead after your initial successes to build momentum and fully embed the change within your organization.

By following the eight steps outlined below, Kotter believes that organizations have more chance of driving through meaningful and lasting changes in the workplace.



Practice questions

1 Explain one internal and one external factor that can influence human resource planning. (4 marks)

2 Suggest two reasons why employees may be resistant to change in the workplace. (4 marks)

3 In early 2023, as the impacts of the COVID-19 pandemic were easing, businesses were asking employees to return to the physical office, after many years of adopting flexible or home-based working. Disney employees pushed back on the company's announcement that it was returning to four days a week of in-person work.

More than 2,300 workers signed a petition addressed to CEO Bob Iger urging the executive to abandon the planned return to offices, claiming it is 'likely to have unintended consequences that cause long-term harm to the company.'

At that time, those 'currently working in a hybrid fashion will be asked to spend four days a week on-site, targeting Monday through Thursday as in-person workdays,' according to the email.

He pointed to the 'tremendous value in being together with the people you work with' as he explained his reasoning for the change, noting he has been holding meetings with various teams across Disney since returning to the company.

Discuss two appropriate strategies Disney could employ to reduce resistance to the change. (10 marks)

2.2 Organizational structure

Learning outcomes

At the end of this section, you will be able to:

- construct the various forms of organizational chart and explain their key features
- analyze how changes in organizational structure affect employee performance, motivation levels, and flow of communication
- discuss the reasoning behind adopting centralized or decentralized structures.
- examine how a business may change its organizational structure given a change in external factors.

Research and inquiry

How can creative organizational structures be more suitable in the dynamic business world?

An organizational structure refers to how employees are coordinated and communicated with in a business setting. The decision to organize a business in a certain way will depend on a variety of factors such as number and type of employees, working practices, business environment, and the stage of business development.

A formal organizational structure is one with clearly defined positions, duties, responsibilities, and authorities. Within a formal structure, businesses operate within a set of rules and procedures. This provides a level of stability to a business in its day-to-day operations and should see a more coordinated approach to activities and operations, with no ambiguity over who is responsible for what.

Within this structure, we also start to see informal organization networks appear, with interpersonal relationships developing as people interact in the workplace. In these member-developed systems, there are often no written rules or clearly defined roles and responsibilities for each member.

The key terms listed in Table 2.1 are used to describe the structure of an organization.

Table 2.1 Organizational structures: key terms

Delegation	When a manager/superior empowers another employee to make a particular decision or lead an initiative but maintains the overall responsibility for the outcome
Span of control	The number of people for whom an individual has direct authority in a business
Levels of hierarchy	The number of levels of authority within an organization, typically from senior management and executives to general employees
Chain of command	The formal route through which instructions, communication, and decisions travel down through an organization
Bureaucracy	The range of rules, regulations, and procedures that must be followed in an organization
Centralization	A set-up in which the decision-making powers are concentrated in a few leaders at the top of the organizational structure
Decentralization	The transfer of control of an activity to several managers rather than one
Delayering	The process of reducing the number of levels in the hierarchy of an organization

Flat versus tall organizational structure

Organizational structures can be flat (horizontal) or tall (vertical) in nature.

A flat organizational structure is characterized by limited levels of hierarchy, wider spans of control, short chains of command, frequent delegation, and an increased level of decentralized decision-making.

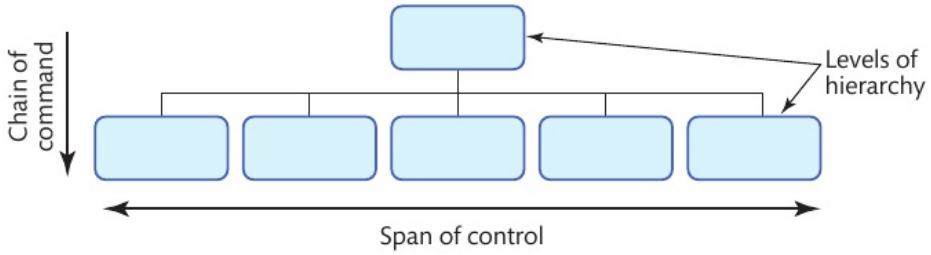


Figure 2.4 A diagram showing a flat organizational structure

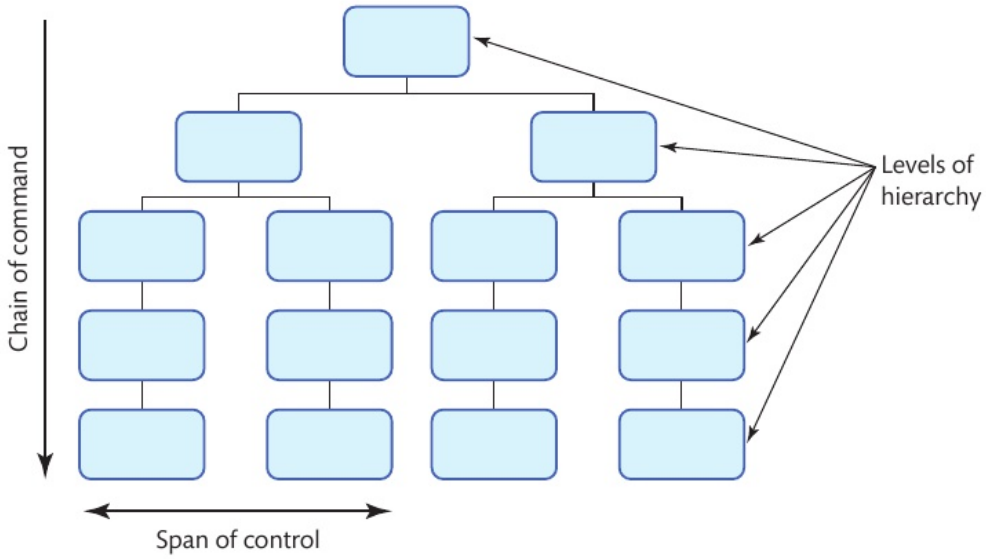
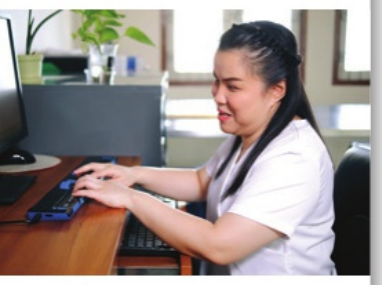


Figure 2.5 A diagram showing a tall organizational structure

A tall organizational structure displays more levels of hierarchy, limited delegation, narrow spans of control, longer chains of command, and a more centralized approach to decision-making.

Three common ways to arrange an organization are by function, product, or region.

In a functional structure, an organization is divided by areas of specialty (such as finance, marketing, IT, and operations). The management team may consist of several functional heads, such as the chief financial officer and the chief operating officer. Communication generally occurs within each functional department and is transmitted across departments through the department heads.



IT departments ensure that employees have access to the computer technology they need to do their job

The product-based organization structure draws upon the functional approach by creating business units within the organization for each major product the company produces. As a result, each product division comprises functional departments to support that product. For example, if a company has a food division and a homeware division, each of those product-based divisions will have its own sales department, marketing department, manufacturing department, and other functional groups. Businesses that have distinct product groups that require specialized functional teams to support each product are suited to this organizational structure.

Businesses may choose to organize their activities geographically, according to a location. For example, it is common for companies to have an Asia division, an Americas division, and a Europe, Middle East and Africa (EMEA) division. Each region will have its own management, operations, marketing, sales, and product teams, each able to operate according to local customs and demand. The overall direction of each region, however, will be directed by the central business. A global CEO, with an executive management team, based in the organization's headquarters, will oversee all the regional divisions.

Case study – The IB by region

The IB works with schools and educators around the world, with representatives in three global centers in The Hague, Bethesda, and Singapore, its Foundation Office in Geneva, and the Assessment Centre in Cardiff.

Each global center includes a regional office, which enables the IB to work closely with schools and educators, identifying local needs and providing relevant services – from professional development services to the authorization of schools that implement the IB's programs.

The regional offices cover work in:

- Africa, Europe and the Middle East
- the Americas
- Asia-Pacific.

Discuss the advantages and disadvantages to the IB of organizing its business by region.

Matrix

A matrix structure is an organizational structure based on vertical and horizontal relationships. Vertical relationships may be based on business function, project, product, or region; horizontal relationships tend to be project-based. This structure does not follow the traditional hierarchical model. Resources and employees are divided by these relationships. For example, an employee reports to two superiors: the functional manager and the project manager.

The matrix structure helps companies to fulfill two goals: maintain existing products, and create new, more innovative products and services. In addition, this structure makes human resources more flexible because they are accustomed to performing multiple roles.

However, complexity can create confusion among employees. For example, they must report to more than one boss. The potential additional work pressure may become too much, resulting in stress and demotivation, especially if the work is not accompanied by an adequate compensation package.

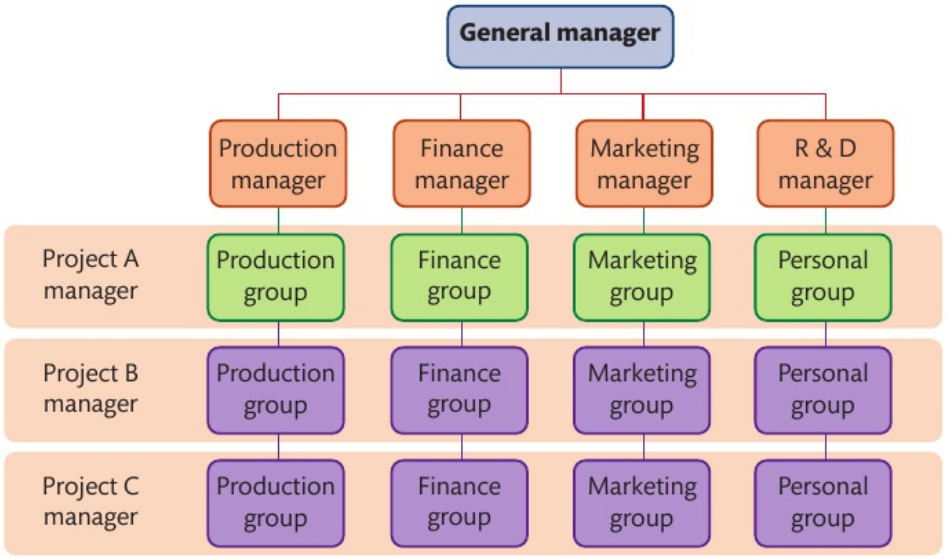


Figure 2.6 A diagram showing a matrix organizational structure

'Knowledge is power.' If this saying is true, how does it affect different stakeholders' abilities to contribute to business decision-making?

TOK

Appropriateness of different organizational structures given a change in external factors

The business environment is rarely a static one, and businesses need to be ready to reflect on the suitability of their current organizational structure when faced with changes in external factors, such as:

- inorganic growth
- globalization and the move to operating as a multinational
- changes in legislation
- technological innovations
- changes in the marketplace.

HL

Charles Handy's shamrock organization

There has been lively discussion on the most appropriate organizational structure for the future over the past 30 years. The British management thinker, Charles Handy, has been one of the most prominent contributors to this debate. In his 1989 book, *The Age of Unreason*, Handy looked forward to a new type of organization: the shamrock organization.

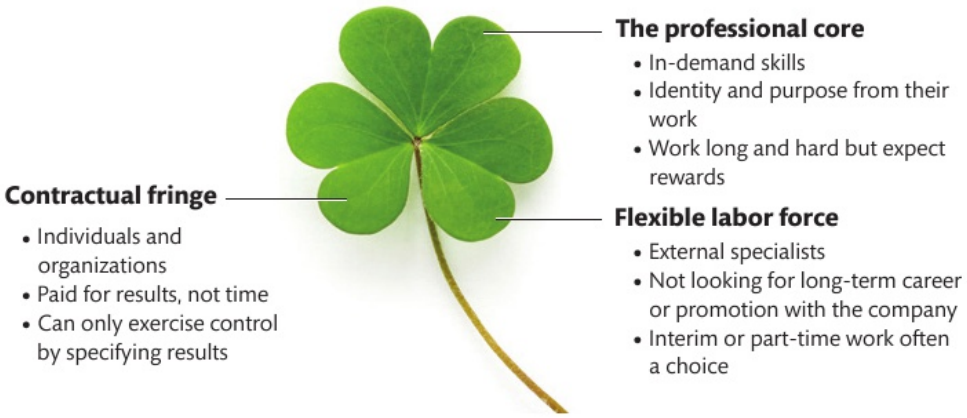


Figure 2.7 The elements of a shamrock organization

The shamrock organization describes a type of organizational structure with three parts, or leaves: 'A form of organization based around a core of essential executives and workers supported by outside contractors and part-time help.'

The shamrock model is often used to explain the move to outsourcing non-core functions. The top leaf of the shamrock represents the core staff of the organization. These people are likely to be senior management and highly trained professionals.

The second leaf represents the contractual fringe, made up of individuals or other organizations, and it may include people who once worked for the organization but now provide it with services. These individuals operate within the broad framework set down by the core but have a high level of discretionary decision-making power to complete projects.

In Handy's model, the third leaf includes the flexible labor force. These workers must be sufficiently close to the organization to feel a sense of commitment, which ensures that their work is carried out to a high standard, despite being part time or intermittent.

Project-based organization

A project-based organizational structure revolves around specialized teams working on specific projects. The company takes staff from each department, appoints them, and assigns them to the project team. They then work to complete the assigned task. Unlike matrix structures, they are project focused and do not report to more than one boss. A project-based organizational structure is important to ensure the business remains competitive and can manage operations effectively.

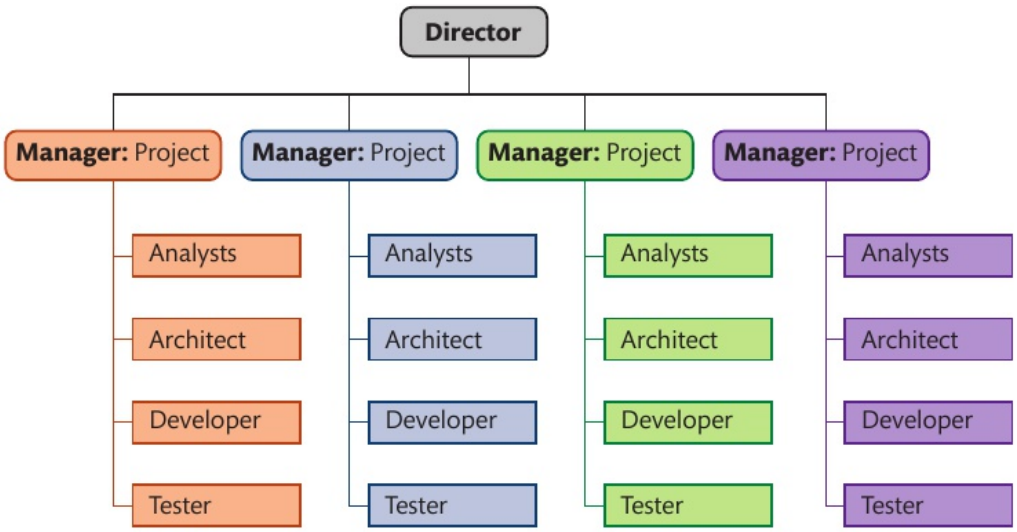


Figure 2.8 This diagram shows what a project-based organizational structure would look like

Advantages

- **Allows for innovation**: Businesses can develop new innovations by launching new projects, allowing them to remain competitive and adapt quickly to changing markets.
- **Greater team control**: Project managers have more control over the team. Unlike a matrix structure, teams focus on the project and do not report to more than one boss. So the project manager can supervise them fully.
- **Synergy between employees**: This structure facilitates individuals across departments to work together as a team. They work together to make the project a success, creating a strong team culture.
- **Efficient use of resources and competencies**: This structure maximizes the knowledge and skills of existing employees. As companies launch projects only when they are essential, this structure allows them to allocate physical and human resources to the most beneficial efforts.

Disadvantages

- **Blurred organizational lines**: This structure effectively draws staff from their functional work. When appointed to a team, they leave their old job and focus on the project.
- **High cost**: Allocating resources and staff to work on a single project can incur high implicit costs and may prevent the business from meeting broader objectives. As a result, project organization usually applies to large, short-term projects.
- **Delayed effectiveness**: Project teams involve staff with various backgrounds and functional skills. This could lead to communication barriers and a delay in knowledge transfer.

HL end

Case study – Marriott International

Marriott International has updated its organizational structure and made several new executive appointments.

'The size and scale of our company is significant, and we expect it to be even more so given the exciting opportunities ahead of us,' Anthony Capuano, newly named president and CEO of Marriott International, said in a statement.

Drew Pinto, a nearly 20-year company veteran, has been appointed Executive Vice President and chief revenue and technology officer, reporting to Capuano. Pinto will lead sales, revenue management, distribution channels, digital and information technology for Marriott. 'These global platforms are critical to Marriott's continued growth and profitability and Drew is the ideal leader to innovate and scale these capabilities,' Capuano said.

Long-time Marriott executive Peggy Fang Roe has been appointed Executive Vice President and chief customer officer, also reporting to Capuano. Roe will be responsible for developing and executing key aspects of the company's global consumer strategy, including evolving the portfolio of brands, the Marriott Bonvoy loyalty program, and developing the end-to-end customer experience using data and AI to fuel future growth.

Tina Edmundson has been appointed president of luxury, reporting directly to Capuano, overseeing a portfolio of nearly 500 properties across The Ritz-Carlton, Ritz-Carlton Reserve, Bulgari Hotels & Resorts, St. Regis Hotels & Resorts, Edition, The Luxury Collection, JW Marriott and W Hotels Worldwide brands. 'As we emerge from the pandemic, it is clear guests want aspirational experiences,' Capuano said.

Mao Yibing, a 24-year Marriott veteran, has returned to the company as president of the Greater China region. A native of Beijing who now calls Hong Kong home, Mao first joined Marriott in 1996. She held positions of increasing responsibility during her tenure with the company until she was SVP and chief legal counsel, Asia Pacific, before stepping down in 2020. 'I am delighted that Yibing is returning to Marriott in the role of president of Greater China, one of our fastest growing regions,' Capuano said. 'During her time with the company, she led Marriott's efforts to develop a strong profile in Asia, and forge substantive and collaborative relationships with owners and key internal and external stakeholders. Yibing is exactly who we need to lead the next chapter of growth for Marriott in Greater China.'

Under the company's new structure, Marriott's continent presidents will all report directly to Capuano: Satya Anand, president, Europe, Middle East & Africa; Brian King, president, Caribbean and Latin America; Raj Menon, president, Asia Pacific Excluding China; and Mao Yibing, president, Greater China. Liam Brown, group president, U.S. and Canada, will continue to report to Capuano.

1 Based on the information above, construct a simple organizational chart for Marriott International.

2 Comment on the structure of the organizational chart using the key terms in Table 2.1.

3 Analyze one advantage and one disadvantage to Anthony Capuano of the organizational chart he has created at the top levels of Marriott International.

2.3 Leadership and management

Learning outcomes

At the end of this section, you will be able to:

- outline the key functions of management
- distinguish between management versus leadership
- discuss the following leadership styles:
  - autocratic
  - paternalistic
  - democratic
  - laissez-faire
  - situational
- HL distinguish between scientific and intuitive management.

Research and inquiry

Why is a democratic style of leadership one way of encouraging creativity in a business?

The key functions of management

Management is a process that all managers, irrespective of their aptitudes or skills, engage in through inter-related functions to achieve their desired goals. There are four key functions of management.

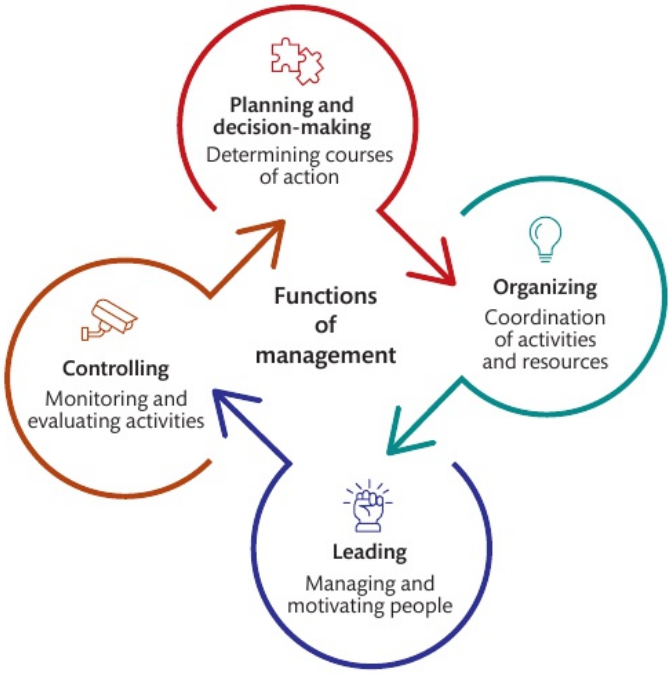


Figure 2.9 The four functions of management

Planning and decision-making

Planning is a vital role within a manager's remit. Looking to the future and predicting possible trends or occurrences that are likely to influence the working situation is essential. Planning involves setting an organization's goals and deciding how best to achieve them.

Organizing

Organizing can be defined as the process that enables plans to happen. Once a manager has a plan and goals within that, they can begin organizing the resources necessary to reach the goals.

Leading

Leading involves influencing or prompting stakeholders to work together in the interest of the organization. It involves creating a positive attitude toward the work and goals among employees, managers, and other key stakeholders.

Controlling

Controlling is the monitoring of the progress toward achieving the goals and the plan. It is an essential part of management.

Controlling involves measuring and adapting the tasks and actions that will lead to the successful completion of goals or objectives. Controlling enables the accomplishment of the plan.

These functions are cyclical, with evaluations informing further plans, organization, and leadership.

Management versus leadership

Leadership and management are often mistaken for the same thing. However, they are very different. Leaders have people who follow them, while managers have people who simply work for them.

Leadership is about motivating people to understand and believe in a company's vision and to work on achieving the company's goals.

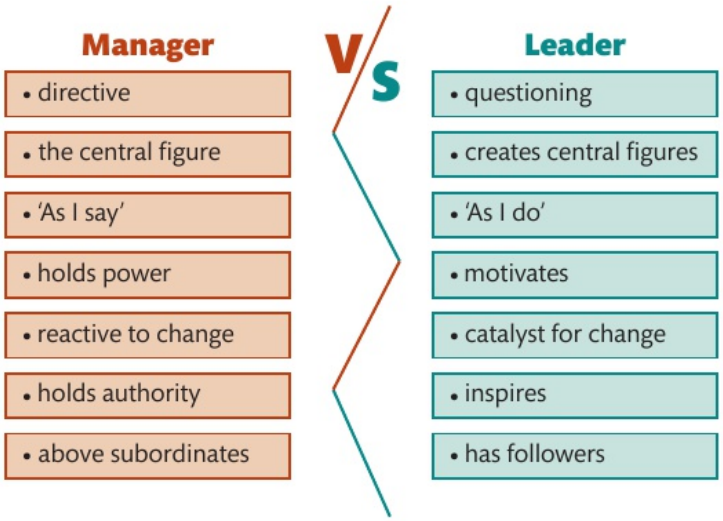


Figure 2.10 The manager and leader roles are different

Management is more an administrative role within the workplace, ensuring the day-to-day activities are being completed.

In a small business, the owner needs to be both a strong leader and manager to get their team on board working toward their vision of success.

Leadership and management often go hand in hand. Even though they are not the same thing, they are closely linked and complement each another.

For any company to be successful, it needs management that can plan, organize, and coordinate its employees, and leaders who are inspiring and motivating them to perform to the best of their ability.

Figure 2.10 on the previous page summarizes how managers and leaders may work.

Leadership styles

TOK Is being knowledgeable an essential quality in a manager?

The type of leadership style an individual follows can depend on their personality, traits, and attributes. There are advantages and disadvantages to each leadership style. Five key leadership styles are outlined below.

Autocratic

An autocratic leader, also known as an authoritarian leader, possesses a management style in which little or no input from employees is requested in the decision-making process. This is a top-down leadership approach in which senior management or a central leader has the final say on all business-related decisions.

Advantages

Although often considered an unpopular method of leadership, autocracy does have some advantages.

- In situations where decisive leadership is needed to make difficult or complex decisions, this approach can be well suited. For example, in military conflicts or an air traffic control tower.

Leaders can be autocratic, paternalistic, democratic, laissez-faire, or situational

- Crises often call for split-second decision-making. If an urgent need is faced by an organization, then an authoritarian leader can quickly make decisions without consulting a group of people.
- The authoritarian leader sets clear expectations and rules for employees to follow. A clear chain of command can help to ensure communication from the top to the bottom of the organization is not distorted.

Disadvantages

There are several disadvantages to consider regarding the autocratic style of leadership.

- It can create rigid work environments that feel unwelcoming.
- Autocratic environments can stifle creativity and limit the potential of employees by restricting their ability to think outside of the box.
- Working for an autocratic leader can be demotivating. Employees may be less likely to enjoy their job if they feel that their opinions are not important, leading to low levels of morale.

IB learner profile

Caring

In small groups, share ideas on the types of organizations that may suit a paternalistic leadership style, whereby a caring approach would fit with the ethos of the business.

Paternalistic

Paternalistic leadership is a leadership style that involves a dominant authority figure who acts like a parent or caregiver and treats employees as if they were members of a large, extended family. In exchange, the leader expects loyalty and trust from employees.

Advantages

- A paternalistic leader thinks about the big picture and considers how every decision will affect their employees.
- Value is placed upon education and social skills, with leaders looking to provide employees with opportunities to improve business and interpersonal skills.
- Employees may work harder to complete tasks within a given time frame so that they can reach, and sometimes even exceed, their goals in order to please their leader.

Disadvantages

- Employees can suffer from low motivation if a loyal connection to management is not established.
- An increased dependency of employees on the leader can mean more supervision is required.
- Employees may be dissatisfied if bad decisions are made.
- Like parents or caregivers, managers sometimes must discipline employees.

Democratic

Democratic leadership, also known as participative or shared leadership, brings leaders and employees into every decision-making process. Although the final word belongs to the leaders, there is equal participation from employees in discussions and debate to find solutions to problems.

Advantages

- Increased staff productivity and job satisfaction can result from encouraging employee engagement. Employees are more likely to be happier and work hard when they know that their opinions matter.

- The freedom to consult anyone in the business allows for diversity of ideas. Often insights from frontline staff allow senior management an opportunity to make better decisions.
- A democratic approach can help to build a strong team as it fosters collaboration, encourages trust, and creates mutual respect. Democratic leaders tend to avoid bias, and choices are based on the information presented.
- Innovation and creativity are encouraged when individuals collaborate effectively as a team and develop fresh new ideas.

Disadvantages

- Decision-making can be slower as democratic leadership requires many people's inputs in the decision-making process.
- In times of crisis, leaders might not feel confident enough to make instant decisions without the time to consult anyone. It is difficult for them to decide without their team members or employees.
- Under a democratic leader, the emphasis is on considering everyone's viewpoints, regardless of whether they are the right people to make decisions. Although the leader can make the final decision, employees may not have sufficient experience to make the right decisions.
- Employees have different views and ideas on a specific problem or situation, but leaders can choose only one. The employees whose ideas they disregard may feel they are not valued in decision-making.

Laissez-faire

Loosely translated from French, laissez-faire means 'let it be'. In practice, it means leaders provide their subordinates with the freedom to complete responsibilities in a manner they choose, without requiring strict policies or procedures.

Advantages

- This leadership style empowers employees and allows them the opportunity to practice their leadership skills, encouraging personal growth.
- The level of freedom afforded to employees can lead to increased innovation and creativity as there is less fear of failure.
- It encourages trust between employees and the leader and instills a sense of independence.
- Decision-making can become faster, due to the absence of micromanagement, as employees are encouraged to make their own choices without a long wait time for approval.

Disadvantages

- In the wrong business context, too much freedom given to employees can result in low productivity if they know there is little oversight of their activities.
- Conflicts can arise between team members if there are no clear directions to follow.
- Conflicts can be made worse by potential confusion about roles and responsibilities.

Situational

Situational leadership is an adaptive leadership style in which a leader changes their approach based on the individual, the task, and the context. From a leadership perspective,

this theory changes the conversation from 'Who am I and how do I lead?' to 'Who is the person in front of me, and what do they need from me in order to be successful?'

Ken Blanchard and Paul Hersey developed their situational leadership theory in their book *Management of Organizational Behavior*. In it, they call on the situational leader to draw on a framework that depends upon flexibility, adaptability, and a considered analysis of what employees need to develop and succeed in a given business context. This helps to inform the appropriate leadership style needed for each situation.

1 The enthusiastic beginner

This is where almost everyone starts when they are learning a new role or skill. Their commitment is high because there has not been any experience that would challenge it, and their competence is low because they have little-to-no experience.

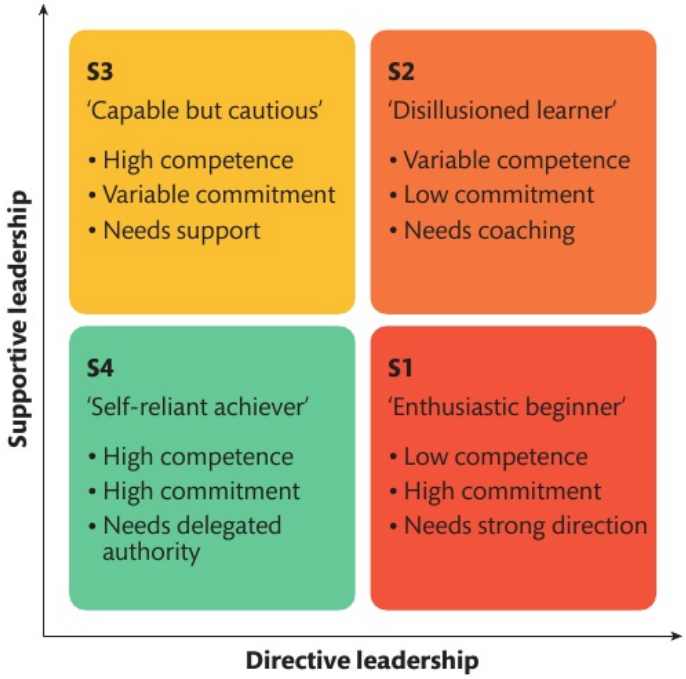


Figure 2.11 Blanchard and Hersey's situational leadership framework

People don't know what they don't know. When an employee or teammate is learning something new, the best leadership for them will be highly directive. They do not need to be encouraged to do it, as much as they need to be told what to do. This is not demeaning; it's just the reality of starting to learn something new.

2 The disillusioned learner

When employees are at the disillusioned learner stage, they have probably come up against their shortcomings in the competency they are trying to gain. This experience of failure or inadequacy, coupled with only marginally increased competence, can be incredibly deflating.

As a person is confronted with the shortcomings in their proficiency, the natural reaction is to become discouraged. If a leader perceives that shift in someone who reports directly to them, it is essential that they add highly supportive behavior while maintaining a highly directive leadership. The critical mistake leaders make at this stage is to think that because the person has been working at a skill that they no longer need direction. However, this is the stage where highly directive behavior is most important.

3 The capable-but-cautious performer

At this stage, the employee starts to turn a corner. As their competence increases, often people will start to move out of that low-commitment slump.

This is a critical transition, according to situational leadership theory. As someone's competence makes meaningful progress, and their commitment level increases again, it's important to scale back the level of direction provided while maintaining a highly supportive environment.

4 The self-reliant achiever

At this point, the developing employee has reached a point of mastery in the skill they are learning. They can perform at a high level and feel confident about the quality of their contributions.

If a self-reliant achiever knows what they are doing, then giving them lots of direction, or smothering them with check-ins, will most likely backfire. It's a waste of a manager's time and takes the employee's focus away from the thing they have become good at. Managers of self-reliant achievers should focus on delegating tasks more than supporting their work.

HL

Scientific and intuitive thinking/management

Decision-making is an essential part of running a business, whether this is deciding to launch a new product, to relocate the business, who to employ, or how to respond to a new competitor in the market. We can view thinking, managing, and ultimately decision-making, as either intuitive or scientific. Intuition is based on a gut feeling and experience, whereas a scientific approach is based on data and analysis.

Intuitive thinking and decision-making relies on instinctive understanding and feeling, often used to make quick decisions. Intuitive thinkers usually don't need a lot of information or conscious reasoning to make a decision, as they just know. This can make intuitive thinking very helpful in fast-paced, stressful situations.

Advantages of intuitive thinking

- It's fast. Managers don't have to make calculations or compare alternatives. Intuitive thinking often comes from experience, so there's nothing to think about.
- When a decision is made based on intuition, it feels right and natural.
- It allows for creativity.
- It can facilitate strategic thinking and strategic decision-making.

Disadvantages of intuitive thinking

- Intuitive thinkers are more prone to making poor decisions and mistakes when they let their intuition guide them instead of considering all options and thinking things through logically. This is particularly true in unfamiliar or rapidly changing environments, for example, stock market trading.
- Confirmation bias can occur when managers form an opinion or conclusions early on and then look only for information that confirms those conclusions.
- Errors in fact-based situations arise as intuition isn't always reliable in decision-making.

Scientific thinking aids businesses and managers who want to reduce uncertainty and risk by applying logic to decision-making, supported by relevant data. This may involve the use of:

- data mining and big data to source relevant data to inform decisions
- software logic and predictive models to analyze scenarios
- forecasts to consider the possible implications of business decisions.

Advantages of scientific thinking

- Decisions are data-driven and evidence-based.
- Some but not all subjective judgment is removed from the decision.

Disadvantages of scientific thinking

- Decisions may still rely on assumptions.
- Scientific thinking doesn't guarantee the best decision will be taken.
- This way of thinking may ignore the business experience that gives some context.

Activity

Read the article 'The intuitive manager: A threatened species?', which is available from the QR code.

To what extent do you agree that intuitive decision-making should be encouraged when making important decisions in the business environment?

Support your answer with real world examples where possible.

Case study – Musk and Ma leadership styles

Micromanagers are supposedly the opposite of delegators. Micromanagers are attacked for obsessing over fine detail, stifling their subordinates' initiative and lacking strategic nous. Delegators are applauded for appointing gifted deputies, 'empowering' front-line team members and stepping back to concentrate on the wider vision.

While it may no longer be his biggest problem, Elon Musk has been criticized for micromanaging Tesla, after the electric carmaker he heads struggled to stick to forecasts and burnt through cash and senior executives. Some investors have urged him to appoint a chief operating officer, rather than trying to solve Tesla's problems single-handed by working 120-hour weeks. One former executive told Business Insider, the US news website, that when something goes wrong, 'Elon fires some engineer that made some irrelevant, bad decision and Elon sleeps on the factory floor until the problem is fixed, or whatever. But it doesn't actually fix the root problem, which is terrible management.'

Coincidentally, around the same time as Musk was earning opprobrium for his micromanaging, another entrepreneur, Jack Ma, was winning plaudits for being a great delegator. Ma announced last month he would step down as chairman of Alibaba, the Chinese internet group, next year, handing the role to the chief executive Daniel Zhang. Ma was already known for devolving a lot of autonomy to Alibaba's business units and for appointing 'a lot of generals', in the words of Duncan Clark, a consultant and author of Alibaba: The House That Jack Ma Built.

There are good reasons why Ma is more hands-off at Alibaba and Musk more hands-on at Tesla and SpaceX, his rocket venture. Ma lacks Musk's technical knowledge. It would be hard for him to step in and fix a coding problem. Musk possesses both the total commitment of the start-up founder and the skills to repair things that go wrong.

In his 2015 biography of Musk, Ashlee Vance identified how in some situations the same combination that is now under fire at Tesla was an asset to SpaceX. A SpaceX colleague pointed out how Musk would sometimes take on a flagging project himself on top of his CEO duties, dismissing the project leader. 'What's crazy is that Elon actually does it,' this colleague said. 'Every time he's fired someone and taken their job, he's delivered on whatever the project was.'

The competence of your manager is one important factor in deciding how you view his or her intervention in your project, according to Roshni Raveendhran, a professor at the University of Virginia's Darden School of Business.

After studying what she describes as 'detail-oriented controlling behaviours', she suggests micromanagement is not a leadership style, but a phenomenon that depends in part on the context in which it occurs. While micromanaging generally reflected badly on the leader, she and her fellow researchers found people were less likely to take a negative view of leaders who knew what they were doing. Similarly, a subordinate who was new to the job, or less competent, was more likely to accept, or even welcome, the leader's hands-on guidance.

That micromanaging and delegating are on the same spectrum is not so surprising. Even Ma, the arch-delegator, is capable of getting close to the problem when required, particularly if he feels that Alibaba is neglecting customers. 'He's like a hawk,' says Duncan Clark. 'He swoops down on things that might violate trust.' Similarly, it is hard to say that Musk, whose goals include the colonisation of Mars, lacks a long-range vision.

The question is one of degree. When she gave her MBA student volunteers the role of detail-oriented leader in her experiments, Prof Raveendhran found they often assumed that micromanaging was what leaders were supposed to do; but when they played the put-upon subordinate they hated taking close instruction.

Neither extreme is ideal. 'I'm hating work at the moment: the boss is always on top of us,' we might say about a micromanager. But then when a problem spirals out of control, critics wonder why a strategic leader was not 'on top of the problem'. Achieving that balance between seeing the big picture and worrying about the detail is hard, but it is the essence of good leadership.

1 Compare the leadership styles of Musk and Ma. Discuss their suitability for their specific roles.

HL end

Practice questions

1 Distinguish between leadership and management. (6 marks)
2 Explain one advantage and one disadvantage from an employee's perspective of working for a laissez faire leader. (4 marks)
3 To what extent would a paternalistic leader be most suitable in running the accident and emergency department in a hospital? (10 marks)

2.4 Motivation and demotivation

Learning outcomes

At the end of this section, you will be able to:

- define motivation in a business context
- describe the following motivation theories associated with:
  - Frederick Wimslow Taylor
  - Abraham Maslow
  - Frederick Herzberg
  - HL David McClelland
  - HL Edward Deci and Richard Ryan
  - HL John Stacey Adams
  - HL Victor Vroom
- HL calculate labor turnover
- HL explore the reasons for labor turnover in a business
- HL discuss the advantages and disadvantages of a high labor turnover for a business
- HL explain and apply the following methods of appraisal: formative, summative, 360-degree feedback, self-appraisal
- HL explain the different methods of recruitment
- HL discuss the advantages and disadvantages of internal and external recruitment
- explain and apply different types of financial and non-financial rewards
- explain and apply the different types of training: on-the-job, off-the-job, induction training.

Research and inquiry

What is the impact of financial motivation on employees' sustainable behavior?

Motivation refers to the ways a business can encourage its employees to work. A motivated workforce will care about the success of the business and help it to achieve its goals and realize the mission statement.

People can be motivated intrinsically or extrinsically. Intrinsic motivation involves completing a task that is personally rewarding with an absence of threats or rewards. Extrinsic motivation involves doing something because there is an external factor driving the activity, such as a reward like pay or the threat of negative outcomes.

Motivational theories

Individuals are motivated by different things and deciding on the best way to motivate people in a business has led to the development of a range of motivational theories. This section provides an overview of some of the key theorists and the methods and frameworks they propose.

Frederick Wimslow Taylor – scientific management theory

Taylor is best known for his 1911 book *Principles of Scientific Management*. He suggested that an organization and its employees should work together to get the maximum benefit from each other and be compensated for this endeavor. Taylor's philosophy focused on the belief that making people work as hard as they could was not as efficient as optimizing the way the work was done.

Taylor's overriding principles of scientific management are as follows:

- Each part of an individual's work is analyzed 'scientifically', and the most efficient method for undertaking the job is devised. This becomes the 'one best way' of working. This consists of examining the tools needed to carry out the work and measuring the maximum amount a 'first-class' worker could do in a day. All workers are then expected to do this much work every day.
- Scientifically, the most suitable person to undertake the job is chosen. The individual is taught to do the job in the exact way devised. Taylor's belief was that every worker had the ability to be 'first-class' at some job. It was the responsibility of management to find out which job suited each employee and train them until they were first-class.
- Managers must cooperate with workers to ensure the job is done in the scientific way.
- There is a clear 'division' of work and responsibility between management and workers. Managers concern themselves with the planning and supervision of the work, while the workers carry it out.

Abraham Maslow – hierarchy of needs

Maslow's motivation theory on the hierarchy of needs is perhaps one of the most well-known and influential theories on workplace motivation.

Developed in the 1940s, psychologist Abraham Maslow's theory suggested that humans have a hierarchy of needs. That is, that all humans act in a way that will firstly address basic needs, before moving on to satisfy other, so-called, higher-level needs. He arranged these in a form of a pyramid, shown in Figure 2.12.

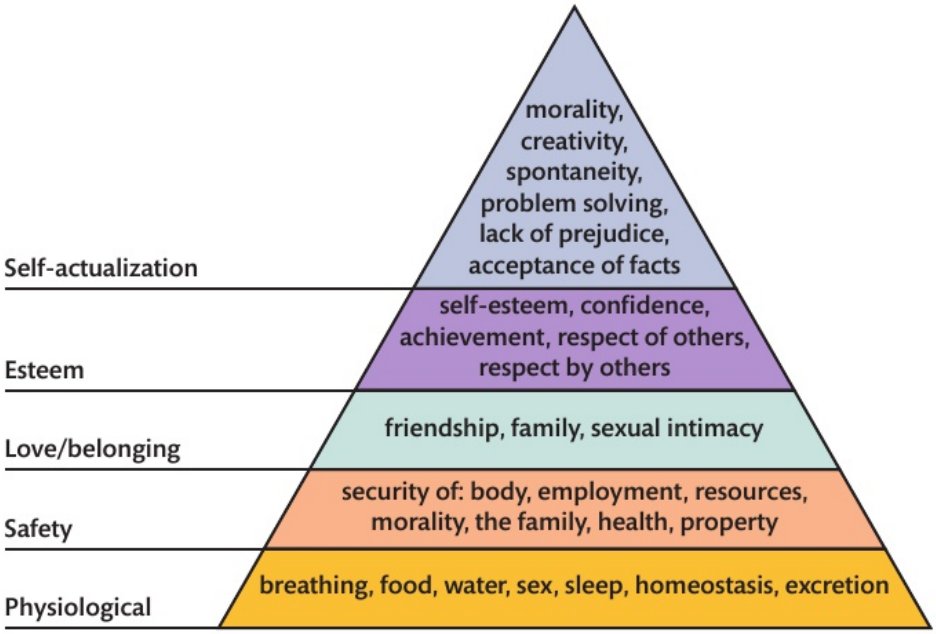
There are five main levels to Maslow's hierarchy of needs, with the most basic needs forming the first level. Originally, Maslow believed that a person needed to completely satisfy one level to begin pursuing further levels. However, a more modern perspective sees overlap between the levels. As an individual reaches higher levels, their motivation is directed more toward these levels. Although their main focus is on those higher levels, they will continue to pursue elements within the lower levels of the hierarchy but with less intensity.

From a management perspective, it is worth noting some of Maslow's main assertions:

- As the needs in one level are met, the next level of needs becomes more of a motivator to an individual.

- Only unsatisfied needs motivate an individual, not satisfied ones.
- On reaching self-actualization, this stimulates a desire for more of what Maslow termed as 'peak experiences', created by the effect of reaching one's full potential.

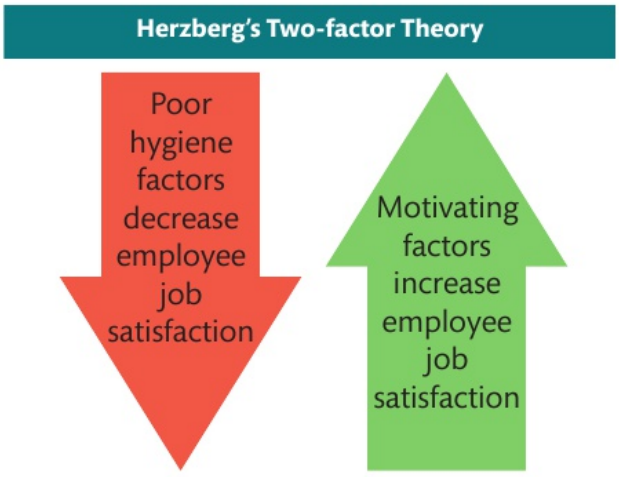
Figure 2.12 Maslow's hierarchy of needs



Frederick Herzberg – two-factor theory

The two-factor theory of work motivation developed by Frederick Herzberg proposes that employee job satisfaction and job dissatisfaction are influenced by separate 'factors'. These factors are divided into motivators and hygiene factors.

Figure 2.13 Herzberg's two-factor theory



- Motivators cause employees to work harder and are found within the job itself.
- Hygiene factors are not present within the job itself but surround the job. An absence of these factors will cause employees to work less hard.

Herzberg's motivators and hygiene factors can be seen in Figure 2.14.

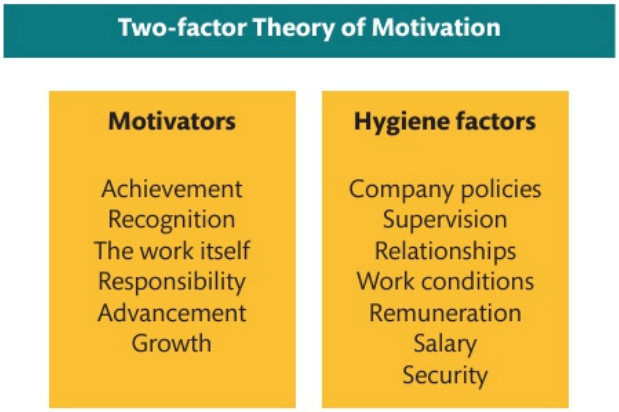


Figure 2.14 Herzberg's motivators and hygiene factors

HL

David McClelland – acquired needs theory

The acquired needs theory was proposed by psychologist David McClelland, one of the most cited psychologists in the 20th century. Unlike Herzberg's two-factor theory, McClelland separated needs into three classifications and argued that these needs were specific to every individual and were acquired over time.

The three classifications can be seen in Figure 2.15.

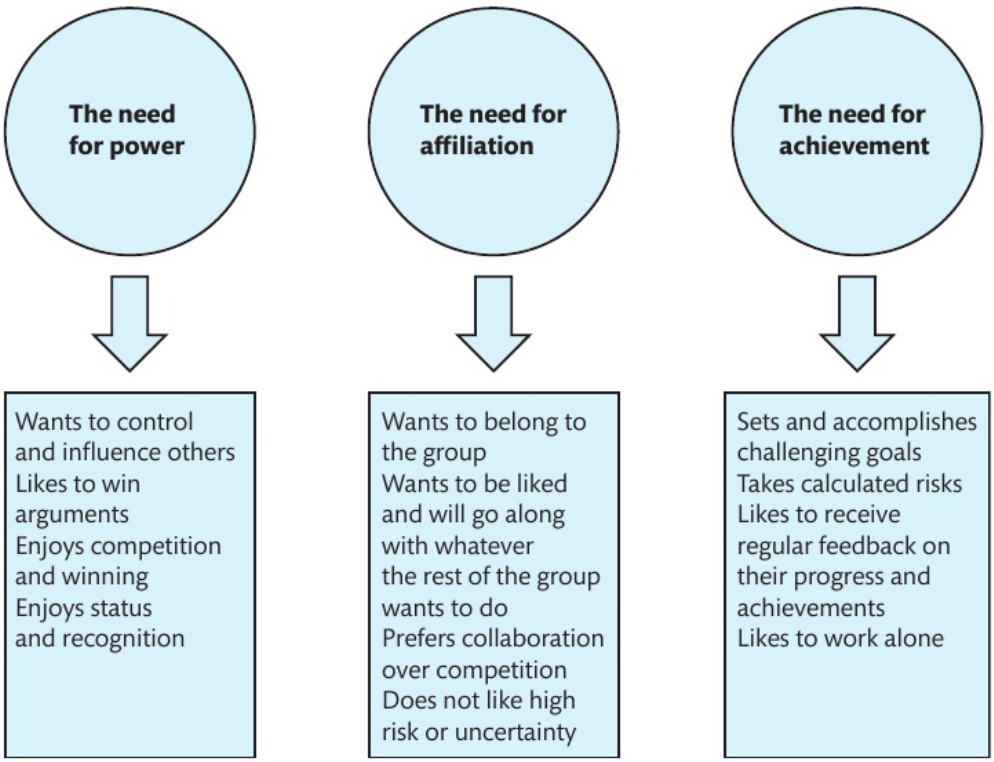


Figure 2.15 McClelland's three classifications of needs

1 The need for power

When an individual wants the ability to direct others, it suggests they have a high need for power. Institutional power needs also indicate a desire for organization, which makes the person more effective as a supervisor because the goals are directed toward the needs of the company instead of their personal needs.

2 The need for affiliation

When an individual has a high need for affiliation, they have a strong desire to be accepted by others and look for harmony in their lives. Typically, they will look to take the path of least resistance in their decisions. By wanting to conform to the social norms of the groups, they desire significant levels of social interaction.

3 The need for achievement

Individuals that possess a high need for achievement will avoid situations that are high risk or low risk in nature. Low-risk situations lack opportunities to move forward, while high-risk situations are often seen as an outcome of chance instead of skill. Individuals with this need take calculated risks and will make choices when there is a greater than 50 per cent chance of success.

People who have different needs require different forms of motivation.

Activity

Using McClelland's acquired needs theory, suggest ways in which a business may look to motivate employees who exhibit needs from each of the classifications.

Edward Deci and Richard Ryan – self-determination theory

The self-determination theory developed by Deci and Ryan helped to counter the once dominant belief that the best way to get humans to perform tasks was to reinforce their behavior with rewards. First introduced in their 1985 book *Self-Determination and Intrinsic Motivation in Human Behavior*, their theory suggested that people tend to be driven by a need to grow and gain fulfillment.

This theory suggests that people can become self-determined when their needs for competence, connection, and autonomy are fulfilled.

- **Competence**: People need to gain mastery of tasks and learn different skills. When people are confident that they have the skills needed for success, they are more likely to take actions that will help them to achieve their goals.
- **Connection or relatedness**: People need to experience a sense of belonging and attachment to other people.
- **Autonomy**: People need to feel in control of their own behaviors and goals. The ability to take direct action that will result in real change plays a major part in helping people feel self-determined.

Let's consider an employee who fails at a particular task in the work environment. Under this theory, if this person is high in self-determination, they will admit their mistake, believe that they can do something to fix the problem, and take action to correct the mistake.

If the person is low in self-determination, they might look for other things that they can blame. They might make excuses, assign blame, or refuse to admit their own role in the failure. Most importantly, this person won't feel motivated to fix the mistake. Instead, they might feel helpless to control the situation and believe that nothing that they do will have any real effect.

In addition, people who demonstrate self-determined behaviors tend not to rely on external rewards as encouragement to do a task. Often, completing the task properly is its own reward. To motivate these individuals, it may be best to remove external rewards and punishments.

Taking responsibility is important for learning how to become self-determined as it helps the individual accept that they are human (meaning that they are capable of failure) and that they can admit their mistakes (a sign of confidence).

John Stacey Adams – equity theory

John Stacey Adams, a workplace and behavioral psychologist, developed his job motivation theory in 1963. Adams' equity theory advocates for a fair balance between an employee's 'inputs' (such as hard work, skill level, acceptance, and enthusiasm) and their 'outputs' (salary, benefits, intangibles such as recognition, and more).

This fair balance achieves a strong and productive relationship between the business and the employee, resulting in contented, motivated employees.

If an employee feels that their inputs are greater than the outputs they receive, they are likely to become de-motivated, both in relation to their job and their employer. Employees respond to this in different ways, and may exhibit demotivation, reduced effort, annoyance, and possibly disruptive behavior in the workplace.

While it is difficult to quantify many inputs and outputs, the theory argues that managers should aim for a fair balance between the inputs that an employee gives, and the outputs they receive.

Table 2.2 Employee inputs and outputs

Inputs	Outputs
Effort	Financial rewards (such as salary, benefits, perks)
Loyalty	Recognition
Hard work	Reputation
Commitment	Responsibility
Skill	Sense of achievement
Ability	Praise
Adaptability	Stimulus
Flexibility	Sense of advancement/growth
Acceptance of others	Job security
Determination	
Enthusiasm	
Trust in superiors	
Support of colleagues	
Personal sacrifice	

According to the theory, employees are likely to be content where they perceive inputs and outputs to be in balance.

Victor Vroom – expectancy theory

Vroom's expectancy theory (also known as the VIE theory of motivation) proposes that individuals rationally weigh the relative attractiveness of all possible rewards and outcomes of an action. In addition, individuals also estimate the probability that performance and effort will lead to that desirable outcome. Vroom called them valence, instrumentality, and expectancy.

Valence

Valence refers to the strength of a person's performance for a given outcome. Vroom argued that psychological and physical objects (like satisfaction, money, etc.) have attracting or repelling forces. For instance, money may be an attracting force for most people, whereas frustration due to an abusive boss may be a repelling force.

Instrumentality

Instrumentality refers to the relationship between performance and the attainment of the promised reward. An employee may think that they will receive an increase in compensation if they fulfill the target. Fulfilling a target will also involve working longer hours, more work responsibility, and less time for family and leisure. Hence, several instrumentalities are involved in a single decision. The individual now behaves like a scientist and combines the information to decide whether the outcome will be positive or negative.

Expectancy

Expectancy refers to a person's belief that increased effort will lead to the desired outcome. For instance, people might believe that they will not be promoted, despite working hard and achieving targets, because their boss does not like them. In such a case, expectancy is low. If they believe that working longer hours will enable them to achieve their goal, expectancy will be high.

These three components make up the VIE theory. In simple terms, individuals ask themselves three questions:

1 To what extent do I desire or value the outcomes?

2 Is the expected outcome likely to yield other negative or positive outcomes?

3 Is the action I am engaging in likely to lead to a desired outcome?

The VIE theory assumes individuals to be calculative scientists, who are constantly assessing the benefits associated with a particular task.

Activity

Examine two ways in which managers could motivate employees in accordance with expectancy theory.

HL end

Research and inquiry

Alongside the theories mentioned in this unit, there are others that are often mentioned when talking about motivation in a business context. They include:

- Douglas McGregor: Theory X and Theory Y
- William Ouchi: Theory Z
- Elton Mayo: The Hawthorne Effect
- Daniel Pink: Three Elements of Intrinsic Motivation

Find out about these theories and identify any similarities with the ones you have already studied.

HL

Labor turnover

There are multiple reasons why employees may leave a business, whether this is for career advancement elsewhere, unhappiness in their current role, or moving abroad to start a new life. Whatever the reasons, a business needs to keep track of its labor turnover.

Labor turnover refers to the rate at which employees leave employment. Labor turnover can be evaluated by relating the number of employees leaving their employment during a certain period to the total or average numbers employed in that period.

It can be calculated using the following formula:

$$\frac{\text{Number of employees leaving in a year}}{\text{Average number of people employed}} \times 100$$

Case study – Hospitality sector hits crisis point

A 2022 article on the website stuff.co.nz discussed a report into the hospitality sector, which found that the sector is at a crisis point with high turnover, bullying, and lack of training.

Research report 'Voices From the Front Line' said the sector was dealing with employment and work issues, including problematic pay and working conditions, bullying and harassment, and significant levels of non-compliance with employment law.

Academics at AUT University gathered responses to 40 questions from 396 people in late 2019 and early 2020.

'While the survey was conducted during the exceptional times of COVID-19, the findings align with historical work experience problems in this sector,' the report says.

'The findings highlight unfair and illegal practices but also aim to be the starting point for discussion to improve work experiences and long-term sustainability for the hospitality sector.'

It found that 16 per cent of respondents had not signed a contract before starting their jobs, 18 per cent did not receive the minimum wage, and 77 per cent did not receive other entitlements such as time off in lieu, holiday pay, and rest breaks.

Many respondents said they were reluctant to raise issues with their management or HR department because of a fear of negative consequences.

Nearly half (48.3 per cent) of respondents said they never had the opportunity to get a pay rise or promotion. 'No pay rise in the five years I worked for him. If you were not happy with the pay you got you could leave, and he would find someone that was happy with the pay,' one respondent said.

Verbal abuse from management, co-workers, or customers was experienced by 58 per cent.

Nearly half reported they had witnessed or experienced bullying in the workplace. Bullying was often not reported to management, mainly out of fear of being fired, or making the situation worse.

'The results support previous research in New Zealand and internationally that depict the hospitality sector as having significant levels of labor turnover, low pay, and poor work conditions,' the report says.

The report suggests three priorities for change:

1 Drive out employers who fail to provide a minimum of decent work experiences. Employer representatives have a role to play in naming and shaming poor employers.
2 Offer better pay conditions, training, and development associated with longer-term career paths and the ability for employee voices to be effective and make significant changes in the workplace.
3 Change the image of hospitality work from 'poor and off-putting' in order to overcome embedded recruitment and retention issues resulting from this image.

The report encourages employer groups, unions, and the government to provide support and firm direction to employers.

1 Define the term 'labor turnover'.
2 Analyze the reasons for high labor turnover in the hospitality sector.
3 To what extent do you think the three suggested priorities for change will lower the labor turnover rate in the hospitality sector?

Potential causes of labor turnover

Poor recruitment can lead to employees who are mismatched with the business or unsuitable for the job roles. This can result in a desire by the employee to leave the business, or the business to look to cease employment contracts.

On reaching **retirement** age, employees can leave the business; some may be offered the opportunity to continue past retirement age or even volunteer to do so.

Redundancy arises after the need for a particular job role ceases, and employees are let go from the business. This could be a large contributor to labor turnover in industry sectors during times of recession.

Pay and conditions are important factors that can influence an employee's decision on whether to remain with their current employer. If they don't match an employee's expectations, this can be a key contributing factor to the decision to leave.

Lack of career progression opportunities can cause employees to look to other employers who would provide better opportunities to reach their work and career goals.

Advantages of labor turnover

There are some advantages to labor turnover:

- Healthy turnover enables growth.
- New employees bring fresh insights and innovative ideas.
- It can remove underperforming employees.
- New staff may introduce new concepts, skills, tools, and experiences.
- It enables teams to develop and evolve.
- It can encourage the promotion of those staff that are good at their roles rather than offering promotion because of length of service.

Disadvantages of labor turnover

There are also disadvantages to labor turnover:

- It takes money, time, and resources to recruit new employees.
- A high labor turnover could damage a business' reputation – there may not be staff who advocate for the business, and those leaving may share negative experiences.
- Changes to teams can cause project delays, with new employees needing training on company policies, tools, and systems.
- Employees may believe that they are expendable if there are too many leavers, and they may seek a company with more stability. If a popular employee leaves, it can encourage others to follow.
- Being short-staffed can lead to pressure on the remaining staff.
- It can become harder to meet commitments if a team's size changes too rapidly or dramatically.

Appraisal

An appraisal is a review of an employee's performance, by a senior member of staff, to verify the employee's contribution to the business against the roles and responsibilities set out in their job description. The frequency of appraisals can vary, but it is not uncommon to expect them on a quarterly or annual basis. In addition, interim

meetings will often be built into the performance management cycle between the appraiser and appraisee.

Appraisals are conducted to:

- identify an employee's current level of performance against their job description and personal targets
- identify an employee's strengths and weaknesses
- allow opportunities for employees to improve their performance
- provide a basis for assessing relevant rewards for employees in relation to their contribution to the business' goals
- motivate employees
- identify individual training and development needs in line with an employee's career plan
- provide information to aid succession planning.

There are various forms of appraisal, including formative, summative, 360-degree feedback, and self-appraisal.

Formative

Formative appraisal takes place at the beginning, middle, and end of a training placement, or at regular periods throughout an employment contract. The appraisal evidence is used by employees to assess their progress to date and to inform them on how to improve their performance.

A variety of tools and methods can be used with formative appraisal. However, the key idea is that employees feel supported along the way and are provided with meaningful insights as to what adjustments may be needed, if any, to improve their performance and productivity in the business.

Summative

A summative appraisal is a written account of an employee's performance in the work environment over the course of the year, documenting their personal achievements and contributions against predetermined targets that were set at the start of the year. Summative appraisals are useful in holding employees to account and ensuring that they are aware of their individual responsibilities and contribution to the wider goals of the business. The appraisal will identify areas that they are competent in as well as areas that require further development.

360-degree feedback

360-degree feedback is a system in which anonymous feedback is gathered about an employee, drawn from a variety of colleagues they have working relationships with. This may involve managers, subordinates, and peers, as well as a self-evaluation by the employee.

It is designed to provide a well-rounded view of the individual as several people share their opinions – hence, the name '360-degree'. It is used as a development tool to cover work competencies, behavior, and working relationships, and is commonly used by more senior members of staff.

As this method draws on opinions, it can lack factual evidence to support the judgments given so is not appropriate for all business contexts and situations.

Self-appraisal

Employees may be asked to carry out a self-appraisal against a set of predetermined criteria. The results may be compared to an assessment carried out by their line manager. This provides a useful starting point for discussion in an appraisal meeting as areas of agreement and disagreement can be discussed. However, some employees may feel uncomfortable rating themselves and undersell their contributions, whereas others may have an inflated opinion of themselves and overrate across the categories.

Advantages of appraisals

There are many advantages to undertaking regular appraisals:

- They can identify the true potential and interests of employees. This can support the HR department in assigning jobs according to the skills and competencies of employees.
- The process helps employees' personal and career development.
- Appraisals can boost employees' morale and confidence. A greater awareness of one's true potential motivates employees to give their best performance.
- The assessment of strengths and weaknesses of employees enables the HR department to plan and design training programs to address the needs of the business.
- Performance appraisal is an opportunity for employees to discuss work related problems and to find out ways to resolve them, helping to build relationships between employees and management.
- Appraisal helps in future planning and development of human resources as they can plan to recruit new employees or develop the quality of the existing workforce in the organization.
- Appraisals provide a platform to improve employee communication.
- Talented employees in the organization can be identified through performance appraisals. This information helps the organization in developing competent employees ready to apply for promotion opportunities.

Disadvantages of appraisals

There are also disadvantages to undertaking appraisals:

- Appraisals are time-consuming. Managers may be required to complete an appraisal form for every team member and note down strengths, achievements, weaknesses, and other observations.
- Appraisals may not always be carried out by skilled or trained managers. This can result in the evaluation process not being carried out properly due to a lack of knowledge or experience.
- Managers may give higher ratings to favorite employees. They may also give low ratings to employees they do not like, even if they are competent.

- Evaluators may not always select an appraisal method that is suitable for the organization. They select an appraisal method that is simple and less time-consuming as a way to reduce workload.
- When someone sees only the negative aspects of a person and ignores their positive aspects, this is called the horn effect. It occurs when an appraiser makes their decision based only on an employee's negative attributes.
- The halo effect is the opposite of the horn effect. Here, the positive qualities of the employee overshadow any negative attributes or behavior. The appraiser may give high ratings to employees in those areas where they may not be proficient.
- Employees resist the performance appraisal system because they consider that the whole process of appraisal is only for pointing out their mistakes and criticizing their performance. Thus, they may not be actively involved in the evaluation process.
- Appraisal can be an expensive process, particularly if the organization must bring in outside experts to design and/or conduct the evaluations.
- Managers who are strict and have overly high expectations of their employees may give low ratings to all employees, despite good performances. Lenient managers may give high ratings to all employees irrespective of their performance. Such evaluations are not valuable to the organization or the employees.

Methods of recruitment

Recruitment methods refer to how an organization finds the right people to employ. In other words, these are ways of establishing contacts with potential candidates. Recruitment methods are different from the sources of recruitment.

Internal recruitment

Internal recruitment takes place by drawing on the talent within the organization. Internal sources of recruitment are readily available to an organization and primarily consist of:

- transfers
- promotions (through internal job postings)

Recruiting internally can save a company time, effort, and money

- re-employment of ex-employees – this is one of the internal sources of recruitment in which employees can be invited and appointed to fill vacancies. There are situations when ex-employees provide unsolicited applications also.

One benefit of internal recruitment is that it may lead to an increase in an employee's productivity as their motivation level increases. It also saves time, money, and effort as the employee is already associated with the business.

However, internal recruitment prevents the organization from bringing in fresh ideas from external candidates. Moreover, not all workforce requirements can be met from within the business, particularly if departments are expanding.

External recruitment

External recruitment extends the search for potential employees to outside the organization, and can use one or several sources of recruitment.

- **Advertisement**: This is an external source with an important place in recruitment procedure. Advertising can cover a wide area. Traditionally, job openings were posted in newspapers, but the internet is now the key job advertising medium for businesses, mainly through specialist recruitment websites and social media.
- **Employment exchanges and job centers**: Some employment exchanges and job centers are run by governments. Businesses can often advertise their vacancies free of charge, but the jobs posted tend to be low paid or unskilled positions.
- **Employment agencies**: These recruitment consultant firms often specialize in industry sectors (such as education or construction) and build a talent pool of job seekers that they can match to suitable job vacancies.
- **Educational institutions**: Many companies visit universities to advertise graduate vacancies and recruit from a skilled pool of labor. Often these positions are for management level posts.
- **Specialist trade publications**: Posting a job in an industry specific publication increases the chances that the right audience will see the job vacancy. These publications can charge high advertisement fees as they have a captive audience of industry specialists.
- **Employee recommendations**: An existing employee may recommend someone they have worked with in another organization or role for a specific vacancy. The potential disadvantage is that the recommended person may be a poor fit for the business.
- **Labor contractors**: These supply workers to the manufacturing sector. Through these contractors, workers are appointed on a contract basis (for a particular time period or project). This is a common recruitment practice in the construction industry.
- **Headhunting**: Businesses can approach individuals working in other organizations if they are highly sought after for their experience, skill set, and expertise in their field. Websites such as LinkedIn have become popular 'hunting grounds' for talented individuals in professional job roles.

Toolkit connection

Hofstede's cultural dimensions help managers of international companies understand the similarities and differences between different cultures and develop appropriate human resources strategies to conduct operations in different settings.

The six cultural dimensions are: power distance, individualism versus collectivism, masculinity versus femininity, uncertainty avoidance, long-term versus short-term orientation and indulgence versus restraint.

Research and inquiry

Jobseekers have access to a variety of websites to help them find the right job. Job listing sites can be generic or industry specific.

Choose a career/job role of interest to you. Carry out a short investigation into the websites available to jobseekers in this field.

Think about:

- How easy is it to find information on jobs available for your chosen field?
- What types of information do employers include in the job advertisement?
- Apart from listing jobs, what other services do the websites provide for employers and jobseekers?
- Where else might job vacancies be listed for your chosen field? Why?

HL end

IB learner profile

Principled

It can be quite common for recruiters to headhunt the best talent from other organizations.

Imagine you have been working for a business for ten years and you are approached with an offer from a rival organization in the same city to come and work for them, doing the same job for a 15 per cent increase in salary. They would like you to start immediately.

How would you approach this situation? Do you consider yourself to be financially motivated? What personal trade-offs would you be making if you decided to accept?

Financial rewards

Salary

A salary is a yearly fixed financial payment to employees that is paid monthly. As part of the contract, the working hours will be stated. If an employee decides to work more hours than contracted, they will not be paid any overtime. This is a common form of financial reward that can be found in a wide variety of sectors, such as education.

A key advantage of this method of remuneration is that employees know that they will receive the same payment each month and can plan their commitments accordingly. Even though overtime is not rewarded, some employees may decide to work beyond their stated hours in order to get the job done. If this is a regular occurrence, this may cause some resentment.

Wages

Wages are commonly paid on a weekly basis and are in recognition of hours worked (time based) or output produced (piece rate). This is an easy to understand form of remuneration: the more hours you work or items you produce, the more you get paid that week. To combat exploitation of workers and ensure that a basic standard of living can be maintained, many countries have passed minimum wage legislation that employers must abide by.

Research and inquiry

A minimum wage is the lowest remuneration that employers can legally pay their employees.

Investigate what the current national minimum wage is in a country of your choice.

Think about:

- What are the typical jobs that currently pay the minimum wage in that country?
- Do you think that the current minimum wage rate is enough to provide a basic standard of living for an employee working an average of 40 hours each week?

Commission

Commission-based pay rewards employees with a set percentage of each sale for every item sold or service provided. Often, but not always, employees receive a minimal base salary as well as the commission element. This is a common form of remuneration in sales-based environments such as car sales showrooms and real estate agencies.

The motivation is to sell, sell, sell, as the more sales that are converted, the greater the commission. However, it can foster an environment of unhealthy competition as sales agents try to outcompete each other, and hostilities can develop in the workplace.

Case study – Dubai villa sells for 280 million dirhams

According to news website Gulf News, in 2022, a 24-year-old Irish real estate agent, Conor Mckay, sold Dubai's costliest villa for a record 280 million dirhams (approximately $75 million). In this fiercely competitive environment, real estate agents are vying to make the next big deal. For a select few, the rewards are high, as commission on sales is the most common form of remuneration in this sector. For each sale or rental property deal completed, the agent will receive around 2–4 per cent of the property price. In some cases, if no sales are made, then agents will not receive any pay from the real estate agency they work for.

1 Define what is meant by commission as a form of financial reward.
2 Discuss one advantage and one disadvantage of offering commission as the main form of financial reward for real estate agencies operating in Dubai.

Performance-related pay

Performance-related pay is pay awarded to employees subject to meeting or exceeding performance-related targets. On meeting the performance targets, it may result in a pay award in the form of:

- cash bonuses
- an increase in salary or wage
- gratuity pay.

This can act as a motivator for employees to increase their productivity levels to meet their targets. However, it does not always align well across all industry sectors, especially where performance can be subjective or difficult to measure, such as for healthcare workers.

Profit-related pay

Profit-related pay remunerates employees with a percentage of the annual profits that the business earns. This is an added financial reward on top of an employee's regular pay award. Employees have to meet the annual profit targets set by the business, either individually, or collectively as a group of staff.

Profit-related pay can be very lucrative for employees, motivating them to work harder and pull together as a team to meet profit targets. More senior employees may be eligible for a greater share compared to lower-level employees. However, unrealistic profit targets or missing out on a target by a small amount can be demotivating.

Employee share ownership scheme

An employee share ownership scheme is another type of financial reward commonly offered to employees who work for public limited companies that have shares listed on the stock market. Often, there are two main options.

- The company may give employees a set number of shares as a reward for performance or loyalty.
- Employees have the option to put aside part of their monthly salary to purchase shares in the company at a discounted rate. At the end of the agreed purchase period, they can either keep the shares or cash in at the market price. By taking ownership of shares, working hard to increase profits has the tangible benefit of greater dividend payments and/or capital gains through increases in the share price.

However, share ownership schemes dilute ownership of the company as the number of shareholders increases. It can also be an expensive scheme to administer.

Activity

The John Lewis Partnership is the UK's largest employee-owned business and the parent company of two retail brands, John Lewis & Partners and Waitrose & Partners, which are owned in Trust by their 83,900 Partners.

There are 51 John Lewis & Partners shops and 349 Waitrose & Partners shops across the UK, along with johnlewis.com and waitrose.com. There are also two international sourcing offices, a soft furnishings factory, distribution centers, three Waitrose & Partners cookery schools, a content production hub, a heritage center, and a Waitrose & Partners farm.

Over 100 years ago, founder John Spedan Lewis began an experiment into a better way of doing business by including staff in decision-making on how the business would be run. He set out the principles for how the business should operate and produced a written Constitution to help Partners understand their rights and responsibilities as co-owners.

Spedan Lewis wanted to create a way of doing business that was both commercial, allowing it to move quickly and stay ahead in a highly competitive industry, and democratic, giving every Partner a voice in the business they co-owned.

The Partnership is one of a handful of companies to have a written Constitution. Uniquely, the Constitution places the happiness of its Partners (employees) and worthwhile, satisfying employment at the heart of its successful business. The Constitution also sets out the Partnership's democratic governance system.

The Partnership operates on democratic principles, sharing power with all Partners. The first democratic council was set up 100 years ago in 1919. Today, the democratic network of elected councils, committees, and forums

enables Partners to participate in decision-making, challenge management on performance, and have a say in how the business is run. They have over 3,000 specially elected representatives who feed into the three governing authorities, Partnership Council, Partnership Board, and the Chairman, that run the Partnership.

Partners reap the benefits of employee ownership by sharing 'profit, knowledge, and power'. Partners can feed their views to management through the formal democracy bodies and through the company's weekly magazine, which is the longest running in-house magazine in the UK.

Research employee ownership schemes, like the one operated by the John Lewis Partnership. Explain the advantages and disadvantages to the employees and the business of this scheme.

Fringe benefits

Fringe benefits or perks are provided in addition to basic pay (salary or wage) to employees. Although not an extra payment to an employee's bank account, they are still classed as financial benefits as they otherwise would have to be paid for by the employee. Examples include:

- staff discounts
- medical insurance
- travel allowance
- company car
- staff uniforms
- meal allowance
- gym memberships
- pension contributions
- childcare allowances for children.

A diverse fringe benefit package can tempt employees into working for the business and offer another form of financial motivation. However, as they are provided by the business, they do raise the costs of production.

Many employers offer gym membership as an employee benefit

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What is Unlimited PTO?

Unlimited PTO stands for unlimited paid time off. It's also sometimes referred to as 'discretionary time off', 'unlimited vacation' or 'extended vacation'. Microsoft, Netflix and Zoom are just some of the companies that have adopted this policy.

Unlimited PTO generally refers to any vacation policy where there is no limit to the number of days an employee is allowed to take off during a given year.

In theory, unlimited PTO means employees could take weeks – or even months – off work at one time. However, unlimited PTO policies operate on the basis that trusted, valued and capable employees won't abuse the policy in this way.

HR software company Namely examined the PTO plans offered by 1,000 businesses they work closely with. Interestingly, Namely found that the average employee in a company with an unlimited PTO policy took an average of just 12.09 days off per year, whereas employees at companies with limited PTO policies took 11.36 days off.

Non-financial rewards

Non-financial rewards are cost efficient for a business as many will not require a financial outlay to implement. In addition, the focus is on recognizing the employee.

Developing sound and well-thought-out non-financial rewards can be a powerful tool for employee retention. If employees stay just because of pay increases, then they can be easily lured away by a rival company. However, non-financial rewards help to build working relationships with employees that they may not find elsewhere.

Job enrichment

Job enrichment involves employees in a wider variety of tasks that require new skills. The focus is on enhancing or 'enriching' their experience in the work environment by providing more challenging tasks and responsibility at work. This entails more training, upskilling, and encouraging workers to take part in decision-making.

Job enrichment helps to build employee confidence, competence, and a sense of achievement in the workplace. Hence, employers gain from a more motivated and skilled workforce. However, job enrichment has cost implications for businesses – namely the costs of training, developing, and upskilling workers.

Job rotation

This form of non-financial motivation involves employees switching between jobs over a period of time. This helps to upskill the employees in different tasks and spread the existing work skills throughout the organization. Encouraging a variety of work for staff in the business guards against repetitive tasks and boredom setting in. However, businesses need to be careful not to rotate jobs too frequently as this may hinder productivity.

Job enlargement

Job enlargement increases the number of tasks involved with a specific job. In other words, it means increasing the scope of the duties and responsibilities. Job enlargement is a horizontal restructuring method aimed at increasing workforce flexibility, and at the same time, reducing boredom that may creep in over time.

Empowerment

Empowerment can be a powerful motivator for employees as it involves the delegation of power to the workers, helping to increase morale and the feeling of trust and value in the business. When given the autonomy (Pink's theory of motivation) and authority to carry out tasks, employees have the responsibility and freedom to conduct their day-to-day activities in the way they see fit. This would be the opposite situation to an employee who is working under a strict set of guidelines and lacking empowerment.

Empowerment also gives managers more time to focus on strategic planning as they entrust their subordinates with tasks or duties that they may otherwise have to complete themselves.

Purpose

Having a sense of purpose within the work environment is an intrinsic motivator and is associated with making a difference on a personal, professional, or social level. This drive comes from within and is not something that can be implemented by the business. However, it can be fostered or supported, and recognition of the work employees are doing helps to reinforce their purpose.

Often the following fields are associated with 'purpose', with people pursuing a career in these areas wanting to make a difference rather than focusing on the pay rewards on offer:

- social work
- healthcare
- police
- fire service
- education.

Teamwork

Working in teams is a common practice in the business environment and the opportunity to do so can be a motivator. Teamwork allows for collaboration and social interactions with colleagues (Maslow's social needs), which can stimulate a team approach, whereby employees support each other to reach a common goal. This helps to increase job satisfaction and productivity, the number of innovative ideas, and improve performance. However, conflicts can arise and people can become too dependent on each other. Some may feel they do not get their fair share of credit. Facilitating teamwork can carry a financial cost.

Training

Training is a key part of human resource management. It involves a learning and development process in which employees acquire specific skills, abilities, and knowledge to improve their performance. Training includes teaching new employees how to perform their job, introducing new technology to existing staff, or helping employees to reach a certain level of proficiency in their job functions. Training is often focused on improving the performance of the employee in their current job activities, whereas coaching or mentoring may be geared toward future job functions.

TOK

Can individual motivation only emerge internally, or can it be created externally? Is there such a thing as collective motivation?

Induction training

Induction training is a workplace orientation program, whereby new employees are introduced to the rules and regulations of an organization with the main objective of familiarizing them with the working environment.

Typically, new employees will be provided with:

- general information about the daily work routine
- the history, objectives, mission, vision, products, and services of the organization
- a detailed presentation of the company's policies, work rules, and employee benefits.

Advantages

Induction training has several advantages for a business:

- It helps to retain employees, as turnover can often be much higher with newly recruited employees. A comprehensive induction program can help new employees settle into the work environment and reduce any initial anxieties they may have.
- It creates a positive first impression of the business for new employees. The early experiences in a work environment can create a lasting impression for new employees.
- An induction program helps the business to inform new employees about desired staff conduct as well as the core business values and attitudes expected from them while they work at the organization.
- Induction training breaks the ice for new recruits, as they will often be introduced to key members of staff within the organization and spend some time getting to know their co-workers while they are eased into the job role.

Disadvantages

If induction training is not well-thought-out, then there can be some disadvantages:

- The individual(s) providing the training are not well trained themselves.
- New employees are daunted by the initial formalities required (form filling and so on).
- Information overload can occur if too much is packed into a short induction period.
- Asking new employees to perform challenging tasks when they first join can increase the chance of failing and lead to early demoralization.

On-the-job training

On-the-job training is instruction for employees that takes place at work. This may include job shadowing or observing an experienced employee perform certain job tasks, as well as learning how to use any software, tools, or machinery required for the job role.

The instruction and hands-on practice for the employee helps to develop the skills, competencies, and knowledge needed. When complete, the employee should be able to perform most or all the tasks for the position without supervision.

Advantages

- Experienced staff members can teach new employees the proper protocol, meaning they are less likely to pick up bad habits or make mistakes.
- External training can be expensive; keeping it in-house curbs these costs and provides instant access to resources.
- Employees are more likely to build trust with those they work with over time, so on-the-job training promotes teamwork from the start.
- On-the-job training ensures that employees only acquire information on a need-to-know basis.

Disadvantages

- As the training is usually provided by other employees, it may mean that more people are unavailable to work, lowering productivity levels.
- It is unlikely to bring new ideas and skills into the business.
- The employee providing the training may be ineffective.

Off-the-job training

Off-the-job training is when employees learn more about their job or the latest advancements in their field outside their workplace. The idea of this type of training is to help employees perform their job more efficiently.

Employees can express their views and opinions and explore new ideas to bring to the workplace. Before the conclusion of the training, employees typically receive some form of evaluation, such as a summative test of the knowledge shared with them during the training.

Advantages

- With training held away from the workplace, employees have fewer distractions. They can focus on the learning material and receive the most benefit from the training.
- Off-the-job training requires an investment, meaning employees feel the employer values them and their success, often leading to increased motivation and loyalty.
- It provides employees with an opportunity to learn from experts in their field, and access to new ideas and approaches.

Disadvantages

- Training courses and the associated expenses (accommodation, travel) can be expensive.
- There is a risk that the newly trained employee may leave the business.
- Training might be generic and not be tailored to the business, limiting its application to the employee's role.
- The time spent training is time taken from productive working hours.

Case study – Google's g2g training program

At Google, 80% of all tracked trainings are run through an employee-to-employee network called 'g2g' (Googler-to-Googler). The 'g²g' learning program is created to offer first-hand knowledge in different fields, from employees to employees. What makes the program so successful? Summed up in one sentence, it promotes a culture that values learning.

First, Google acknowledges the employees' right to learn. Second, it gives them an opportunity to grow with an on-the-job-training and allows them to give back to other employees by participating in the program. Finally, with the g²g program, the company trusts its employees 'to be smart, capable and motivated and have the capacity to grow the organization's learning culture'.

So, even if the program is of a 'voluntary nature,' employees care for the value it provides both to them and the organization as a whole, and support its nurturing power.

According to Google, 'your own employees are perhaps the most qualified instructors available to you.' The role of the managers in establishing a 'healthy team culture' for group employee learning is immense.

Google's bite-sized lessons, part of the so-called 'Whisper course' were created to make messages 'stick.' The microlearning method was used to remind managers 'of the importance of regularly showing genuine and explicit appreciation for their team members.' A survey showed that because of its positive effect, 95% of the participants would recommend the whisper course to fellow Googlers.

Google still uses microlearning to nudge managers 'to take action when they receive their survey results on how they are doing as a manager.' An internal analysis showed that 'Google managers who received a whisper lesson improved on that behavior in the next survey by 22-40 percentage points.'

Nudges are, 'simple interventions that change behavior in a predictable way.' Based on behavioral economics, which studies why people sometimes make decisions against what seems rational or logical, nudges can improve work experience in organizations. But only if they are transparent and don't limit choice.

Review the infographic on Google's g2g training method.

1 Define the term 'on-the-job training'.
2 Explain two advantages of Google adopting the g2g approach to training.
3 Analyze the potential disadvantages that may be associated with the g2g program.

Practice questions

1 Explain two types of financial awards that a business can use. (4 marks)
2 Explain two types of non-financial awards that a business can use. (4 marks)
3 Using examples, distinguish between on-the-job and off-the-job training. (4 marks)

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2.5 Organizational (corporate) culture

Learning outcomes

At the end of this section, you will be able to:

- describe different cultures and explain the influences on organizational culture
- identify reasons for the emergence of cultural clashes within and between organizations
- analyze the consequences of cultural clashes within and between organizations
- discuss strategies to address cultural clashes in the workplace.

Research and inquiry

To what extent is it possible for an organization to maintain a uniform corporate culture when operating globally?

Culture can be defined as the shared beliefs, meanings, and values that are collectively held by a group. It can be characterized in terms of a country, a community, an ethnicity, or small groups of people, such as a company.

The success of a business depends on many factors, including its organizational culture. For example, a clear and consistent organizational culture helps to create cohesiveness and purpose. This helps to minimize misunderstandings and miscommunications, thereby reducing the chances of conflict in the workplace.

Organizational culture is influenced by numerous factors, including:

- the size of the organization: larger organizations tend to have more formal policies, procedures, and bureaucratic processes
- traditions and values of the organization: for example, a small charity will have a different organizational culture to a large multinational fast food restaurant chain
- attitudes and traits of senior managers: organizational culture is shaped by the personalities and traits of senior managers, such as their approach to risk-taking and risk management
- societal and cultural norms in the region or country: for example, some countries (such as in Scandinavia) have greater gender equality, so are more receptive to female leadership and female participation in the labor force. Societal norms also shape business ethics and corporate social responsibilities of business organizations.

Although organizational culture is established over a long period of time, it can be disrupted by radical changes to the firm. For example, a change in the senior leadership team or a takeover of the company can alter the organizational culture in a short period of time.

Types of organizational culture

Gods of management

In 1978, management thinker Charles Handy wrote an influential book: *Gods of Management: The Changing Work of Organizations*. In it, Handy attempts to classify four management cultures that are present in all organizations, and uses four Greek gods to symbolize them. The four cultures are Power (Zeus), Role (Apollo), Task (Athena), and Person (Dionysus).

Zeus continues to influence modern thinking and culture

Zeus: Power culture

Zeus, the god of thunder and lightning, is extremely powerful. In a power culture organization, decision-making centers around an individual (or a small group of senior staff), usually the figurehead or founder. Therefore, control radiates from a few individuals and their influence. The 'powerful few' make most of the decisions. Few rules and little bureaucracy characterize this culture; decision-making tends to be swift because only a few people hold real power and authority. Often results driven, the execution of tasks can be quick, but employees have little autonomy. Because of the high level of trust, this type of organization is cheap to operate. However, these organizations can quickly turn toxic if there isn't a strong moral compass at the top of the organization, leading to a high staff turnover.

Apollo: Role culture

Role culture is associated with Apollo, the son of Zeus and the Greek god of medicine, music, art, knowledge, poetry, prophecy, the Sun, light, and so on. Role cultures are underpinned by clear policies and hierarchical structures to facilitate the smooth running of the business. Employees have clearly defined roles and are conscious of their place in the chain of command. Role cultures are commonly found in large organizations, such as local and central government, and retail banks. A person's level in the hierarchy dictates the power they wield, and what they're responsible for and who reports to them.

Organizations with a role culture benefit from a clear direction and stability. However, they tend to be risk adverse and can be slow to react to any changes in the external environment. Employees may lack initiative as they readily accept direction from their superiors.

Athena: Task culture

Athena, daughter of Zeus, is the Greek goddess of battle strategy, wisdom, law and justice, and civilization, and is considered to be task oriented. In a task culture, teams are formed to work on specific areas or solve specific problems with their relevant skills. An individual's expertise – and whether the wider group values such expertise – determines the power they hold. The task, and its successful completion, is what value is placed on. Group dynamics play a part in success as power shifts depending on who is in the team, the nature of the problem, or the stage in the task's completion.

This is an effective culture in dynamic and creative businesses, especially if the mix of people, leadership, and governance is right. This is what a matrix organization looks like. This type of culture can be expensive to maintain as hiring, paying, and retaining industry experts is not always sustainable over the long term.

Dionysus: Person culture

Dionysus is another son of Zeus and is the Greek god of winemaking and theater. In a person culture, power is held on an individual level as people regard themselves or their skill set as indispensable and more important than the organization itself. Effectively, this means the organization only exists to help individuals to achieve their personal and professional goals. People with similar training and backgrounds tend to accumulate here – the organization is a collective of individuals who are loosely aligned, such as a group of barristers or private health professionals.

Due to the value placed on the individual, generous financial and non-financial remuneration packages are essential to recruit and retain staff. In addition, an organization with a person culture must manage the different and competing personalities and egos of experts in their field. Handy asserts that these types of people view themselves as independent professionals who have temporarily lent their services or skills to an organization. Person culture can be seen as an expensive approach for an organization to adopt.

Handy says it is important to realize that the most effective organizations are the ones that create a balance of power between the gods, and adopt a particular god depending on what needs to be done.

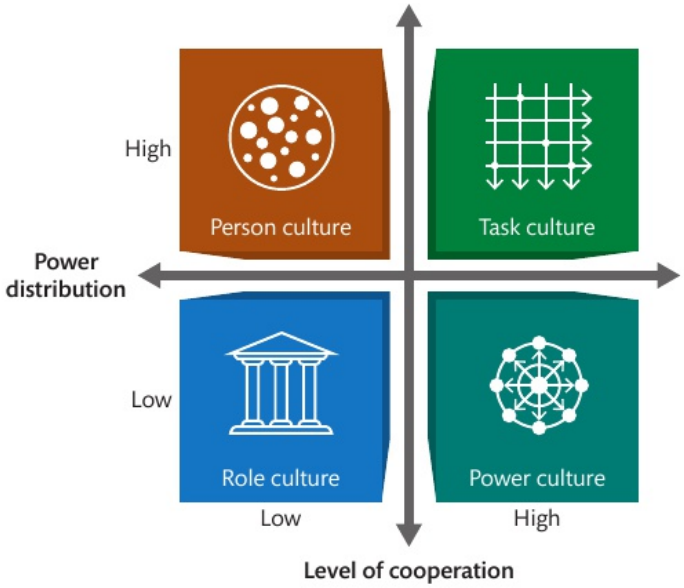

Figure 2.16 The levels of cooperation and power distribution in Handy's organizational culture model

Quinn and Cameron's competing values framework

Robert E Quinn and Kim S Cameron of the University of Michigan developed the competing values framework to explore corporate culture. They investigated the qualities that make businesses effective. Drawn from a list of 39 attributes, the researchers identified two key polarities:

- internal focus and integration versus external focus and differentiation
- flexibility and discretion versus stability and control.

These qualities are shown in the competing values framework in Figure 2.17.

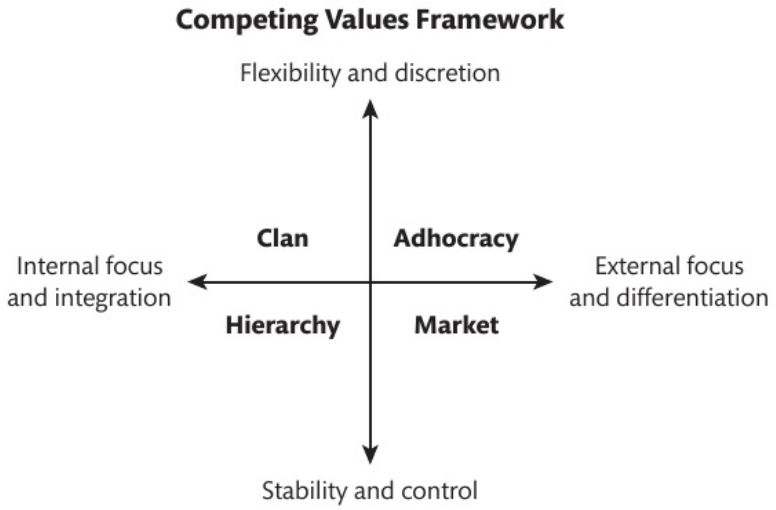

Figure 2.17 The competing values framework looks at the qualities that make businesses effective

Clan culture (collaborate culture)

A clan culture is people-focused in that the company feels family-like, with a primary focus on mentorship and teamwork. Communication is prioritized within this work environment, and each individual has a sense of value.

Clan culture aims to break down barriers between senior leaders and employees through encouraging mentorship opportunities, and it follows a horizontal leadership structure. Being action-oriented and ready to embrace change, those within a clan culture display a highly flexible nature.

Clan cultures are often seen in start-ups and smaller companies where there is a heavy emphasis on collaboration and communication, with leaders looking to their employees for creativity and ideas.

Advantages

Clan cultures can boast of high rates of employee engagement, and happy employees make for happy customers. Because of its highly adaptable environment, there is great possibility for growth.

Disadvantages

Maintaining a family-style corporate culture becomes increasingly difficult as the company grows. Utilizing a horizontal leadership structure means day-to-day operations can seem cluttered and lacking direction.

Adhocracy culture (create culture)

Adhocracy cultures are rooted in innovation and adaptability with risk-taking and innovation at the forefront. With this approach, these companies are looking to develop the next big thing before other businesses and operate at the cutting edge of their industry.

Employees are encouraged to think creatively and bring their ideas to the table. Because this type of organizational culture falls within the external focus and differentiation category, new ideas need to be tied to market growth and company success.

Google and Apple are companies that embody the external focus and risk-taking nature of adhocracy culture. They run on creative energy and doing what has never been done before. Adhocracy cultures are common within the ever-changing technology industry where new products are being developed and released on a regular basis.

Advantages

An adhocracy culture contributes to high profit margins. Employees stay motivated with a focus on creativity and new ideas, translating into professional development opportunities that are easy to justify.

Disadvantages

With risk-taking encouraged, there is always a chance that a new venture will not work out and may even hurt the business. Unhealthy competition between employees can arise as the pressure to come up with new ideas increases.

Market culture (compete culture)

Market culture prioritizes profitability through competition and growth. These are results oriented businesses where everything is evaluated with the bottom line in mind. This leads to a focus on external results over internal satisfaction of employees. A market culture revolves around meeting quotas, reaching targets, and getting results. Each employee has an objective that aligns with the company's larger goal, and there are often several degrees of separation between employees and leadership roles.

The goal of a market culture company is to be the best in its industry. Because of that, these are often larger companies that are already leaders of the pack.

Advantages

The focus on delivering results means that there is a key objective employees can get behind and work toward. Companies that embody a market culture are profitable and successful.

Disadvantages

The constant drive for improving numbers, sales, and results means it can be difficult for an employee to feel valued as a person, and there is a high risk of burnout in this fast-paced and aggressive environment.

Hierarchy culture (control culture)

Companies with hierarchy cultures adhere to a traditional corporate structure, seen as a stable model to adopt. There is a clear chain of command and management tiers that separate employees and leadership. There is often a set way of doing things, which makes for a stable company that is risk-averse in its approach.

Hierarchy cultures can be found in companies that are hyper-focused on how day-to-day operations are carried out and aren't interested in changing things anytime soon. Established fast food restaurants are a good example of this.

Advantages

With internal organization as a priority, hierarchy cultures have clear direction. There are well-defined processes that cater to the company's main objectives.

Disadvantages

The company can be slow to adapt to changing trends in the market, as the rigidity of hierarchy cultures leaves little room for creativity. The company takes precedence over the individual, which doesn't necessarily encourage employee feedback.

Ultimately, it falls on the manager to recognize the 'organizational culture' that exists in a business environment and take steps to cultivate and foster that ongoing environment, or to look to make changes to steer the business culture in a different direction. If a manager fails to recognize the existing culture, this can lead to employees in the organization pulling in opposite directions while pursuing business goals. To understand the cultural aspect of business, it requires managers to possess a mix of intelligence quotient (IQ) and emotional quotient (EQ).

In what ways can language be used to influence, persuade, or manipulate employees?

TOK

Research and inquiry

Investigate what role emotional quotient (EQ) plays in the world of business leadership.

To what extent do you agree that possessing an understanding of your EQ is important in helping to shape the culture in an organization?

Cultural clashes

Over time, organizations change: this could be because of growth, external factors, or a change of leadership. Whatever the reason that causes change, cultural clashes can result.

Cultural clashes due to mergers and acquisitions

The primary driver for mergers and acquisitions (M&As) is revenue gain. However, M&As rarely take account of cultural differences, which can obstruct a successful merger or acquisition. Because culture is an essential element in an organization, conducting a cultural analysis is key in an acquisition.

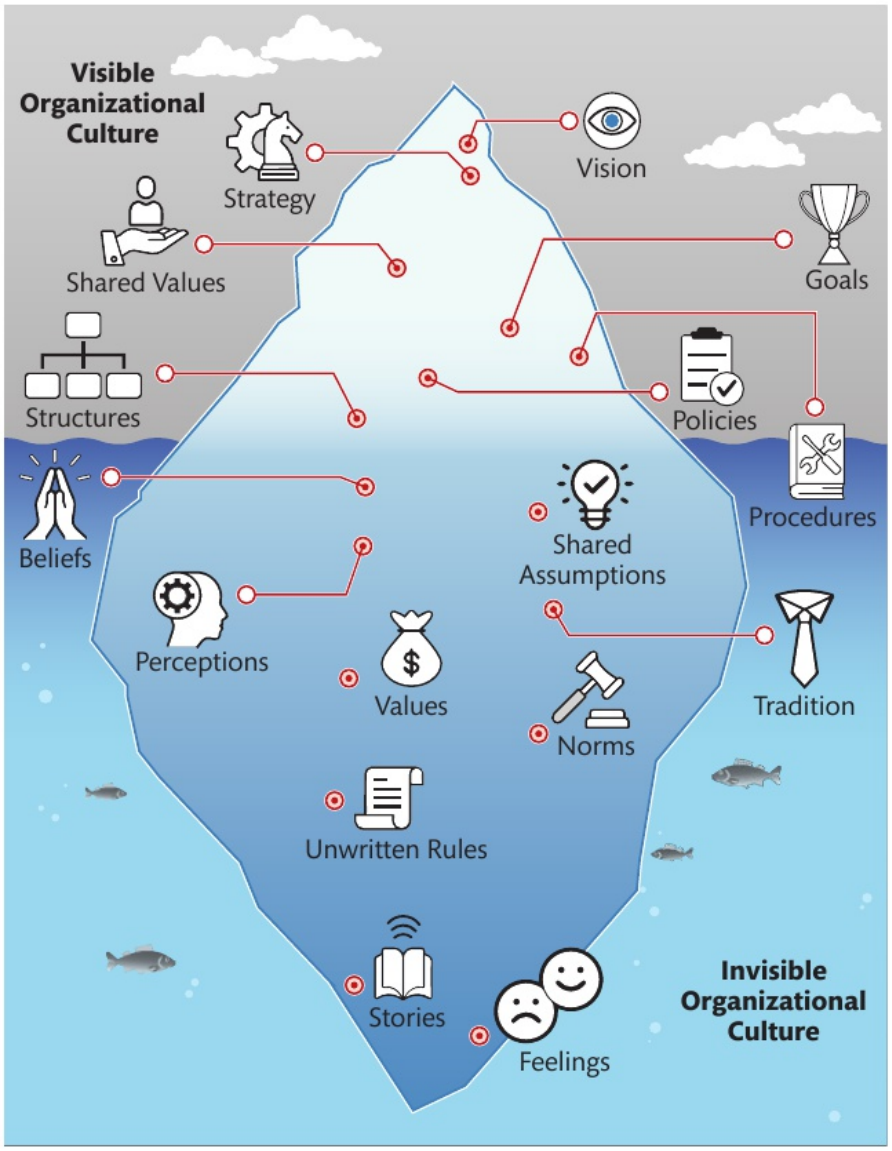

Figure 2.18 The organizational culture iceberg

When one company looks to acquire another, it may factor in the visible organizational culture to its decision and plans, but it may fail to consider invisible organizational culture factors. This is best illustrated using the iceberg model, shown in Figure 2.18.

Failure to account for the full range of factors of the organizational culture (visible and invisible) increases the likelihood of culture clashes post-merger. However, managing the cultural clash in M&As can result in a post-merger organization that can better achieve strategic and financial objectives than either company could do on their own.

Activity

One of the most well-known failures in the world of M&As was that of AOL and Time Warner, which formally completed in January 2001. At the time, it was one of the biggest media mergers in history, with AOL acquiring Time Warner for $182 billion in stock and debt. The resulting mega-corporation, AOL Time Warner, held dominant positions across the media, in music, publishing, news, entertainment, cable, and the internet.

The AOL Time Warner merger came at the height of the 'internet bubble', when young dot-com businesses were growing quickly with no sign of stopping.

However, shortly after the merger completed, trouble started.

In small groups, carry out an investigation into the failure of the AOL Time Warner merger. Produce a short report on the key factors that led to the failure, including a section providing an insight into the clash of cultures that took place.

Cultural clashes due to changing leadership style

Effective leaders recognize that choosing the right leadership style for the current situation tends to improve the likelihood of success. However, most leaders have a primary style in their management approach. Cultural traditions and values play a role in a leader's style, so it is expected that cross-cultural differences in leadership will arise.

Google acquired Nest, a smart-home start-up, for its automation capabilities and innovation in 2014. Given Nest's history with Apple, it was more structured in its approach, whereas Google's approach was more informal. The CEO of Nest, Tony Fadell, left the business due to how his approach and leadership style differed from that of Alphabet (Google's parent company). Many other Nest employees also left.

Nest was a company with a transparent top-down approach, whereas Google was more engineer-driven and had a bottom-up culture. The change in leadership style experienced by Nest employees was not something they were accustomed to or welcomed, and subsequently led to cultural clashes and friction.

Multinational expansion

The expansion of companies across borders drives globalization. Mergers, acquisitions, joint ventures, and subsidiaries do not result in a standardized corporate culture, and often give rise to culture clashes.

Organizations' hierarchies vary across countries. For example, a US company may have a very egalitarian culture with a very flat structure, with four or five levels of hierarchy. When trying to transfer this approach to another location, it may not work, as people may organize themselves into hierarchies quite quickly. What seems egalitarian in one country may seem authoritarian in another.

In addition, methods of motivating people can be very different. A Harvard business professor, Lynne Paine, noted that Anglo-Saxon and Scandinavian countries tend to be more individualistic, whereas Asian and Latin American cultures tend to be more group-oriented. Therefore, putting an emphasis on individual performance can be a mistake in a place where the team is viewed as paramount.

For companies in developing countries, the pressure to adhere to Western norms can be especially strong. For example, a company hoping for investment from the West might install a code of ethics that prohibits conflicts of interest in supply contracts. But in many countries, doing business with companies owned by family members is standard practice.

Case study – Starbucks

Behind a secure door at Starbucks Corp. headquarters lies a technology lab where the chain is plotting its renewal and rethinking the corporate culture of its establishments. That includes rethinking the onerous path its baristas must take to make a Frappuccino.

Inside the 20,000-square-foot space called the Tryer Center, baristas working in a mock-up of a Starbucks cafe walked back and forth between refrigerators, blenders, and syrups to make a single blended coffee topped with cold foam and caramel drizzle. They asked if the company could build kitchens that bring the equipment closer together and make syrup pumps, milk dispensers, and ice bins that work better.

Natarajan Venkatakrishnan, who is in charge of the center, is testing a new machine that could reduce the time it takes to make cold brewed coffee. He also wants Starbucks to have better blenders. 'Today, you go to a Starbucks store, you take this,' Mr. Venkatakrishnan said, holding up one of the blenders currently in use. 'You put a cap on it, you put it in, you blend it, you pour it out, you have to rinse this, you have to rinse the lid. All of that takes time.' 'It's the complexity of those cold beverages,' Mr. Schultz said in a recent interview.

Starbucks, the chain that made espresso ubiquitous in America, now faces daily crises in dispensing it. U.S. stores designed a decade ago struggle to meet today's consumer demand. Cafes that once averaged 1,200 orders a day are now trying to make 1,500. Executives recently visited one East Coast cafe that averaged $1 million in annual sales a decade ago. Now, it is ringing up nearly $3 million in sales in the same 1,500-square-foot space.

Many U.S. locations need to be overhauled, said Katie Young, who as senior vice president of global growth and development is in charge of figuring out what new cafes should look like. Having so much demand is a privilege for Starbucks, but also a problem, she said.

Starbucks was hit hard by the pandemic. By last year, to-go orders had helped sales recover to prepandemic levels, but this year, rising costs have begun eating into profit margins, and the company has raised prices. In the quarter ended July 3, Starbucks reported that sales had risen 9% from the year-earlier period, but net income dropped 21%.

Executives also are grappling with a unionization push that began in its Buffalo, N.Y., market in August 2021. Workers have been pressing for better pay, staffing levels and hours. Turnover has shot up since the pandemic hit. One in four U.S. baristas are quitting their jobs within 90 days, according to internal figures, up from roughly one in 10 previously.

Starbucks, the world's largest coffee company by locations and sales, started out by selling coffee to office workers in cities such as Seattle. Mr. Schultz took over in 1987 with the goal of bringing Italian-style espresso to Americans, building stores with small prep areas to brew a limited number of offerings. As Starbucks expanded, so did its menu. It started serving Frappuccinos in 1995, and pumpkin spice latte and other flavors and toppings followed. Warm sandwiches came in 2003. It introduced cold brew and draft nitro coffee in the 2010s.

In 2015, the company launched an app feature that allowed customers to pay for their drinks ahead of time and to customize their coffee orders in what Starbucks says are 170,000 ways.

At the Tryer Center recently, barista Lisa Koss demonstrated the steps required to create one popular drink, an Iced Caramel Macchiato. Ms. Koss first dispensed shots from the espresso machine at the hot-bar section of the cafe, then crossed the floor to whip cold foam in a blender. She walked back to the hot bar to collect the espresso shots and grab milk from a refrigerator. She headed back to the cold bar for the foam, bent down to scoop ice, then poured the drink together. It took about three minutes to make. Other popular drinks require even more steps. 'There's usually so much walking and bending, that after eight hours, it hurts,' said Greg Pieczynski, another barista.

Starbucks expects workers to deliver handcrafted beverages fast. A clipboard in one Buffalo Starbucks, used to track workers' drive-through delivery times, said 'Expectations: Under 50 Seconds,' according to a photo provided by one barista. Starbucks said there isn't a standard time for drive-through service because each location is unique, but that service in 50 seconds or less is ideal. In the company's early years, baristas served coffee over the counter. Starbucks tested its first drive-through in 1994, and by 2009, more than one-third of the company-owned locations in North America had them. Now, nearly half of Starbucks's U.S. sales come from drive-through orders. Mr. Schultz wants 90% of the chain's new stores to include drive-throughs—continuing a shift that he acknowledged has contributed to new pressures on workers.

Baristas' frustrations played into a unionization effort that began in certain stores. Workers have lobbied for better pay, equipment and operations. 'We love our regulars. We have their orders memorized,' said Mr. Hudson, who has worked for Starbucks for more than four years. 'We know it's annoying to wait for that food or when our equipment is down.'

Starbucks has upgraded equipment periodically, including in the past year adding espresso machines that can pull three shots for complex orders, rather than two. The pandemic delayed some of the equipment installations, the company said. Amid workers' calls for better store conditions, Starbucks executives formed a team to focus on what more they could do to improve cafe operations and productivity. They gathered at the Tryer Center to try to speed up the time it took Starbucks to launch new ideas. Starbucks has told employees that the company hopes to have new equipment and designs rolling out to its stores as soon as possible over the coming years.

1 Define the term 'corporate culture'.
2 Evaluate how the culture of Starbucks has been impacted by the large-scale growth of the business.

Practice questions

1 Outline two factors that can influence organizational culture. (4 marks)
2 Using Charles Handy's Gods of Management model, select and apply one type of organizational culture to a business you are familiar with. (4 marks)
3 Using real world examples, to what extent is culture clash inevitable when two businesses merge together? (10 marks)

2.6 Communication

Learning outcomes

At the end of this section, you will be able to:

- examine formal methods of communication
- examine informal methods of communication
- analyze the barriers to communication in a business.

Research and inquiry

How can effective communication impact business success?

Formal and informal communication

Clear and timely communication is crucial in ensuring a well-run and efficient business organization. Within a business environment, methods of communication can be classified into formal and informal methods. Depending on the given situation, it is for the business to decide whether formal or informal methods of communication are the most appropriate vehicle for the message to be delivered.

Formal communication refers to the official flow of information through predefined channels and routes. Formal communication will often align with the organizational structure, usually following the hierarchical structure through the chain of command. Information flows down from senior members of staff to employees at lower levels in the organization.

Informal communication is free flowing throughout the organization and travels outside the bounds of the formal communication channels. It is quick and often natural as it happens with everyday interactions with colleagues around the workplace. Topics may be work related but can stray into outside interests, thus helping to build relationships. Due to the nature of informal communication, it does not leave a paper trail and is often known as the 'grapevine'. Table 2.3 on page 114 shows the key differences between formal and informal communication.

Types of formal communication

Formal communications include:

- an intranet
- meetings
- conferences
- one-to-one meetings
- bulletin boards
- handouts
- letters
- presentations
- speeches
- notice boards
- organizational blogs
- emails from managers and leaders.

▲ Informal communications flow through chains of people

Types of informal communication

There are four key types of informal communication:

- **Single strand chain**: A shares an idea or information with B, who then passes it to C, and so on.
- **Gossip chain**: This is the same idea as in social circles, whereby one person initiates the conversation and shares information with a group of people, who then pass on the information to more people.
- **Cluster chain**: In cluster networks, a person will receive information and choose to pass it on to their cluster network or keep the information to themselves. An individual will pass on the information to the next cluster network. Think of how a social media challenge becomes viral: people do something unique and tag three friends for the challenge. They complete the challenge and tag three more people each, and so on. That's how a cluster chain communication is formed and continues.
- **Probability chain**: Each individual randomly tells another individual the same piece of information.

Table 2.3 Key differences between formal and informal communication

Factor to consider	Differences	
	Formal	**Informal**
Official versus unofficial	It is mainly written. The management is responsible for the timely and accurate use of these formal communication channels.	These communication channels exist in every organization but are not used for official purposes. Serve as a medium for employees to interact personally and build better relations.
Reliability	Considered more reliable due to the records that are left behind.	Informal communications are mostly verbal, and there is no definite channel and supporting documents, making it a little less credible. It is easier for the message to be distorted.
Time	Formal communication can be time-consuming and costly because the information and channels are checked for errors before being issued to the public or person intended. Feedback is an essential component required to complete a formal communication chain, because of which, the information may get a little delayed.	Informal communication spreads faster as it can be started at any level of the organization and is quick to travel.
Information flow	Information through formal communication is only through predefined channels.	Information through informal communication moves freely.
Secrecy	Secrecy is maintained with formal communication.	Informal communication makes it hard to maintain full secrecy due to its reliance on individuals.

Barriers to communication

Anything that hinders or stops the business delivering the correct message to the right person at the right time, or a receiver from receiving the right message at the right time, is a communication barrier. The following are some of the barriers to business communication in a work environment.

- **Organizational structure complexity**: Due to many filtering points, communication in an organization with multiple administrative levels leads to transmission loss and poor retention. If there are a lot of layers in an organization for the message to travel through, then some or all the information included in the message may be lost. This is a particular problem with oral communication. Poor retention of the message is also a major stumbling block. People cannot retain knowledge for lengthy periods of time if they are not attentive or engaged.
- **Status**: Communication between people with different statuses and positions can be challenging as they are unable to speak freely with one another.
- **Insufficient incentives**: Employees may be full of rich ideas and creativity but remain subdued in making useful recommendations if they are not rewarded or appreciated due to a lack of incentives.
- **Lack of confidence in subordinates**: If a supervisor has doubts about their subordinates' skills, they will not ask for their advice or comments.
- **Reluctance to communicate**: Some employees struggle to communicate, and engaging with them can be challenging. Some people may be unwilling to communicate due to fear of rejection or of other negative consequences.
- **Linguistic differences**: Conversing with an employee who doesn't speak your language fluently can make it difficult to reach a shared understanding. That's why language can be a major barrier to communication. This isn't just about different dialects, but about jargon too. If a marketing team member is talking to someone from the finance team using 'business speak' like 'PPC' and 'top of the funnel', confusion is inevitable.
- **Emotional**: An emotional barrier is a mental block that influences how you perceive others' actions and prevents you from clearly communicating your feelings. Emotional barriers can trigger an emotional response that's inappropriate or unproductive.
- **Physiological**: Physical limitations, such as ill health, a vision or hearing impairment, or limited mobility, can become a barrier to effective communication.
- **Psychological**: There are many psychological barriers to communication that can affect a workplace:
    - **Filtering** is the withholding or framing of information to manage others' reactions, such as an employee telling their manager that their laptop is broken, but not mentioning that they'd spilled their coffee on it.
    - **Selective perception** is when people filter information to suit their own needs. Often subconscious, this includes making assumptions based on experience, like assuming someone is angry when they use all capital letters in a typed message.
    - **Information overload** happens when there is too much information to process in the allotted time. This may occur when there are too many ads on a website, or when someone is responding to emails during a business meeting and can't focus on either the emails or the meeting particularly well.

IB learner profile

Communicators

Think of a time when you wanted to get a message across, but the outcome was not what you hoped for. What was the barrier or barriers that prevented effective communication taking place?

- **Emotional disconnect** occurs when someone is upset or preoccupied. Emotional disconnect may be caused by the communicators or it may be unrelated, like when a loved one is ill.
- **Biased language** can offend or stereotype people without the speaker being aware of it. A man, for example, excludes women and non-binary people in his audience if he only uses 'he' when providing examples in case studies.

Case study – Maersk

At the end of 2021, the world's largest container shipping company, AP Moller-Maersk announced its most profitable quarter ever, and it was on course to deliver the highest profits of any Danish company in history.

However, not everything was running quite as smoothly internally. Maersk's attempt to rebrand itself from a container shipping company to a technology-led, end-to-end logistics provider was creating tensions.

A senior IT executive appeared to suggest that the ships that move 20 per cent of global trade were no longer at the heart of Maersk's mission. The group 'used to be an industrial company that had technology on [the] side', he said in an interview. 'Now it's a technology company where we have some physical devices we need to move around.'

A few other comments from the software engineer about the business of moving cargo ('It's about more than stuffing things into boxes and sailing them around the earth') sparked fury on social media.

'I am very sorry, but I will have to correct you,' wrote a veteran Maersk sea captain, who is also the employee representative on the board. 'But we are NOT a tech company who "happens" to operate ships,' he said on LinkedIn. The maritime business contributes 78 per cent of group revenue. Without the group's 12,000 seafarers, there would be no Maersk.

There is nothing unusual about tensions emerging when strategic changes are afoot. After a century of moving goods mainly by sea, Maersk is expanding into other modes of freight transport and connecting up the platforms digitally.

Increasingly, supply-chain logistics is about the flow and visibility of information, as well as the ability to quickly identify and resolve problems, no matter where on the Earth the goods are.

How Maersk deals with the tensions that arise from these changes could determine the success or failure of its transformation. 'It's not the strategy that is wrong,' said Lars Jensen, chief executive of shipping consultancy Vespucci Maritime and author of a book on the Danish group. 'It is more in the communication … How do you perceive yourself? What is the core business? Is it to move boxes or information?'

In 2017, a study by technology consultant Capgemini and digital analyst Brian Solis highlighted a sharp difference in perception about digital transformation between company executives and those on the ground.

Some 85 per cent of top executives believed their organizations promoted collaboration on digital transformation internally, but only 41 per cent of employees agreed. While 71 per cent of leaders said discussions about novel

business initiatives using new technology were open to all employees, only 41 per cent of those workers felt this was true.

Maersk's social media spat shows the findings are still relevant. 'The fact that this has boiled over into the public domain is genuinely very unusual at Maersk,' said Jensen. 'It should be a discussion that takes place internally. But I suspect there are people who feel they are not being heard.'

Navneet Kapoor, chief technology and information officer, insists the public debate is not a sign of a disconnect over the company's mission. 'At the leadership level … we take great pride in our legacy and the fact that we have a huge network of assets,' he told the *Financial Times*. That message appears to have been lost in transmission to the grassroots – whether to the crew of Maersk's 700 ships or to the digital side of the business.

Pretending these tensions do not exist would be foolish. But both sides have to adapt. Maersk's core business is neither technology nor shipping. It is both, and more. The only message that needs to be conveyed is that neither side on its own will shape Maersk's future. Nor will one prosper without the other.

1 Define the term 'formal communication'.
2 Define the term 'informal communication'.
3 Explain one barrier to communication that can be seen in this case study.
4 Recommend a suitable form of communication that Maersk could have used to communicate its strategy to rebrand from a container shipping company to a technology-led, end-to-end logistics provider to its employees.

Practice questions

1 Explain two factors that can act as barriers to communication in a business. (4 marks)
2 Using real world examples, examine one business scenario where formal and one business scenario where informal communication methods would be most suitable. (10 marks)

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2.7 Industrial/employee relations

Learning outcomes

At the end of this section, you will be able to:
- identify and explain sources of workplace conflict
- discuss approaches to conflict in the workplace from an employee perspective
- discuss approaches to conflict in the workplace from an employer perspective
- evaluate approaches to conflict resolution in the workplace.

Research and inquiry

How might consumers be impacted by workplace conflicts in an organization?

Sources of conflict in the workplace

Conflict in the workplace can arise for a multitude of reasons, but let's look at some of the primary causes.

Fear of the unknown and resistance to change

One of the common causes of conflicts in the workplace is the resistance that employees show to change, coupled with a fear of the unknown if a new management team has been brought in. Employees can get comfortable with familiar working practices, and changes in the work environment can result in confusion, denial, and workplace conflict between management and team members.

Poor work habits

Certain individual habits can be harmful to the harmony in the workplace and become a cause of conflict. These might be linked to arriving late, creating a messy environment, or things that may be harmless in intention, such as being extra diligent in checking work multiple times.

Unclear job expectations

As part of the induction process, employees should be made aware of their roles and responsibilities. If this doesn't happen, it can become difficult for a new employee to understand how to do their job effectively. Unclear job expectations are one of the most common causes of conflict in the workplace, and even existing employees may find themselves in this position.

Poor communication

The importance of clear communication was highlighted earlier in this unit. Employees need access to important information. However, businesses don't always get this right, and poor communication is a common cause of conflict in the workplace.

Personality differences

Organizations can be a melting pot of people with different backgrounds, cultures, preferences, experiences, temperaments, demographics, and capabilities working together. Although it is expected that employees will come together for the good of the organization, sometimes this is not possible, and the individual differences become so great that there is no longer any mutual respect among certain co-workers. This has a direct impact on workplace relationships.

Toxic work culture, abusive conduct, and bullying

These lead to unhappiness and negativity in the workplace. Abusive conduct or bullying can lead to serious repercussions if left unchecked.

Misunderstandings related to policies and practices

Policies and practices help an organization to run successfully. Too many, however, can mean they become difficult to remember and follow. If the policies or practices are too

complex, implementation by employees may be ineffective. Such misunderstandings can result in workplace conflict.

There are many reasons for conflict in the workplace

Approaches to conflict in the workplace

Having identified how conflicts may arise in the workplace, it is important to consider how employees and employers can approach conflict when faced with it.

Employee approaches to conflict

Collective bargaining

Collective bargaining is the official process by which representatives of trade unions negotiate with employers on behalf of their members with respect to employees' terms and conditions of employment. The idea is that more can be achieved by workers coming together collectively than by working alone to improve employee benefits and rights at work.

Collective bargaining between employers and trade unions can range from negotiations on specific matters arising daily within the workplace to extensive periodic negotiations on terms and conditions of employment affecting the whole workforce. Common issues pursued through this process include pay increases, and improved terms of employment and working conditions (such as working hours, holidays, pension contributions).

Work-to-rule

Work-to-rule is a form of protest in which employees do exactly what is stated in their contracts, and nothing more, in order to slow down productivity in the business. A work-to-rule is seen as a way to protest against low pay or bad working conditions. In addition to slowing down production, it indicates the end of an employee's goodwill. Goodwill is the gap between the minimum someone needs to

do to keep their job, and the maximum they will do if they are really excited about doing it. It is something that is completely at the discretion of the individual and often helps businesses to go that extra mile in the production of their goods or provision of their services.

Strike action

Strike action is a work stoppage caused by the mass refusal of employees to work. A strike usually takes place in response to employee grievances. Most strikes are undertaken as a last resort by labor unions during collective bargaining. A strike may consist of workers refusing to attend work or picketing outside the workplace to prevent or dissuade people from working in their place or conducting business with their employer.

Employer approaches to conflict

Threats of redundancies

Depending on the conflict that arises, an employer may issue a threat of redundancies to employees involved in the conflict. Redundancy is a form of dismissal. It happens when employers need to reduce their workforce as there is no longer any need for a job role. If redundancies do occur, employees might be eligible for redundancy pay, which the employer needs to factor into the costs of the decision.

Changes of contract

Ongoing conflicts may result in the employer moving to change the terms and conditions in employee contracts. The degree of change and ability to make the change will be governed by the employment law in that context. In most circumstances, an employer can't change a contract without consent. Even with a clause in employee contracts, employers must still talk about the changes they plan to make with each employee affected. If they don't do that and go ahead anyway, they risk breaching the contract, which can have legal consequences.

Lockouts

A lockout is a work stoppage or denial of employment through a temporary closure of the workplace initiated by the management of a company during a labor dispute. This tactic aims to hinder union organization or to gain leverage.

Closure

Closures differ from lockouts in that they result in the permanent closure of the business itself, not just a temporary workplace shutdown. This can be seen as the most severe reaction to a workplace conflict by the employer.

How might emotive language and faulty reasoning be used in collective bargaining situations?

TOK

Collective bargaining

Employers may decide to engage with the collective bargaining process by dealing with the employees' unions. This approach from employers engages with the workers over the conflict at hand. Some employers recognize the benefits that come from voluntary union recognition, such as being able to negotiate wages and other contractual terms and conditions collectively for large groups of workers at the same time. Most employers are also readily prepared to recognize the existence of a trade union where there is significant support among the workforce.

Approaches to conflict resolution

Conciliation and arbitration

Conciliation draws on a mediator to help facilitate negotiations during the conflict resolution process. Each party involved in the conflict is met by the independent mediator who helps to resolve their differences. The mediator will aim to encourage both parties to come to an agreement (not legally binding) that is mutually beneficial, often requiring a degree of compromise on the part of each side.

If the conflict situation is not resolved through conciliation, it can then move to arbitration. With arbitration, an independent arbitrator decides on the most appropriate outcome after reviewing the demands of both parties involved in the conflict. Unlike conciliation, the decision made by the independent arbitrator is legally binding.

While helping to avoid even costlier legal battles in court, conciliation and arbitration can still take a lot of time and money.

Employee participation and industrial democracy

Employee participation means that workers are given responsibilities and autonomy to do their jobs. By empowering employees, this provides a sense of ownership and a level of accountability in relation to their job role, helping to improve staff morale in the workplace. Industrial democracy is an arrangement that involves workers making decisions, and sharing responsibility and authority in the workplace. Workers are treated as responsible partners of an enterprise and are allowed to participate in the decision-making process through different methods. There are clear links here to motivation theory; Maslow and Herzberg would say this helps to improve staff morale and labor productivity (see Section 2.4 Motivation and demotivation).

Encouraging employee participation and industrial democracy should result in improved industrial relations in an organization. A sense of belonging is fostered, as teamwork and collaboration become the norm, meaning the employer benefits from a participative workforce who help toward problem solving.

However, there are some disadvantages for the employer to consider:

- Technology and organizations are complex: specialized work roles are required, making it difficult for people to participate successfully if they go very far beyond what they are familiar with.
- Issues can arise when workers make suggestions in areas that they do not know or do not have experience in.
- Employee participation can be used by management, unions, or experts to manipulate employees.
- Participation does not transfer to all cultural contexts. The feudalistic concept of the master and the servant is still prevalent in some cultures. Workers may have an innate feeling that they are born to serve and not to rule.
- Frustration can build among employees if their suggestions are not accepted by management.

No-strike agreement

A no-strike agreement is a provision in a collective bargaining contract in which the union promises that, during the life of the contract, the employees will not engage in strikes, slowdowns, or other job actions. A union often agrees to such a clause in exchange for some concessions on the part of the employer, such as a grievance arbitration process or resolving other matters of industrial unrest.

A no-strike agreement rules out aggressive approaches to settling disagreements, thus avoiding the problems associated with strikes for the employer, such as lost productivity. In addition, if union members disregard the agreement and go forward with strike action, the employer then has the legal right to discipline or even dismiss employees.

A key disadvantage for the employer is that to seal the no-strike agreement, they must compromise on some of the union's demands. Such compromises could come at a high cost to the employer.

Single-union agreement

A single-union agreement describes the arrangement between a company and its employees that states that the company will discuss pay, working conditions, and so on, with one main trade union.

Some companies have multiple unions dealing with different employees within it. Each union competes with other unions for their group's employment rights and for improvements to working conditions and pay. As such, there is a lot of competition that leaves the management unwilling to cooperate with any union group. The advantage for the employer of single-union agreement is increased clarity and efficiency in negotiations, as one union represents all interests, which prevents conflicting goals from multiple unions at the negotiating table.

Case study – Italian unions sign a collective bargaining agreement with Amazon

In May 2022, facilitated by worker activism, unions in Italy signed a collective bargaining agreement with Amazon.

Amazon, one of the largest companies in the world, has reportedly 'long discouraged staff from organizing,' and, according to one source, it allegedly refuses 'in principle to recognize trade unions as collective representatives of workers' interests'. However, in Italy, Amazon signed agreements that recognize unions as the workers' representatives, set company-specific requirements for hours and worker protections, and oblige the firm to comply with relevant sectoral agreements that set minimum compensation and other standards for entire industries. Moreover, the contracts cover direct employees of Amazon and also temporary workers and those who make the 'last-mile' delivery (often other firms or independent contractors).

Workers secured recognition of their unions as well as significant improvements in pay and working conditions for direct employees and indirect workers. Despite significant efforts, Amazon workers in other countries have not achieved anything close to that of Italian workers and their unions.

Three factors were critical in enabling Italian unions to sign a collective bargaining agreement with Amazon.

Pressure from workers

Amazon workers in Italy conducted a 24-hour strike seeking recognition of their unions and to secure a collective bargaining agreement with the company. The strike included workers throughout Amazon's Italian delivery chain – including warehouse workers, drivers, and contractors – and was much bigger and broader than previous Italian strikes against Amazon. Union leaders said that about 70 to 75 per cent of direct employees working in warehouses and delivery went on strike, as did about 25 to 30 per cent of temporary workers. The strike significantly disrupted Amazon's operations and delayed deliveries.

Supportive policy environment

Italian Minister of Labor Andrea Orlando intervened and summoned Amazon and the unions for discussions. The minister did not directly negotiate, but rather offered a place for the negotiations and encouraged them. The minister wanted the parties to come to an agreement and apparently pushed them to do so. As Orlando stated after the September 2021 agreement was finalized, 'I express great satisfaction with the agreement signed today … It is good news, desired and urged by the Ministry.'

Sectoral bargaining system

The Italian sectoral system means industry-wide compensation applies to all workers in that sector. The sectoral agreements put pressure on Amazon while making it less costly for the company to sign an agreement. Amazon aims to portray itself as an important community actor in Italy, promoting needed jobs in impoverished communities as well as academic scholarships, yet failing to comply with required sectoral standards made its reputation vulnerable. In the Italian system, collective bargaining coverage is the norm, and Amazon stuck out as an outlier by not complying with the sectoral agreement.

1 Define the term 'collective bargaining'.
2 Describe two reasons why Amazon may be reluctant to recognize the role of trade unions.
3 Explain one advantage and one disadvantage of collective bargaining for Amazon workers in Italy.

Practice questions

1 Explain two sources of conflict that can arise in a business setting. (4 marks)
2 Using real world examples, analyze the impact of employees taking strike action on a business. (6 marks)
3 To what extent is it in the best interests of a business to encourage employee participation in helping to resolve a conflict? (10 marks)

Summary

In this unit, you have learned:

- Human resource management plays an essential role in the modern business environment.
- Organizational structures define how employees are coordinated and communicated with in a business setting.
- Managers plan, make decisions, organize, lead, monitor, and evaluate.
- Leaders motivate people to understand and believe in a company's vision and to work on achieving the company's goals.
- Businesses encourage employees to work productively through motivation.
- Organizational culture is the shared beliefs, meanings, and values held by its leaders, managers, and employees, and it is key to an organization's success.
- Clear and timely communication is crucial in ensuring a well-run and efficient business operation.
- Conflicts arise in the workplace for a wide variety of reasons, and employees and employers can use different approaches to resolving those conflicts.

UNIT 3

Finance and accounts

Conceptual understandings

- **Change** in the business structure can impact a business' financial resources.
- **Creativity** in financial reporting can have diverse impacts in a business.
- **Ethical** financial and accounting practices can be a form of **sustainable** business behavior.

3.1 Introduction to finance

Learning outcomes

At the end of this section, you will be able to:

- explain the role of finance in business
- distinguish between capital and revenue expenditure.

Inquiry questions

These are questions based on themes within this unit that you could conduct some independent research about. You could explore:

- How can cost and revenue management ensure sustainability?
- Why could final accounts analysis be essential in changing stakeholder perspectives?
- Why might profitable businesses face insolvency?
- How can time value of money affect future consumer choice?
- How can triple bottom line accounting support the shift toward more ethical business practices?

The triple bottom line (also known as TBL or 3BL) is a framework with three key parts: social, environmental (or ecological), and financial. Some organizations have adopted the triple bottom line framework to evaluate their performance on a broader perspective to create greater organizational value.

The triple bottom line refers to the following three 'pillars'.

- People (social): where an organization practices fair and equitable treatment of its employees and other internal and external stakeholders.
- Planet (environmental): a firm's commitment to minimize the environmental impact of its business operations.
- Profit (financial): which is achievable without comprising any of the previous pillars. Profit is the reward for successful entrepreneurial activity, but any social or environmental negative impacts should be included when reporting profitability.

While many businesses no longer measure their success by profit alone, money plays a key role in overall business activity. **Finance** or funding needs to be obtained and managed carefully to meet the needs of society in a sustainable manner.

Finance is about businesses obtaining the money needed to help them buy or do something for a particular purpose. For example, a coffee shop may need to raise money to buy an espresso machine to make its coffee products. The different types of expenditures (or payments) and different ways a business can fund its activity will be the focus during the first part of this unit.

Later in the unit, we will expand our understanding of finance to look at how businesses manage their money. We will explore the different ways in which businesses record and analyze their financial situation, and how financial tools and techniques can be used to help make managerial decisions.

First, we will look at the two main categories of expenditures for a business: capital expenditure and revenue expenditure.

Capital expenditure

Capital expenditure is the spending by a business on any long-term or non-current assets (assets that are used for more than one year), like buildings, machinery, and equipment. For example, many businesses purchase office equipment and technology

A coffee shop needs to purchase specialized equipment

like computers or phones for their managers and employees. These purchases are all examples of a capital expenditure.

Capital expenditures will be discussed in more detail in the following sections:

- 3.2 Sources of finance: Businesses can use various internal and external sources of finance for capital expenditures.
- 3.4 Final accounts: The value of non-current assets and the ways they are funded are captured on the balance sheet.
- HL 3.6 Efficiency ratio analysis: Debt/equity ratios compare how much debt is used with the amount of equity for capital expenditures.
- 3.7 Cash flow: A cash flow forecast can help managers determine how much capital is needed for the upcoming period.
- 3.8 Investment appraisal: Different investment appraisal techniques can be used to evaluate capital expenditures and options.

Revenue expenditure

Revenue expenditure is the money spent by a business to generate revenue. Revenue expenditure refers to the ongoing expenses for purchasing raw materials, paying wages, employing sales staff, and so on to generate revenue within the accounting period (12 months). The purchase of stock (or inventory) and paying wages and salaries are examples of revenue expenditures. Revenue expenditures are also called operating expenses and consist of any short-term expenses that are used to run the day-to-day business operations. Any purchases by the business that are not for capital items are considered revenue expenditures.

Revenue expenditures will be explored in more depth in the following sections:

- 3.2 Sources of finance: Some sources of finance, such as overdrafts and trade credit, can be used to help pay for more short-term revenue expenditures.
- 3.3 Costs and revenues: Revenue expenditures can be categorized into fixed and variable, and direct and indirect.

- 3.4 Final accounts: The profit and loss account shows revenue expenditures over a given period of time.
- 3.5 Profitability and liquidity ratio analysis: Profit margins are one way for businesses to analyze how much of the revenue being generated is turned into profit.
- 3.7 Cash flow: The timing and amount of future revenue expenditures paid in cash are estimated on cash flow forecasts.
- 3.9 Budgets: The amounts of future revenue expenditures are set within the budget.

Practice questions

With reference to an organization of your choice, distinguish between capital expenditure and revenue expenditure. (4 marks)

3.2 Sources of finance

Learning outcomes

At the end of this section, you will be able to:

- explain the following internal sources of finance:
  - personal funds (for sole traders)
  - retained profit
  - sale of assets
- explain the following external sources of finance:
  - share capital
  - loan capital
  - overdrafts
  - trade credit
  - crowdfunding
  - leasing
  - microfinance providers
  - business angels
- recommend appropriate short- or long-term sources of finance for a given situation.

Whether a business is small or large, just starting up, or looking to expand, all businesses must pay for their expenses. The first step in choosing the right source of funds is to learn about the options.

Sources of finance can be split into two main categories: internal and external.

Internal sources of finance

Internal sources of finance rely on funds available within and generated by the business. These include:

- personal funds
- retained profit
- sale of assets.

Personal funds

Many entrepreneurs start their business with their own money (**personal funds**). They see a business opportunity and are so passionate about their business idea that they are willing to invest their own savings. This source of finance tends to be shorter term because most entrepreneurs have a limited amount of funds available. As an entrepreneur and their business become more successful, they often look to other external sources of finance like loan capital or investors.

Retained profit

Profitable businesses can choose to use their retained profit from previous periods for future expansion. Retained profit is the money left after all expenses including dividends and taxes are paid out. Exactly how this is calculated will be made clear in Section 3.4. Businesses that enjoy large, consistent profits can use this type of funding for bigger, longer-term capital expenditures, while others may have only limited retained profits available, if any at all.

Sale of assets

Businesses can sell assets. This can include selling buildings or machines that are no longer used. This is usually more appropriate for older, more established businesses, as new businesses have few assets to sell. Although finding a buyer can be challenging, this source of finance can be a clever way for a business to raise cash.

Advantages and disadvantages of internal sources of finance

The main advantage of internal sources of finance is that the business owners maintain full control and direction of the organization. Moreover, there are no interest payments or borrowing costs, and no external application or process is required.

The main disadvantage is that these sources of finance are often limited, meaning they are not usually sufficient for long-term needs, expensive capital expenditures, and ambitious expansion plans. For organizations to pursue these goals, external sources of finance are often required.

External sources of finance

External sources of finance rely on outside organizations or individuals to help obtain the required funds. These include:

- share capital
- loan capital
- overdrafts
- trade credit
- crowdfunding
- leasing
- microfinance providers
- business angels.

Share capital

Funds acquired through the sale of shares are called **share capital**, also known as equity capital. Both privately held and publicly held companies issue shares providing ownership of the company to investors. As discussed in Unit 1, companies have shareholders, but sole traders and partnerships do not. Large amounts of money

can be raised through share capital, especially for publicly held companies, making it a popular choice for expensive capital expenditures and expansive growth. Share capital is a permanent source of finance because it does not need to be repaid. There are no interest payments for this source of finance, but dividends may be paid to shareholders and the application process for publicly held companies can be costly and time-consuming. The major disadvantage of share capital is that selling shares means dilution of control and ownership of the business.

Companies can issue shares to raise funds from investors

Loan capital

Loan capital, also known as debt capital, is another way for businesses to obtain a large amount of funds. However, unlike share capital, loan capital needs to be repaid. Loan capital consists of borrowing funds from financial institutions (such as banks), and paying the loan back with interest through installment payments over an agreed period. The amount of interest charged can be fixed or variable depending on the arrangement. Making these loan payments can be difficult, but an important advantage is that the owners retain control of the organization when using loan capital. Loans can be difficult for new businesses to obtain as lenders often require collateral and a detailed business plan including a history or detailed forecast of reliable income. Without this, the lender will see the investment as too risky and either deny the loan or charge high interest rates. In some areas, governments offer loans to small businesses to grow the economy.

Overdrafts

In addition to loan capital, financial institutions can provide **overdrafts** to any type of business (and individuals). These are a form of short-term finance to cover any cash deficits up to an agreed amount. Banks often charge high interest rates for overdrafts, making this a costly option and not suitable for long-term or large expenditures. However, the flexibility and convenience of overdrafts can help businesses meet their day-to-day financial obligations.

TOK

Are objective facts or appeals to emotion more effective when applying for an external source of finance?

Trade credit

Trade credit is an important short-term finance option available to all businesses. Rather than paying for goods and/or services immediately with cash, businesses often purchase on credit, negotiating the terms of payment. Discounts can be offered for quicker payment, but businesses usually agree to make a payment within 30, 45, 60, or even 90 days. Although this is not a way for a business to bring in money, the extra time gained from using trade credit can allow businesses to sell their products before they have to pay for the raw materials. However, any delay in paying back creditors as agreed will put the good relationships between the business and its trade creditors (often suppliers of materials) at risk.

Crowdfunding

Crowdfunding (short- to medium-term) is a relatively new way of raising finance. Crowdfunding usually relies on websites and social media to attract a large number of people to each contribute a small amount of money. Recently, some countries have allowed companies to participate in equity or regulation crowdfunding, where investors receive percentage ownership in the company based on the amount of their investment. Other types of crowdfunding are more suitable for small and medium-sized enterprises and include:

- donation-based, where investors donate to social enterprises that share their own interests
- rewards-based, where investors contribute funds with the expectation of being one of the first customers to receive a new product
- profit or revenue-sharing, where investors contribute funds in exchange for a share of future profits or revenue
- debt or peer-to-peer crowdfunding, where investors contribute funds in exchange for repayment at a later date with interest.

Although some organizations have raised millions using crowdfunding, and some analysts project future growth and evolution, this source of finance was originally intended for business start-ups and entrepreneurs.

Leasing

Rather than purchasing an asset (such as a building or machinery), businesses can use **leasing** as a source of finance. Leasing means the business (lessee) will never own the asset, but will make payments to the the asset owner (lessor) over an agreed period of time in order to use the asset. The lessor remains the owner throughout the duration of the lease and regains full use of the asset when the agreement ends. Some leases can be packaged with other services, like maintenance. One major disadvantage of leasing rather than buying is that the asset is not recorded as a fixed asset on the balance sheet. This means the business cannot use it as collateral for other sources of finance like loan capital. Leasing is not a way to bring in money. However, if a business plans to use the asset for a short period of time, leasing can save the organization money.

Microfinance providers

As with crowdfunding, **microfinance providers** contribute small amounts of capital for small businesses and entrepreneurs. Microfinance providers operate much like a bank and focus on providing initial capital to help entrepreneurs who might otherwise not be able to get any finance (such as organizations or entrepreneurs that

Online resources

Indiegogo and Kickstarter are two of the more popular crowdfunding websites for businesses.

Online resources

To learn more about the Grameen Foundation, visit the link below.

lack collateral). Professor Muhammad Yunus is largely credited for inventing this idea to help people escape poverty and empower women. In 2006, Yunus and Grameen Bank were awarded the Nobel Peace Prize for their work. Microfinance providers often operate in developing countries, and many provide basic financial literacy to help the entrepreneur succeed.

Business angels

Business angels target small and medium-sized enterprises. Business angels are wealthy groups or individuals who wish to invest in a profitable privately-owned business in exchange for partial ownership. Angel investors often focus on start-ups or businesses in the early stages of high growth. In contrast to loans, businesses do not have to make monthly repayments or interest payments under this arrangement. Instead, the angel investor receives partial ownership in the business in exchange for funding. This does mean some dilution of control and ownership. However, many business angels also offer their business skills and expertise to start-ups that do not have as much experience.

The most appropriate source of finance

Determining the most appropriate source of finance for a given situation can be challenging. There is no single, correct answer, and the best solution is often to combine several sources of finance. That way, businesses can minimize the disadvantages and maximize the advantages of each source of finance. There are a variety of factors to consider when choosing sources of finance.

Businesses often need to combine several sources of finance

Type and size of the business

Some funding options are appropriate for certain types of organization and inappropriate for others. For example, personal funds and microfinance providers are only appropriate for sole traders and partnerships. Similarly, share capital is only appropriate for privately and publicly held companies. In addition, business angels favor smaller businesses and are not appropriate for publicly held companies.

Table 3.1 Sources of finance by type of organization

	Sole traders	Partnerships	Privately held companies	Publicly held companies
Personal funds	✓	✓		
Share capital			✓	✓
Microfinance providers	✓	✓		
Business angels	✓	✓	✓	

Other finance options can be suitable for any type of business. However, larger, more established organizations usually find it easier to secure sources of finance like loan capital due to the large number of resources and assets available to them. Smaller organizations have fewer assets to offer as collateral and usually cannot provide the same level of security to investors and lenders.

The sources of finance used by social enterprises and non-profit organizations can also vary. For example, charities rely purely on grants, donations, and endowment. Other social enterprises, especially for-profit social enterprises, may utilize many of the sources of finances discussed above.

Type and amount of expenditure

Expenditures can range from basic raw materials needed for production in the short term (smaller, revenue expenditures) to larger, capital expenditures needed in the long term like machinery or an office building. Figure 3.1 shows the external sources of finance that are suitable for different types of expenditures.

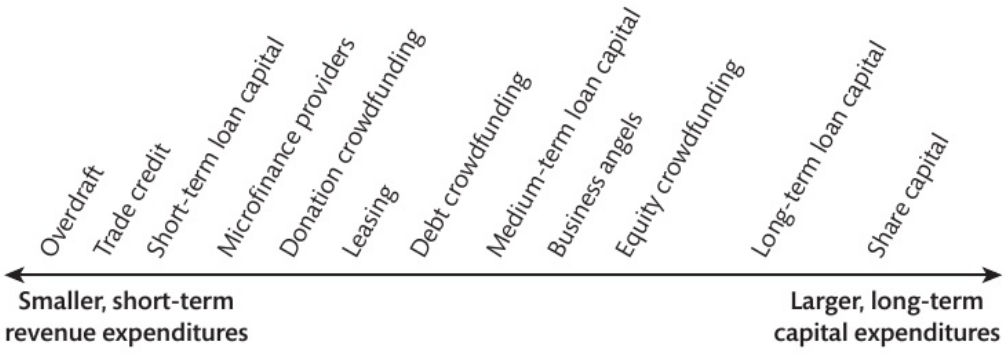


Figure 3.1 Short- and long-term sources of finance

Other considerations include the following:

- The amount of risk involved: Short-term finance is usually less risky for lenders and easier to obtain. Long-term finance takes longer to pay back and is generally riskier for lenders. Therefore, some organizations, especially smaller ones with fewer assets to offer as collateral, will have more difficulty securing this type of funding.
- How quickly the funds are needed: Some businesses may need to acquire funds quickly to survive, while their other needs are less immediate. Personal savings and internal sources of finance are usually the quickest, whereas external sources of finance like share capital can take time to set up and acquire.

IB learner profile

Inquirers

Research the sources of finance available for a local business.

Every source of finance has some cost to it. The most obvious example is the amount of interest charged when securing a loan. However, even donation crowdfunding has a cost in the amount of time and effort required to set it up and attract investors.

Activity

Discuss appropriate sources of finance for the following business opportunities.

1. A social entrepreneur wants to start an online tutoring business. The school year is about to begin, and the entrepreneur will need to purchase computer equipment, software, and peripherals.
2. A large, multinational company is nearing capacity and wants to open an additional production facility overseas.
3. A profitable food delivery service is looking to purchase a fleet of electric bikes to improve efficiency for its local customers. Currently, it uses two small vans.
4. A privately-owned company operates several parking garages across the country. The company is considering installing solar canopies over the parking spaces. It will be expensive to install these solar canopies, but they could generate significant revenue in the future. The company would be able to sell the power generated by the solar canopies to local energy companies and charge higher prices for covered parking spaces.

Practice questions

With reference to an organization of your choice, distinguish between share capital and loan capital. (4 marks)

3.3 Costs and revenues

Learning outcomes

At the end of this section, you will be able to:

- define, identify, distinguish, and explain the following types of costs:
  - fixed
  - variable
  - direct
  - indirect/overhead
- define, identify, and explain total revenue and revenue streams, using examples.

Now we turn our attention to the costs and revenues of a business. Developing a clear understanding of these quantitative measures helps managers to plan and control the direction of the business, and helps in decision-making. In addition, information about the costs and revenues of a business is needed to calculate profit and prepare final accounts, which will be covered in the next section.

Fixed and variable costs

The first way businesses classify costs is whether they change or do not change in relation to the level of output (the number of units produced).

Fixed costs do not change in the short term. These costs stay the same regardless of any change in the level of production, output, or sales during the relevant period. They remain the same whether a business makes or sells one item or 1,000 items. Most costs change (in the long term) depending on the level of output. For example, if a business continues to increase their sales, then additional equipment and/or employees will be needed. Some examples of fixed costs include rent, equipment leases, marketing/advertising, administrative expenses, loan/interest payments, business licenses, insurance, and salaries. Fixed costs are shown in Figure 3.2.

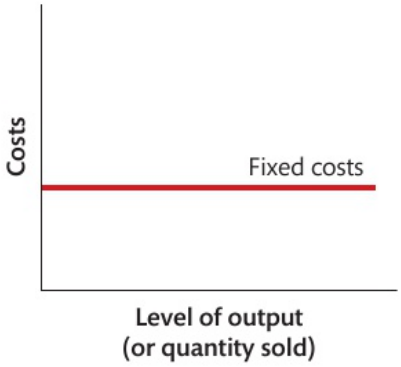


Figure 3.2 Fixed costs

Rent on a manufacturing facility is an example of a fixed cost

Variable costs vary in direct proportion to the change in output/level of production or sales during the relevant period. The raw materials needed to make a product are an example of a variable cost. The amount of raw materials needed depends on how many units a business produces. For example, if a furniture maker increases their production, then more material like wood will need to be purchased. Other examples of variable costs include utilities, transportation, materials, delivery, and royalties. Figure 3.3 shows variable costs.

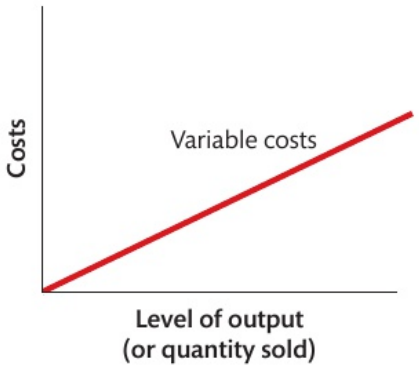
i

Software companies like Microsoft usually have higher fixed costs versus variable costs, as their costs do not change much when the level of sales changes. In contrast, a retail firm like Aldi has high variable costs versus fixed costs due to the high cost of sales.

What does this mean? Any short-term downturns in revenue would affect organizations like Microsoft more, as they would still need to pay their high fixed costs. It also means that software companies have the potential for higher profits in times of economic growth, as increased sales would not necessarily mean a large increase in costs.

This type of cost analysis was very important for many organizations during the COVID-19 pandemic. As the economy slowed during lockdowns, organizations with high fixed costs suffered greatly.

Figure 3.3 Variable costs

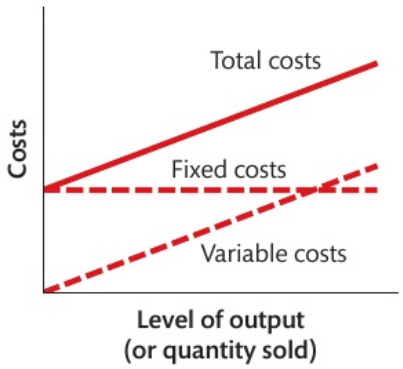


Transportation is an example of a variable cost

Typically, the salaries of full-time staff are fixed costs, as this expense cannot be identified directly with the production levels or sales of a business. However, salary can be based on commissions or performance-related pay, so could be seen as semi-variable. Employees working on the production line, especially those paid an hourly or per unit wage, are typically considered variable costs.

Fixed and variable costs can be combined to indicate total costs when applying break-even analysis. This is shown in Figure 3.4 and will be explained in more detail in Unit 5.

Figure 3.4 The total costs line does not start at the origin because of the fixed costs



Direct and indirect costs

Another way businesses can classify costs is in terms of how they relate to the goods or services being produced and sold.

Direct costs directly relate to the production of goods and can be traced to a specific cost object, which may be a product, a service, or a department. Some examples include packaging and raw materials. These costs are included in gross profit calculations.

Many direct costs are variable costs, but this is not always the case. Some fixed costs such as rent being paid for a production facility are considered a direct cost.

Indirect or **overhead costs** cannot be linked directly to a specific product, service, or department. Some examples include management salaries and rent paid for multi-purpose facilities. These costs are excluded from gross profit calculations but included in net profit calculations. Many indirect costs are fixed costs, but not all. For example, utilities (such as gas, electricity, and water) are variable costs as they change depending on the level of output. They are considered indirect costs as they cannot usually be directly linked to specific goods or services.

Activity

1 Are the following fixed or variable costs?
   a. Lease payments
   b. Packaging
   c. Raw materials
   d. Insurance
   e. Administrative salaries for managers
   f. Workers' hourly wages

2 Are the following direct or indirect costs?
   a. Packaging
   b. Raw materials
   c. Royalties
   d. Rent for general office
   e. Utilities

Revenue

Money going out of a business is considered costs or expenses, whereas money coming into the business from sales is considered **revenue**. There are many different terms used to describe revenue (including sales, sales revenue, and sales turnover). All these terms represent income being generated by the main operations of a business from the sale of goods or services.

Revenue can be earned through cash or credit transactions and is recorded on the date the item was sold. Revenue is shown as the top item in a profit and loss statement from which all costs and expenses are subtracted to arrive at gross and net profit.

A simple formula used to describe revenue is:

$$\text{Revenue} = \text{price} \times \text{quantity sold}$$

For example, if a chocolate shop sells 50 bars of chocolate for £3.00 each, then the revenue earned from those sales will be £150 (£3.00 × 50).

Revenue is shown in Figure 3.5 and will be explained in more detail in Unit 5.

Comparing Figure 3.5 to Figure 3.4 yields some key observations:

- The total revenue graph starts from the origin (at zero), because if the business does not sell any items, then there will be no revenue. The total cost graph does not start from the origin because of fixed costs.
- The gradient (slope or steepness) of the total revenue line is determined by the price. A business needs to make sure that the average price of its products exceeds the variable cost per unit in order to make a profit. Profit is the total revenue minus total costs.

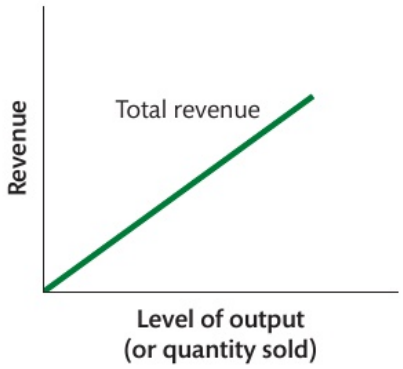


Figure 3.5 The total revenue line starts from the origin because with no sale of items, there will be no revenue

Organizations often sell multiple products at different prices, but this simple formula and the graph are important to understanding revenue, and they will be used again in Unit 5.

Businesses may also receive income from activities and sources not considered their main operation. This would be considered non-operating income and not revenue. Examples of this type of income may include:

- interest received from financial institutions
- one-time exceptional gains from the sale of fixed assets.

Revenue streams refer to the different sources of sales revenue that firms may have in terms of the number of customers, the number of products being sold, and the number of markets in which they operate. Often, as firms grow, they attempt to diversify revenue streams to find sales growth in saturated markets or to offset risk. If sales revenue from one revenue stream decreases, it can be offset by sales growth in another revenue stream.

This section provides an introduction to important terminology regarding costs and revenues. Costs and revenues will be explored further in Unit 4 and Unit 5.

Practice questions

Describe two examples of revenue streams for an organization of your choice.
(4 marks)

3.4 Final accounts

Learning outcomes

At the end of this section, you will be able to:

- explain the purpose of accounts to different stakeholders
- prepare and analyze final accounts:
  - profit and loss account
  - balance sheet
- explain the different types of intangible assets
- HL calculate and analyze depreciation using the following methods:
  - straight line method
  - units of production method
- HL evaluate the appropriateness of each depreciation method.

The final accounts

To capture the quantitative aspects of business activity, financial transactions are recorded by businesses according to accounting principles. Although we discuss some of these accounting principles in general terms throughout this book, the focus of this section is on the **final accounts** or statements that emerge from the recording of these financial transactions. Specifically, we will focus on two final accounts:

- profit and loss account
- balance sheet.

The **profit and loss account** (also known as the income statement or statement of profit or loss) is concerned with the financial performance of an organization and displays the income and expenses over a defined period (usually one year).

The **balance sheet** (also known as the statement of financial position) provides the financial position of an organization by displaying its assets, liabilities, and equity at a certain point in time (on a specific date). These are usually published on an annual basis to align with the company's fiscal year.

The purpose of final accounts

As discussed in Unit 1, publicly held and privately held companies are required by law to produce final accounts. Publicly held companies publish theirs, while privately held companies file theirs with the registrar for companies.

Sole traders and partnerships are not required to prepare final accounts, as they have unlimited liability (the owners of sole traders and partnerships do not have separate legal identities from their businesses). Owners of sole traders and partnerships are required by law to file their annual individual income statement for the purpose of paying income taxes.

Publicly held companies must produce and publish final accounts. These final accounts are published within their annual reports to give key stakeholders the ability to assess the financial performance and position of the organization. Privately held companies like sole traders and partnerships often prepare these final accounts, but they are not required to share them publicly.

Non-profit organizations also prepare final accounts. The format of these differs from those of for-profit organizations and will be discussed later in this unit.

The main purpose of final accounts is to aid the decision-making of different stakeholders, which include the following:

- **Existing and potential investors** need to determine where to invest their money so they can maximize their return on their investment. Investors can assess their investment risk and return by analyzing the final accounts. Owners can assess the stewardship of management to determine whether changes are needed.
- **Existing and potential lenders** need to make lending decisions, such as who to lend to and the terms of the agreement (interest rate, length of contract, etc.). Lenders want to ensure the loan will be repaid with interest. The final accounts can be used to assess the lending risk.

Investors and lenders assess the final accounts of businesses

- **Existing and potential creditors** want to make sure that they will receive payment from their clients. The final accounts can be used to assess their credit risk.
- **Managers** can use the final accounts to measure the performance of the organization and make informed decisions about its direction. Although more timely information is usually available through informal financial reports, the final accounts are a key resource for managers.
- **Government** regulators and organizations like national stock exchanges require final accounts to be published to provide transparency and protect the public. Governments rely on these accounts to calculate and gather taxes.
- The public and the local **community** can use the final accounts and annual reports to monitor the actions of organizations, assessing their economic and environmental impact on the community.
- **Competitors** can use the final accounts to compare their performance with similar organizations, providing insight and direction on future decisions.

Final accounts have some limitations, and the usefulness of final accounts to any stakeholder depends on several factors. These factors include the relevance, faithful representation, comparability, accuracy, timeliness, and understandability of the accounts. For example, businesses operate in a dynamic environment. Final accounts quickly become historical documents and may not accurately capture the current financial situation of a business.

TOK

Do financial statements reflect the 'truth' about a business?

Does the accounting process allow for creativity?

How certain is the information we get from financial statements? For example, can we know in advance if an investment will be successful?

What is the role of interpretation in accounting? For example, can we compare businesses by just looking at their financial statements?

Statement of profit or loss

The statement of profit or loss (also known as the profit and loss account or income statement) can be thought of as a video that captures the financial performance of a business over a given period (quarterly, semi-annually, or annually).

The title of the profit and loss account will describe the time period. For example, the title might include 'For the year ended December 31, 2022'.

The statement of profit and loss shows a company's financial performance over a certain period of time

Starting with the income received from the company's main operations, deductions are made to generate different measures of profit (for example, gross profit, net profit, and retained profit). The profit and loss account captures any revenue expenditures, which are short-term costs like the purchase of raw materials or repairs to assets.

IB learner profile

Balanced

Explain the limitations of quantitative information and the importance of considering different stakeholder perspectives when analyzing final accounts.

The format of the profit and loss account varies from country to country, and from company to company. When profit and loss accounts are given in case studies or examination questions, they will be in the format shown in the Subject Guide and Figure 3.6. The main sections of the profit and loss account are numbered in Figure 3.6 and explained below.

ABC Ltd
Statement of profit or loss
for the year ended 31 December 20XX (1)

	$m
Sales revenue	1,500
Cost of sales	(500)
Gross profit (2)	1,000
Expenses	(300)
Profit before interest and tax (3)	700
Interest	(100)
Profit before tax (4)	600
Tax	(200)
Profit for period (5)	400
Dividends	(150)
Retained profit	250

Figure 3.6 Statement of profit or loss for a profit-making entity

1 Title

Every final account must have a title that includes the business name, the name of the statement, and the time period. In addition, the currency and scale of the amounts need to be provided. In this case, the amounts are in millions of dollars.

2 Gross profit

The profit and loss account starts with sales revenue. This is the total income generated from the sales of goods or services associated with the main operations of an organization. The cost of sales (or cost of goods sold) is the money spent on raw materials, manufacturing, and/or acquiring the goods it sells. For a service business, it is the money spent on supplying those services. Gross profit is calculated by subtracting the cost of sales from the sales revenue.

3 Profit before interest and tax

Expenses (indirect costs or overheads) are subtracted from the gross profit to get the profit before interest and tax. This amount is used to calculate the net profit margin and return on capital employed (see Section 3.5 Profitability and liquidity ratio analysis).

4 Profit before tax

This profit line subtracts any interest expense to get profit before tax. This is the amount used to calculate the tax owed for a given period. In Figure 3.6, the organization is taxed at a rate of 33.3 per cent ($600m × 33.3% = $200m).

5 Profit for period

Taxes are deducted, and the result is the profit for the period. This profit is then allocated as dividends (payments made to shareholders) or retained profit (money

used to grow the business). Note that the retained profit amount in the profit and loss account is only for the period indicated on the statement of profit and loss. This amount gets carried over to the balance sheet (the statement of financial position), which will be explained later in this unit.

Statement of profit or loss (non-profit entity)

Non-profit entities can also prepare a statement of profit or loss. Statements of profit and loss will be in the format shown in Figure 3.7 in case studies or examination questions. The main difference is that non-profit organizations use the terms surplus and deficit instead of profit and loss. Since non-profit entities do not have owners/shareholders, there are no dividends to be paid. Instead, the surplus for the period is invested back into the organization as retained surplus. Non-profit entities are often exempt from taxes, which is reflected in their statement of profit or loss.

Figure 3.7 Statement of profit or loss for a non-profit entity

ABC
Statement of profit or loss
for the year ended 31 December 20XX

	$m
Sales revenue	1,500
Cost of sales	(500)
Gross surplus	1,000
Expenses	(300)
Surplus before interest	700
Interest	(100)
Surplus before tax	600
Tax	0
Surplus for period	600
Retained surplus	600

Statement of financial position

While the statement of profit or loss can be thought of as a video that captures the financial performance of a business, the statement of financial position (also known as the balance sheet) is a snapshot of the financial position of a business at a given point in time.

The title of the balance sheet will include a certain date, for example, 'As at December 31, 2022'. The balance sheet shows what the business owns (assets), what it owes (liabilities), and how it is funded (for example, equity).

Assets are acquired through capital expenditures using one or more sources of finance (for example, share capital, loan capital, retained profit). These capital expenditures are captured within the different line items of the balance sheet.

The format of the balance sheet varies from country to country, even from company to company. When balance sheets are given in case studies or examination questions, they will in the format shown in the Subject Guide and Figure 3.8.

ABC Ltd
Statement of financial position (1)
as at 31 December 20XX

	$m	$m
Non-current assets (2)		
Property, plant, and equipment	900	
Accumulated depreciation	(100)	
Non-current assets		800
Current assets (3)		
Cash	600	
Debtors	400	
Stock	100	
Current assets		1,100
Total assets (4)		1,900
Current liabilities (5)		
Bank overdraft	200	
Trade creditors	100	
Other short-term loans	200	
Current liabilities		500
Non-current liabilities (6)		
Borrowings — long term	300	
Non-current liabilities		300
Total liabilities (7)		800
Net assets (8)		1,100
Equity (9)		
Share capital	100	
Retained earnings	1,000	
Total equity		1,100

Figure 3.8 Statement of financial position for a profit-making entity

The key sections of the balance sheet are numbered in Figure 3.8 and explained below.

1 Title

The balance sheet must have a title that includes the business name, the name of the statement, and the date. In addition, the currency and scale of the amounts need to be given. In this case, the amounts are in millions of dollars.

2 Non-current assets

These are assets (items owned by the business) that will be used by the business for more than a year. Examples include buildings, land, and machines. Non-current assets can also be called fixed assets. The accumulated depreciation expenses are deducted to provide an accurate value of these assets. Depreciation will be explained in more detail later in this unit.

3 Current assets

These are assets (items owned by the business) that will be used up or converted into cash within a year. Examples include cash, debtors (accounts receivable), and stock (inventory). Cash includes money received from sales which is held by the business or deposited into the business' bank account. Debtors is the amount of money owed to the business by customers from purchases made on trade credit. Stock (or inventory) is the value of all of the raw materials, unfinished goods, and finished goods in the possession of the business.

4 Total assets

The total value of all items owned by the business (total assets) is equal to the sum of non-current assets and current assets.

5 Current liabilities

Current liabilities are all the debts or other payables due within one year. Examples include bank overdrafts, creditors, and other short-term loans. Creditors is the amount of money owed to suppliers due to purchases made on trade credit.

6 Non-current liabilities

These are all the debts or other payables that are not due until after one year. Non-current liabilities can also be called long-term liabilities. Examples include long-term bank loans.

7 Total liabilities

The total value of all items owed by the business (total liabilities) is equal to the sum of non-current liabilities and current liabilities.

8 Net assets

Net assets are equal to total assets minus total liabilities.

9 Equity

This is the value of the business that is the property of its shareholders. It is calculated by total assets minus total liabilities. The total equity amount must be equal to (that is, balance with) the net assets. The retained profits shown in the profit and loss account get carried over into the retained earnings. The retained earnings shown on the balance sheet represents the accumulated retained profits from previous profit and loss accounts.

Statement of financial position (non-profit entity)

Non-profit entities can also prepare a balance sheet. Balance sheets will be in the format shown in Figure 3.9 in case studies or examination questions. The main difference in this balance sheet is that non-profit entities do not have owners/shareholders and therefore do not have share capital.

ABC
Statement of financial position
as at 31 December 20XX

	$m	$m
Non-current assets		
Property, plant, and equipment	900	
Accumulated depreciation	(100)	
Non-current assets		800
Current assets		
Cash	600	
Debtors	400	
Stock	100	
Current assets		1,100
Total assets		1,900
Current liabilities		
Bank overdraft	200	
Trade creditors	100	
Other short-term loans	200	
Current liabilities		500
Non-current liabilities		
Borrowings — long term	300	
Non-current liabilities		300
Total liabilities		800
Net assets		1,100
Equity		
Retained earnings	1,100	
Total equity		1,100

Figure 3.9 Statement of financial position for a non-profit entity

Intangible assets

Do not underestimate the value of intangible assets. According to the Statista Research Department, Apple has the most valuable brand in the world, estimated at over $355 billion, with Amazon a close second at just over $350 billion.

So far, assets have been explained as something a business owns. In most cases, these are tangible items like buildings, equipment, cash, or stock. However, some assets are intangible, meaning they lack physical substance. These are difficult to evaluate, but they still add value to the business and are often included in the balance sheet. They are typically long-term assets, meaning they are included in the non-current assets section of the balance sheet.

Some examples of intangible assets include:

- **Patents**, **copyrights**, and **trademarks** are all considered different types of intellectual property of a business. They can have different legal requirements, and each serves a special purpose. For example, a patent is used to describe a license issued by the government giving an individual or business sole rights to make or sell a new invention or product. A patent's value can be determined by the sum of its development costs and/or its purchase price, if acquired. A copyright is often used for art and literature in items such as books, plays, movies, or pieces of music. A trademark can be used to protect a company's name, short slogan, or logo.
- **Franchises** were discussed in Unit 1 and are a way for a company to grow by selling the right to use a product, service, and/or brand in exchange for a fee. The value of the franchise can be captured as an intangible asset on the balance sheet of the company that acquires the franchise (the franchisee).
- **Brand value** estimates how much a brand is worth in terms of income, potential income, reputation, prestige, and market value. Determining the value of this intangible asset is important when one business is acquiring another business. The acquiring company often pays more than the value of the net assets, and this difference between the purchase price and net assets is recorded in the form of **goodwill**.

Brand value can be considered an intangible asset, alongside other aspects of a brand

You may be required in an examination to analyze a table of financial information to create a partial or full financial statement. The following worked example is an example of an IB exam-style question.

Worked example

Lestari Lights is a social enterprise providing efficient solar lighting in Indonesia. Financial information for Lestari Lights is shown below.

	Year 1 (Rp 000s)	Year 2 (Rp 000s)
Non-current assets	10 000	10 000
Sales revenue	22 000	24 000
Cash	1 200	1 000
Stock	4 800	5 200
Debtors	2 900	3 200
Cost of goods sold	8 400	8 900
Total current liabilities	3 200	3 400
Retained earnings	6 700	7 900
Expenses	4 400	5 000
Share capital	2 000	2 000
Non-current liabilities	7 000	6 100

Questions

1 Construct a profit and loss account for Year 1 and Year 2.
2 Prepare a balance sheet for Year 1 and Year 2.

Solution

1 Identify the line items that belong in each financial statement. Starting with the profit and loss account, look for line items that show sales revenue, expenses, and profit levels. In this case, there are three.

	Year 1 (Rp 000s)	Year 2 (Rp 000s)
Sales revenue	22 000	24 000
Cost of goods sold	8 400	8 900
Expenses	4 400	5 000

Add in a title and the relevant profit calculations.

Lestari Lights
Statement of profit or loss for Year 1 and Year 2

	Year 1 (Rp 000s)	Year 2 (Rp 000s)
Sales revenue	22 000	24 000
Cost of goods sold	(8 400)	(8 900)
Gross profit	13 600	15 100
Expenses	(4 400)	(5 000)
Net profit before interest and tax	9 200	10 100

IB learner profile

Communicators

Explain to a classmate, friend, or family member the information being shown on a balance sheet and a profit and loss account.

Since interest expenses and taxes are not provided, this is the amount of detail that can be given for this profit and loss account.

2 Identify the remaining line items to use for the balance sheet.

	Year 1 (Rp 000s)	Year 2 (Rp 000s)
Non-current assets	10 000	10 000
Cash	1 200	1 000
Stock	4 800	5 200
Debtors	2 900	3 200
Total current liabilities	3 200	3 400
Retained earnings	6 700	7 900
Share capital	2 000	2 000
Non-current liabilities	7 000	6 100

Put them into the correct order. Remember, the balance sheet starts with assets, then liabilities, then equity.

	Year 1 (Rp 000s)	Year 2 (Rp 000s)
Non-current assets	10 000	10 000
Cash	1 200	1 000
Stock	4 800	5 200
Debtors	2 900	3 200
Total current liabilities	3 200	3 400
Non-current liabilities	7 000	6 100
Retained earnings	6 700	7 900
Share capital	2 000	2 000

Add the title and any missing line items from the balance sheet, showing the relevant subtotals and calculations.

Lestari Lights
Statement of financial position as at the end of Year 1 and Year 2

	Year 1 (Rp 000s)		Year 2 (Rp 000s)	
Non-current assets		10 000		10 000
Current assets				
Cash	1 200		1 000	
Stock	4 800		5 200	
Debtors	2 900		3 200	
Current assets		8 900		9 400
Total assets		18 900		19 400
Current liabilities		3 200		3 400
Non-current liabilities		7 000		6 100
Total liabilities		10 200		9 500
Net assets		8 700		9 900
Equity				
Share capital	2 000		2 000	
Retained earnings	6 700		7 900	
Total equity		8 700		9 900

Notice how the balance sheet balances. In other words, the net assets equal the total equity.

HL

Depreciation

Business assets (for example, buildings, vehicles, machinery, equipment) **depreciate** (decrease in value over time). It is important to record this expense and reflect the value of these assets accurately in the balance sheet, as one purpose of the balance sheet is to provide an accurate picture of what the company owns. Therefore, it is important to provide an accurate, up-to-date value of its assets.

Consider a business that manufactures clothing. To manufacture clothes, machines are purchased, and the value of these machines are recorded as an asset. As clothes are produced, costs are incurred. These costs could include the purchase of raw materials, the wages of employees, and the cost of the electricity to power the machinery. Another cost is the wear and tear on the machinery (depreciation).

The machinery does not last forever. It will only be useful for a certain amount of time (for example, five years). After those five years, the machinery will have little value, and this needs to be reflected in the balance sheet. Otherwise, in five years, the company will still have the original value of the machinery on their balance sheet.

The depreciation incurred during a specific period (for example, one year) is recorded as an expense in the profit and loss account. The amount of depreciation expense accumulated over the lifetime of the asset is then recorded in the balance sheet to reflect more accurately the value of that asset.

Although there are many ways to calculate depreciation, here we will focus on two methods of depreciation:

- straight line method
- units of production method.

i The value of a new car can depreciate (decrease in value) by as much as 15 to 20 per cent as soon as it is driven. This means that a new car costing £30,000 may be only worth £24,000 once you leave the car dealership and drive it home.

Straight line method

The **straight line method** divides the amount of depreciation equally over the expected life of the asset.

The amount of depreciation for a given period is calculated using the following formula:

$$\text{Annual depreciation amount} = \frac{\text{original cost} - \text{residual value}}{\text{lifespan of asset in years}}$$

The residual value and useful life of the asset are estimates. (They will be provided in an examination.)

Worked example

Su's Sustainable Swimsuits

Su's Sustainable Swimsuits uses natural and upcycled fibers to produce swimsuits. An industrial sewing machine was purchased for $5,000 and has an expected life of five years.

At the end of the five years, the machine is estimated to be worth $1,000.

The annual depreciation expense is calculated using the formula:

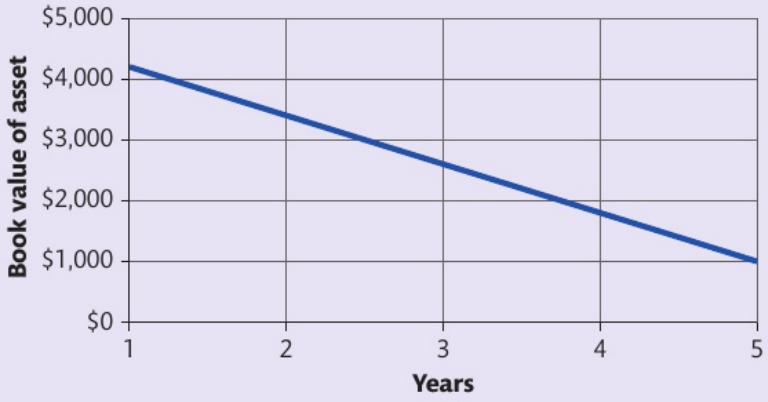
$$\text{Annual depreciation amount} = \frac{\text{original cost} - \text{residual value}}{\text{lifespan of asset in years}}$$

$$= \frac{\$5000 - \$1000}{5} = \$800$$

The depreciation amount and the value of the sewing machine after each year are shown in the table below.

	Annual depreciation amount	Accumulated depreciation	Book value of asset (original value – accumulated depreciation)
Year 1	$800	$800	$4 200
Year 2	$800	$1 600	$3 400
Year 3	$800	$2 400	$2 600
Year 4	$800	$3 200	$1 800
Year 5	$800	$4 000	$1 000

Graphing the value of the asset over time gives a straight line.



Straight line method of depreciation

Note that $800 is the amount of depreciation expense that gets recorded in the profit and loss account each year. The $800 carries over (that is, accumulates) into the balance sheet each year, decreasing the value of the fixed asset, until at the end of Year 5, it reaches the residual value of $1,000.

Advantages and disadvantages of the straight line method

The straight line method is a simple method that requires only three numbers: the original cost, residual value, and life expectancy. These numbers are relatively easy to obtain and estimate. The calculation can usually be done quickly and can save the expense of hiring an accountant. Because the straight line method provides a constant depreciation expense amount, managers can have some level of certainty about this expense and can plan.

The disadvantage of the straight line method is that it might not be as accurate as other methods. Businesses operate in a dynamic environment. Production levels and use of machines can fluctuate depending on customer demand and the economic environment. For example, Su's Sustainable Swimsuits may experience unexpected demand for its products, requiring it to use its machine more during a year of growth. This means that the sewing machine may be overvalued on the balance sheet, as it would deteriorate in value much quicker during that year of high production and use than it would in years of normal or slower demand.

Units of production method

Another method of depreciation is called the **units of production method**.

The units of production method uses the following formula:

$$\text{Annual depreciation amount} = \frac{\text{original cost} - \text{residual value}}{\text{estimated number of units that can be produced}} \times \text{actual units produced}$$

where $\frac{\text{original cost} - \text{residual value}}{\text{estimated number of units that can be produced}}$ is called the units of production rate.

The formula shows that this method requires additional data compared to the straight line method: the original cost, the residual value, the estimated number of units that can be produced by the asset, and the actual number of units produced each year.

Let's revisit Su's Sustainable Swimsuits to see how this method can be applied.

Worked example

Su's Sustainable Swimsuits

The industrial sewing machine was purchased for $5,000 and is expected to produce approximately 100,000 units over its lifetime. At the end of its lifespan, the machine is estimated to be worth $1,000.

The number of units produced each year is shown in the table below.

	Number of units produced
Year 1	10 000
Year 2	20 000
Year 3	15 000
Year 4	25 000
Year 5	30 000

Calculate the units of production rate:

$$\frac{\text{original cost} - \text{residual value}}{\text{estimated number of units that can be produced}} = \frac{\$5000 - \$1000}{100\,000} = 0.04$$

The units of production rate is multiplied by the number of units produced to find the depreciation amount each year, as shown in the table below.

	Annual depreciation amount	Accumulated depreciation amount	Book value of asset (original value – accumulated depreciation)
Year 1	$0.04 \times 10\,000 = \$400$	$400	$4 600
Year 2	$0.04 \times 20\,000 = \$800$	$1 200	$3 800
Year 3	$0.04 \times 15\,000 = \$600$	$1 800	$3 200
Year 4	$0.04 \times 25\,000 = \$1\,000$	$2 800	$2 200
Year 5	$0.04 \times 30\,000 = \$1\,200$	$4 000	$1 000

Advantages and disadvantages of the units of production method

Comparing the two methods for Su's Sustainable Swimsuits shows that the final book value of the fixed asset in Year 5 is the same ($1,000) regardless of method used. However, the individual annual depreciation amounts differ. This is because the units of production method is based on the number of units produced rather than spreading out the depreciation expense evenly over the life of the asset.

In cases where use and demand fluctuate, this provides a more accurate depreciation amount and book value. In addition, it provides businesses with a way to offset increases in revenue when the company is performing well, as in Years 2, 4, and 5 for Su's Sustainable Swimsuits. This will lower a company's tax bill and minimize depreciation expenses in years when production levels are low.

One disadvantage of the units of production method for depreciation is that keeping track of the number of units produced can be challenging or, in some cases, not practical. While the units of production method may work well for manufacturing firms, it does not work in all cases. For example, this method is not applicable to buildings and furniture. In addition, it does not take into consideration other external factors involved in the depreciation of an asset (for example, a new invention or changes in technology may make the asset obsolete), and this method is not always accepted for tax purposes.

Practice questions

Recycled Tires Ltd obtains used tires and turns them into a wide variety of products, including artificial turf and playground equipment. It has recently purchased specialized tire-shredding machinery at a cost of €1.5 million. The expected life of this equipment is four years.

1 Using the straight line method, fill in the missing amounts. (6 marks)

Year	Depreciation	Accumulate depreciation	Book value of asset
1			
2		€700 000	
3			
4			€100 000

2 Using the units of production method, fill in the missing amounts. (6 marks)

Year	Number of units/tires	Annual depreciation	Accumulated depreciation	Book value of asset
1	1 000 000	€200 000		
2	2 000 000			
3	2 500 000			
4	1 500 000			€100 000

Toolkit connection

Contribution costing is a quantitative technique used to calculate how many units have to be produced and sold in order to cover all costs (both direct and indirect). Contribution costing assumes that each product will contribute to covering indirect costs (overheads) but does not apportion the indirect costs between different products. It is a useful technique when the business must decide which products should be continued, which should be removed from production, or whether to accept a new production contract for a product or component depending on the 'contribution' of the contract towards indirect costs.

Contribution measures how much is being contributed towards the indirect costs.

$$\text{Total contribution} = \text{Sales revenue} - \text{Direct costs}$$

When the total contribution exceeds indirect costs, a profit is made. When the total contribution is lower than the indirect costs, a loss is incurred.

HL end

3.5 Profitability and liquidity ratio analysis

Learning outcomes

At the end of this section, you will be able to:

- calculate and analyze the following profitability ratios:
  - gross profit margin
  - profit margin
  - return on capital employed (ROCE)
- calculate and analyze the following liquidity ratios:
  - current ratio
  - acid test (quick) ratio
- recommend possible strategies to improve these ratios.

Ratio analysis is a useful quantitative tool when evaluating the financial success of a business. Consider the performance of two bookstores: Tiny Bookstore operates in a small village in Vietnam, while Giant Bookstore has several stores located throughout Asia and operates online. Their financial performances during the most recent year are summarized in Table 3.2. The amounts are in millions of Vietnam Dong (VND).

Table 3.2 Profit and loss accounts for Tiny Bookstore and Giant Bookstore

	Tiny Bookstore	Giant Bookstore
Sales revenue	1 000	20 000
Cost of goods sold	500	8 000
Gross profit	500	12 000
Expenses	250	10 000
Net profit before interest and tax	250	2 000

Comparing the two companies' gross profits suggests that Giant Bookstore is much more profitable, as its gross and net profits are much higher than Tiny Bookstore. However, is this a fair comparison? Imagine you are an investor interested in investing in a bookstore that is best able to turn their revenue into profit. Which bookstore would you choose? As the owner of Tiny Bookstore, how could you evaluate your store's performance? This is where ratio analysis can help.

In this section, we will explore different ways to analyze the financial performance and stability of a business using ratio analysis. These ratios will help us to compare the profitability and liquidity of a business to those of other businesses in the same industry, and to analyze trends over time.

Profitability

Profit is a way to measure the financial performance of an organization. It can be measured in different ways (such as gross profit and net profit) by subtracting expenses from income. These amounts are shown in the profit and loss account.

Profitability ratios attempt to measure the performance of a business by calculating the degree to which a business achieves financial gain from its sales. These ratios can be calculated in terms of **gross profit margin (GPM)** and **net profit margin (NPM)**. Both are expressed as a percentage and are given by the following formulae:

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

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

Note that the term 'profit margin' in the second equation refers to net profit margin.

All organizations strive for as high a gross or net profit margin as possible, as these ratios indicate how much of the revenue is turned into profit. Let's revisit Tiny Bookstore and Giant Bookstore. Rather than just calculating the gross profit amounts, we can also calculate the GPMs (Table 3.3).

Table 3.3 Profit and loss accounts for Tiny Bookstore and Giant Bookstore with gross profit margins

	Tiny Bookstore	Giant Bookstore
Sales revenue	1 000	20 000
Cost of goods sold	500	8 000
Gross profit	500	12 000
Gross profit margin	$\frac{500}{1\,000} \times 100 = 50\%$	$\frac{12\,000}{20\,000} \times 100 = 60\%$

The gross profit margins show that Giant Bookstore has achieved a higher margin. This may be due to its size and ability to minimize its cost of goods sold by leveraging economies of scale through bulk purchases. Another explanation is that Giant Bookstore may be able to charge higher prices. However, it should be noted that the gross profit margins are much closer than the gross profit amounts. To investigate profitability further, we can now calculate the NPMs (Table 3.4).

Table 3.4 Profit and loss accounts for Tiny Bookstore and Giant Bookstore with gross and net profit margins

	Tiny Bookstore	Giant Bookstore
Sales revenue	1 000	20 000
Cost of goods sold	500	8 000
Gross profit	500	12 000
Expenses	250	10 000
Net profit before interest and tax	250	2 000
Gross profit margin	$\frac{500}{1\,000} \times 100 = 50\%$	$\frac{12\,000}{20\,000} \times 100 = 60\%$
Net profit margin	$\frac{250}{1\,000} \times 100 = 25\%$	$\frac{2\,000}{20\,000} \times 100 = 10\%$

Looking at the NPMs leads to a different conclusion. Tiny Bookstore has a higher net profit margin of 25 per cent, whereas Giant Bookstore has a net profit margin of 10 per cent. This indicates that Tiny Bookstore can generate more profit from its sales than Giant Bookstore. More specifically, for every 100 VND in sales, Tiny Bookstore earns 25 VND in net profit, whereas Giant Bookstore earns 10 VND in net profit. One explanation for this is that Tiny Bookstore can control its indirect expenses or overheads better.

When calculating and analyzing profit margins, note the following:

- Both gross and net profit margins are expressed as a percentage.
- The formulae for both profit margins (and all ratios) will be provided in the examination.
- The calculation of gross and net profit margins requires relevant information from the profit and loss account (statement of profit or loss).
- The higher the profit margin, the better.

- Ratio analysis is an effective way of comparing the profitability of two or more organizations within the same industry, regardless of their size.
- A single profit amount or ratio is not very helpful. Consider all gross and net profit amounts and ratios when evaluating the profitability of an organization.
- When looking at the profit margins of a single organization, look at several years of data. That way, trends can be analyzed. For example, are profit margins going up or down?
- Comparing NPMs to GPMs reveals how well a business is managing its indirect costs or overheads. A large difference between the net and gross profit margins can indicate poor management of these indirect costs. This is especially relevant for managers to help them make decisions.
- In general, NPM is considered a better measure of profitability than GPM as it considers cost of goods sold and expenses.
- Profit margins can vary by industry. For example, we would expect lower production costs in service industries. This means that organizations operating within the service industries have higher gross profit margins than organizations involved in producing and selling physical products. Organizations that sell massive quantities can operate successfully with lower margins, as the higher volume of sales can compensate for lower margins. Organizations that sell fewer units (such as luxury items) often require higher margins to succeed.

Online resource

IBISWorld provides worldwide industry reports.

Another ratio that can be used to analyze an organization's profitability is the **return on capital employed** (ROCE). This ratio also starts with the net profit before interest and tax, but instead of expressing this as a percentage of sales revenue as for the NPM, the ROCE expresses the net profit as a percentage of capital employed. It uses the following formula:

$$\text{Return on capital employed (ROCE)} = \frac{\text{profit before interest and tax}}{\text{capital employed}} \times 100$$

where capital employed = non-current liabilities + equity

Non-current liabilities and equity (capital employed) come from the balance sheet. Non-current liabilities include any long-term borrowings held for more than one year. Equity consists of share capital and retained earnings. Therefore, capital employed includes all shareholders' funds and long-term sources of finance.

Expressing profit as a percentage of capital employed can provide investors and owners with insight into how much profit is being generated from their capital investments. Since traditional investments like stocks and real estate historically yield a 10 per cent return, investors are likely to look for businesses that have a ROCE above this. The level of risk involved also needs to be assessed. Any ROCE lower than the interest rates offered by banks (a low-risk investment) will be avoided by investors.

When calculating and analyzing the ROCE ratio, note the following:

- Just like profit margins, the higher the ROCE, the better.
- ROCE requires information from the profit and loss account, and the balance sheet.
- ROCE can be used to analyze a firm's efficiency in terms of how the capital employed is being used and whether managers are making effective decisions.

- ROCE is considered a prime or key ratio, as many investors and analysts start with this ratio when analyzing the profitability and efficiency of a business before calculating any additional ratios.
- While comparing the ROCE of an organization to competitors and interest rates at banks is helpful, analysts and investors are also interested in identifying ROCE trends over multiple periods of time. One way to do this is to use simple linear regression.

Simple linear regression

Simple linear regression can be used to analyze the ROCE of a business over different periods of time. For example, look at Figure 3.10, which compares the ROCEs of Company A and Company B over ten years.

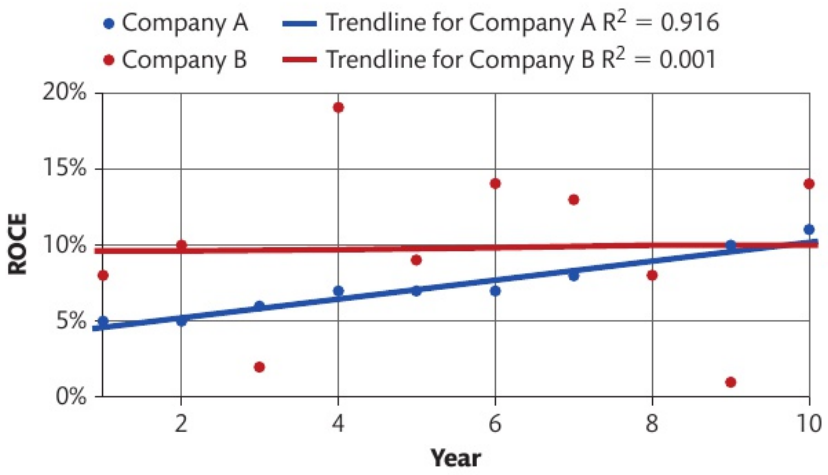


Figure 3.10 ROCE of Company A and Company B. The R^2 value or coefficient of determination indicates the level of variation in the data in comparison to the trendline. R^2 values close to 1 indicate there is little variation, while R^2 values close to 0 indicate large variation

Although Company B has earned a higher ROCE on average, some investors would look to minimize risk and look for steady growth and choose Company A. Other investors would be fine with some volatility in exchange for more growth potential and would invest in Company B.

Improving profitability ratios

It is important to understand how profitability ratios can be improved.

Strategically changing prices to increase profits: For example, the prices of inelastic products can be increased, while the prices of elastic products can be decreased. (Price elasticity of demand is covered in more detail in Unit 4.) However, the business needs to be careful with its pricing strategy and ensure that its prices are still competitive so that it does not lose sales.

Finding cheaper suppliers or renegotiating the terms of payment: This can help reduce the cost of goods sold and thereby increase gross profit. However, the quality of materials might suffer when cheaper suppliers are used, and longer payment terms might jeopardize the survival of suppliers or a long-term relationship with them.

Increasing or implementing effective promotional strategies: The promotional strategy must increase sales enough to cover the increase in promotional expenses. It is often difficult to measure the effectiveness of promotional strategies.

Price discounts can increase sales

Reducing labor costs or making labor more productive: In theory, this decreases production costs and thereby increases profits. However, this needs to be done carefully, as existing employees may become demotivated.

Although this would not affect the GPM, **cutting or reducing unnecessary indirect costs** would improve the NPM and ROCE. This could include reducing salaries of managers or benefits, which needs to be done carefully. Another example is finding premises with a lower rent or negotiating a cheaper rent.

While **decreasing the capital employed** will, in theory, increase ROCE, this is not a recommended approach unless it means reducing non-current liabilities. This means that net profit would need to be maintained, which might be difficult with the reduction in long-term loans used to purchase fixed assets like machinery.

Increasing dividend would decrease retained earnings: This would decrease capital employed, and as a result, increase the ROCE. However, this means that the business will be left with lower retained earnings as a source of long-term funds for its activities.

Practice questions

The Pie Store (TPS) bakes pies and sells them in its three retail stores. In the current year, each store made a profit.

Financial information for TPS' three stores (all amounts in $)

	Store 1	Store 2	Store 3
Sales revenue	180 000	223 000	170 000
Cost of sales	90 000	120 000	85 000
Gross profit	90 000	103 000	85 000
Expenses	66 000	76 000	67 000
Net profit before interest and tax			

At the end of the year, the balance sheet for TPS (three stores combined) showed $200,000 in assets and $120,000 in liabilities, $50,000 of which was long-term debt.

1 Calculate which store:
   a. made the highest net profit before interest and tax (1 mark)
   b. had the highest profitability. (2 marks)
2 Calculate:
   a. TPS' equity (1 mark)
   b. TPS' return on capital employed (ROCE). (2 marks)
3 Explain one effect that the $50,000 long-term debt may have on TPS' profit and loss account. (2 marks)

Liquidity

The NPM, GPM, and ROCE ratios provide a way of analyzing the profitability of a business. Here, we will look at two additional ratios, which focus on **liquidity**. Liquidity ratios are used to analyze the financial stability of a business and its ability to meet any short-term debt obligations.

We will explore two liquidity ratios:

- current ratio
- acid test (quick) ratio.

Current ratio

The formula for the current ratio is:

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

The current ratio compares current assets and current liabilities, which both come from the balance sheet. These were explained in the previous section.

- Current assets are items owned by the business that will be used up or converted into cash within a year. Examples include cash, debtors (accounts receivable), and stock (inventory).
- Current liabilities are all the debts or other payables due within one year. Examples include bank overdrafts, creditors, and other short-term loans.

The balance sheet of ABC Ltd in Figure 3.8 shows current assets totaling $1,100m and current liabilities totaling $500m. This means the current ratio for ABC Ltd is 2.2.

$$\text{Current ratio} = \frac{\text{current assets}}{\text{current liabilities}} = \frac{\$1\,100\text{m}}{\$500\text{m}} = 2.2$$

As with profitability ratios, a single current ratio does not provide much information and recommended values can vary depending on the industry. It is better to have the ratios of multiple time periods or other competitors to compare.

However, it is important to be able to explain what the current ratio is showing. A current ratio of 2.2 states that for every $1 of short-term debt (current liabilities), the business has $2.20 in current assets to pay off these debts. Having more current assets than current liabilities is a good thing, but can there be too much of a good thing? Table 3.5 shows recommended levels for the current ratio.

Table 3.5 Recommended levels for the current ratio

Current ratio	Explanation
Below 1.5	For most businesses, a current ratio below 1.5 is too low and indicates potential liquidity problems. A business may have trouble meeting its day-to-day expenses.
1.5–2.0	This is the recommended range for most businesses and indicates a healthy liquidity position.
Above 2.0	A current ratio above 2.0 is considered too high, although this is not usually as big of a problem as being too low. This might be an indicator that a business has too many assets tied up in cash or other current assets, and it should look to use these current assets to invest in additional fixed assets to grow the business.

Acid test (quick) ratio

The acid test ratio (or quick ratio) is given by the following formula:

$$\text{Acid test (quick) ratio} = \frac{\text{current assets} - \text{stock}}{\text{current liabilities}}$$

The key difference between the two liquidity ratios is that the acid test ratio removes stock (inventory) from current assets before dividing it by current liabilities. This is because not all organizations can rely on converting their stock into liquid cash to pay off their daily expenses. Therefore, the acid test ratio can be used by organizations wanting to take a more conservative approach.

The term 'acid test' originated from the 1800s gold rush. Nitric acid was used to identify real gold, as the acid dissolves any metal that is not gold. The phrase has come to mean a test that produces indisputable results.

Revisiting the ABC Ltd example produces the following for the acid test ratio:

$$\text{Acid test (quick) ratio} = \frac{\text{current assets} - \text{stock}}{\text{current liabilities}} = \frac{\$1\,100\text{m} - \$100\text{m}}{\$500\text{m}} = 2.0$$

Table 3.6 shows recommended levels for the acid test ratio. ABC Ltd has an acid test ratio of 2.0, which may be too high. However, this can vary depending on the industry. For example, if ABC Ltd is involved in the technology sector, a higher liquidity ratio may be advised so that the business has enough cash on hand to adapt to rapid changes in the industry.

Table 3.6 Recommended levels for the acid test (quick) ratio

Acid test (quick) ratio	Explanation
Below 1.0	For most businesses, an acid test ratio below 1.0 is too low and indicates potential liquidity problems. A business may have trouble meeting its day-to-day expenses.
1.0–1.5	This is the recommended range for most businesses and indicates a healthy liquidity position.
Above 1.5	An acid test ratio above 1.5 is considered too high , although this is not usually as big of a problem as being too low. This might be an indicator that a business has too much of its assets tied up in cash, and it should look to use some of its cash to invest in additional fixed assets to grow the business.

TOK

What roles do reason and emotion play when analyzing financial performance?

Are the results of some types of ratio analysis less open to interpretation than others?

When calculating and analyzing liquidity ratios, note the following:

- Both liquidity ratios require information from the balance sheet only.
- Both liquidity ratios are expressed as a number and not a percentage. They can also be expressed as a ratio. For example, a current ratio of 2 can be expressed as 2 : 1.
- Lenders and creditors are two stakeholders interested in liquidity ratios. Before lending money or providing supplies, they will want to make sure the business has enough cash (and current assets) available to meet its short-term debt obligations and make payments.
- When looking at liquidity ratios of a single organization, look at several years of data. That way, trends can be analyzed. For example, are the liquidity ratios going up or down?
- Like profitability ratios, liquidity ratios can vary by industry. For example, organizations operating in the technology or consumer discretionary (for example, automobile) industry would most likely have higher liquidity ratios to respond to changes in the market. Organizations operating in consumer staple and healthcare industries would most likely have lower liquidity ratios, as they can rely on regular purchases.
- HL Efficiency ratios (which we will look at in the next section) can help to determine which liquidity ratio to use. Specifically, the stock turnover ratio can be used to assess a company's ability to turn stock into cash.
- When in doubt, it is probably best to use the more conservative acid test ratio, as stock is usually the least liquid current asset.

IB learner profile

Inquirers

Calculate and analyze the profitability and liquidity ratios of a local business.

Improving liquidity ratios

Liquidity ratios can be too low. Some strategies to address liquidity ratios that are too low include the following:

- Reduce overdrafts and use more long-term debt to finance business activity. This will reduce current liabilities and improve liquidity ratios. Taking on long-term debt is not always the best solution as interest still needs to be paid.
- Organizations can sell fixed assets and convert these into cash (current assets). This will increase liquidity ratios. Some organizations may not have any fixed assets to sell, as they are being used and are necessary for operations. One option would be to lease rather than own certain fixed assets, but leasing fixed assets will increase long-term payments, and the business cannot use the fixed asset as collateral when seeking long-term loans.
- To increase the acid test ratio, organizations can sell stock at a discount or offer extended credit period to debtors. This will reduce stock and increase other current assets like cash and debtors, thereby improving the acid test ratio. However, extending the credit period to debtors might cause the business to experience difficulties in paying its suppliers (creditors).

Liquidity ratios can also be too high, although this is less of a problem. Businesses can decrease liquidity ratios by purchasing more fixed assets. If purchased using cash, this will decrease current assets and lower liquidity ratios. If purchased using short-term credit, this will increase current liabilities and lower liquidity ratios.

Limitations of ratio analysis

Many of the limitations of final accounts also apply to these financial ratios, as they also rely on information from the final accounts. These limitations include the following:

- Financial statements and ratios provide quantitative data. Although this is important, many of today's organizations take a more holistic approach when evaluating their performance and position (such as the triple bottom line approach of people, planet, and profit).
- Profitability ratios are not applicable to non-profit organizations, as they generate surpluses instead of profits, and their focus is on achieving social objectives.
- Businesses use additional ratios and variations of these ratios when reporting on and analyzing performance.
- These ratios are probably most reliable for publicly held companies as they need to publish their final accounts according to established accounting principles.
- Comparative data from competitors and/or multiple time periods may not be available. Single ratio calculations without any context are less helpful.
- Financial ratios are based on historical financial statements and therefore provide historical information. Businesses operate in a dynamic environment, which is constantly changing.

Practice questions

Papel manufactures and sells paper bags. It pays cash for 80 per cent of its raw materials but, to remain competitive, it must sell on credit to all customers. Many debtors are not paying on time and creditors (suppliers) are increasing. The board of directors is concerned about Papel's liquidity position.

The finance manager has provided information from Papel's accounts.

Selected information from Papel's accounts at 31 December 2022

	000s ($)
Retained earnings	14
Cash	3
Cost of sales	2
Trade creditors	20
Debtors	12
Expenses	2
Borrowings – long term	20
Non-current assets	60
Sales revenue	5
Share capital	26
Stock	5

1 Define the term 'debtors'. (2 marks)

2 Using information from the table:

a. construct a fully labeled balance sheet for Papel for the end of December 2022 (5 marks)

b. calculate the current ratio for Papel for the end of December 2022. (1 mark)

3 Explain one possible strategy, other than elimination of credit sales, for Papel to improve its liquidity position. (2 marks)

HL

3.6 Efficiency ratio analysis

Learning outcomes

At the end of this section, you will be able to:

- calculate and analyze the following efficiency ratios:
  - stock turnover
  - debtor days
  - creditor days
  - gearing ratio
- recommend possible strategies to improve these ratios
- distinguish between insolvency and bankruptcy.

In the previous section, we learned how ratios can be used to analyze the profitability and liquidity of a business. We will now explore additional financial ratios to assess the efficiency of a business. Efficiency ratios are used to assess the effectiveness of the directors and their management of current assets and current liabilities. These include:

- stock turnover
- debtor days
- creditor days.

We will then learn about the gearing ratio and how this can be used to assess the financial structure of a business. Finally, we will investigate the difference between insolvency and bankruptcy.

Again, we will look at Giant Bookstore and Tiny Bookstore. Relevant line items from their final accounts are shown in Table 3.7 and Table 3.8 (amounts are in millions of Vietnam Dong).

Table 3.7 Profit and loss account for Tiny Bookstore and Giant Bookstore

	Tiny Bookstore	Giant Bookstore
Sales revenue	1 000	20 000
Cost of goods sold	(500)	(8 000)
Gross profit	500	12 000
Expenses	(250)	(10 000)
Net profit before interest and tax	250	2 000

Table 3.8 Balance sheet information for Tiny Bookstore and Giant Bookstore

	Tiny Bookstore	Giant Bookstore
Stock	150	1 100
Debtors	250	4 000
Creditors	100	2 000
Non-current liabilities	750	5 000
Share capital	300	15 000
Retained earnings	200	5 000

Stock turnover

First, we will focus on stock. Stock (or inventory) is the value of all the raw materials, unfinished goods, and finished goods in the possession of the business. Stock is a current asset that is included on the balance sheet. Looking at this amount provides a little insight into the business.

Although the management of stock and stock control will be covered in more detail in Unit 5, the following stock turnover ratios can help managers assess and manage this important part of the business.

A bookstore's stock is its books and any other items it sells

There are two formulae for stock turnover. The first provides the average number of times the stock is sold and replenished over a given year. The second provides the average number of days between the purchase and sale of stock over a given year.

$$\text{Stock turnover (number of times)} = \frac{\text{cost of sales}}{\text{average stock}}$$

$$\text{Stock turnover (number of days)} = \frac{\text{average stock}}{\text{cost of sales}} \times 365$$

$$\text{where average stock} = \frac{\text{opening stock} + \text{closing stock}}{2}$$

As discussed earlier in this unit, the cost of sales (or cost of goods sold) is the money spent on raw materials, manufacturing, and/or acquiring the goods it sells. This is found in the profit and loss account.

The average stock value is calculated using the opening stock and closing stock values in order to determine the stock turnover. The balance sheet information in Table 3.8 provides the stock value at a certain date (closing stock). The opening stock value can be found from the previous year's balance sheet. This is because the opening stock is the same as the previous year's closing stock (or stock shown on the previous year's balance sheet).

Tiny Bookstore had an opening stock value of 100 million VND, and Giant Bookstore had an opening stock value of 900 million VND. Using the stock amounts from Table 3.8 for the closing stock, we can calculate the average stock values for Tiny Bookstore and Giant Bookstore as follows:

$$\text{Tiny Bookstore: } \frac{150 + 100}{2} = 125 \text{ million VND}$$

$$\text{Giant Bookstore: } \frac{1\,100 + 900}{2} = 1\,000 \text{ million VND}$$

The stock turnover can now be calculated for both bookstores, as in Table 3.9.

Table 3.9 Stock turnover for Tiny Bookstore and Giant Bookstore

	Stock turnover (number of times) $= \frac{\text{cost of sales}}{\text{average stock}}$	Stock turnover (number of days) $= \frac{\text{average stock}}{\text{cost of sales}} \times 365$
Tiny Bookstore	$\frac{500}{125} = 4$ times	$\frac{125}{500} \times 365 = 91.25$ days
Giant Bookstore	$\frac{8\,000}{1000} = 8$ times	$\frac{1000}{8\,000} \times 365 = 45.625$ days

These ratios indicate that Giant Bookstore has a better stock turnover ratio than Tiny Bookstore. Giant Bookstore has sold and replenished the value of its entire stock about eight times over the year, whereas Tiny Bookstore did this only four times. Similarly, Giant Bookstore sold and replenished the value of its entire stock about every 45 days (or exactly 45.625 days) during the past year, whereas Tiny Bookstore did this about every 90 days (or exactly 91.25 days).

Note the following about the stock turnover ratio:

- Stock turnover has two formulae, allowing the ratio to be expressed as the number of days or the number of times.
- A higher number of times and a lower number of days is preferred, as this means that a business is being successful in selling its stock. More sales mean more revenue and usually more profit (unless sold at a discounted price). A higher number of times or lower number of days for the stock turnover also means that the stock is less likely to become obsolete.
- As with other ratios, stock turnover ratios vary between industries. For example, businesses involved in the technology industry tend to have a better stock turnover than businesses involved in luxury items. Similarly, a store that sells perishable items like fruits and vegetables will want to have a better stock turnover ratio than a store that sells shelf-stable items like books.
- Holding low levels of stock means low costs of holding stock (storage). Ideas like just-in-time stock control are discussed in Unit 5.
- The stock turnover ratio can help decide which of the current and acid test ratios is a more accurate way to measure the liquidity of a business. For example, a business may have a poor stock turnover ratio, meaning it cannot rely on its stock being sold quickly and used to pay off short-term debts. Therefore, the acid test ratio would be a more appropriate way to assess the liquidity of the business.

There are strategies that businesses can use to improve the stock turnover ratio, including the following:

- **Implementing a more aggressive marketing strategy** such as lowering prices or increasing promotion, which might help sell more. However, it is not guaranteed that the increased expenditure on marketing will bring higher sales and improve stock turnover ratio.
- **Disposing of slow-moving or obsolete stock**: This might bring losses for the business but could reduce the stock turnover ratio. It might also result in the business having insufficient stock if there is a sudden surge in demand, and the business could lose potential sales and market share.
- **Narrowing the variety of products being offered**: A business might choose to stock only fast-selling items in order to improve its stock turnover ratio. Thus, the rate of sales will improve, and storage costs will be reduced. However, the business might lose potential sales and market share of other items which, although slow-moving, still contribute to the covering of costs and provide opportunities for future growth.
- **Using stock management techniques** like just-in-time (see Unit 5). This will ensure reduction of storage costs and no excess stock. However, if there is a sudden surge in demand, the business might be unable to respond quickly, and this will result in dissatisfied customers and a loss of sales and profits for the business.

Debtor days

The line item 'debtors' represents the amount of money owed to the business by customers. The debtor days ratio provides the average amount of time that customers take to pay for goods and services bought on credit. The formula to calculate the debtor days ratio is:

$$\text{Debtor days ratio (number of days)} = \frac{\text{debtors}}{\text{total sales revenue}} \times 365$$

In this ratio, the amount of debtors shown on the balance sheet is linked to total sales revenue.

In general, the lower the debtor days ratio, the better. A low debtor days ratio provides the business with more cash on hand, as it indicates that the customers are paying off their purchases made on credit quicker. The cash received by the business can be used to pay its daily expenses and grow the business. A business with a high debtor days ratio may face liquidity problems, as it may not have sufficient cash on hand for its day-to-day operations.

However, this ratio needs to be consistent with the company's policy. For example, as a convenience to their customers and to maintain a positive relationship, many businesses provide 30 to 60 days of credit to their customers. Therefore, the debtor days ratio should be consistent with the organization's policy, which is often between 30 to 60 days.

The bookstores example yields the following debtor days:

$$\text{Tiny Bookstore: } \frac{250}{1\,000} \times 365 = 91.25 \text{ days}$$

$$\text{Giant Bookstore: } \frac{4\,000}{20\,000} \times 365 = 73 \text{ days}$$

Giant Bookstore has a better debtor days ratio, although it is on the high side, averaging 73 days for customers to make payment on purchases made on credit. Tiny Bookstore customers average 91.25 days. Although these debtor days ratios may be consistent with the organizations' policies and a key to maintaining a positive relationship with their customers, they could be a cause of concern. The managers of both bookstores, especially Tiny Bookstore, will need to make sure they have ample cash on hand to meet their daily business expenses. To fully assess the efficiency of these bookstores, trends over multiple years should be compared.

To improve its debtor days ratio, a business can provide discounts to customers who pay early or in cash. This will encourage customers to pay cash or cover their debt early. However, this might result in losing sales as some customers might switch to different businesses due to favorable trade credit terms.

Businesses could also penalize customers who take too long to pay by charging penalties. This might incentivize customers to pay on time and thus reduce the debtor days ratio for the business. However, some customers might switch suppliers and the business might lose them. A business can pursue legal means or refuse future sales until the customer pays off its debts. Again, this can result in the loss of customers, and the business will need to find new customers, which can present different risks.

Creditor days

Although creditors and debtors are balance sheet items, creditors is a current liability and debtors is a current asset. Creditors is the amount of money owed to suppliers due to purchases made on credit. The creditor days ratio is the average amount of time that it takes a business to pay for goods and services purchased on credit from its suppliers. The formula to calculate the creditor days ratio is:

$$\text{Creditor days ratio (number of days)} = \frac{\text{creditors}}{\text{cost of sales}} \times 365$$

In this ratio, the amount of creditors is linked to the cost of sales.

In general, the higher the creditor days ratio, the better. A higher creditor days ratio provides the business with more cash on hand. The business is taking advantage of the free credit being offered by its suppliers. This could help a business minimize the need to take on other short-term debt like overdrafts. However, just like the debtors days ratio, the creditor days ratio should be compared with the terms offered by its suppliers. If the creditor days ratio is much higher than what is being offered, then penalties may have been incurred. In addition, the relationships between the suppliers and the business may be strained. If the creditor days ratio is much lower than what is being offered, then the organization may not be taking full advantage of the free credit being offered.

The creditor days ratios for Tiny Bookstore and Giant Bookstore are as follows:

$$\text{Tiny Bookstore: } \frac{75}{500} \times 365 = 54.75 \text{ days}$$

$$\text{Giant Bookstore: } \frac{2\,400}{8\,000} \times 365 = 109.5 \text{ days}$$

To analyze these ratios, it is important to put them into context and look at historical data to analyze trends. The high creditor days for Giant Bookstore may indicate a problem. Most businesses offer credit terms between 30 and 60 days. Taking over

100 days to pay creditors may mean that Giant Bookstore is also paying penalties. Although this could help Giant Bookstore free up cash for other purposes, it may also put a strain on its relationship with suppliers.

Strategies to improve an organization's creditor days may involve negotiating with its suppliers for an extended credit period. This will allow the business to maintain sufficient cash on hand and, at the same time, not incur any additional penalties. Negotiating with suppliers for an extension of trade credit might threaten the suppliers' survival as they rely on customers to pay on time.

In addition, a business may choose to manage creditor days through better stock control. For example, a business could implement just-in-time stock control, which will save storage costs, and cash will not be tied up in stock. The business will acquire the stock (inventory) when it is needed and will not need to use trade credit with suppliers. However, just-in-time stock control (see Unit 5) requires special arrangements and equipment that is costly and not always efficient.

Gearing ratio

The gearing ratio measures how much of the business is funded through long-term debt or loan capital. The formula for calculating the gearing ratio is:

$$\text{Gearing ratio} = \frac{\text{non-current liabilities}}{\text{capital employed}} \times 100$$

where capital employed = non-current liabilities + equity

This is an important ratio for investors and lenders to assess the financial risk of a business. Too high a gearing ratio suggests that a business may be unable to make interest payments and/or pay off the loan. A business that is highly geared will also be negatively affected by any sudden increases in interest rates, as it will need to make higher interest payments. In contrast, a gearing ratio that is too low suggests that a business may be playing it too safe and not using the credit available to it to grow. Having too low a gearing ratio is usually not much of a concern for a business as it indicates room for future expansion.

What is the ideal gearing ratio? This will depend on the context of the business and the industry in which it operates. For example, mature companies with a reliable cash flow may tolerate a higher gearing ratio. However, an ideal gearing ratio for most businesses is usually between 25 and 50 per cent. Above 50 per cent is usually considered too high, and below 25 per cent is considered too low.

Gearing ratio calculations for the two bookstores are:

$$\text{Tiny Bookstore: } \frac{750}{750 + 300 + 200} \times 100 = 60\%$$

$$\text{Giant Bookstore: } \frac{5\,000}{5\,000 + 15\,000 + 5\,000} \times 365 = 20\%$$

Although both bookstores fall outside the ideal range, it appears that Giant Bookstore is in a better position. Having a lower gearing ratio means that Giant Bookstore is less susceptible to sudden increases in the interest rate and more appealing to lenders

and investors. In addition, a lower gearing ratio indicates room for further expansion through the acquisition of additional long-term loans. In contrast, Tiny Bookstore is highly geared, which indicates that a large portion of its business is funded through long-term loans. This could cause long-term liquidity problems due to the high interest and loan payments it will need to make.

To improve (lower) its gearing ratio, a business can pursue alternative sources of finance rather than loan capital. For example, sale of shares (privately and publicly held companies) can raise more equity capital for the business as a source of finance. However, this might lead to reduced control of the business by the initial shareholders and dilution of ownership.

A business could decrease dividends to increase retained profit and capital employed. Increasing retained profit will result in a lower gearing ratio as retained profit is part of the equity of the business. This can be achieved by reducing cost of sales and expenses, or by increasing sales revenue without raising expenses (costs of sales are more likely to increase proportionately). Increasing retained earnings might affect some stakeholders, such as shareholders who will see their dividends decrease. As a result, they might decide to sell their shares (for publicly held companies) and invest in other ventures. Such sales might reduce the price of shares on the stock exchange, which reduces the interest of potential future investors.

Insolvency versus bankruptcy

Stakeholders are keen to measure and monitor the liquidity of a business. The liquidity ratios compare current assets and current liabilities and are one way to determine whether a business has enough liquid assets to pay its debts.

Insolvency occurs when a business is unable to pay debts that become due. Although a poor liquidity ratio may indicate insolvency, this is not always the case. Insolvency can occur even if total assets exceed total liabilities. For example, an organization that has assets which cannot be converted to cash in time to meet debts as they mature can become insolvent. Insolvency does not necessarily mean business failure: a business may still be able to make plans to solve this problem, such as rescheduling its debt. Insolvency can be temporary and reversed.

Bankruptcy is when a business is judged by a court of law to be unable to pay its debts. A bankrupt company's liabilities exceed assets, and it is deemed unable to fix this problem and pay its debts. A business that declares bankruptcy has failed and, in most cases, ceases to exist, at least in its current form of ownership. Its assets are distributed to the people and organizations it owes (creditors and lenders), and sometimes shareholders. Bankruptcy can be involuntary, when one or more creditors bring a petition against the debtor, or more often it is voluntary, when the debtor files a petition claiming inability to meet debts.

A business can experience insolvency but avoid bankruptcy. However, a company that experiences bankruptcy is always insolvent. Insolvency and bankruptcy can also be applied to individuals.

The ratio analyses discussed earlier are good indicators of the direction a business is heading. To avoid insolvency and bankruptcy, businesses can monitor their financial performance and position using ratio analysis and can try to take appropriate action to reverse any negative trends.

Case study – Marvel

Insolvency and even bankruptcy can be a common occurrence in the dynamic world of business. According to Britannica.com, the US media and entertainment company Marvel declared bankruptcy in 1996. The company, known for popular comic book characters like Spider-Man, Thor, Iron Man, and the Incredible Hulk, later reorganized and was purchased by the Walt Disney Company for $4 billion in 2009.

Activity

Working individually or with a partner, compare the financial statements of two competing businesses (for example, Amazon and Alibaba, Aldi and Lidl, Samsung and Apple). Remember only publicly held companies are required to publish their financial statements. The best place to find financial statements is usually in the investor section of the company website.

1 Compare and contrast the profitability, liquidity, or efficiency of your selected businesses. (You may need to calculate the appropriate ratios, or you may be able to find them in a business' annual report.)
2 Recommend one strategy for one of the organizations to improve its profitability, liquidity, or efficiency.

Practice questions

With reference to an organization of your choice, distinguish between insolvency and bankruptcy. (4 marks)

3.7 Cash flow

Learning outcomes

At the end of this section, you will be able to:

- explain the difference between profit and cash flow
- calculate and explain working capital
- analyze the liquidity position of a business
- prepare and analyze cash flow forecasts
- explain the relationship between investment, profit, and cash flow
- recommend strategies for dealing with cash flow problems.

In this section, we will learn more about **cash** and **cash flow** from a business perspective.

Think back to the balance sheet earlier in this unit. Cash is a line item within the current asset section of this financial statement. In this context, cash represents the value of liquid assets that are on hand (either held in a bank account or held by the business) that are used up within a year to pay for daily expenditures like wages and raw materials.

The cash flow of a business is the movement, the inflows and outflows, of these funds. Think of cash flow as the money going into and out of a company's 'wallet' or bank account.

In this section, we will compare cash flow to other financial terms like profit and investment. We will then discuss how to prepare and analyze cash flow forecasts. Finally, we will look at some recommended strategies for dealing with cash flow problems.

Profit versus cash flow

You may think that profit and cash flow are the same thing. In some cases (such as cash transactions), net cash flow (cash inflows minus cash outflows) and profit are the same. However, many business transactions are done on credit, and when this is the case, profit and cash flow are different.

Profit is calculated by subtracting expenses from revenue. The key to understanding the difference between profit and cash flow relies on an understanding of accounting principles, specifically the accrual method of accounting. Using the accrual method of accounting means that revenue, expenses, and profit are recorded and calculated on the date they are earned or the date they are incurred. However, credit sales and expenses do not immediately impact cash flow, or the actual movement of funds. The cash inflows and outflows only occur when the payment is made or received. In other words, a timing difference can exist between the accrual of a revenue or an expense and the actual exchange of funds.

For example, Company A sells €1,000 of merchandise to Company B during the month of January. Company A then invoices Company B for payment, and Company B pays Company A in February. Since the sale occurs in January, this sale is recorded in January as revenue using the accrual method, contributing to the profit of Company A. This expense is recorded in January for Company B. However, no cash is exchanged in January, so the impact on the cash flow in January for Company A and Company B is zero. Instead, payment is made and collected in February, and this is when Company A will experience a cash inflow and Company B will experience a cash outflow from this transaction.

It is important for businesses to keep track of cash flow as well as profit because a firm can be profitable but end up going bankrupt due to cash flow problems. Both cash flow and profit play an important role in any business. For example, a company could have a large deal in place that will bring in immediate revenue and thus appear profitable. However, if the transaction is done on credit and the company does not manage its cash flow well, it may struggle to pay its bills and short-term debts when they become due.

Cash flow is used in quantitative tools such as investment appraisal and cash flow forecasts, while profit is used in break-even analysis, final accounts, budgeting, and ratio analysis.

Liquidity and working capital

Earlier in this unit, liquidity ratios were explored as a way to analyze the financial stability of a business and its ability to meet any short-term debt obligations. Two liquidity ratios were discussed: the current ratio and the acid test ratio. These ratios compared current assets and current liabilities, which can be found in the statement of financial position (the balance sheet).

Working capital provides another measure of liquidity. However, rather than calculating liquidity as a ratio, working capital is calculated by subtracting the total current liabilities from the total current assets. Although the needs of individual businesses vary depending on the circumstances, most businesses will want to have a positive amount of working capital. An organization with sufficient working capital on hand can meet its daily obligations (raw materials, wages, and so on) and keep the business running. Organizations that have insufficient working capital may experience insolvency.

Case study – Alibaba and Amazon

For some companies, converting raw materials into sales is a lengthy process and demands a significant amount of working capital on hand to make this happen.

This is especially true for traditional brick-and-mortar retailers, as they must purchase large amounts of inventory well ahead of any sales in order to attract customers. Many of these retailers cannot rely on quickly converting their inventory into sales, and they will need substantial working capital to run their daily operations.

Large e-commerce retailers like Alibaba and Amazon show that this does not have to be the case. These retailers collect payment from their customers before they pay their suppliers. This means they do not need much working capital, as they rely on consistent and rapid sales to run their daily operations.

Profit, cash flow, and investment

To understand the relationship between profit, cash flow, and investment, it is helpful to think about how a new business starts.

Most business start-ups need to make significant capital expenditures initially to generate sales. The capital expenditures are considered an investment. For example, a manufacturing company will need to purchase the equipment, machinery, and possibly a factory, to manufacture their product. Office or retail space may be required for businesses that operate in the service sector. Investments are usually quite high in the early stages of a business.

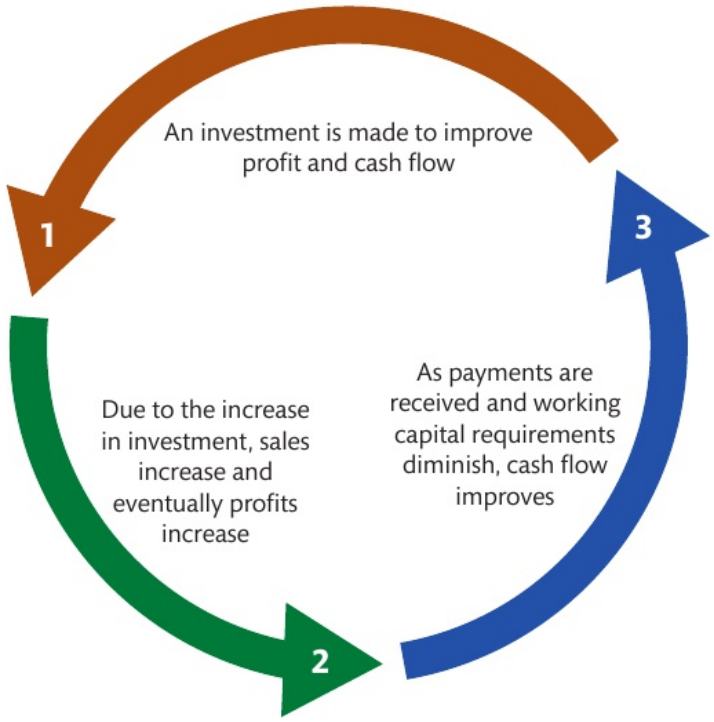
How does this relate to profit and cash flow? Initially, businesses will have trouble making a profit. Most start-ups will lose money early in the business. However, if smart investments are made, sales will eventually grow and so will profits.

Cash flow will take a similar path, but due to the timing involved in receiving payment from sales on credit and the working capital requirements during this time of increased sales (such as high labor and/or manufacturing costs), the cash flow of a business tends to lag behind the profit amounts. However, once profits and cash inflows are received, additional investments can be made. This cycle and the relationship between investment, profit, and cash flow is shown in Figure 3.11.

To remain successful, mature businesses need to capitalize on this investment, profit, and cash flow cycle. For example, an investment can be made in research and development to improve a product or service. Alternatively, a manufacturing company can invest in a new, environmentally friendly machine. Wise investments will lead to

an increase in sales and profits, and eventually improve cash flow. If a poor investment or no investment is made, then a business' sales, profit levels, and eventually cash flow will suffer in the long term.

Figure 3.11 Relationship between investment, profit, and cash flow



Cash flow forecasts

Given the potential delay in receiving cash inflows, and the dangers in not having sufficient cash on hand to meet the daily obligations of a business, owners and managers need to plan and create a **cash flow forecast**.

Cash flow forecasts differ from cash flow statements. Cash flow statements are historical financial statements that are usually published along with profit and loss accounts and balance sheets. Cash flow forecasts include projected cash inflows and outflows for future time periods (often monthly).

A cash flow forecast shows the following for a business:

- opening balance
- cash inflows
- cash outflows
- net cash flow
- closing balance.

Cash flow forecasts will be in the format shown in Figure 3.12 in case studies and examination questions.

Preparing a cash flow forecast has many benefits. Cash flows forecasts can:

- show when there might be a cash shortfall (for example, Figure 3.12 shows a negative closing balance in March for ABC Ltd)

Cash flow forecast for ABC Ltd or ABC for the first three months of 20XX

All figures in $m	**January**	**February**	**March**
Opening balance	8	2	1
Cash inflows			
Cash sales revenue	300	300	300
Tax refund		3	
Total cash inflows	300	303	300
Cash outflows			
Rent	2		
Packaging	15	15	15
Salaries and wages	50	50	50
Cost of sales	220	220	220
Heating and lighting	4	4	4
Delivery	15	15	15
Total cash outflows	306	304	304
Net cash flow	(6)	(1)	(4)
Closing balance	2	1	(3)

Figure 3.12 Cash flow forecast for a profit-making or non-profit entity

- allow managers to work through different scenarios (for example, ABC Ltd may consider securing a loan to avoid any cash shortfall)
- allow managers to plan and inform stakeholders like banks when additional finance is needed.

However, cash flow forecasts do have limitations. They are based on projected amounts, and the accuracy of these values can vary, especially given the dynamic nature of business and the external environment. In addition, cash flow forecasts do not indicate future profit levels. Remember, although cash flow usually aligns with profit, cash flow and profit are different concepts.

Worked example

Carolina plans to set up a bakery, Las Migas, in a small town. Competition from established bakeries is strong. Carolina has asked for a bank loan because her personal savings are insufficient. The bank manager has requested:

- a business plan
- a cash flow forecast for the first four months of operations.

Carolina has no experience with financial forecasts, but she estimates the amounts for Las Migas for the first four months of operations. These amounts are shown in the following table.

Estimated amounts for Las Migas for the first four months of operations

Estimated sales per month	For the first two months of operations: $1,500 From the third month of operations onwards: $3,500
Monthly rent	$1 000
Opening balance	$100
Cost of sales	30% of sales
Heating and lighting	1% of sales
Carolina's monthly salary	$380

Questions

1 Prepare a cash flow forecast for Las Migas for the first four months of operations.

Solution

1 Cash flow forecast for Las Migas (all amounts in $)

	Month 1	Month 2	Month 3	Month 4
Opening balance	**100**	**(255)**	**(610)**	**415**
Cash inflows				
Cash sales revenue	1 500	1 500	3 500	3 500
Total cash inflows	**1 500**	**1 500**	**3 500**	**3 500**
Cash outflows				
Rent	1 000	1 000	1 000	1 000
Salary	390	390	390	390
Cost of sales	450	450	1 050	1 050
Heating and lighting	15	15	35	35
Total cash outflows	**1 855**	**1 855**	**2 475**	**2 475**
Net cash flow	(355)	(355)	1 025	1 025
Closing balance	(255)	(610)	415	1 440

Dealing with cash flow problems

If a cash flow forecast reveals cash flow problems for a business, then strategies will need to be developed in order to deal with these problems. Cash inflows will need to be increased and/or cash outflows will need to be reduced. Choosing the most relevant strategy or strategies will depend on the situation. Some strategies that a business may implement include the following:

Use alternative, cheaper suppliers: In the cash flow forecast, the cost of sales is the largest cash outflow for ABC Ltd, and finding a way to reduce the cost of items like raw materials will help reduce this cash outflow item. Finding a new supplier often takes time, and it could negatively impact the brand and product quality but could improve cash flow.

Reduce debtor days and/or increase creditor days: A business can extend the amount of time it takes to pay its current suppliers. Alternatively, it can require its customers to make payments sooner. This will improve cash flow but may put a strain on the relationships between key stakeholders.

Implement debt factoring: Debt factoring is a financial service that a third-party business can provide an organization with that is having cash flow problems and trouble collecting payments from its debtors. An agreement is made between a business and a third party whereby the business sells its debts in exchange for a percentage of the total amount originally charged. The business does not receive the entire amount of debt owed but receives a much-needed cash advance from the third party, which then collects full payment from the debtors. By using debt factoring, a business can meet its payments on time with the cash received. However, the business will lose some money as the debt collector does not pay the entire amount of the debt.

Implement stock control techniques like just-in-time (JIT): This will help reduce costs related to maintaining stock for companies involved in manufacturing and retail, although this is not as relevant for a business involved in the service industry. However, the lack of stock in storage may hinder the business's ability to react if there is a sudden surge in demand.

Reduce other expenses: Managers can review and examine current expenditures like packaging, salaries and wages, and delivery costs, and see if there are any ways to reduce these amounts. However, reducing salaries, wages, and fringe benefits might negatively affect the motivation of employees and reduce productivity.

Implement marketing strategies: Some examples that could improve cash flow include a reduction in pricing to increase sales, enhanced promotion, or improving the product portfolio. However, reduction in pricing might not achieve the desired effect of increased sales and may lead to losses. Promotion can be expensive, and this will increase cash outflows and might not achieve increased sales. Improving the product portfolio by introducing new products is costly (research and development are expensive activities), and terminating less successful and slow-moving products might also affect the cash inflows negatively.

Obtain additional short-term financing: Although overdrafts can be costly due to high interest rates, they are designed to help businesses manage any cash flow problems that may emerge from seasonal sales.

Practice questions

With reference to an organization of your choice, explain the difference between profit and cash flow. (4 marks)

3.8 Investment appraisal

Learning outcomes

At the end of this section, you will be able to:

- calculate the payback period and average rate of return (ARR)
- evaluate investment opportunities using payback period and average rate of return (ARR)
- HL calculate the net present value (NPV) for different investment opportunities
- HL evaluate investment opportunities using net present value (NPV).

This section looks at capital investments and expenditures. Capital expenditures are any purchases made by a business for long-term or fixed assets (assets that are used for more than one year), like buildings, machinery, and equipment.

Investment appraisal is the process of assessing the future returns of capital expenditures. Although there are several factors to consider when making decisions about capital investments (such as human resources and organizational issues), financial implications need to be fully understood first.

In this section, we will cover three quantitative investment appraisal techniques:

- payback period
- average rate of return
- HL net present value.

To apply these techniques, the following information is needed (and will be provided in an examination):

- initial capital cost of the investment
- projected returns or net cash flows from the investment
- life expectancy of the investment (the length of time that the investment/asset will be used).

Activity

Ky runs a seaweed farm, Ky's Kelp, and is considering the purchase of a new machine to help with harvesting. There are two available machines: machine A and machine B. Financial data for these two machines are outlined in the table below.

Ky's Kelp net cash flows ($)

	Machine A	Machine B
Year 1	50 000	100 000
Year 2	100 000	100 000
Year 3	100 000	50 000
Year 4	200 000	50 000
Year 5	200 000	50 000

Which machine should Ky choose?

Payback period

The **payback period** is the amount of time it takes to recover the initial capital costs of the investment. The payback period is usually expressed in years and months. Most businesses will want investments to have a payback period of under three years. The shorter the payback period, the better.

Using the information in the activity, we can calculate how long it will take to recover the initial cost of each machine using the following process.

STEP 1: Organize the given information and calculate cumulative net cash flows (or returns) for each year.

Table 3.10 Ky's Kelp cumulative net cash flows ($)

	Machine A		Machine B	
Initial cost	250 000		150 000	
	Annual net cash flows	**Cumulative net cash flows**	**Annual net cash flows**	**Cumulative net cash flows**
Year 1	50 000	50 000	100 000	100 000
Year 2	100 000	150 000	100 000	200 000
Year 3	100 000	250 000	50 000	250 000
Year 4	200 000	450 000	50 000	300 000
Year 5	200 000	650 000	50 000	350 000

STEP 2: Identify the year when the initial cost is recovered.

To do this, compare the cumulative net cash flows with the initial cost in Table 3.10.

- For machine A, the $250,000 initial cost is reached at the end of Year 3.
- For machine B, the $150,000 initial cost is reached at some point after Year 1 but before the end of Year 2.

STEP 3: Calculate the additional time needed (the number of months) to recover the initial cost, if needed.

For machine A, no additional time is needed. The initial cost of the investment of $250,000 is paid back exactly at the end of Year 3.

For machine B, the initial cost of $150,000 is reached at some point during Year 2, so we need to calculate how many months in Year 2 will be needed. After Year 1, the cumulative net cash flow is $100,000. Therefore, subtracting $100,000 from $150,000, requires an additional $50,000 from Year 2.

Dividing $50,000 by the total amount of net cash flow expected in Year 2 ($100,000) indicates that an additional 0.5 years or 6 months (0.5 × 12 months) is needed to recover the initial costs.

Another way to calculate the additional time needed is to convert the projected net cash flow from Year 2 to a monthly amount by dividing the annual net cash flow by 12. Dividing $100,000 by 12 yields a projected monthly net cash flow during Year 2 of $8,333.33. Then, take the additional amount that is needed in Year 2 to reach the initial cost ($50,000) and divide that by $8,333.33 to get the number of months needed: 6 months.

STEP 4: State your answer.

The payback period for each machine is:

- Machine A: 3 years
- Machine B: 1.5 years, or 1 year 6 months.

Therefore, the payback period indicates that machine B is the best choice, with initial costs being recovered twice as fast. It only takes 1 year 6 months to recover (pay back) the initial costs of machine B, whereas machine A would take three full years.

i

The formula to calculate payback period is not on the formula sheet provided in examinations. Therefore, you need to understand and be able to apply the steps outlined above.

If the annual net cash flow amounts are the same, then the payback period can be calculated using the following formula:

$$\text{Payback period (in years)} = \frac{\text{initial capital cost}}{\text{annual net cash flow}}$$

Advantages and disadvantages of the payback period

Although the payback period can be extremely important for organizations that have insufficient cash on hand and need to recover their investment costs quickly, applying additional investment appraisal techniques can provide a more complete picture. For example, one major limitation of the payback period is that once the initial cost is reached, the net cash flows beyond the payback period are not considered. In the above example, years 4 and 5 are not considered for machine A, and years 3, 4 and 5 are not considered for machine B. The average rate of return considers all of the projected net cash flow amounts.

Average rate of return

The **average rate of return (ARR)** expresses the average net cash flow of an investment as a percentage of the initial capital costs. ARR considers the entire life of the investment and is calculated using the following formula:

$$\text{Average rate of return (ARR)} = \frac{(\text{total returns} - \text{capital cost}) \div \text{years of use}}{\text{capital cost}} \times 100$$

Generally, businesses want investments to have an ARR greater than 10 per cent, and the higher the percentage, the better.

To calculate the ARR for machine A and machine B, we need to find the total returns. Total returns can be calculated by adding up the expected annual net cash flows. These are shown in the cumulative net cash flows column in Table 3.10.

The ARR for each machine is:

Machine A:

$$\text{Average rate of return (ARR)} = \frac{(\$650\,000 - \$250\,000) \div 5}{\$250\,000} \times 100 = 32\%$$

Machine B:

$$\text{Average rate of return (ARR)} = \frac{(\$350\,000 - \$150\,000) \div 5}{\$150\,000} \times 100 = 26.67\%$$

These calculations suggest that during the next five years, Ky's Kelp will earn on average a 32 per cent return on the initial investment for machine A. It will earn on average a 27 per cent return on machine B. Therefore, applying the ARR investment appraisal technique suggests that machine A and not machine B (as suggested by the payback period) is the better investment. Machine A would provide a higher rate of return on average for Ky.

TOK To what extent are the methods used to gain knowledge in investment appraisal 'scientific'?

However, the average rate of return has some disadvantages. One main disadvantage of ARR (and to a lesser degree payback period) is that the **time value of money** is not considered. The concept of the time value of money states that cash inflows received now are worth more than cash inflows received later.

HL

Net present value

Would you rather have $50,000 today or $50,000 three years from now? Most of us would probably take the money today, as we can use it right away. Alternatively, we could take that $50,000 today and invest it. At the end of three years, we would then have more than $50,000 (if we invested it wisely).

Net present value (NPV) factors in the value of money over time. This is done by reducing cash inflows received in the future by an appropriate discount factor using the following formula:

$$\text{Present value} = \text{annual net cash flow} \times \text{discount factor}$$

Discount factors can be found using Table 3.11. If a discount table is needed to answer a question in an examination, it will be provided.

Once the present value amounts are determined, the NPV of the investment is determined using the following formula:

$$\text{Net present value (NPV)} = \sum \text{present values of return} - \text{original cost}$$

In other words, the value of the investment is expressed in terms of the sum of the NPVs of the net cash flows minus the initial cost. Generally, the NPV must be positive to be considered, and the higher the NPV, the better.

These discount factors can be explained through one formula, specifically:

$$\text{discount factor} = \frac{1}{(1+i)^n}$$

where i = the discount rate and n = the number of years

Try a few examples and see if you get the same results as those in Table 3.11.

For example, the working to find the discount factor for year 5 using an 8 per cent discount rate is:

$$\frac{1}{(1+0.08)^5} = 0.680583\ldots$$

Table 3.11 Discount table

Years	Discount rate				
	4%	6%	8%	10%	20%
1	0.9615	0.9434	0.9259	0.9091	0.8333
2	0.9246	0.8900	0.8573	0.8264	0.6944
3	0.8890	0.8396	0.7938	0.7513	0.5787
4	0.8548	0.7921	0.7350	0.6830	0.4823
5	0.8219	0.7473	0.6806	0.6209	0.4019
6	0.7903	0.7050	0.6302	0.5645	0.3349
7	0.7599	0.6651	0.5835	0.5132	0.2791
8	0.7307	0.6271	0.5403	0.4665	0.2326
9	0.7026	0.5919	0.5002	0.4241	0.1938
10	0.6756	0.5584	0.4632	0.3855	0.1615

Table 3.12 and Table 3.13 show the NPV amounts for machine A and machine B using a discount rate of 10 per cent.

Applying the net present value investment appraisal technique suggests machine A is the better investment for Ky's Kelp. The NPV for the net cash flows for machine A is higher than machine B.

However, applying the discount factor results in much closer amounts than if comparing the total net returns without applying the discount factors to each machine. For example, the total returns minus the initial cost without applying the discount factor is \$650,000 − \$250,000 = \$400,000 for machine A, and \$350,000 − \$150,000 = \$200,000 for machine B. This is because many of the higher returns for machine A occur in years 4 and 5, and the net cash flow received from these years is not as valuable as the net cash flows received in years 1, 2, and 3.

Table 3.12 Net present value of machine A

Initial cost	\$250 000
	Annual net cash flow × discount factor = present value
Year 1	\$50 000 × 0.9091 = \$45 455
Year 2	\$100 000 × 0.8264 = \$82 640
Year 3	\$100 000 × 0.7513 = \$75 130
Year 4	\$200 000 × 0.6830 = \$136 600
Year 5	\$200 000 × 0.6209 = \$124 180

NPV = (\$45 455 + \$82 640 + \$75 130 + \$136 600 + \$124 180) − \$250 000

= \$464 005 − \$250 000

= \$214 005

Table 3.13 Net present value of machine B

Initial cost	$150 000
	Annual net cash flow × discount factor = present value
Year 1	$100 000 × 0.9091 = $90 910
Year 2	$100 000 × 0.8264 = $82 640
Year 3	$50 000 × 0.7513 = $37 565
Year 4	$50 000 × 0.6830 = $34 150
Year 5	$50 000 × 0.6209 = $31 045

NPV = ($90 910 + $82 640 + $37 565 + $34 150 + $31 045) − $150 000

= $276 310 − $150 000

= $126 310

Although the net present value does factor in the time value of money, there are some limitations that should always be considered when evaluating capital investments. These are discussed in the next section.

Evaluating Ky's Kelp's investment opportunities

A summary of the investment appraisal calculations is shown in Table 3.14.

Based on the quantitative information provided and the calculations above, there are advantages and disadvantages to investing in machine A and machine B. The payback period is much better for machine B, but the ARR and NPV favor machine A. So, how should Ky choose? Here are some additional items to consider:

- Does Ky's Kelp have sufficient cash on hand to meet the day-to-day expenses? Does it have a low gearing ratio? Can it take on additional debt? Can Ky's Kelp take on additional risk? If the answer to any of these questions is no, then machine B may be the better option, as the initial cost is less and it allows Ky to repay the initial cost much quicker than machine A.
- Will any of the stakeholder groups prefer one machine over the other? For example, will one machine require additional training or more/less labor?

Table 3.14 Ky's Kelp investment appraisal calculations

	Machine A	Machine B
Initial cost	$250 000	$125 000
Payback period	3 years	1 year 6 months
Average rate of return (ARR)	32.0%	26.7%
Net present value (NPV)	$214 005	$126 310

- Does one machine align with the organization's brand or objectives better than the other? For example, if profit maximization is one of the main objectives for Ky's Kelp, then ARR and NPV would be more helpful than the payback period, as payback period ignores profitability.
- What is the impact on the environment of both machines? Does one machine create more waste or require more fuel?
- How volatile is the seaweed market? How adaptable are the machines? For example, what if consumer demand changes and requires Ky to grow a different type of seaweed? Will the machines be able to adapt?

Limitations of investment appraisal

Quantitative investment appraisal techniques can provide valuable information for managers and business owners, such as Ky, in evaluating investment options. However, there are some limitations to these techniques, and to investment appraisal techniques as a whole, that must be considered in order to fully evaluate investment opportunities.

Stakeholder considerations: Does the company have enough cash to make the initial investment? Is the company able to take more of a risk? Do employees or customers prefer one investment over the other? Are there supply, ethical, or environmental considerations?

Qualitative versus quantitative: Investment appraisal is a quantitative tool. It is almost always better to decide based on both quantitative and qualitative factors. For example, additional training or labor may be required. How will that affect the morale and motivation of employees? Is one investment more in line with the brand or objectives of the company?

The dynamic nature of business (short- versus long-term implications): Projecting one year in the future is difficult, but investment appraisal often requires projecting even further into the future due to the dynamic nature of business. What will these investments mean for the company in the long term? Will they put it on the right path to success?

Assumptions of investment appraisal techniques

Investment appraisal techniques make certain assumptions in their calculations.

Accuracy of results: Calculations are based on estimated capital costs and estimated net cash flows. In many cases, these are difficult to project and can lead to inaccurate results. As such, the payback period may be the most accurate, as it does not usually require long-term forecasting.

Timing of cash flows: Neither ARR nor payback period consider when the cash is coming into the business. This could be a significant factor especially if the business is a seasonal operation.

Time value of money: Money earned today is more valuable than money earned tomorrow or years from now. This is because once money is received, businesses can turn it into more money. Neither ARR nor payback period consider this. NPV attempts to address this limitation.

Practice questions

Cyprus Tours, owned and operated by Nikolas Georgiadis, is a travel agency. It arranges sightseeing tours for groups of tourists, as well as accommodation and restaurant bookings. Tourism is one of the most important industries in Cyprus. At the moment, Cyprus Tours hires cars from local taxi companies to transport groups of tourists around the island of Cyprus. The hiring of cars is a major expense for the business.

Nikolas is considering purchasing ten cars so that Cyprus Tours can transport customers itself. The cost of the ten cars, which run on petrol (gasoline) only, is €400,000, and the firm forecasts that the net profit will increase by €85,000 per annum from the investment. The vehicles will have a useful life of six years.

Pressure groups in Cyprus have demanded that all new vehicles be hybrid (with an electric battery and petrol engine) in order to reduce pollution. At low speed, hybrid cars pollute less. Taxi companies, however, object to the demands from the pressure groups. A hybrid car costs 25 per cent more than a petrol-only car to purchase, and the cost difference cannot be passed on to consumers.

If Nikolas acts immediately, Cyprus Tours can purchase the petrol-only cars before any changes in the law. However, his son Dimitri, a university student, objects to purchasing petrol-only cars. He argues that businesses have a social responsibility to protect the environment, which also ensures the long-term viability of tourism in Cyprus. Nikolas fears that purchasing hybrid cars would put a financial burden on the company. Cyprus Tours would have to cut expenses by making several booking agents and administrative staff redundant. Cyprus Tours would also have to reduce year-end bonuses.

1 Calculate the following, showing all your calculations:
   a. the payback period, the average rate of return (ARR), and the net present value (NPV) for the petrol-only cars (6 marks)
   b. the payback period, the ARR, and the NPV for the hybrid cars. (6 marks)
2 Analyze the usefulness for Cyprus Tours of using the payback period, the ARR, and the NPV methods for investment appraisal. (6 marks)
3 Discuss whether Cyprus Tours should purchase the hybrid cars. (10 marks)

IB learner profile

Inquirers

Discuss to what extent does careful financial management help businesses to achieve their social objectives.

HL

3.9 Budgets

Learning outcomes

At the end of this section, you will be able to:
- distinguish between cost and profit centers
- explain the roles of cost and profit centers
- construct and analyze a budget
- calculate and analyze variances within a budget
- explain the importance of budgets and variances in decision-making.

In this section, we will discuss two additional tools that business managers can use to help make decisions. First, we will explore the role of cost and profit centers and the differences between them. Second, we will learn how to construct and analyze a budget along with variance analysis.

Cost versus profit centers

As a business grows, it can be difficult for managers to maintain a system of responsibility and accountability. Imagine a manager trying to keep track of 1,000 workers. It would be very difficult to measure the impact each worker is having on a business. One strategy that managers can use is to divide the business into different parts or divisions.

If the costs of these different divisions of the business can be isolated and recorded, then it can be called a **cost center**. For example, a business can divide their business by geographic region if they operate in multiple locations. Alternatively, they can divide the business by function (marketing, human resources, and so on) or by activity (such as manufacturing, sales). Once a division is made, a person can be put in charge of that division and costs can be tracked, targets can be set, and trends can be analyzed. This will help managers determine the various costs needed to run the different parts of a business and help them control, plan, and make decisions about these costs.

Profit centers can record and isolate costs and revenues. For example, the sales department is often considered a profit center as the amount of revenue received from each sale can be recorded and tracked to the relevant salesperson or department. Costs associated with the sales department, like rent and salaries, can also be recorded, making it possible to calculate profits for this division.

IT, accounting, and human resources are typically cost centers, as no revenue can be clearly tracked and allocated to these departments. These cost centers are an accepted overhead of a business, as they provide important services that make it possible for profit centers to be profitable. All divisions of a company are potentially cost centers, and some may be profit centers as well.

Profit centers and cost centers can be run as if they are separate businesses. For example, a person can be put in charge of a profit center making decisions about marketing, pricing, and so on. Upper-level management can see which cost centers are most costly and which profit centers are profitable and which are not. This will help them monitor the performance of different parts of the business, make employees more accountable, motivate and reward them for strong performance, and help them make critical decisions.

Case study – Lego

Traditionally, businesses often think of marketing as a cost center. Developing and launching a marketing campaign can be costly, and the benefits of marketing are often difficult to measure. However, some businesses have figured out a way to turn their promotional expenses into a profit center. For example, Danish toy maker LEGO collaborated with several production companies to create and release *The LEGO Movie*. The movie made hundreds of millions in profit and increased LEGO's sales.

Find other examples where marketing was used as a profit center.

Constructing a budget

A budget is another financial planning tool that a business can use to set and communicate goals, and to increase accountability and control. It is a plan made by an organization detailing expected future income and expenditures over a particular period. Quantitative goals are set within a budget, providing an organization with a clear focus and direction of activity. Creating a budget can help an organization make plans, and a budget is usually a component of a business and marketing plan. Budgets can be done for each cost or profit center, or for an entire business. They are usually done annually but can also be done monthly or quarterly. Figure 3.13 shows a budget for a profit-making or non-profit entity.

Budget for ABC Ltd or ABC for the period ended 20XX

All figures in $m	**Budgeted figures**
Income	
Sales revenue	500
Interest earned	40
Total income	540
Expenses	
Salaries and wages	150
Materials	80
Rent	15
Advertising	8
Electricity	12
Total expenses	265
Net income	275

Figure 3.13 A budget for a profit or non-profit entity

Notice the similarity between a budget and profit and loss account. Both start with income or revenue, followed by expenses. Then net income (or profit) is calculated by total income minus total expenses.

TOK What assumptions underlie the techniques used when budgeting?

Once a budget is developed, managers can compare the results using variance analysis.

Analyzing variances within a budget

A variance analysis can help managers monitor and control the performance of their organization. A variance is calculated by taking the actual figure minus the budgeted figure. Rather than displaying a negative or positive value, the words 'favorable' or 'adverse' are used.

For income, if the actual amount of income is more than the budgeted amount (the sales revenue), then this is considered a favorable result and is marked with an 'F'. If the actual amount is less than the budgeted amount (the interest earned), then it is considered an adverse result and is marked with an 'A'.

If the actual amount of expenses (such as salaries and wages) is more than the budgeted amount, then it is marked as adverse ('A'). If the actual amount of expenses (such as materials) is less than the budgeted amount, then it is marked as favorable ('F'). This is summarized in Table 3.15.

Table 3.15 Favorable and adverse variances

Actual income > budgeted income	F / favorable
Actual income < budgeted income	A / adverse
Actual expense > budgeted expense	A / adverse
Actual expense < budgeted expense	F / favorable

An example of a budget with variance analysis is shown in Figure 3.14.

Figure 3.14 A budget with variance analysis

Budget for ABC Ltd or ABC for the period ended 20XX

All figures in $m	**Budgeted figures**	**Actual figures**	**Variance**
Income			
Sales revenue	500	520	20 [F]
Interest earned	40	35	5 [A]
Total income	540	555	15 [F]
Expenses			
Salaries and wages	150	180	30 [A]
Materials	80	75	5 [F]
Rent	15	15	0
Advertising	8	10	2 [A]
Electricity	12	9	3 [F]
Total expenses	265	289	24 [A]
Net income	275	266	9 [A]

[F] means Favorable
[A] means Adverse

Analyzing variances within a budget is an important business activity

Advantages and disadvantages of budgets and variances

Advantages

- **Communication and coordination**: A budget can set clear goals and communicate a clear focus and direction of activity.
- **System of responsibility and accountability**: Budgets and variance analysis allow a business to see and measure its ability to generate sales and control costs of profit centers and the organization as a whole.
- **Planning**: As a component of a business and marketing plan, a budget allows managers to plan and make key decisions.
- **Motivation**: Managers are given clear targets to reach through budgets and a way to monitor achievements through variance analysis.

Disadvantages

- **Lack of flexibility**: Businesses operate in a dynamic environment and need to constantly change and innovate. Managers can feel constrained by budgets that are no longer relevant.
- **Time-consuming**: The time taken preparing and analyzing budgets can prevent managers from completing other key tasks.
- **Narrow focus**: Budgets can focus managers too much on quantitative aspects and short-term goals, when other qualitative and long-term issues may be more important.

Worked example

Calculate the missing values in the budgets for two social enterprises. (Remember that F means favorable, and A means adverse.)

Budget for social enterprise 1

	Budget amount ($000)	Actual amount ($000)	Variance ($000)
Total revenues	500	450	
Salaries and wages	300	270	
Rent	100	120	
Electricity	50	75	
Total costs	450	465	
Excess of revenues over (under) costs	50	(15)	

Budget for social enterprise 2

	Budget amount ($m)	Actual amount ($m)	Variance ($m)
Total revenues	3.5		0.2 (F)
Salaries and wages	1.8	2.1	
Rent	0.5		0.2 (A)
Electricity		0.2	0.1 (F)
Total costs			
Excess of revenues over (under) costs			

The next two tables provide the answers.

Budget for social enterprise 1

	Budget amount ($000)	Actual amount ($000)	Variance ($000)
Total revenues	500	450	50 (A)
Salaries and wages	300	270	30 (F)
Rent	100	120	20 (A)
Electricity	50	75	25 (A)
Total costs	450	465	15 (A)
Excess of revenues over (under) costs	50	(15)	35 (A)

Budget for social enterprise 2

	Budget amount ($m)	Actual amount ($m)	Variance ($m)
Total revenues	3.5	3.7	0.2 (F)
Salaries and wages	1.8	2.1	0.3 (A)
Rent	0.5	0.7	0.2 (A)
Electricity	0.3	0.2	0.1 (F)
Total costs	2.6	3.0	0.4 (A)
Excess of revenues over (under) costs	0.9	0.7	0.2 (A)

Practice questions

With reference to an organization of your choice, explain the importance of budgets and variances in decision-making. (6 marks)

Summary

In this unit, you have learned:

- Careful management of an organization's finances allows businesses to be profitable and achieve social objectives in a sustainable manner.
- Internal and external sources of finance provide businesses with the capital to produce goods and services.
- Costs can be categorized as fixed, variable, direct, and/or indirect, while the money coming into the business from sales is called revenue.
- Final accounts (balance sheet and profit and loss account) capture the quantitative aspects of business activity.
- Financial ratios can be used to analyze a business' profitability, liquidity, and efficiency.
- Cash flow forecasts allow businesses to plan ahead so that they have sufficient cash for their daily operations.
- HL The investment appraisal techniques payback period, average rate of return, and net present value provide a way for businesses to evaluate and decide on capital expenditures.
- HL Budgets are a quantitative planning tool that allows businesses to set and communicate financial goals.

UNIT

4

Marketing

Conceptual understandings

- Social, cultural, and technological **change** can impact the language and medium of marketing.
- **Creative** ways of informing stakeholders can lead to positive business outcomes.
- **Ethical** marketing practices can enhance a business' brand image.
- **Sustainable** marketing practices can be effective for business success.

4.1 Introduction to marketing

Learning outcomes

At the end of this section, you will be able to:

- distinguish between market orientation and product orientation
- calculate and analyze market share
- calculate and analyze market growth
- HL discuss the importance of market share and market leadership.

Inquiry questions

These are questions based on themes within this unit that you could conduct some independent research about. You could explore:

- How might marketing strategies evolve in response to changeable customer preferences?
- Why can effective market research bring about creative business practice?
- How could social media development change an organization's marketing strategies?
- Why could globalization bring many changes to business activity?
- Why are successful marketing campaigns increasingly being built around the ethical and sustainable practices of a business?

Welcome to the world of marketing! Most of us can say that we have already been here. After all, from the moment we wake up and turn off our alarm clock to the moment we put our head on our pillow at night, we are surrounded by products, services, and brands. With the increased use of ubiquitous technologies such as smartphones and wearable devices, the presence of marketing activity has become even more apparent. But what exactly is marketing? And how should we approach marketing in this course?

Consulting ten different sources on the definition of marketing might result in ten different definitions. But most, if not all, definitions of marketing will have the following key points:

- Marketing is about identifying, anticipating, and meeting the needs and wants of customers and society.
- Marketing is more than just a promotion, slogan, or logo. Marketing involves all aspects of the marketing mix – product, price, promotion, place, people, processes, and physical evidence.
- Marketing is about the way an organization communicates the value it can bring to, and how it connects with, its target audience.

Online resources

For more on the fascinating world of content marketing use this QR code.

Interesting information

A traditional approach to marketing stresses that marketing success is all about getting the marketing mix right. If a business can just get the right product, at the right price, in the right place, and with the right promotion, then success will come. While the marketing mix certainly plays a major role in any marketing program and will be a big part of this unit, one interesting trend in marketing has emerged in response to the increasing use of technologies in the hands of consumers. Technology today allows consumers to ignore advertising and irrelevant content. As a result, brands now need to have a compelling and remarkable story to tell so they can capture the interest of today's consumers. All of this puts an emphasis on the key point that marketing is about the way organizations communicate the value they can bring to, and how they connect with, their target audience, and leads to the idea of content marketing.

The Content Marketing Institute defines content marketing as:

> The strategic marketing approach of creating and distributing valuable, relevant, and consistent content to attract and acquire a clearly defined audience – with the objective of driving profitable customer action.

Marketing is much more than a simple advertisement or logo. Marketing involves a dynamic range of activity and tasks that require an in-depth study of multiple, related concepts to fully understand.

Perhaps, even more than the other main functions of business (human resources, finance, and operations), marketing relies on the key concept of creativity, requiring entrepreneurs, managers, and students to stay open to new possibilities and perspectives. For example, although traditional approaches to marketing focus on sales and profits, most (if not all) non-profit organizations and social enterprises use marketing as they pursue and meet their social objectives in a creative manner.

IB learner profile

Open-minded

Although you may have several preconceived notions about marketing as a consumer, it will be important to be open-minded during our study of marketing and consider marketing from the perspective of other stakeholders (e.g., managers).

Case study – Aravind Eye Care

Social marketing applies marketing principles and techniques to change social behaviors and promote awareness of social issues. This is commonly used in public health and was adopted by Dr Govindappa Venkataswamy, founder of Aravind Eye Care, as it pursued its mission to eliminate needless blindness. By applying social marketing and providing large volume, high-quality and affordable eye care, Aravind Eye Care has been able to change the behavior and eye health of millions of people in India.

Explain the role of marketing for social enterprises like Avarind Eye Care.

This first section on marketing looks at the different ways organizations can approach marketing and how organizations can measure their efforts.

Market versus product orientation

One way to understand how organizations approach marketing is through the ideas of **market orientation** and **product orientation**.

Organizations that use a product orientation approach focus their activity on making the best product possible and emphasize the features of that product throughout the marketing process. It assumes that there will always be a market for the products the firm makes. Product orientation is driven more by technical innovation than by consumer needs.

In an interview with *Fortune* magazine, Steve Jobs (co-founder and former CEO of Apple) once said 'We do no market research'. What does that mean? Does this mean that Apple did not think about the needs and wants of its customers when designing the iPhone or iPad? Can a typical business be successful taking such a drastic approach? Do you think Apple is still taking this approach?

To really understand what is meant by this statement, we need to consider the context. Take the example of the Apple iPhone. Consumers were not aware that such a revolutionary product could be invented and developed. But, thanks to Apple and the innovation of other technology companies, the smartphone industry is now worth hundreds of billions of dollars. Other examples of product orientation can often be found in the pharmaceuticals and electronics industries. Remember, product orientation rests on the belief that if an innovative product is produced of good quality, then consumers will purchase it.

Market orientation focuses on identifying and satisfying consumer needs through market research and analysis. The accessibility and availability of data is generating a major shift toward market orientation, making it easier for organizations to capture market and consumer behaviors and trends. Rather than going on what the business

Table 4.1 The key features of product orientation and market orientation

Product orientation	Market orientation
Focuses on building a quality product	Focuses on meeting the needs of customers
Internal looking	External looking
No market research is used	Extensive market research is used
Believes that an innovative product (key) will sell	Believes that a business must first understand the needs and wants of the market (lock)
Advantages: • Puts focus on specializing in producing high-quality products • Eliminates the need for market research, giving full control over its activities to the business	Advantages: • Looks to minimize risk by conducting market research • Can respond to changes and new ideas in the market
Disadvantages: • Can lead to an outdated or obsolete product, creating waste, and lead to unsustainable business practices • Can be risky • Usually requires high research and development costs • Can have negative ethical implications as businesses use marketing techniques to persuade and convince consumers to purchase these products	Disadvantages: • Market research can be costly • Can be difficult to capture current trends • Can slow down innovation

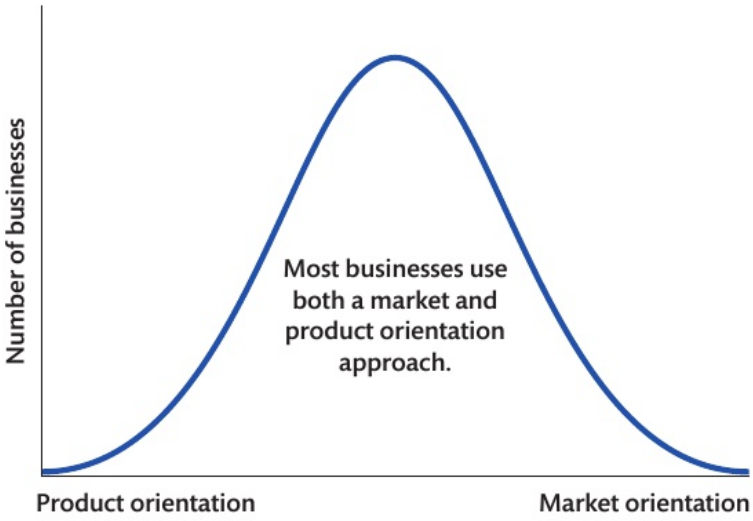


Figure 4.1 Most organizations use a combination of product and market orientation

thinks is right for the customer, a market orientation approach results in activity and decisions that are based around what customers need and want.

Another way to distinguish between these two approaches is to consider Seth Godin's lock and key analogy presented in his book *This is Marketing*. A product orientation approach would start by making a key (a product) thinking it will easily find the right lock (the right market). While this can be done, it is quite rare and challenging. In contrast, a market orientation approach starts with the lock (people's dreams and desires) and makes a key (product) just for them.

Although product and market orientation are two distinct approaches to marketing, like most things, nearly all organizations fall somewhere in the middle. Most organizations take a product orientation approach at some times (focusing on creating a new, innovative product) and a market orientation approach at others (focusing on meeting the needs and wants of their customers).

Market share and market growth

Before getting too far into the topic of marketing, we will need to spend some time understanding what is meant by the term **market** and how it can be measured. 'Market' has many meanings, but in general business terms, a market is a place where buyers and sellers gather. A market can be categorized in different ways (such as geography, size, industry, product type). The size of the market can be measured in terms of the value of sales or the number of units sold.

Once the market size is known, then an organization can calculate its **market share**, or the percentage of its total sales in relation to the total market sales. Market share can be calculated in terms of sales revenue (the money spent on all goods sold) using the following formula:

$$\text{Revenue market share} = \frac{\text{sales revenue of organisation}}{\text{total sales revenue of the market}} \times 100$$

Alternatively, market share can be calculated by volume or the number of units sold:

$$\text{Unit market share} = \frac{\text{units of sales of an organisation}}{\text{total unit sales of the market}} \times 100$$

Larger companies often compete in multiple markets (they sell multiple products or sell in multiple geographic regions). Therefore, it is important to clearly define the market being studied when analyzing market share data.

In addition to market share, **market growth** can be measured. Market growth can be expressed in terms of the percentage change in the market size over a given period (such as one year). This can be based on the sales revenue.

$$\text{Revenue market growth} = \frac{\text{current sales revenue} - \text{previous sales revenue}}{\text{previous sales revenue}} \times 100$$

Alternatively, this can be calculated based on the units sold.

$$\text{Unit market growth} = \frac{\text{current units of sales} - \text{previous units of sales}}{\text{previous units of sales}} \times 100$$

For example, the total sales revenue (in billions of US dollars) of the airline industry worldwide is shown in Figure 4.2.

Using this data, market growth, or the change in the market size, can be calculated for 2019, 2020, and 2021 as follows (percentages are rounded to two decimal places):

Market growth, 2019

$$\frac{\$818.32 - \$806.56}{\$806.56} \times 100 \approx 1.46\%$$

Market growth, 2020

$$\frac{\$359.30 - \$818.32}{\$818.32} \times 100 \approx -56.09\%$$

Market growth, 2021

$$\frac{\$471.82 - \$359.30}{\$359.30} \times 100 \approx 31.32\%$$

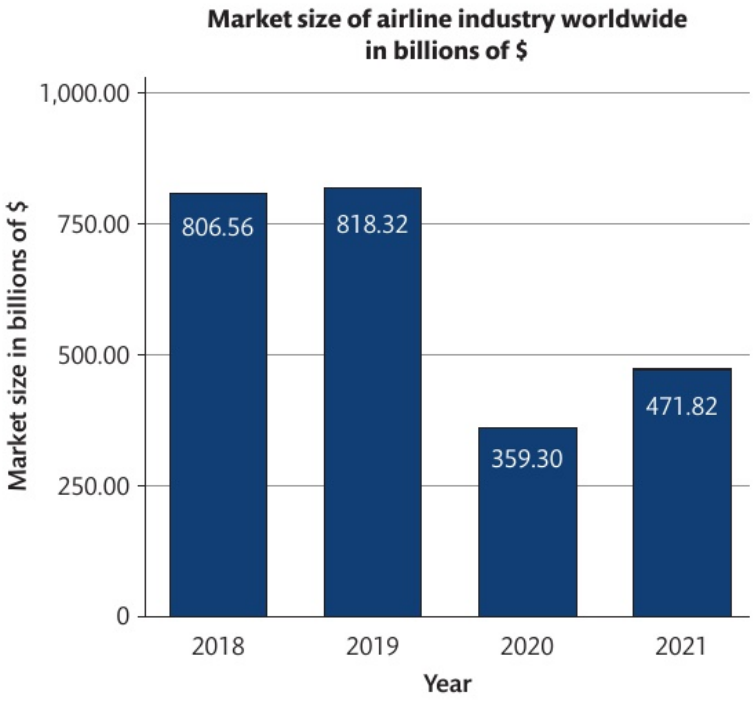


Figure 4.2 Market size of global airline industry ($, billions)

As expected, the airline industry has been quite volatile since the start of the COVID-19 pandemic. However, the growth in sales of over 30 per cent in 2021 shows that the industry may well have started to recover.

HL

The importance of market share and market leadership

Market share can be an important indicator of success for a business. It is a way for a business to measure consumer preferences in relation to its competitors. A high market share indicates effective marketing practices and often leads to higher profit margins.

A **market leader** is typically the organization with the highest market share in a particular market. Market leadership can bring many benefits to an organization including:

- The ability to influence its competitors: Many businesses look to see what their major competitors are doing and try to replicate their success. This means that market leaders can have more of an impact on the market. For example, market leaders can determine and set prices for their goods and services that other, smaller competitors will often need to follow. Furthermore, social enterprises that are market leaders can inspire others to adopt behaviors and products that align with the organization's social objectives.
- Brand recognition: Having the top market share means most consumers and competitors know about your business, resulting in a higher brand value. A market leader has an easier time developing its brand as it can include their leadership position in promotional materials.
- Growth: Being a market leader often means that the business will have increasing sales and profits. A market leader can benefit from economies of scale to fuel its growth. Economies of scale allow the business to produce at a lower unit cost compared to smaller competitors (see 1.5 Economies and diseconomies of scale). The business can use this advantage to reduce prices and attract even more customers. Or it can use this cost advantage to pay for improvements in the product.
- Human resource benefits: Many employees want to work for the best. Market leaders can provide job stability and afford to pay their workers a quality wage. Workers can be highly motivated working for a market leader knowing that their work is making a large impact.

At the same time, being a market leader can make things more difficult for a business. Market leaders attract competition. In fact, competitors operating in the same market see the market leaders as the main competition and will do what they can to capture some of their market share. Some businesses become so large that they dominate the market. This can attract the attention of government regulators.

Additional limitations of market leadership can be ascertained by considering the impact on the environment and other stakeholders like the customer. For example, too much growth can negatively affect the environment and be unsustainable. In addition, when a business dominates a particular market, the customer often suffers due to the lack of competition, innovation, and affordable prices.

Furthermore, caution should be used when using and interpreting market share information. As mentioned earlier, for market share data to be valuable to an organization, the market must be clearly defined. This is not always easy, as organizations can be involved in multiple markets with multiple products. Access to accurate data can be challenging. Furthermore, the fact that market share can be calculated in two different ways (by sales revenue and by units sold) can lead to different or conflicting results. Lastly, as we saw with the airline industry figures earlier, it is important to consider the context of the situation. Businesses operate in a dynamic environment and things can, and often do, change quite rapidly.

IB learner profile

Thinkers

One challenge often faced by marketers is how to measure the impact of their marketing activity. Market share is one quantitative measure that can be used. Can you think of other ways to quantitatively measure the impact of marketing activity?

Practice questions

Market share

Consider the following annual unit sales amounts for the entire market and for Company A and Company B.

	Year 1	Year 2	Year 3
Unit sales for market	1 500 000	1 720 000	1 900 000
Unit sales for Company A	350 000	325 000	320 000
Unit sales for Company B	60 000	95 000	150 000

Company A's market share for Year 1 can be calculated as follows:

$$\frac{350\,000}{1\,500\,000} \times 100 = 23.3\% \text{ (rounded to 1 decimal place)}$$

Company B's market share for Year 1 can be calculated as follows:

$$\frac{60\,000}{1\,500\,000} \times 100 = 4\%$$

1 Calculate the market share for Company A and Company B for Years 2 and 3. (2 marks)

2 Describe any trends in the market share data. (2 marks)

Market growth

The following table shows estimated global automobile sales amounts ($, trillions) as provided by ibisworld.com.

2019	2020	2021	2022
$3.8	$3.25	$3.6	$3.8

The annual market growth of automobile sales for 2020 is calculated below:

$$\frac{(\$3.25 - \$3.8)}{\$3.8} \times 100 = -14.5\% \text{ (rounded to 1 decimal place)}$$

1 Calculate the annual market growth of automobile sales for 2021 and 2022. (2 marks)

2 Describe any trends in the market growth data. (2 marks)

HL end

4.2 Marketing planning

Learning outcomes

At the end of this section, you will be able to:

- explain the role of marketing planning
- explain segmentation, targeting (target market) and positioning
- construct position maps
- explain the difference between niche market and mass market
- explain the importance of having a unique selling point/proposition (USP)
- examine how organizations can differentiate themselves and their products from competitors.

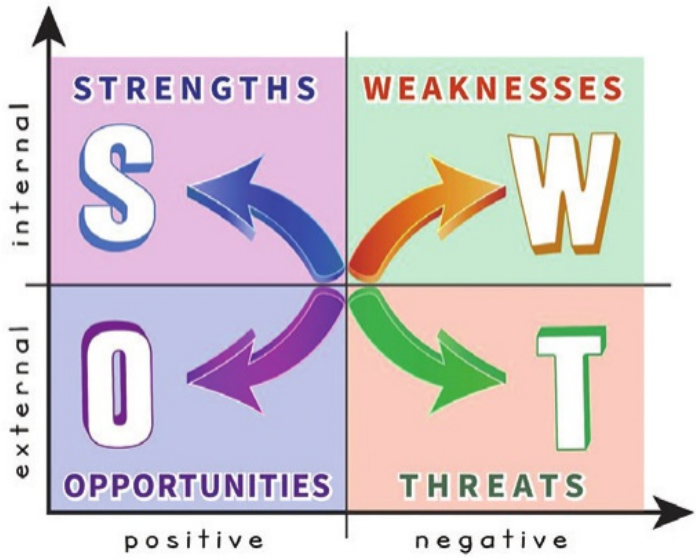
Now that we have been introduced to what marketing is and how it can be measured, we will look more closely at the different ways organizations can approach marketing activity.

Marketing planning

Following the business plan that was discussed in Unit 1, each division of a business (such as the marketing division) will do some planning of its own. Although each business can go about the planning process differently, the typical elements of a marketing plan include:

- a market analysis, which may include background data on the market, market research, and a SWOT or STEEPLE analysis
- details of the marketing objectives and goals of the business including the target market
- marketing strategies (which may include the 7Ps of the marketing mix), which explain how the organization will accomplish its marketing objectives
- financial projections including the marketing budget and sales forecasts
- a detailed action plan explaining the next steps, how the actions will be monitored, and, perhaps, contingency plans.

SWOT analysis looks at an organization's strengths, weaknesses, opportunities, and threats



This marketing plan, and marketing planning in general, helps organizations in several ways. It includes developing a clear understanding of:

- the market in general, and the needs and wants of the target market
- the organization's marketing objectives and how to accomplish them
- the financial constraints in which it will need to operate
- the potential problems it may face
- how its marketing activity fits in with the rest of the organization
- the systems and processes that are in place to monitor and improve its marketing activity.

Segmentation, targeting, and positioning

When studying the market, the majority of successful organizations go through a process called **market segmentation**. In market segmentation, organizations collect, organize, and analyze market research to identify and categorize different groups of people into market segments. These groups or segments share one or more characteristics or traits.

The main ways in which a market can be segmented are by:

- demographics: age, education, income, religion, etc.
- psychographics: attitudes, tastes, values, behaviors, etc.
- geographics: country, state, town, climates, etc.

Identifying market segments cannot always be done effectively, but with the increase in digital traffic and commerce, a vast amount of data is being collected for this purpose.

When organizations understand different market segments, they can develop their marketing strategies and marketing mix (product, price, promotion, etc.) by **targeting** a particular segment or target market. It should be noted that organizations do this to varying degrees. This will be explored later in this section when mass and niche markets are discussed.

One way to develop an effective targeting strategy is through **positioning**. Market positioning is when a business seeks to identify its brand within a certain part of the market. For example, a business may want to position itself as a luxury or budget brand, or a modern or traditional brand. One visual technique that can be used to determine the most appropriate market positioning strategy is position maps.

Position maps

Let's take a moment to think about different types, brands, prices, and flavors of ice creams. Which brand name comes to mind when you think of top-quality ice cream? Likewise, which brand name comes to mind when you think of cheap ice cream? Are there any other brands that you think are in between the top quality one and the cheap one?

Just as you hold different views about different ice cream brands, customers hold various views or perceptions for almost any product. Companies trace or plot these views or perceptions that customers hold of their products onto a map known as a position map or perception map.

Many disciplines use the idea of categorization to develop understanding and determine the appropriate action.

For example, biology students know that the number of organisms to study seems infinite. According to one study published by the National Institute of Health, there are over 8 million species and many more still to be discovered. The modern taxonomic classification system attempts to make this more manageable by using eight levels to categorize these species: domain, kingdom, phylum, class, order, family, genus, and species.

Another example is medicine, where doctors use diagnostic codes to identify ailments and determine the most effective treatment.

Usually, two variables are plotted graphically on a position map. The variables chosen depend on what the organization thinks are most important. For this example, and in many cases, quality and price are selected.

Next, market research is gathered to place the organization and its competitors in terms of price and quality. Although quantitative information may be available for price, identifying the customers' perceptions on quality can be more challenging. Utilizing the expertise of market research professionals can provide accurate and more insightful data.

Figure 4.3 is an example of a position map. The brands' positions can vary by region and change over time.

The last step of market positioning is to identify where a gap exists in the market, so the company can position itself strategically. If you were to start an ice cream business, how would you position your brand?

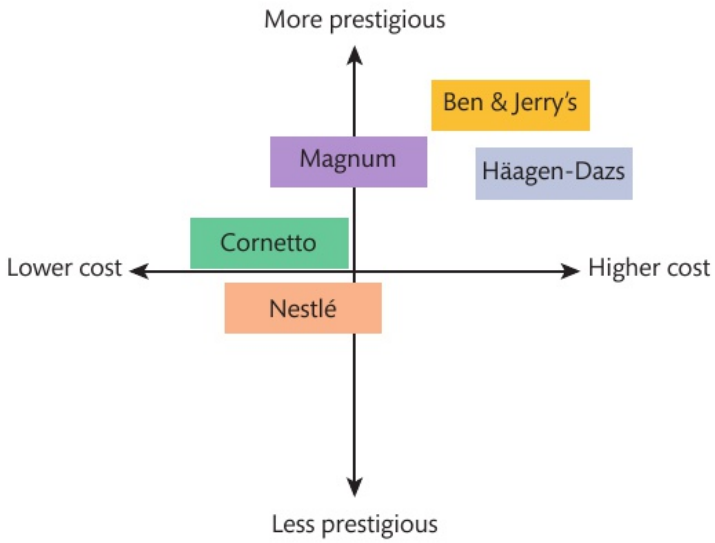


Figure 4.3 An example of a position map for ice cream

Activity

Look at the diagram below and think about how the ideas of segmentation, targeting, and positioning can be used to formulate a marketing strategy. Consider products or brands that you are familiar with and complete your own position map.

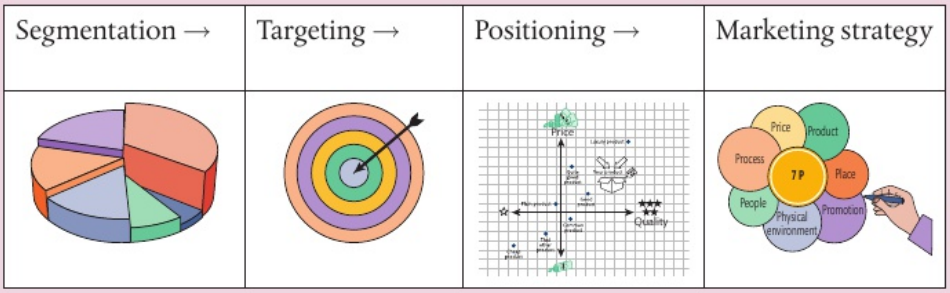


Figure 4.4 Segmentation leads to targeting, which leads to positioning, which leads to marketing strategy

In this example, there is no clear answer, but there may be more opportunity to enter with a low price, as most competitors are either high or medium priced. Of course, high quality and low price is always favorable in the minds of consumers, but is often difficult for businesses to achieve, especially in the long term.

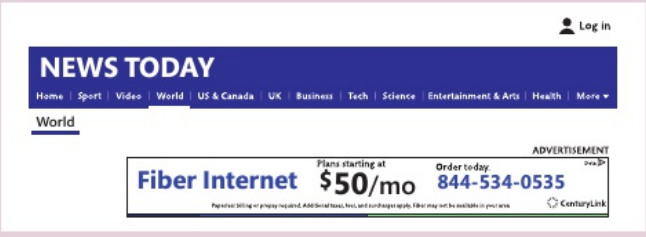
Niche versus mass markets

Some organizations may have products or services that appeal to a mass market while other organizations target a more specific segment of the market, thus exploring and creating a niche market.

Interesting information

Do organizations still need to choose between mass and niche markets?

As new technologies emerge, this is not always clear. In fact, many businesses are turning toward mass customization as a production technique (which is discussed in Unit 5) and a marketing strategy. By using a mass customization approach, organizations can use technologies to communicate with individual customers in a customized way on a massive scale. This is possible as companies obtain large amounts of consumer data and employ machine learning and algorithms to deliver a customized message on a massive scale. For example, personalized advertisements appear on a user's screen based on a recent internet search.



This advertisement based on location is an example of mass customization

Alternatively, a dynamic pricing strategy can be used to charge different prices to individual customers depending on how and when they arrive at a company's website.

When organizations take a mass marketing approach, they try to communicate to the largest possible audience. This large audience most likely has a wide range of needs and wants. In addition, there are probably many similar products being offered. In a mass market approach, there is no attempt to segment the market. Instead, the business attempts to reach every potential customer through mass marketing or mass retail. Organizations that operate in a mass market tend to focus on quantity rather than quality to reach profit targets.

In contrast, organizations that take a niche marketing approach use segmentation and targeting to communicate with small groups of existing or potential customers with similar and specific needs and wants. Niche markets tend to be smaller and narrower than mass markets. There tends to be less competition. Organizations operating in a niche market tend to use specialized processes and, as a result, charge a higher price. Instead of being a small fish in a big pond (a small market share in a large market), organizations that take a niche marketing approach strive to be a large fish in a small pond (a large market share in a relatively small market).

Unique selling point/proposition

Given that most business organizations operate in a competitive environment, they will look to separate themselves from their competitors by developing a **unique selling point** or **proposition**. A unique selling point (USP) is a distinguishing feature of a product or brand. A position map can be an effective tool for a business to use to identify and develop its USP.

The USP can come from any of the marketing mix elements (product, price, place, promotion, people, physical evidence, or process). Once this USP is identified, a business can communicate this feature through promotional materials. In other words, it will make a proposition to the customer about why its product or service is better than the competition. A USP can become the key factor for a business to use as it persuades customers to purchase its product.

One challenge associated with a USP that many businesses face is how to communicate and control the messaging regarding the USP in a consistent manner. Although we will cover social media in more detail later in this unit, thinking about social media now can provide an interesting perspective on this topic.

Social media can be defined as any website or application that facilitates the sharing of content through virtual networks and communities. Although this is a fast-moving industry, Table 4.2 shows some of the top social media tools as of 2022 along with a description of their unique selling point.

▲ The definition of 'social media' has rapidly changed since the term was first used in the mid 1990s

Table 4.2 Social media tools and their USPs

Social media tool	USP description
Facebook	The world's largest social network
YouTube	Interactive video platform giving everyone a voice
TikTok	User-generated, short and funny videos
Instagram	Building community through visual media
WeChat	An innovative, all-in-one chat and social media platform
WhatsApp	Worldwide, ad-free instant messaging platform

Toolkit connection

Many of the terms, approaches, and activities discussed in this chapter help organizations formulate their marketing strategy. In fact, these ideas can be connected to the business tool called Porter's generic strategies.

Porter's generic strategies emphasize differentiation. Porter argued that it is difficult for a business to be superior in all aspects. Instead, organizations should identify what they do best and highlight their unique selling point.

Porter's generic strategies also consider focus. Using segmentation and targeting allows a business to get to know its market, narrow it down, and meet the needs of its customers.

Case study – Social enterprises and USPs

As outlined by the Social Enterprise World Forum (SEWF), a social enterprise:

- is mission focused
- has its surplus (profit) invested in its mission
- has an ownership model tied to its mission with wide community involvement
- is ethically transparent and accountable to its stakeholders
- generates most of its income from the sale of goods and/or services
- has own assets 'locked' (if feasible) so that the social enterprise cannot be purchased by a private equity firm or taken over by another entity.

One example is Bee's Wrap, which provides a natural alternative to plastic wrap. Its homepage and social media presence highlights its USP.

Explain the importance of a unique selling point for social enterprises like Bee's Wrap.

Differentiating from competitors

There are many ways organizations can differentiate themselves from their competitors. Many of these revolve around USPs and the marketing mix, but an organization can also differentiate itself by:

- having a unique product feature or range of products to offer (product)
- offering its product for less than the competition (price)
- selling its product in convenient or unique locations (place)
- offering exceptional customer service and developing relationships with its customers (people)

IB learner profile

Reflective

Applying for a job or admission into a college or university can be very competitive. Reflect on how you can differentiate yourself from other candidates. What is your unique selling point?

- attaching a unique story or image to its product (promotion or brand)
- packaging its product in a unique or environmentally friendly manner (product)
- utilizing other innovative practices and/or operations (process and/or physical environment).

Practice questions

Starting in New Zealand with the launch of a sneaker made from wool, Allbirds is now a global company that sells footwear and apparel made from sustainable resources.

Competition within the footwear and apparel market is fierce. However, Allbirds set out to distinguish itself through its use of renewable resources in its products, providing a unique look and selling point. In addition to its unique products, it is currently pursuing the Allbirds Flight Plan to reduce its environmental impact. This plan involves cutting its carbon footprint by 50 per cent by 2025 and reducing it to near zero by 2030.

There is also evidence of Allbirds using market segmentation and targeting. For example, it has a product line specifically targeted at runners, 'The Running Shop'.

1 Explain how Allbirds differentiates itself from its competitors. (6 marks)

HL

4.3 Sales forecasting

Learning outcome

At the end of this section, you will be able to:
- discuss the benefits and limitations of sales forecasting.

A forecast is a description of what may happen in the future. Some familiar examples include a sunny weather forecast and a cash flow forecast, covered in Unit 3. In this chapter, we will discuss sales forecasting, how it is done, and how it can be used to formulate a marketing plan and strategy.

What is sales forecasting?

As discussed in 3.3 Costs and revenues, sales or sales revenue is the amount of income generated from the main operations of a business from the sale of goods or services. Sales forecasting attempts to approximate the number of sales in the future.

Predicting the future often starts with understanding the past. By analyzing historical sales data, a business can identify whether there is an upward, downward, or constant trend. How do we calculate the trend?

Predicting the future often starts with understanding the past

First, let's consider the annual sales data in Table 4.3.

Using simple linear regression, the actual sales versus the year can be graphed and a line can be drawn following the general pattern of the data. This can be done precisely using any spreadsheet program or graphing calculator.

Alternatively, an approximate trend line can be determined by first calculating the mean (or average) of each data point:

$$\text{Mean} = \frac{\text{sum of all data points}}{\text{number of data points}}$$

$$\text{Mean of years} = \frac{(1+2+3+4+5+6+7+8+9+10)}{10} = \frac{55}{10} = 5.5$$

$$\text{Mean of actual sales} = \frac{(300+500+600+550+600+750+850+1100+800+1100)}{10}$$

$$= \frac{7150}{10} = 715$$

Table 4.3 Annual actual sales

Year	Actual sales ($, million)
1	300
2	500
3	600
4	550
5	600
6	750
7	850
8	1 100
9	800
10	1 100

Figure 4.5 Actual sales, the actual sales trendline, and the mean data point

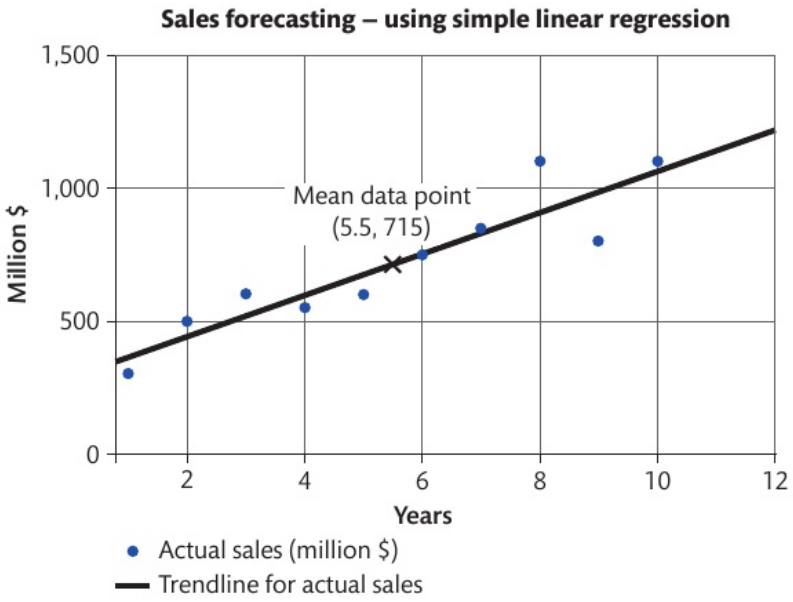
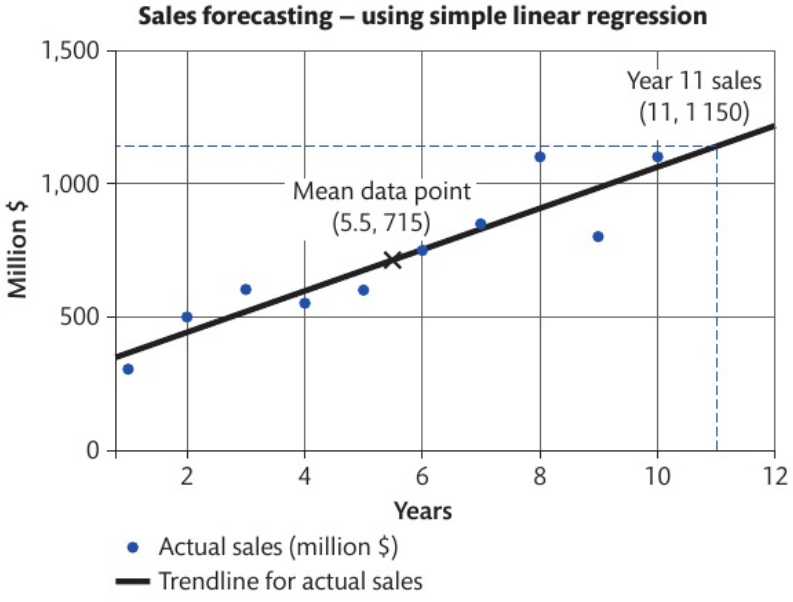


Figure 4.6 Sales forecasting using simple linear regression



The mean data point for this set of data is (5.5, 715). The trendline must go through this mean data point. Plotting this point and using a straight edge, we can then draw a trend line that follows the general pattern of the data as shown above.

This trendline can be extended to forecast future sales. For example, expected sales for year 11 would be approximately $1,150 million.

Interesting information

A close observation of the data shown in the example reveals some cyclical fluctuation (peaks and troughs) most likely due to external factors (such as economic conditions). Therefore, we can investigate the data further by calculating moving averages and yearly variations.

Year	Actual sales ($, million)	Three-year moving average (trend)	Yearly variation
1	300		
2	500	466.67	33.33
3	600	550.00	50.00
4	550	583.33	−33.33
5	600	633.33	−33.33
6	750	733.33	16.67
7	850	900.00	−50.00
8	1 100	916.67	183.33
9	800	1 000	−200.00
10	1 100		

Calculations

Three-year moving average (trend):

$$\text{Year 2} = \frac{(\text{Year 1} + \text{Year 2} + \text{Year 3})}{3}$$

$$\text{Year 2} = \frac{(300 + 500 + 600)}{3} = 466.67$$

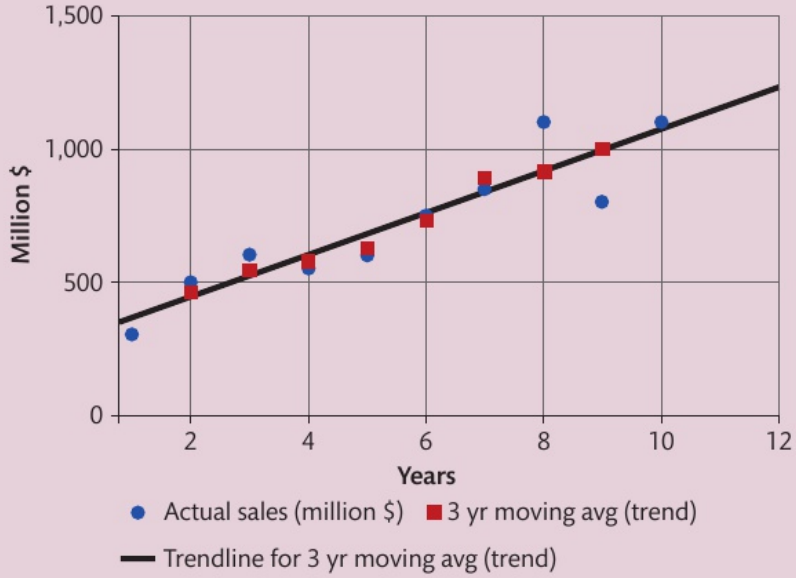
Yearly variation:

$$\text{Year 2} = \text{actual sales} - \text{trend}$$
$$\text{Year 2} = 500 - 466.67 = 33.33$$

Calculating a three-year moving average smooths out any fluctuations in the data. In the following graph, notice how the red squares (three-year moving average data) align closer to the trendline than the blue points (actual sales).

A trendline based on the three-year moving average data can then be more easily drawn and used to forecast future sales.

Graph 2: Sales forecasting – using a 3 yr moving avg



In some cases, sales figures can fluctuate depending on the season (summer, winter, etc.). This same technique of using a moving average can be used to smooth out the data in these circumstances. This will allow the business to get a clearer picture of what is happening. The average seasonal fluctuations can be calculated and used to forecast sales in the future more accurately.

Advantages of sales forecasting

Sales forecasting is useful for many reasons. It:

- allows managers to make better decisions. For example, as they see trends in sales, they can make changes to the company's product portfolio when necessary.
- can help with better stock management so that the business knows how much stock to hold on hand, as indicated by the trend. The production department will know the number of goods to produce and when to produce them.
- provides helpful data for planning and managerial activities, such as budgeting, working capital management, and marketing/business plans. In addition, if cyclical or seasonal variations are identified, this can help organizations control their cash flow.
- offers opportunities for businesses to tap into customers' changing preferences and buying trends, and adjust their marketing mixes accordingly.

Disadvantages of sales forecasting

However, sales forecasting does have limitations.

- Forecasting does not consider changes that are beyond the control of a business, such as government policies, pressure from competitors, and changes to certain laws.
- Trends can be hard to identify, especially in businesses that experience fluctuations in their sales.
- The use of simple linear regression in sales forecasting requires extrapolating from historical data, which can be inaccurate. Major problems can occur in the future that are not reflected in past sales figures.
- Seasonal, cyclical, and random variations in data can be difficult to predict and affect the accuracy of the sales forecast.

Worked example

The table shows the annual sales revenue for Toyota.

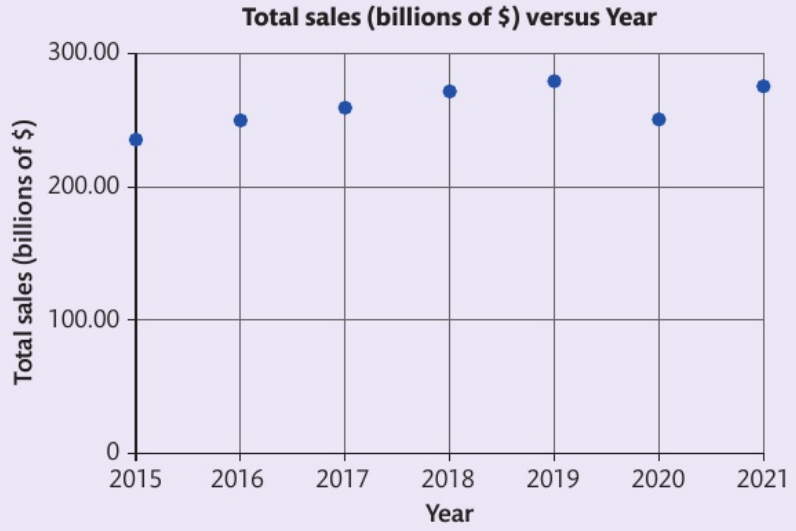
Year	Total sales ($, billions)
2021	$276.57
2020	$251.62
2019	$280.44
2018	$272.78
2017	$260.43
2016	$250.85
2015	$236.48

Questions

1 Using graph paper, create a scatterplot for the data.
2 Calculate the mean data point.
3 Draw the line of best fit.
4 One business analyst has forecasted that the total sales for Toyota will reach $300 billion by 2025. Explain one reason why this may be true and one reason why this may not be true.
5 Explain one advantage and one disadvantage for Toyota of using sales forecasting.

Solution

1



2

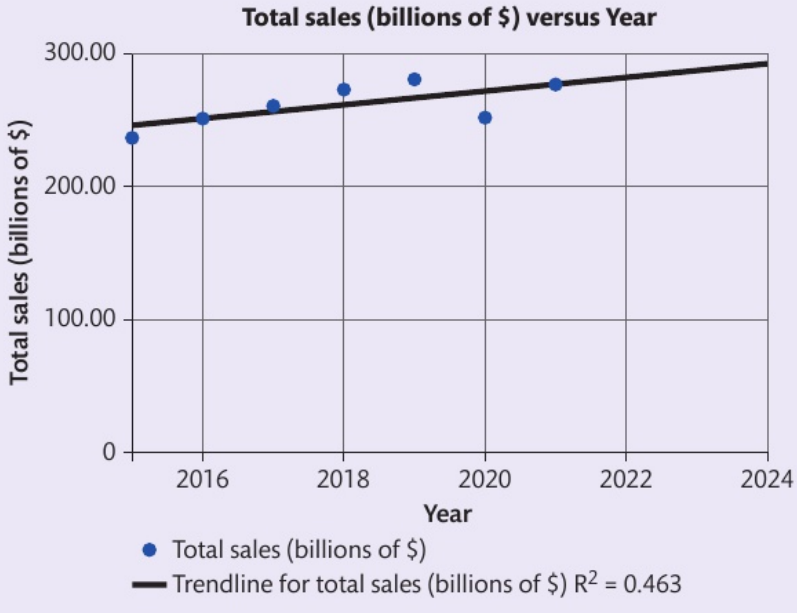
$$\text{Mean of x (years)} = \frac{(2021 + 2020 + 2019 + 2018 + 2017 + 2016 + 2015)}{7} = 2018$$

$$\text{Mean of y (sales)} = \frac{(\$276.57 + \$251.62 + \$280.44 + \$272.78 + \$260.43 + \$250.85 + \$236.48)}{7}$$

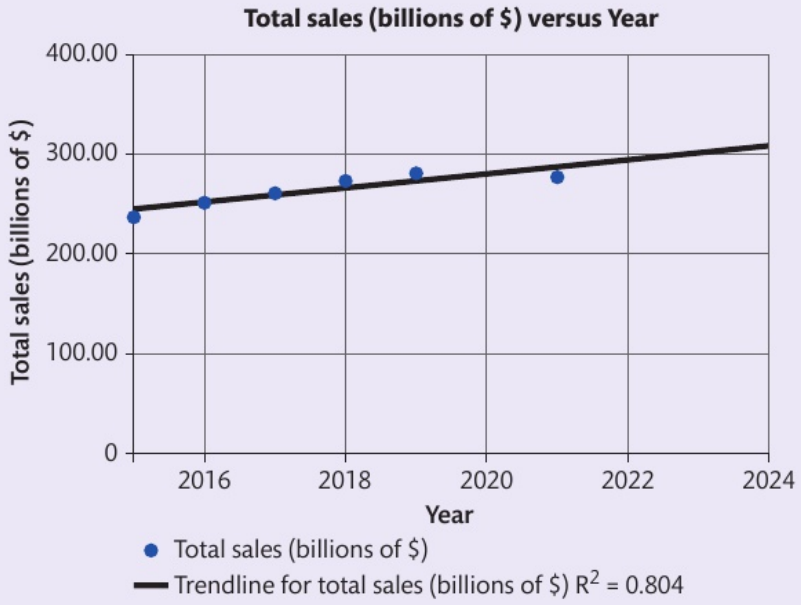
$$= \$261.31 \text{ billion}$$

Therefore, the mean data point is (2018, $261.31 billion).

3



4 Based on the line of best fit, this seems reasonable. Furthermore, an argument can be made that 2020 is an outlier due to the pandemic. This data point is negatively affecting the mean data point and line of best fit. Removing the data from 2020 indicates that $300 billion in sales will be reached as soon as 2023.



Of course, things can change. Businesses operate in a dynamic environment, as was demonstrated in the 2020 data. Additional changes can occur in the external environment that would affect the sales of Toyota. In addition, this forecast is based on limited historical data (only seven years of data) and trends can change. This forecast requires extrapolating several years beyond the gathered data, which makes this forecast less accurate.

5 Advantages include:

Sales forecasting allows managers to make better decisions. With a forecasted sales amount, managers can plan production accordingly. This can help with better stock management so that the business knows how much stock to hold on hand, as indicated by the trend. The production department will know the number of goods to produce and when to produce them.

Sales forecasting provides helpful data for planning and managerial activities such as budgeting, working capital management, and marketing/business plans. The data reveal that the sales of Toyota can be impacted by changes in the external environment, as was the case in 2020.

Gathering more detailed data (by product or quarterly amounts) could allow Toyota's managers to identify opportunities to tap into customers' changing preferences and buying trends, and adjust their marketing mixes accordingly.

Disadvantages include:

Forecasting does not consider changes which are beyond the control of a business, such as government policies, pressure from competitors, and changes to certain laws. This was apparent in 2020, when sales declined due to the pandemic.

Trends can be hard to identify. For example, the correlation coefficient of the sales data gathered is below 0.5, indicating that the line of best fit may not be an accurate model.

The use of simple linear regression in sales forecasting requires extrapolating from historical data, which can be inaccurate. Major problems can occur in the future that are not reflected in past sales figures. Any future variations in data can be difficult to predict and affect the accuracy of the sales forecast.

HL end

4.4 Market research

Learning outcomes

At the end of this section, you will be able to:

- examine why and how organizations carry out market research
- explain the different methods/techniques of primary and secondary market research
- explain the difference between qualitative and quantitative research
- analyze the various methods of sampling.

Research is a critical skill. Although some research can take place informally and happen quite quickly, most worthwhile research follows a systematic process like the one outlined in Figure 4.7.

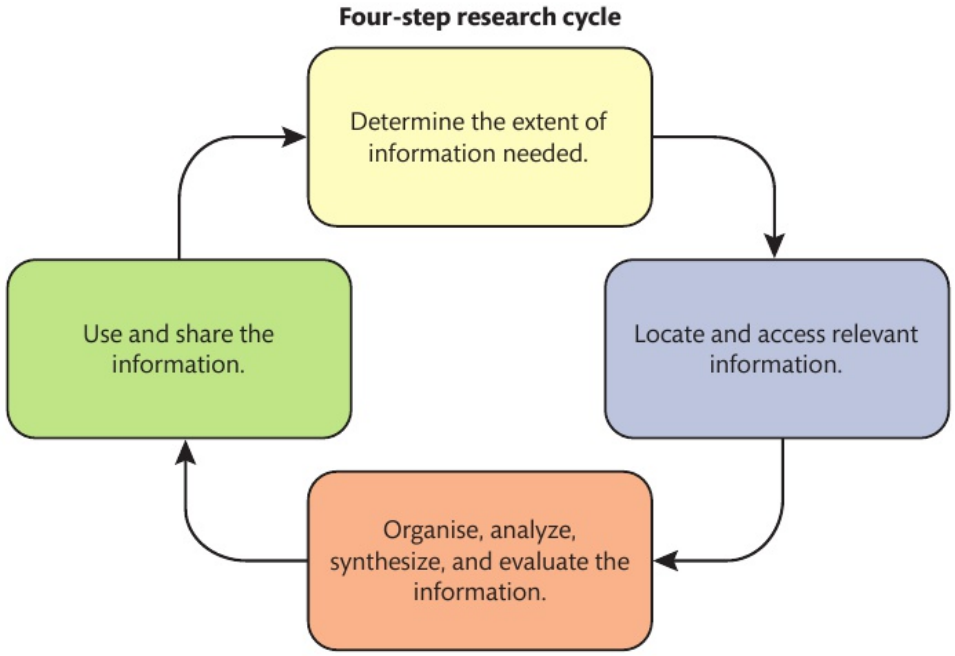


Figure 4.7 The four-step research cycle

In this section, you will find that successful organizations complete a similar process. Just like schools, colleges, and universities, business organizations must be a place of inquiry, where key decision-makers seek knowledge about the market in which they operate, then synthesize and evaluate information in a reflective manner.

What is market research?

Any systematic activity an organization performs to obtain information about a particular market is considered market research. This information is often about potential and existing customers but can also be about competition and/or the market.

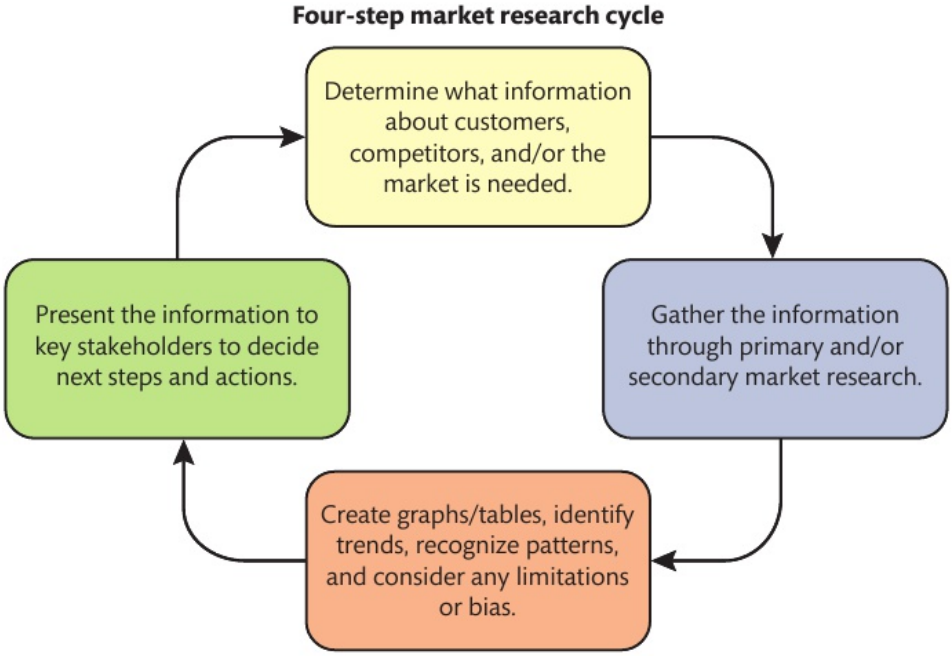
Some questions that can be answered through market research include:

- What types of products are being sold in a particular market?
- How much of each product is being sold?
- Who is buying the product?
- Why are customers buying the product?
- Where are customers buying the product?
- How much would customers pay for a product?
- How do customers feel about a particular product or brand?

Research can be done quickly and informally in a business environment. However, here we will focus on the systematic process organizations take and the different methods they use to obtain the valuable information needed to make decisions, solve problems, and reduce risk.

The activities performed during the market research process are outlined below and include identifying, collecting, analyzing, evaluating, and reporting data.

Figure 4.8 The four-step market research cycle



Activity

As you know from Unit 1, one of the main interests of governments is to stimulate business activity and help new businesses to succeed. As a result, government agencies often produce guides for entrepreneurs and businesses. For example, the Queensland government in Australia has published guidance on market research.

Research your local government agencies to see what guidance is available for local businesses and entrepreneurs regarding market research.

Why do organizations carry out market research?

The information gathered through the market research process about existing and new customers, competitors, and the market in general, helps business owners and managers to make informed decisions to achieve organizational objectives, solve problems, and reduce risk.

Market research is helpful and necessary during many business activities, and there are connections across the topics in this book. These include:

- Business plans: When starting a business or creating a business plan, market research should be performed to assess the current situation of a particular market.
- SWOT and STEEPLE analysis: These are two common frameworks that can be used to analyze the current overall situation of an organization. Gathering and analyzing internal and external factors impacting a business organization often starts with market research.
- Sustainability: The United Nations explains the concept of sustainability as 'meeting the needs of the present without compromising the ability of future generations to meet their own needs'. Market research can help determine both current and future needs, and their current and future impact on local cultures and communities, the environment, and the economy.
- Change: Given that businesses operate in a dynamic environment, ongoing market research can help organizations stay on top of these changes.
- Decision trees: Creating a decision tree involves calculating chances of success and expected values. Market research can help with these calculations.
- Segmentation and target market: Market research can provide insight into understanding who your customer is and how to best target that customer.
- Position maps: Market research can help create a position map, which can be used to identify any unmet needs or wants (i.e., gaps in the market).
- Product versus market orientation: It is rare for business organizations to take a purely product orientation approach. Therefore, gathering some insight into the needs and wants of customers is usually a critical component of the marketing process.

Online resources

Use the QR code here to view the guidance on market research published by Queensland.

Toolkit connection

A SWOT analysis is a framework for identifying and understanding the strengths, weaknesses, opportunities, and threats within an organization.

A STEEPLE analysis is another framework for analyzing a business, taking into account the social, technological, economics, environmental, political, legal, and ethical factors.

- Branding. Brand awareness and value can only be ascertained through market research. Furthermore, market research can help determine appropriate strategies for brand development.
- BCG matrix: Creating a BCG matrix requires an understanding of market share and the growth rate of a particular market. Market research can help determine both.
- Marketing mix: This is perhaps the most obvious and most common way to use market research. As a business makes decisions about their marketing mix, managers can use market research to determine the optimal strategy. In addition, market research can help measure the effectiveness of marketing strategies already implemented.
- Big data and data mining: As more and more business activity takes place in a digital environment, more data can be captured. These data can play a substantial role in human resource, operations, and marketing decisions.
- Ethics: With this increased availability of data, privacy and cybersecurity issues can arise, requiring business stakeholders to understand these ethical implications and act in a responsible manner.

Quantitative versus qualitative market research

Organizations can undertake both **quantitative** and **qualitative research**. Quantitative research involves market research activity that gathers and analyses results in the form of numbers (rankings, percentages, etc.). In contrast, qualitative research aims to find out people's attitudes or opinions about something (a product, price, customer service, etc.) where the results cannot be shown in numbers.

To complete a balanced analysis, it is usually wise to include both qualitative and quantitative arguments. The same is true for market research. To complete a thorough analysis of the market, both qualitative and quantitative research should be used, as they are often complementary. For example, qualitative research can be used initially to explore the thoughts and opinions of customers within new or existing markets. Then, quantitative research can be used to develop specific recommendations (such as pricing or promotional strategies) for a particular product.

TOK

Given advancements in technology, consider the following questions:

- Can all aspects of the market be measured?
- Can companies know us better than we know ourselves?

As new technologies emerge and as business activity increasingly takes place in a digital environment, massive amounts of quantitative data can be gathered by business organizations to aid decision-making. Furthermore, this data can be inputted into algorithms, and advanced computer technologies like machine learning can be used to provide a more customized experience to customers on a massive scale.

Toolkit connection

Analyzing qualitative information can be challenging and time-consuming. However, statistical tools can be used to analyze quantitative data. These include:

- Measures of central tendency (or averages): The mean, median, and mode of data can be calculated.
- Measures of dispersion: Quartiles and the standard deviation can be calculated.
- Displays of data: Bar charts, pie charts, and infographics can be created.
- HL Application of linear regression techniques to create scatterplots and analyze bivariate data (data involving two variables).

Although both qualitative and quantitative information can be gathered from all the various research methods, some techniques are better than others at gathering certain types of data. The different research techniques and their uses are explained in the next section.

Primary versus secondary market research

Business organizations use a range of methods when conducting market research. These various methods can be put into two categories: **primary market research** and **secondary market research**.

Primary market research, also known as field research, involves gathering information first-hand to address a specific issue or purpose. Although some larger companies can have their own market research departments, many organizations hire external suppliers (market research firms) to carry out some or all their market research needs. Doing primary market research well requires experience and expertise that many organizations might not have.

Primary market research techniques include:

- **Surveys** consist of a set of questions given to many people to answer about their thoughts, attitudes, preferences, and opinions. These can be done by mail, telephone, and online. Surveys can be an excellent way to gather large amounts of information from existing or potential customers but can be very challenging to design and carry out effectively.
- **Interviews** involve two people, where the interviewer asks the interviewee a series of questions face-to-face, over the phone, or virtually. These can be quite structured, where the interviewee prepares and asks only predetermined questions, though are often more useful when the interviewee asks more detailed, follow-up questions. Interviews can be an effective way to gather detailed information from key stakeholders but can be quite time-consuming.
- **Focus groups** consist of bringing a group of customers together to discuss feelings, perceptions, opinions, and general feedback about products, price, advertisements, brand, and more. Like interviews, they can provide detailed and immediate information allowing the business to clarify any potential issues or problems. On the other hand, these can be hard to set up, control and manage. Furthermore, the small number of consumers gathered may not fully represent the target market.
- **Observations** consist of an observer gathering information by carefully watching and trying to understand certain behaviors of potential or existing customers. For example, a retailer may track how individuals navigate a store and observe how the traffic flow or store displays impact purchases. This can be done in a digital environment too, where analytics like the navigation or clicks of a web page can be gathered automatically. Observations can be a cost-effective way to gather market research during the business activity (rather than before or afterwards). However, observations alone rarely yield underlying attitudes or opinions of individuals.

▲ Focus groups can help companies look past data and understand their customers better

Secondary market research, or desk research, refers to the collection and analysis of information that already exists (i.e., secondhand data). This information was previously gathered for other purposes but can be useful for organizations to solve their own problems and make decisions.

Some companies use the massive amount of information gathered through social media platforms, mobile apps, video platforms, and search engines for market research. Logging this kind of data and employing machine learning allows companies to provide customized advertising. For example, if you search for a new backpack, the next day you may see advertisements for backpacks on unrelated web pages.

Native advertising (placing advertisements strategically within online content) can be used to blur the lines between advertisements and content, increasing the likelihood of the user engaging with the advertisement.

Secondary market research consists of:

- **Market analyses**: Studies, market intelligence, and reports are often published by specialist organizations (such as Mintel) to provide information about consumers, products, competitors, and other detailed information about a market. Although these can be available through libraries and databases, they can be expensive.
- **Academic journals**: These too are often available through libraries and databases, and are a collection of articles produced by experts published periodically throughout the year. University professors, graduate students, and others contribute their first-hand research, knowledge, and experience related to their field of expertise in the world of business. The *Journal of International Business Studies* is an academic journal that businesses can use to gain knowledge on all aspects of international business.
- **Government publications**: Local, regional, and national governments gather data and produce reports on a wide range of business-related issues. These can provide businesses with helpful information on various markets operating within their region, economic data, demographic or census data, and consumer and social trends.
- **Media articles**: These include newspaper and magazine business articles. Many are available online free, although some require a small subscription fee. Some news agencies like the BBC can have a dedicated section and team of writers and editors to capture the latest business and market news, while others can specialize in a specific aspect of business. For example, *Entrepreneur* magazine focuses on small businesses.
- **Online content**: The internet provides entrepreneurs and businesses access to massive amounts of market-related information, many of which are high-quality

Table 4.4 The advantages and disadvantages of primary and secondary market research

	Primary market research	Secondary market research
Relevance and accuracy	Primary market research allows an organization to gather up-to-date information that is specific to its needs.	Secondary market research can be an effective way for a business to get a quick overview of a market. However, it can be outdated, poor quality, and not specific to the organization's needs.
Time	All the primary market research techniques require preparation, and this can be time-consuming.	Secondary market research gathers information already collected and can be done very quickly.
Difficulty	Primary market research can be very difficult for an entrepreneur or business to do well. In many cases, an outside expert is hired.	Although effective research skills are needed, secondary market research can usually be done quite easily.
Cost	Primary market research can be very expensive to conduct well.	Many are free or inexpensive, although market reports, and some higher quality publications can be costly.
Type of data	Although surveys and observations can generate quantitative data, other forms of primary market research (like interviews or focus groups) tend to capture qualitative data such as feelings, opinions, and emotions.	Government publications and market reports often contain large amounts of quantitative data but, in general, secondary market research provides both qualitative and quantitative data.

multimedia like videos and podcasts. However, the source of such information should always be carefully evaluated. Internet searches and social media platforms often rely on algorithms to maximize attention, which can make it more difficult to find high-quality, relevant information with opposing viewpoints.

Interesting information

Primary and secondary research consider how the information is gathered. Another strategy that you can use when evaluating information is to consider who is the source of that information. To do this, we can apply the terms primary and secondary sources that are commonly used in disciplines like history, literature, and law to the world of business.

Primary sources provide a first-hand account of an event or time period. Primary sources are considered to be a reliable source of information because they give direct, first-hand evidence (though they may still contain their own biases). In business, primary sources would come from a business itself in the form of annual reports, financial statements, press releases, interviews, speeches, company documents or websites, and social media posts.

In contrast, secondary sources do not give original information. They are created by someone not present at the event they are writing about and often involve synthesis, interpretation, and analysis. In business, this comes from sources outside the organization itself and includes articles from newspapers, magazines, and trade publications.

Which do you think is more valid? What biases do these sources have? How does knowing where the information comes from affect your own arguments, analysis, and judgments? What other information about the source should you consider?

Activity

Look at this collection of videos from Stanford University, which aims to help all citizens become smarter and better informed.
After watching at least one video in the collection, create a list of tips to share with your classmates on how to become a better researcher.

IB learner profile

Thinkers, Inquirers

Although these are hard questions to answer, thinking critically about the source of information (or 'the who') is an important research skill to use in this course, in many of your other courses, and in life.

Limitations of market research

As discussed, market research can play a key role in helping organizations make informed decisions. Gathering and analyzing both qualitative and quantitative data using both primary and secondary market research techniques can provide decision-makers with a balanced and comprehensive understanding of the market in which they operate.

However, there are some limitations to market research. One way to understand these limitations is by applying the business concepts of change, ethics, and sustainability.

TOK

To what extent is market research dependent on knowledge of the past and to what extent is it about knowledge that tries to predict the future? Is one more prevalent than the other?

How might the language used in focus groups, interviews and surveys influence the conclusions that are reached?

Is it possible to eliminate the effect of researcher bias when conducting market research?

Change

Businesses operate in a dynamic environment where new competition, technologies, markets, and consumer tastes and behaviors are constantly emerging. Therefore, any analysis of data must acknowledge the temporary nature of the market and the need for market research to be an ongoing process.

Ethics

New technologies and the increasing amount of digital business activity brings large amounts of data and opportunity to market researchers to maximize profit. However, it also brings concerns of data privacy and security to the fore. Just like many, if not all aspects of a business activity, the ethical implications and perspectives of all stakeholders need to be considered throughout the market research process.

Sustainability

Market research is a key ingredient to reducing risk and business success, especially for new businesses and entrepreneurs. At the same time, market research can be quite costly and time-consuming. Therefore, a balance between the benefits and costs of market research must be carefully managed for a business to survive and thrive into the future.

In the next section of this unit, we investigate how sampling can be used when conducting primary market research to address at least one of these limitations.

i

Do random number generators produce random numbers?

Most do not produce truly random numbers. Most random number generators use algorithms to generate pseudo random numbers. These generators rely on mathematical formulae or precalculated lists, which can be repeated. These generators are quite good at mimicking the selection of a random number, which means they are more than sufficient for random sampling.

There are many random number generators available online, such as this one:

Sampling methods

You may recall the term 'sample' from science or mathematics classes when gathering and analyzing data (for example, a cell sample). Or maybe you are familiar with 'sample' in relation to food (free samples). One is certainly more enjoyable than the other, but in both situations, the word sample represents a portion or small amount of the whole.

In business, market researchers can use **sampling** when conducting primary market research. More data is usually better, but this is not always realistic. It is often difficult, if not impossible, to gather data from every customer or member of the target population. This is where sampling, or contacting only a small, representative group of customers, can be a powerful way for researchers to recognize and generalize patterns and trends.

Gathering a representative sample is not easy, and there are several different methods market researchers can use.

- **Random sampling** is when every member of the population has an equal chance of being included in the sample. A purely random sample is often hard to achieve but can produce the most fair and unbiased results. One way market researchers can achieve random sampling is to assign each member of the target population a number and then use a random number generator to select the sample.
- **Quota sampling** is when a market is divided into different groups (e.g., by age, gender, geographic region) and then a sample is taken from each group to represent the total market. For example, let's say a university wants to survey their students about campus security. Since it has both graduate and undergraduate

students, it wants to gather a representative sample from both groups. Therefore, the market researcher sets a quota for each group. This quota is often set to obtain proportional representation. In this case, the researcher bases the quota on current enrollment numbers (e.g., 4,000 or 40 per cent graduate students and 6,000 or 60 per cent undergraduate students) and collects surveys from 20 graduate students and 30 undergraduate students. The 20 graduate and 30 undergraduate students can then be selected randomly or in a non-random way (such as by using convenience sampling).

- **Convenience sampling** is a popular, non-random method used by market researchers when faced with time and cost constraints. In this method, individuals are selected based on their availability (such as the first 100 people to enter a store). Of all the sampling methods, convenience sampling can lead to the most inaccurate and biased results, as the most available customers would most likely not represent all customers accurately. Therefore, organizations should resist making any significant generalizations based on convenience sampling data.

TOK

How might a company protect against sample error and bias when designing primary market research?

Activity

One way to develop and practice your understanding for this topic (and many others) is to consider the perspective of different stakeholder groups.

To help develop your understanding of market research, complete the following tasks.

1 Brainstorm a list of different perspectives (i.e., stakeholder groups) that would be interested in market research. Revisit your notes or the section on stakeholders (section 1.4) as necessary.
2 Choose one perspective (stakeholder group) and think about and investigate market research from their viewpoint.
3 Summarize your thoughts and findings by completing the following sentences:

I am thinking of market research from the viewpoint of _____. [Insert the stakeholder group you've chosen.]

I think _____. [Describe the topic from your selected stakeholder. Be an actor – take on the character of your viewpoint.]

A question I have from this viewpoint is _____. [Ask a question from this viewpoint.]

Practice questions

Taxi-M (TM) operates 2,500 taxis in a developing country. All drivers are full-time employees and have a professional taxi license. Although it's not compulsory, TM regularly conducts safety inspections of the taxis. Though they are safe, most of TM's taxis are old and TM charges high prices. Many customers complain.

IB learner profile

Caring

Which sampling method could be used to best serve underrepresented communities or groups of people?

In addition, TM is facing competition from a new service. A multinational company, RE, with offices around the world, has designed an advanced mobile application (app) called Best-Taxi (BT), which helps reduce its operational costs. Using their mobile phones, passengers can use BT to book and pay for a car journey. Any car owner can offer journeys through BT. For security reasons, the BT app registers passengers' and drivers' personal details.

TM's sales are falling, and profits are down. Several TM drivers are becoming demotivated. Facing lower incomes, poor management, and rumors of **redundancies**, many loyal drivers have left to offer taxi services using their own cars and the BT app. Some of these drivers are earning considerably higher wages than before.

The situation for TM appeared critical. However, the local media has reported a higher rate of road accidents for BT drivers than licensed taxi drivers. Several of BT's drivers have assaulted and robbed customers. Primary market research conducted by TM using focus groups revealed that some of their customers thought BT and TM were the same company.

In response, TM's management decided to downsize and differentiate itself from BT by positioning its service as a high-price, high-quality, traditional taxi service. TM will:

- sell its older cars and lease new luxury cars
- develop a unique selling point/proposition (USP) emphasizing comfort and safety.

Customers will be able to book TM taxis by telephone and by stopping them in the street. TM's target market will be businesspeople, higher-income families, and passengers concerned about safety.

1 Explain one benefit and one limitation for TM of using focus groups. (4 marks)
2 Explain two sampling methods TM could use to conduct further primary market research. (4 marks)

4.5 The seven Ps of the marketing mix

Learning outcomes

At the end of this section, you will be able to:

Product

- explain the relationship between the product life cycle, product portfolio and the marketing mix
- recommend extension strategies
- explain the relationship between the product life cycle, investment, profit, and cash flow
- explain the following aspects of branding: awareness, loyalty, development, and value
- explain the value of branding

Price

- evaluate the appropriateness of the following pricing methods:
  - cost-plus (mark-up) pricing, penetration pricing, loss leader, predatory pricing, premium pricing
  - HL dynamic pricing, competitive pricing, contribution pricing, price elasticity of demand

Promotion

- explain the following aspects of promotion: above-the-line, below-the-line, and through-the-line
- discuss social media marketing as a promotional strategy

Place

- discuss the importance of different types of distribution channels

People

- discuss the importance of employee–customer relationships in marketing a service and cultural variation in these relationships

Process

- discuss the importance of delivery processes in marketing a service and changes in these processes

Physical evidence

- discuss the importance of tangible physical evidence in marketing a service
- recommend appropriate marketing mixes for products or businesses.

Although the marketing mix has been introduced previously, this section explores the 7Ps of the marketing mix in more depth. The first four Ps of the marketing mix apply to all business organizations:

- **Product** is a good or service that a business sells to its customers.
- **Price** is the amount a business charges its customers in exchange for the product.
- **Promotion** is when a business informs people about products and attempts to persuade them to buy its product.
- **Place** is the process of getting products from the business to its customer (i.e., distribution), ensuring that goods and services are available where and when they are required.

Three additional elements of the marketing mix are most applicable to organizations involved in the service industry:

- **People** involves the skills, attitudes, knowledge, and appearance of employees and the interaction and relationships between key stakeholders (e.g., customers and employees).
- **Process** is the way in which the service is ordered, received, and paid for by the customer.
- **Physical evidence** is the tangible aspects or physical environment of the business in which the customers and employees interact.

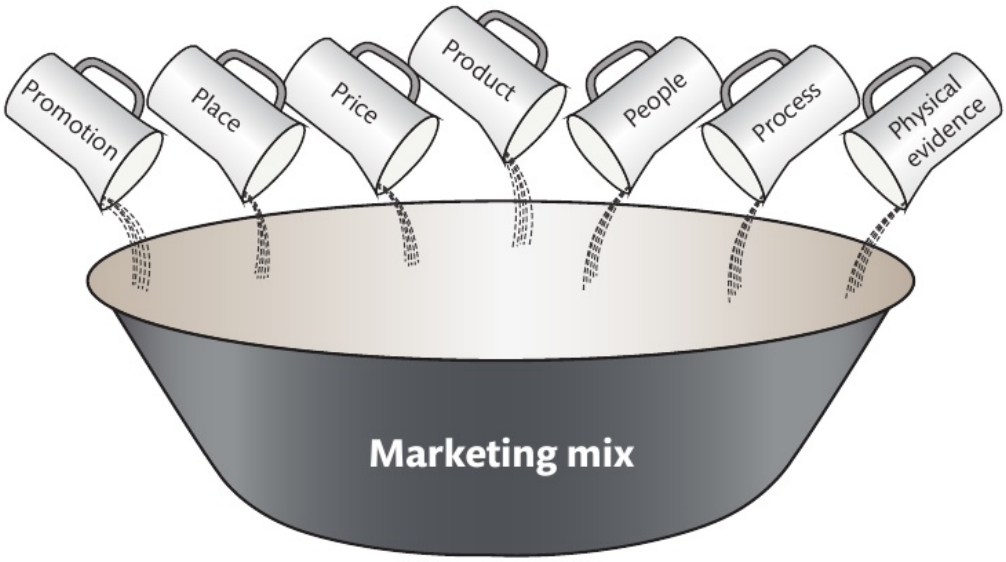


Figure 4.9 The 7Ps of the marketing mix must be used together in a strategic fashion, just like the ingredients of a cake

Although we will explore each of these elements separately in depth, it is important to recognize how these elements work together. Much like the ingredients in a cake (flour, butter, sugar, etc.), the marketing mix elements are the ingredients businesses use to develop an effective marketing strategy (to meet the needs and wants of its customers). The marketing mix elements must be used in a strategic manner, working together and not against each other for them to be effective. For example, a business that develops a luxury product will usually want to set a high price and make it available at an appropriate, high-end retailer.

Product

Most businesses start with a product, an idea for a good or service that will satisfy a certain need or want within the market. Previously discussed ideas like market orientation, market research, segmentation, targeting, and positioning can all help a business decide on what type of product to sell. Another way to analyze this critical element of the marketing mix and formulate appropriate marketing strategies is through the product life cycle.

A product life cycle charts the progression of a product's sales over its lifetime and divides the life of the product into four distinct stages: introduction, growth, maturity, and decline. Figure 4.10 shows the typical product life cycle and these four distinct stages.

During the introduction stage, the product experiences slow sales growth as it becomes known in the market. The business typically spends heavily during this phase to get the business running. For example, capital expenditures like manufacturing equipment and revenue expenditures like employees' wages and promotional materials may be needed. The average cost per customer is usually quite high during the introduction stage. Businesses often lose money during this phase (i.e., profits are zero) and experience poor cash flow (i.e., outflows are usually much more than any inflows).

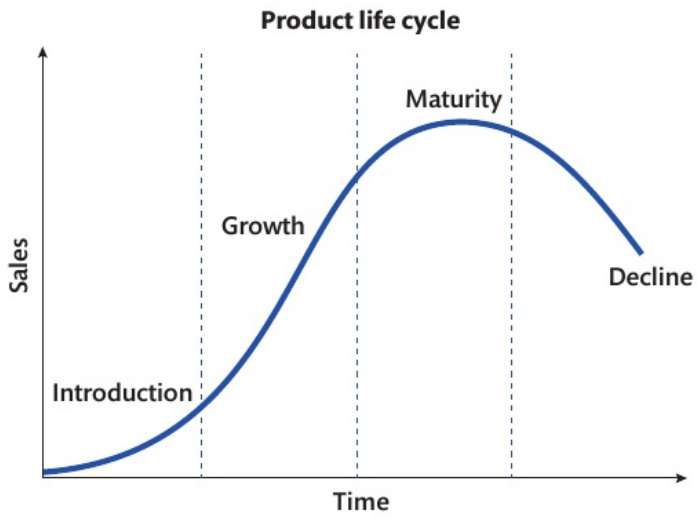


Figure 4.10 The four stages of the product life cycle

During the growth stage, sales rapidly increase as the product becomes more well-known and desired by its customers, as the promotional strategies start producing results. Profits also increase during this period and this can be followed by positive cash flow.

Eventually, most products will hit the maturity stage and experience a slowdown in sales growth as the product has already reached most of its potential customers. Profits begin to stabilize during this period or even decrease due to the reduction in sales and increase in other similar products coming onto the market. Cash flow can remain strong during this phase but will often show some signs that it too will eventually decrease, as the cash payments from sales start to decline.

Lastly, the decline stage signals a downward trend in sales, and profits continue to further decline. Cash flow too starts becoming a problem, and the business will most likely begin phasing out the product.

A summary of the product life cycle characteristics, objectives, and strategies inspired by Philip Kotler in his textbook called *Marketing Management* is shown in Table 4.5.

Once the life cycle phase is determined, the information in Table 4.5 can be a helpful way for organizations to formulate relevant marketing objectives and strategies for a particular product. However, there are some disadvantages to using the product life cycle. It is not always clear which phase the product is in. As we discussed in 4.3 Sales forecasting, there can be significant variation in sales data, making it difficult to identify trends. There can be many ups and downs in the life of a product when it comes to its sales, and the duration of the stages can vary widely.

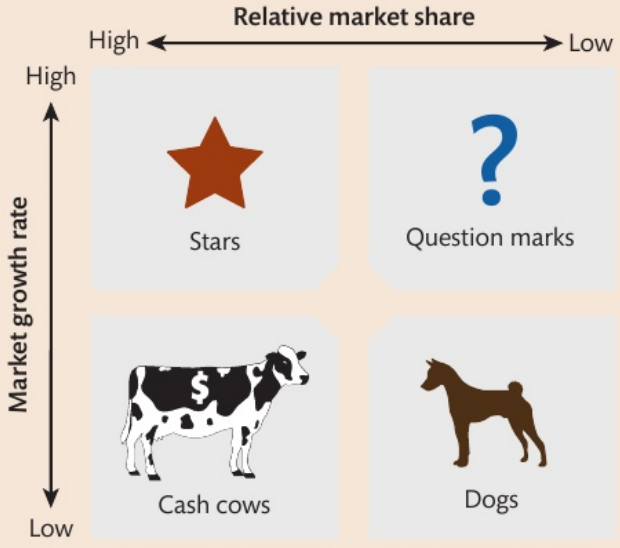
To manage this uncertainty, many organizations choose to sell multiple products. A business' range of products is called its product portfolio. Ideally, an organization that sells multiple products will have products at multiple stages in its life cycle. This will allow it to spread out the amount of investment needed and balance out any cash flow problems.

Table 4.5 Product life cycle characteristics, objectives, and strategies

		Introduction	Growth	Maturity	Decline
Characteristics	**Sales**	Low	Rapidly increasing	Peak	Decreasing
	Investment (costs)	High	Average	Low	Very low
	Profits	Negative (none)	Rising	High	Decreasing
	Cash flow	Problems	Becoming positive	Strong	Decreasing
	Competitors	Few	Growing	Stable	Decreasing
Objectives		Product awareness	Maximize market share	Maximize profits	Reduce expenditure
Strategies	**Product**	Basic product	Improving quality and extension strategies	Additional extension strategies, diversify	Phase out
	Price	Cost-plus	Penetration and competitive pricing	Competitive and predatory pricing	Cut prices, loss leader
	Place	Selective distribution	Multiple distribution channels	Additional distribution channels	Phase out
	Promotion	Product awareness and entice trial	Awareness and interest in the mass market	USP, new market segments	Reduce

Toolkit connection

The Boston Consulting Group matrix enables firms to classify their products according to two key variables (relative market share and market growth), resulting in four categories.



The four categories of the Boston Consulting Group matrix

In addition to the product life cycle, the Boston Consulting Group matrix can be used to evaluate its product portfolio and determine appropriate marketing strategies. These strategies and the connection to the product life cycle are summarized in the table.

Product life cycle stage	BCG matrix	Marketing strategy
Introduction	Question marks	High level of investment to BUILD product awareness
Growth	Star	Maximize and HOLD market share developing awareness and interest of the mass market
Maturity	Cash cow	Maximize and HARVEST profits developing brand loyalty and value using competitive pricing
Decline	Dog	DIVEST, phasing out product and investment

After an organization classifies and plots its various products in the BCG matrix, it must determine whether its portfolio is healthy. An unbalanced portfolio would have too many dogs or question marks and too few stars and cash cows.

Activity

B-Pharma, a public limited company, is one of the biggest multinational companies (MNCs) in the pharmaceutical industry. It employs over 30,000 people globally. The corporate headquarters are in Tsukuba Science City, Japan.

B-Pharma sells a wide range of prescription drugs to its customers. Three of its products are:

- Pharmax, a painkiller and B-Pharma's bestselling drug. It has a share of around one-third of the market in Japan and the U.S.A. That figure has been stable for the past ten years. Although the market is saturated and growing very slowly, this painkiller is a well-established product. Following the expiration of the original patent, competitors are now starting to produce cheaper substitutes.
- Pharmaflo, a drug that prevents heart attacks. Launched eight years ago, it has a 15 per cent market share in a rapidly growing market.
- Pharmaslim, a drug for weight control. It is selling poorly, even though the market for anti-obesity drugs is growing rapidly.

Applying the BCG matrix, analyze B-Pharma's current portfolio of products.

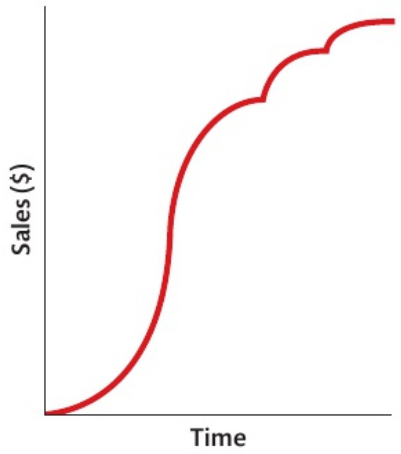


Figure 4.11 The product life cycle with multiple extension strategies

Extension strategies

As shown in Table 4.5, extension strategies can be used to prolong the life cycle of a product. During the maturity and growth stages, the business experiences increasing profits and strong cash flow, which are attractive to a business. Therefore, a business will look to do what it can to keep its products in these stages. In some cases, multiple extension strategies can be used over time to create a cyclical nature to the product life cycle.

Extension strategies include:

- making cosmetic changes to the product, shape, name, color, or packaging
- bringing out new product variants by adding a new feature or reformulating the product – in some cases, a new use for the product can be found
- designing a new advertising or promotional campaign
- lowering the price
- adding more effective distribution channels
- finding new customers (market segments). For example, a business can expand into new geographic markets.

Figure 4.11 shows the possible effects of these on product sales.

Extension strategies can also be used in the early stages of the decline phase. However, this can often be too late, as the product is simply no longer in demand. Changes in technology or consumer tastes can make the product obsolete and require most businesses to begin phasing out the product once the decline stage is reached.

Toolkit connection

Product life extension models are one of the circular business models included in the business management toolkit. Businesses that use this model extend the use period of existing products, slow the flow of constituent materials through the economy, and reduce the rate of resource extraction and waste generation.

One example of a company dedicated to this model is Trove. In their own words, Trove 'extends the life of millions of products' by providing 'the technology, operations, and analytics enabling retailers to stand up a scalable and profitable branded recommerce channel'.

Another organization, Bundles, offers appliances, such as washing machines, on a pay-per-use basis while maintaining and refurbishing to preserve the product for multiple cycles.

Research and inquiry

Research the different production models of four or five businesses. What are the differences between the traditional production model (extraction of materials, adding value, selling, use, then disposal) and a circular business model (reuse, recycle, repurpose)?

Branding

A brand is an identifying name, symbol, image, or trademark, which enables a product to be easily recognized and distinguished from its competitors. However, many people in marketing would argue that a brand is much more than a symbol or logo. For example, marketing author Seth Godin defines a brand in this way:

> A brand is the set of expectations, memories, stories and relationships that, taken together, account for a consumer's decision to choose one product or service over another. If the consumer (whether it's a business, a buyer, a voter or a donor) doesn't pay a premium, make a selection or spread the word, then no brand value exists for that consumer.

Depending on the life cycle stage of a product, an organization will want to focus on one of the following aspects of branding:

- **Brand awareness**: This usually takes place in the early stages of the life cycle (introduction) of a product. Brand awareness is the extent to which the brand is recognized and correctly associated with a particular product. To build brand awareness, promotion is focused on informing customers and potential customers that the product exists.
- **Brand loyalty**: This usually takes place during the middle stages of the life cycle (growth and maturity) of a product, as businesses face increasing competition. Brand loyalty is the extent of faithfulness of customers to a particular brand even when alternative products or companies exist. Brand loyalty aims to attract repeat customers or customers to purchase related products.

- **Brand development**: This is the process of building brand awareness. It can also take place in the later stages of the life cycle. Changing the brand over time can help maintain its popularity. Developing the brand can involve the following steps:
  - reviewing the overall business or marketing strategy
  - identifying the target market
  - conducting market research
  - identifying and developing the unique selling point (USP)
  - adjusting the marketing mix.

  Another aspect of brand development activity can involve the promotion of a firm's corporate social responsibility and ethical values.
- **Brand value**: As discussed in Unit 3, the brand value estimates how much a brand is worth in terms of income, potential income, reputation, prestige, and market value. Coming up with a value of this intangible asset is important when one business is acquiring another. The acquiring company often pays more than the value of the net assets and this difference between the purchase price and net assets is recorded in the form of goodwill.

Branding can be very important to any business but is especially important for businesses facing strong competition, when customers have multiple options to choose between. The brand should be one of the first considerations when a business designs its promotional strategies. It is a key factor in identifying an organization's USP, differentiating it from competition, and formulating a cohesive marketing strategy. Customers now have a strong voice via social media, so it is not always easy to control and develop a brand. A business will need to invest heavily during the initial stages to develop a positive and strong brand. During the middle to later stages, this strong brand will need to be maintained to persuade customers to make repeat purchases and remain loyal. Creating a brand often requires a whole business approach. Having a clear and simple brand is often the key to business success.

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Some companies maintain a multi-brand strategy. Here are two examples that you may be familiar with:

- Unilever is a British multinational company that maintains several large brands including three ice cream brands: Breyers, Magnum, and Ben & Jerry's.
- Facebook (Meta) started as a single app, but now offers a suite of products including Facebook, Instagram, WhatsApp, and Oculus.

What would be the advantages and disadvantages of a multi-brand strategy?

In contrast, other organizations choose to maintain a single company-wide brand for a variety of product lines. Some examples include Ralph Lauren (with fashion and homeware products) and Samsung (with electronics, appliances, life insurance, hospitals, and even theme parks).

What would be the advantages and disadvantages of this approach?

Toolkit connection

Packaging can play a key role in the product, brand, and marketing mix. One company that has made packaging its business is Ecovative Design. It has pioneered the use of mycelium to replace Styrofoam and other plastics in packaging and provide sustainable alternatives to leather and animal agriculture.

Price

The pricing strategies that businesses use can fit into three categories: cost-based, market-based, and competition-based. Each category has its own advantages and disadvantages. A business may choose to use one or a combination of these pricing strategies.

Cost-based pricing

Perhaps the most simple and common way for an organization to set prices is to use a **cost-plus (or mark-up) pricing strategy**. In this strategy, the total cost of production per unit is determined and then a percentage mark-up is added to obtain the selling price. When using the cost-plus pricing strategy, the total cost of production includes

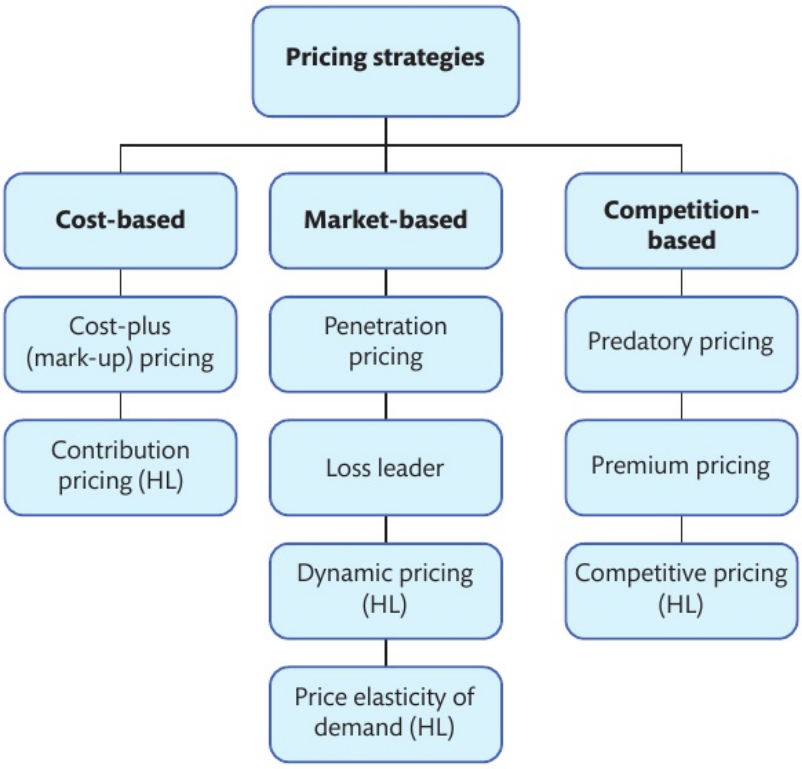

Figure 4.12 Pricing strategies

both the direct costs and an allocated portion of the indirect costs. For example, a t-shirt business determines the cost of making a t-shirt is $10. The business can decide on a 50 per cent mark-up. This results in a selling price of $15 ($10 + (0.5 × $10)).

A cost-plus pricing strategy ensures that a certain percentage of profit will be made on selling the product, as the price will exceed all costs associated with that product. This can help ensure the long-term survival of the business. This strategy is also quite flexible, as the mark-up percentage can be quickly adjusted. This will allow a business the ability to respond to any changes (such as economic downturn or increased competition). However, the cost-plus pricing method relies on a business being able to manage their costs. Small businesses may not be able to take advantage of economies of scale, and as a result, using a cost-based pricing strategy may result in too high of a price compared to their competitors. In addition, obtaining the total costs (direct and indirect costs) to allocate to a single product can be challenging.

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Contribution pricing

In a **contribution pricing** strategy, the price is based on the direct (or variable) costs of manufacturing only, along with some mark-up. This differs from cost-plus pricing, which considers both direct and indirect costs. The amount of mark-up in contribution pricing represents how much that product contributes to the overhead or fixed costs.

Returning to our t-shirt example, let's say that the variable costs per unit (e.g., raw materials) is $7. If the business sells the t-shirt for $15, then for every t-shirt sold, $8 (or $15 − $7) contributes to covering the fixed costs (e.g., rent). Further calculations can be made. For example, if fixed costs total $800, then we can calculate how many t-shirts we need to sell to break even or cover our fixed costs by dividing our fixed costs by the unit contribution ($800/$8 = 100 t-shirts).

Contribution will be explained in more detail in Unit 5; however, it can be best understood as the total revenue minus total variable costs. Contribution can be calculated per unit (unit contribution) by subtracting the variable cost per unit from the price. In short, contribution indicates how much each product (or department) contributes to the overheads of a business.

Contribution pricing avoids complex calculations needed in cost-plus pricing as only the variable costs of manufacturing is needed. However, this strategy may still result in too high of a price for small businesses that cannot take advantage of economies of scale.

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Market-based pricing

Market-based pricing strategies consider market factors such as customer demand or the level of demand in the market.

A **penetration pricing** strategy is when a business sets a low price to increase market share. Businesses often turn to this strategy when launching a product in a new market to build awareness. This can also be used effectively for products operating within a mass market, as the high sales volume will help offset the low profit margins. Setting a low price using the penetration pricing strategy attracts customers and, eventually, once the brand is established, prices can be increased.

A **loss leader** pricing strategy also involves setting a low price to attract customers. When a business uses this pricing strategy, the business sells a product or products below the unit cost (at a loss). This means that loss leader prices are often even lower than penetration prices. This approach can increase awareness, lead to higher market share, and encourage customers to purchase other products. Supermarkets and giant retail stores often use this strategy, as they can offer other products at a higher price to offset the low price on the loss leader product(s). Total sales often increase using both strategies; however, profit margins will decrease.

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Dynamic pricing

A dynamic pricing strategy involves changing the price of a good or service according to the demand. **Dynamic pricing** is sometimes called 'surge pricing' (as prices go up when and where a surge in demand occurs) or 'time-based pricing' (as prices change according to the time of day or year). Airlines are known to use this pricing strategy, charging a higher price around the holiday season. In addition, airline prices can fluctuate around the work week with lower prices generally occurring during the middle of the week (Tuesday, Wednesday, or Thursday). Other examples of businesses that use a dynamic pricing strategy include ride-sharing companies

like Uber and companies providing utilities like electricity and water. This strategy provides businesses with greater control and flexibility when setting prices but it can be challenging for organizations to determine the optimal price at any given time, as it relies on gathering large amounts of data and the use of algorithms.

Price elasticity of demand

Typically, as prices rise, demand for a product decreases. Similarly, as prices drop, demand for a product increases. The **price elasticity of demand** measures how much the demand for a product changes in relation to changes in price. It is calculated using this formula:

$$\text{Price elasticity of demand (PED)} = \frac{\%\text{ change in quantity demanded}}{\%\text{ change in price}}$$

If the PED is between 0 and 1, then demand is inelastic, meaning that the quantity demanded does not change much as prices change. In other words, the quantity demanded does not respond that much to a change in price, which reveals that customers are not very sensitive to changes in price. A business can charge a higher price for products with inelastic demand, because the number of customers will not decrease that much and higher profits can be earned.

If the PED is greater than 1, demand is elastic. As prices change, the quantity demanded changes quite a lot (customers are price sensitive). In fact, the quantity demanded changes proportionately more than the change in the price. A business should charge a lower price for products with elastic demand, because the number of customers would increase a lot and offset the lower profit margins.

In theory, a PED equal to 1 is the optimal price and is called unit elastic. At this price point, revenue would be maximized and any change in the price would result in a proportional change in demand.

Returning to our t-shirt example, if we increase our price by 10 per cent, and the quantity demanded decreases by 25 per cent, then the price elasticity of demand can be calculated as follows:

$$\text{Price elasticity of demand (PED)} = \frac{\%\text{ change in quantity demanded}}{\%\text{ change in price}} = \frac{25\%}{10\%} = 2.5$$

Therefore, we can say that the demand of t-shirts is elastic. The business should consider lowering the price rather than raising it.

In contrast, necessities tend to be inelastic in demand, because consumers would still need to buy products like petrol, salt, and utilities. Inelastic goods will be needed no matter the price and few substitutes exist. Why do businesses not charge high prices for necessities if demand is inelastic, and consumers are not too sensitive to changes in price? Consumers still have a choice: if petrol becomes too expensive, consumers might create carpools and share expenses, or use a bicycle instead. Another reason for not charging extremely high prices is that governments usually have some controls in place for necessities to ensure that people can afford to meet their basic needs. Governments may subsidize certain businesses (such as those providing energy or food) to ensure that prices will not rise more than consumers can afford.

Table 4.6 Inelastic and elastic demand

	When this occurs	Recommended strategy
Inelastic	$0 < \text{PED} < 1$	Increase prices
Elastic	$\text{PED} > 1$	Decrease prices

HL end

Competition-based pricing

Business organizations that use a competition-based pricing strategy start by looking at their competitor's prices.

A **predatory pricing strategy** is when a business sets its price low to eliminate competitors from the market or prevent new competitors from entering the market. Although difficult to prove and enforce, this strategy is illegal in many countries. The anti-competitive nature of this approach raises ethical considerations. Like other prices that involve setting low prices, this strategy can build awareness, attract customers, and increase sales in the short term. However, this approach cannot be used for long, as profit margins will be slim. Furthermore, setting low prices may weaken the brand and not align with the overall marketing plan of the business.

A **premium pricing strategy** occurs when a business inflates its prices to enhance brand value. Businesses that use this strategy are hoping to create the impression that their products are of higher quality or value than their lower-cost equivalents. If successful, business organizations that use this strategy can enjoy high profit margins. However, this may be difficult and costly to maintain, as high levels of promotion and/or customer service are needed to fend off competition. In addition, the higher prices may reduce the pool of potential customers and target those customers seeking a luxury product.

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Competitive pricing

When a business bases the price for its goods or services on what its competitors are charging for similar goods and services, it has three options. It can charge less than the competition, as in the predatory pricing strategy. It can charge more than the competition, as in the premium pricing strategy. Or it can charge the same amount as the competition.

Which one a business chooses depends on several factors and, as with all pricing strategies, the entire marketing mix should be considered. For example, a business that sets a price equal to its competitors will want to differentiate itself in other ways, perhaps by promoting social objectives.

A business might not always know what its competitors are charging. One way to address this limitation is to offer a price match, in which the business provides the same price as a competitor when presented with evidence from the customer.

Table 4.7 Low price tactics and high price strategies

	Low price tactic	Price variation options	High price strategy
Examples	• Penetration • Loss leader • Predatory	• Although cost-plus and contribution pricing vary according to the mark-up, these strategies usually set the minimum acceptable price that a business can use • Competitive pricing varies according to competition • Price elasticity of demand and dynamic pricing varies according to demand	• Premium
Advantages	• Can help capture market share • Can help increase revenue from sales (loss leader) • Can prevent or eliminate competition (predatory) • Can help raise awareness of a new brand on the market (penetration)	• Provides flexibility depending on internal and external factors • Accounts for the costs of production (cost-plus, contribution) • Ensures a predetermined profit margin	• Increase profit margins • Attract consumers perceiving high price as an indication of premium quality • Might be used as differentiation from competitors • Allow for offsetting high R&D costs early in the product life cycle, especially for products with a short life cycle, such as technological gadgets
Disadvantages	• Difficult to maintain in the long run, as profit margins may be slim (or non-existent) and low prices may tarnish the brand • Might be considered illegal in some countries (predatory)	• Can be challenging to implement, as usually requires gathering large amounts of data (cost-plus, contribution) • Businesses might lose sales if price is much higher than that of the competition	• Usually requires a well-established brand or highly innovative product, which can be costly

Competitive pricing is perhaps the most relevant pricing strategy for any business organization that has several competitors selling a similar product. With the increased level of online purchases from organizations like Alibaba and Amazon, more businesses will need to use some form of competitive pricing to stay relevant. Other examples where competitive pricing is used include grocery stores, supermarkets, and fast food restaurants.

While competitive pricing offers some obvious advantages for many businesses, smaller businesses may not be able to ignore their costs when setting prices.

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Summary

Understanding the theory of each pricing strategy in context of one of the three categories – cost-based, market-based, or competition-based – is a good place to start. However, business organizations can and often do use a combination of these strategies in practice. For example, a business will want to avoid completely ignoring its costs when taking a competition-based or market-based approach.

Another way of looking at these pricing strategies is in terms of setting high or low prices. The pricing strategies that involve setting low prices are usually short-term tactics and can rarely be applied for long and across an entire product portfolio. Very few businesses (especially smaller businesses) can survive or thrive in the long term with low prices.

Just like other marketing mix elements, pricing should not be decided in isolation. Getting the pricing right is a high priority for most organizations. After all, it is the only element of the marketing mix that produces revenue. However, setting prices without carefully considering all elements of the marketing mix and the external environment will most likely result in lower profits.

In addition, business tools like the product life cycle, BCG matrix, and Porter's generic strategies can be combined with pricing strategies to formulate a coherent marketing strategy. It may make sense to use a competitive pricing strategy for mature products (i.e., maturity stage of the product life cycle, and the cash cow of the BCG matrix). For organizations taking a cost leadership approach from Porter's generic strategies, a cost-based pricing strategy may be the best option.

Promotion

Promotion is an attempt by marketers to inform people about products and persuade them to buy them. But how? What to say? To whom? And how often?

Promotion can be done in several different ways, including:

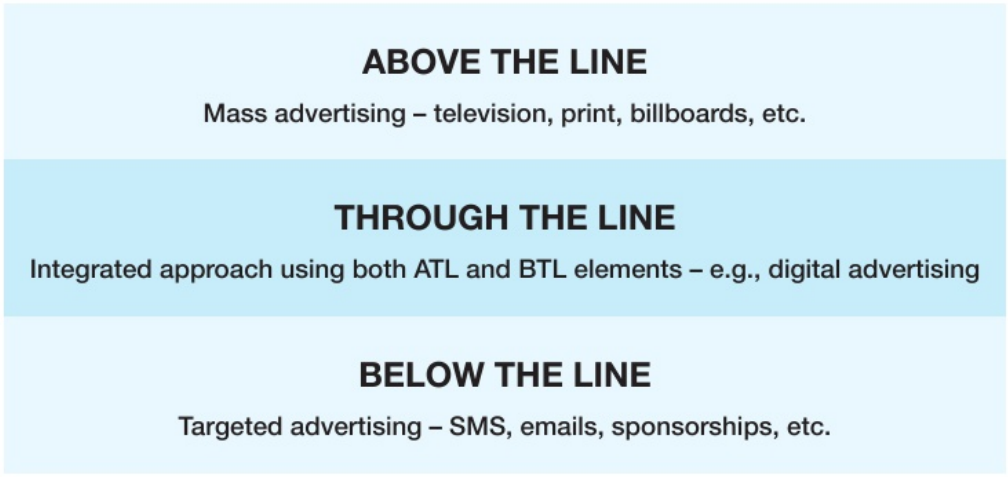
- advertising (online, print and TV ads, packaging, displays, logos)
- public relations (press releases, seminars, annual reports, sponsorships, charitable donations)
- sales promotion (coupons, rebates, contests, sampling)
- direct marketing (emails, telemarketing, catalogs)
- personal selling (presentations, meetings, incentive programs).

Promotional activity can be further categorized by the target audience.

Above-the-line (ATL) promotion, such as television and radio advertising, or print advertising in newspapers and magazines, is aimed at mass or large audiences. ATL promotion is generally not targeted. This form of promotion tends to work best in the early stages of the product life cycle as a business builds brand awareness. Because this form of promotion can be costly, it is used mainly by larger organizations. A downside of this approach is that the effectiveness of ATL promotion can be difficult to measure. In addition, changes in technology (such as the increasing number of social media platforms) make it increasingly difficult to capture the attention of potential customers.

In contrast, **below-the-line (BTL) promotion** refers to the various types of promotion that are focused on specific segments or groups and do not rely on mass promotion techniques. BTL promotional techniques include flyers, banners, text messages, emails, pamphlets, sponsorships, and in-store promotions. This form of promotion is usually less costly, so it is often used by smaller organizations and start-ups. BTL promotion tends to work best in the later stages of the product life cycle, to develop brand loyalty and solicit a direct response from the customer in the form of repeat sales. The major downside of this approach is that BTL promotion can narrow the target audience significantly, reducing the possibility of acquiring new customers and the ability to increase the overall brand value.

An organization usually cannot rely on a single tool to promote its product. A successful promotion mix is one that balances the various forms of promotion in a planned and structured way. **Through-the-line (TTL) promotion** is an integrated marketing approach that includes both ATL and BTL elements. Organizations that use this approach try to leverage the benefits of ATL and BTL promotion, while minimizing the drawbacks. This can be done by using both ATL and BTL techniques, or by using digital marketing, which allows a business to use technologies such as cookies, algorithms, and social media to send targeted messages on a massive scale.



Above-, below- and through-the-line promotion

'Above-the-line' and 'below-the-line' were first used in the 1950s by the accountants at Procter & Gamble. They started paying advertising agencies differently depending on the type of promotional activity that was planned. Advertising agencies that used ATL promotion were paid on commission (a percentage of sales), while advertising firms that used BTL promotion methods were paid fixed fees.

Social media marketing

In the previous section, we learned that promotion can be categorized by the target audience. ATL promotion is aimed at mass audiences, while BTL promotion targets specific segments or groups. TTL promotion indicates that this line is being blurred, meaning that organizations can now provide individualized communications

(promotional materials) on a massive scale. One way this is done is through social media marketing (SMM).

What impact has social media had on how consumers acquire and share knowledge of products?

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SMM, also known as digital marketing, is the use of digital platforms (such as Facebook, YouTube, WhatsApp, Instagram, WeChat, Twitter, or TikTok) to:

- build a company's brand
- increase sales
- connect and interact with existing and potential customers
- gather data analytics to measure engagement.

▲ According to Statista, over 4.26 billion people worldwide used social media in 2021

The first two bullet points are nothing new. After all, marketers have been trying to do this for years using print and television advertising. However, instead of just delivering a message through a static advertisement, organizations can now connect, interact, and engage with new and existing customers quickly and on a global scale. In addition, social media platforms give individuals the opportunity to interact with companies located around the world.

In 4.1 Introduction to marketing, we looked at how marketing is about more than getting the marketing mix elements right. Marketing is also about communicating the value a business can bring to its customers. Businesses can use SMM to amplify their story. For example, social media influencers with millions of followers can be hired or used to develop a company's brand.

In addition, as all SMM takes place in a digital environment, large amounts of data can be collected by businesses to track customer behavior and measure the effectiveness of various promotional strategies. This brings up ethical questions related to how a business should use social media and the large amounts of data available.

- To what extent should social media be used to shape consumer behavior?
- What kind of data, and how much data, should be made available to social media platforms and businesses?
- To what extent should these data be used?
- Should businesses be able to control or regulate the social media accounts of their managers and employees?

Regardless, the advantages for organizations of using SMM as a promotional strategy usually far exceed the disadvantages. Advantages of SMM as a promotional strategy include:

- **Connection**: Through social media, businesses can gain instant access to a large audience. This can help small organizations with little funding to make potential customers aware of their brand.
- **Interaction**: Social media platforms provide a space for organizations to engage with customers and vice versa (through commenting on and replying to posts).
- **Data**: Massive amounts of customer data can be gathered through social media, and the effectiveness of SMM can be measured because the digital environment makes data collection and analysis relatively straightforward.
- **Competitive advantage**: SMM can give small organizations a competitive advantage that they would not be able to achieve otherwise. Both large and small organizations have access to the same platforms.

- **Cost effective**: Although some expertise and staffing may be required, social media accounts can be set up almost instantly at little to no cost to a business.

The drawbacks of SMM are few but can be significant. Specifically, controlling the messages within social media platforms can be challenging. Organizations need to put in time and effort to manage their social media presence, creating interesting content and proactively responding to any negative posts.

Place

Products must be moved or distributed from where they are produced to a convenient place where buyers can see and purchase them. Place (or distribution) is the process of getting goods from producers to consumers, ensuring that products and services are available where and when they are required.

Activity

Next time you visit a supermarket or any retail store, pause for a minute and look at the huge variety of products on sale. Think of how many marketing steps were involved to bring you (the customer) the thousands of items that you see, from logistics to warehousing, to sorting and packaging. Some products may have been imported fresh from around the world, while others have been processed or frozen so that customers can access them all year round.

And now, of course, so much retail activity takes place online, with much of the movement of physical goods taking place out of sight of the consumer. We also see the emerging circular economy, with models such as resource recovery, circular supply, and sharing impacting the way business is done with the aim of improving sustainability.

Investigate how one of your favorite products traveled from the producer to you, the consumer.

Consistent with the idea of a marketing mix, a company's decisions involving place directly affect every other marketing decision. For example, a company's pricing can depend on whether it uses mass merchandising or high-quality specialty stores. The former approach would be more likely to utilize pricing strategies such as cost-plus or penetration pricing, while the latter would use pricing strategies like premium pricing.

IB learner profile

Risk-takers

Although using social media marketing is commonplace in today's business world, discuss emerging technologies that businesses could consider using for their marketing activity.

In addition, some organizations choose to use intermediaries such as wholesalers and retailers to promote their product. Companies may have multiple distribution channels, depending on the type of product and the needs of the customers. For example, some businesses may use multiple wholesalers and retailers to sell their products, while also offering consumers the ability to purchase directly online.

Customers versus consumers

Let's review the terms 'customer' and 'consumer', as this can cause some confusion when learning about distribution.

Customers are stakeholders who purchase a product from a business; consumers are the ultimate users of a product. Customers can be individuals but are often another business. For example, in a business-to-business (B2B) transaction, a tire manufacturer can sell tires to a car manufacturer. The car manufacturer then uses those tires in the production of a car and sells the car to an independent dealership. The car manufacturer is a customer of the tire manufacturer, and the car dealership is a customer of the automobile company, but neither are consumers. In this case, the consumer would be the individual who ultimately buys the car from the dealership.

Car part manufacturers often specialize in producing only one or two specific components

Returning to the tire manufacturer, they would need to understand the needs and wants of their customer (the car manufacturer) but would also need to understand the needs and wants of the end consumer (the car buyer) to have a successful business.

In some cases, customers and consumers are the same thing and can be used interchangeably. For example, the car buyer is the car dealership's customer and is also the consumer. When it comes to customers, consumers, and distribution, the important thing is to clarify the perspective and context of the situation. Otherwise, the marketing mix element of place can get quite confusing.

Channels of distribution

Several options are available when it comes to channels of distribution. This can range from a business selling directly to the consumer, eliminating the need for any intermediaries (agents, wholesalers, or retailers), to a business using one or multiple intermediaries. Agents (or brokers) can facilitate a sale by bringing buyers and sellers together, often in exchange for a commission (fee). Wholesalers make bulk purchases and then sell the product in smaller amounts. Retailers are like wholesalers, but specialize in reducing the sales amounts to single items that are sold to consumers. Retailers sometimes purchase from wholesalers.

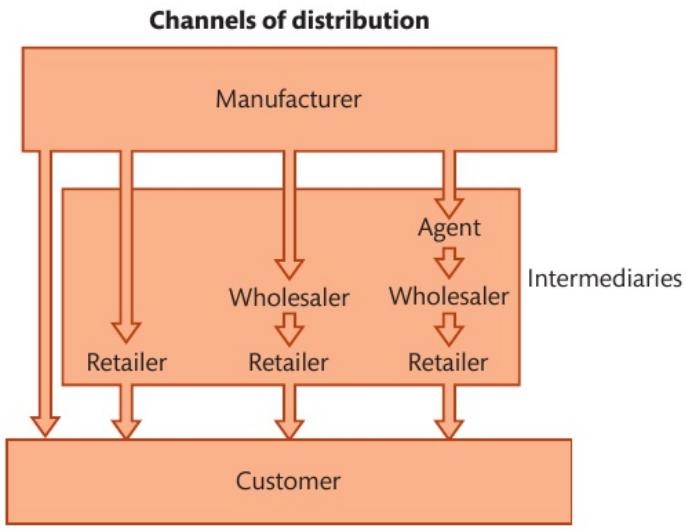


Figure 4.13 Businesses have several options when deciding how to distribute their product to customers and consumers

Most businesses can determine the appropriate channel(s) of distribution by considering the following five factors:

1 **Economic**: Using intermediaries such as wholesalers and retailers usually means higher prices for consumers. Wholesalers or retailers will need to sell a product for more than it cost them to obtain it to make a profit. A manufacturer can maximize its profit by reducing the number of intermediaries involved and selling directly to the consumer. The manufacturer would then collect the full amount the consumer was willing to pay, without losing a share to an intermediary.
2 **Control**: A manufacturer can maintain more control by selling directly to consumers. Outside agencies might not master the details of every product and may favor customers who buy the most goods, rather than the manufacturer's goods. In addition, manufacturers may not want to sell their products in the same space as their competitors. Using intermediaries can limit the interactions between the manufacturer and consumer, which could prevent a manufacturer from making changes needed to stay relevant in the market.
3 **Specialization**: A business may not have the ability, expertise, or desire to sell its product directly to the consumer. Intermediaries like retailers can utilize their superior efficiency and expertise in making the sale. For example, clothing retailers give consumers the ability to try on clothes and receive advice from store employees. Furthermore, many consumers appreciate the convenience of retail stores that allow for comparison shopping and access to a variety of products in one location.
4 **Adaptability**: Agreements with intermediaries mean that a manufacturer will need to commit to supplying a particular product over a given period. This can restrict its level of innovation and its ability to adapt to changes in the external environment. Businesses that use intermediaries may need to keep producing in large batches, even if their products become obsolete, so perishable products often require more direct distribution channels.
5 **Nature of the product**: Some products may be perishable or quickly decay. In these cases, a short channel of distribution would be required and in some cases specialized care like refrigeration would also need to be provided during the distribution process.

Some large businesses, such as Tesla and Apple, have chosen to reduce the number of intermediaries used in their distribution strategies. Both Tesla and Apple operate their

own retail stores to maximize control of their brands and the gathering of important customer data. However, it is rare for a business to utilize a single distribution channel. Apple also utilizes third-party providers to sell its products (such as by selling their phones through cellular network carriers). Taking a multi-channel approach gives organizations the ability to access larger audiences but requires careful coordination to manage costs and maintain control.

Another interesting and unique example is Coca-Cola, which utilizes multiple channels in its distribution process. It uses a franchising model, with independent canning and bottling companies, and many distributors, wholesalers, and retailers located around the world to deliver its products to consumers. These intermediaries provide the local expertise needed to make Coca-Cola products available in some of the more remote locations around the world.

Many organizations that operate within the service sector also need to make distribution decisions. For example, financial institutions such as banks and credit unions can offer online services directly to consumers and provide in-person financial services through local branches. Educational institutions are also diversifying their offerings, providing online courses and degrees, and opening regional campuses located in different parts of the world.

Case study – Conflictfood

Social enterprises often have special considerations to consider when making distribution decisions. Conflictfood, based in Berlin, provides culinary treasures from selected regions undergoing turmoil. To reach its social objectives of strengthening economic structures within regions such as Afghanistan, Myanmar, and Palestine, fighting poverty, and creating peaceful perspectives, it looks to reduce the number of intermediaries in its business model. Specifically, it utilizes direct trade and relationships with suppliers, and mostly sells directly to consumers online. Although Conflictfood uses some independent retailers, it looks for stores that share its social objectives, such as GoodBuy and Ankorstore.

Explain the importance of the different distribution channels used by social enterprises such as Conflictfood.

Extended marketing mix

The marketing mix elements of product, price, promotion, and place play an indispensable role in the marketing of tangible goods. Although they are also relevant to services, applying just these elements to services can mean falling short. When it comes to intangible products or services, consumers' perceptions become a very important part of the transaction.

Intangible products or services need three additional Ps:

- people
- process
- physical evidence.

People

> While extraordinary products and unique services still afford a competitive advantage, the one advantage that stands the test of time … is people.
>
> Mark Salsbury, author of *Human Capital Management*

This quote beautifully summarizes the underpinning role that people play in a company's marketing efforts. In the context of the marketing mix, 'people' refers to the skills, attitudes, knowledge, and appearance of the employees, and the interaction and relationships between key stakeholders (like customers and employees). Selling services successfully requires people who can interact with customers in a positive way and create a direct impact on how a company's product or service is perceived.

Some of the ways in which people can be effective in the delivery of services are:

- creating a positive impression, to encourage customers to return
- staff who do not keep customers waiting
- providing useful feedback to customer queries or complaints
- appropriately trained and well-motivated employees who understand a variety of cultures.

Good customer service is critical in many industries

Marketing can no longer just be left to the marketing department. Every employee of an organization can play an important role in the marketing of a business.

Connections can be made to topics within human resource management. For example, the recruitment, training, and development of staff with a focus on customer service are key parts of this element of the marketing mix. Furthermore, developing this marketing mix element may include creating an appropriate business culture to foster and encourage timely and appropriate service to customers.

Process

Process refers to 'the ease of doing business', or the way in which a service is ordered, received, and paid for by the customer. A company can get the process right when it looks at this from the customer's point of view.

Examples of best processes in the marketing of services include:

- multiple, fast, and secure order and payment methods (such as the option to pay by cash, check, credit card, or mobile payments)

i In The People's Republic of China, online deliveries go via one of two routes. Groceries or food deliveries via Meituan or ale.me go directly to customers. Other products ordered from JD.com or Taobao are delivered via 'beehives' – lockers installed in compounds, for which the customer gets a text message with the key code to retrieve their order.

- the delivery process can be developed into a USP if it is timely and more flexible than competitors; for example, a customer placing a supermarket order online, and that delivery arriving with the customer within an agreed time slot
- short waiting times for customers; for example, with mobile taxi booking services, such as Uber and Didi, customers provide feedback through rating their drivers, which has improved services considerably
- after-sales service or care (such as helpdesks, warranties, or the servicing and repair of equipment) can also serve as a USP to distinguish a business from their competitors.

Physical evidence

A service cannot be experienced before it is delivered. Physical evidence is therefore the 'proof' that allows customers to see for themselves the quality of service being provided. In other words, physical evidence refers to the tangible aspects or physical environment of the business in which the customers and employees interact.

There is an element of risk in buying a service as opposed to a tangible product. However, such uncertainties can be reduced in the following ways:

- clean and tidy reception area
- good location and presentation of business premises
- staff attire to professional standards
- providing a pleasant ambience
- soliciting customer feedback
- giving customers a high-quality online experience
- attractive product packaging
- positive testimonials from customers.

Activity

How would the marketing mix elements (including the extended marketing mix) apply to your experience as a student? As you consider this question, review all the elements of the marketing mix and the corresponding subtopics. Consider your business management course, your other courses, or both when thinking about the following.

- **Product**: Describe the product (service) that your school is providing.
- **Price**: Outline what pricing strategies (if any) are being used.
- **Promotion**: Ask yourself whether you are familiar with any of the promotional strategies being used by your school and to what extent social media marketing is being used or should be used.
- **Place**: Explore how the product (service) is distributed to the customer.
- **People**: Describe the skills, attitudes, knowledge, and appearance of employees and the interaction and relationships between key stakeholders (for example, students, teachers, administrators).
- **Process**: Describe the way in which the service is ordered, received, and paid for.
- **Physical evidence**: Describe the tangible aspects or physical environment of the business.

Practice questions

Office Supplies (OS) is a family-owned private limited company that, for 40 years, has operated three retail office supply stores in a small city. OS offers a wide range of office products (such as computer paper and stationery) and office machinery (such as computers and printers). When each store opened, OS purchased the buildings using long-term loan capital. OS's objective is to have enough profit to finance the company's working capital and pay annual dividends.

OS has no clear marketing strategy. Traditionally, OS competed with several other office supply stores operating in the same city. The market was not competitive, however, and most customers went to the nearest office supply store. OS's prices were comparable to those of other retail office supply stores, and the company did little promotion.

Nationally, the retail office supply store industry is declining. Many retail office supply stores have had to close, and new competitors have entered the market, many of which benefit from some or all of the following:

- specialized office products
- economies of scale, leading to more competitive prices
- greater convenience, including online stores with door-to-door delivery.

Like other physical retail stores, OS has seen its sales decline, and profit margins have fallen. Last year, to ensure there were enough funds for capital expenditure and revenue expenditure, OS's board of directors chose not to pay dividends. OS also anticipates the need for additional finance next year. OS's board is considering changes to the company's marketing mix in response to new competitors.

1 Discuss possible changes to any two elements of OS's marketing mix. (10 marks)

HL

4.6 International marketing

Learning outcome

At the end of this section, you will be able to:

- discuss the opportunities and threats posed by entering and operating internationally.

This final subtopic on international marketing will be an excellent way to review and connect previous topics and concepts. First, we will briefly explore the ways in which businesses can enter international markets, and then focus on the opportunities and threats of entering and operating internationally.

Methods of entry into international markets

As discussed in Unit 1, businesses have multiple options when it comes to growth. Many of these same strategies can be used to enter international markets. Some of these include:

- **Exporting**: The business makes the product in its home country and either manages the marketing directly (e.g., through e-commerce), sending the product to the country of consumption, or hires an intermediary or agent abroad to manage the marketing of the product.
- **Direct investment**: The business sets up and establishes production plants and distribution channels abroad under the direct control and ownership of the business.
- **Franchising**: A business sells the right to use its brand and related products or services to other businesses abroad (franchisees).
- **Licensing**: A business located in another country purchases the right to produce a product of the multinational company. Licensing is often used for physical goods, while franchising is often used in the service industry.
- **Joint ventures**: Businesses from two different countries join to form a third company, sharing the risk and optimizing the comparative advantages of the two original companies.
- **Merger and acquisitions**: Two businesses with similar aims legally consolidate into one company to share their resources.

Activity

Watch this short video from Hans Rosling explaining in four minutes the progress of 200 countries in 200 years.

You can also visit Gapminder to explore more videos and tools to help you understand the world better. Explain the opportunities and the threats that emerge from the trends being displayed through the visualizations and interactions with global data.

Toolkit connection

Applying the Ansoff Matrix, is a form of market development. Although this can be risky, it can be an effective way to increase profits, especially when the product is entering the final stages of its life cycle in the home market. However, operating in a larger market could prevent the organization from taking advantage of the benefits of remaining small, such as flexibility, lower overheads, the ability to provide personal services, and ease of communications.

Advantages of entering and operating internationally

There are several advantages to a business operating internationally. Many of these benefits are related to marketing and were discussed in Unit 1. Some of these benefits include:

- **Larger market size**: Offering products internationally means a business will have access to many more potential customers, increasing its market share and raising the possibility of becoming a market leader.
- **Greater security**: In Unit 1, we looked at how larger firms are less likely to become bankrupt or be taken over by other organizations. In addition, operating in multiple countries means a business can spread its risk. For example, a fall in economic activity in one country can be mitigated by gains in economic activity in other countries.

- **Economies of scale**: Expanding internationally can allow a business to lower its per unit production costs, whether that be through economies of scale in management, marketing, or purchasing, or another form of economy of scale.
- **Brand development**: International marketing allows a business to build its brand, communicating with customers on a global scale. A level of prestige can be obtained, allowing a business to differentiate itself from competitors that operate only domestically. Of course, developing an international brand can be challenging and complex due to the range of cultures and perspectives.

Disadvantages of entering and operating internationally

The disadvantages of entering and operating internationally can be analyzed through the STEEPLE framework. STEEPLE analysis is used to analyze the current external factors affecting an organization.

- **Social**: Due to variations in demographics, lifestyles, tastes, and cultures, entering and operating in international markets can be challenging. To minimize these challenges, organizations will want to choose the right method of entry so that they can utilize local knowledge and expertise.
- **Technological**: Although the internet and social media can alleviate some of the technological issues of operating in a foreign environment, technological infrastructure, and the use of innovative technologies such as machine learning can vary widely depending on locality. The omnipresence of e-commerce has increased competition globally.
- **Economic**: Employment rates, inflation, income levels, cost of living, purchasing power, and exchange rates can all vary across different regions, making it challenging for a business to replicate its business model across borders.
- **Environmental and ethical**: Ethical issues such as sharing prosperity and impact on the environment can be difficult for organizations to achieve when operating on a global scale. Multinational companies can negatively impact the host country by imposing their ways and depredating the host country's cultural identity. Businesses that have a negative image abroad may also damage their reputation in their home market.
- **Political and legal**: A range of political and legal threats face a business as it enters and operates internationally. These can include political instability, varying levels of regulation, anti-competition legislation, international trade agreements, higher tax rates, health and safety laws, consumer protection and employment laws, and intellectual property rights.

Further connections can be made to branding. As a business enters and operates internationally, it can take a pan-global approach, applying its marketing mix and brand worldwide, or take more of a global localization approach, changing its marketing mix to adapt to the local language, culture, and customs.

Research and inquiry

By adapting content for different languages and platforms, and creating shows for a specific region, Netflix can be seen as an example of an organization taking a global localization strategy.

What other examples can you think of?

Practice questions

Although there are many threats to entering and operating internationally, many businesses find ways to overcome these threats. According to an article in the *India Times*, after losing market share on over two-thirds of its product categories and posting significant losses, Procter & Gamble (P&G) was able to turn things around in India by:

- de-prioritizing several unprofitable lines
- gradually shifting from high margin, urban-centric products to lower-priced products.

Today, P&G has over 50 per cent of the market share in shaving razors, diapers, and napkins, and a significant market share in the shampoo and laundry segments in India.

1 Discuss the opportunities and threats posed to MNCs like Procter & Gamble by entering and operating internationally. (10 marks)

HL end

Summary

In this unit, you have learned:

- Marketing activity aims to identify, anticipate, and meet the needs and wants of customers and society.
- Marketing activity also involves communicating the value a business can bring to its target audience.
- Developing a marketing strategy involves segmentation, targeting, branding, positioning, and differentiation.
- HL Using simple linear regression to forecast sales can help a business make decisions and formulate business and marketing plans.
- Gathering and analyzing a variety of market research can help a business make informed decisions.
- The 7Ps of the marketing mix (product, price, place, promotion, people, process, and physical evidence) work together to formulate an effective marketing strategy.
- HL Entering and operating internationally provides unique opportunities and threats to business organizations.

UNIT

5

Operations management

Conceptual understandings

- **Change** in operations impacts other business activities.
- **Creative** production process can disrupt the market.
- Operational business changes may affect its **ethical** stance.
- **Sustainability** ensures efficiency in business operations.

5.1 Introduction to operations management

Learning outcomes

At the end of this section, you will be able to:

- describe and explain the role of the operations management functional area.

Inquiry questions

These are questions based on themes within this unit that you could conduct some independent research about. You could explore:

- How can high standards in operations management make a business more viable?
- How can waste management and quality management contribute to efficiency and sustainability?
- Why could outsourcing result in lower quality products or services?
- How can break-even analysis help decision-making?
- How can technology improve business productivity?
- Why could research and development (R&D) enhance creativity in a business?
- How does digital technology enable new business models to flourish?

The role of operations management

Operations management encompasses the design and control of production processes and business operations involved in the production of goods and services. The overarching goal of operations management is to ensure that business operations use as few resources as possible while meeting customer requirements.

Regardless of the size of a business, operations management plays an integral part in its success. From large scale motor assembly lines to factories producing thousands of biscuits per day, from a web design company to an independent donut store, all businesses need to consider how they will approach operations management to get the best possible result for their customers.

Operations management looks different from business to business but key elements of operations management are:

- **Demand and supply analysis**: Understanding product demand, supply requirements, and business forecasting are critical in manufacturing operations.
- **Inventory management**: This includes management of raw materials, quality of goods, services, and finished products.

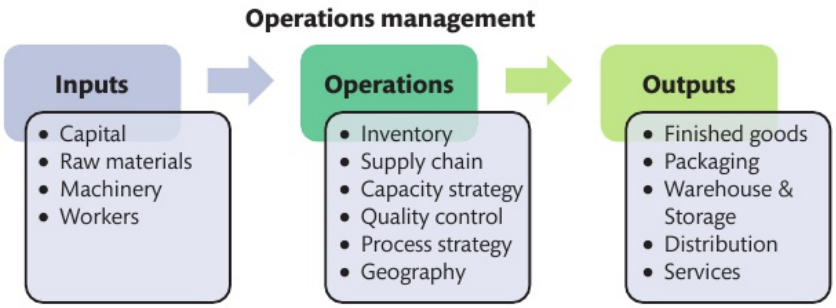


Figure 5.1 Operations management

- **Supply chain management**: This involves everything from sourcing raw materials to product storage to distribution.
- **Capacity management**: Production capacity needs to be evaluated based on demand, productivity, and input inventory.
- **Process and layout strategy**: Factory and workplace layouts, operational processes, and production methods are all critical for business output.
- **Geography strategy**: This involves the need to evaluate locations for factories, warehouses, distribution centers, and retail outlets.

While operations is responsible for producing products and/or delivering services, it needs support and input from other functional areas of the organization. For example, finance, marketing, and operations are closely linked.

The finance department is responsible for securing resources at favorable prices and allocating those resources throughout the organization, as well as budgeting, analyzing investment proposals, and providing funds for operations to take place.

Marketing is responsible for assessing consumer wants and needs, and selling and promoting the organization's goods or services. Feedback from the marketing department on product success will inform future production planning by the operations team. Operations are responsible for producing the goods or providing the services offered by the organization, but both finance and marketing play a part in this.

With sustainability becoming an increasingly important goal of businesses, operations play an integral part in helping to achieve the triple bottom line (TBL). The TBL is a business concept that suggests that rather than solely focusing on generating profit, or the standard 'bottom line', firms should commit to measuring their social and environmental impact, in addition to their financial performance. This means looking at the sustainability of supply chains, as well as the impact of operations on the local communities that an organization operates within, and improving supply chains to ensure favorable outcomes for all involved.

Toolkit connection

Circular supply models use renewable or recovered materials, reducing demand for the extraction of new resources. Reduced extraction benefits the business and society in several ways, including reduced waste and lower energy use.

IB learner profile

Inquirers

Research a business of your choice (other than IKEA, LEGO®, and The North Face®) that has adopted a triple bottom line (TBL) approach. How have they adjusted their operations and what have the impacts been on their internal and external stakeholders?

Some large multinational businesses have adapted their operations to focus on the TBL:

- IKEA, the home furnishing company, has saved over $1 million by recycling food waste.
- LEGO®, the toy manufacturer, has committed to use 100 per cent renewable energy by 2030, and has begun creating plant-based plastics to make its products more sustainable.
- The North Face®, the outdoor clothing company, has pledged to use 100 per cent responsibly sourced fabrics by 2025, to work with retailers and suppliers to reduce their environmental footprint, and to eliminate single-use plastic packaging by 2025.

Practice questions

1 Define the term 'triple bottom line'. (2 marks)
2 Explain two key roles of the operations management department. (4 marks)

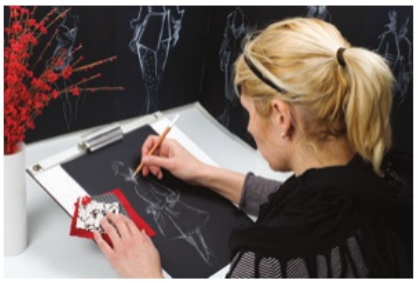
5.2 Operations methods

Learning outcomes

At the end of this section, you will be able to:
- describe, compare, and contrast the features of each method of production
- analyze the suitability of a method of production for a given context
- justify a method of production for a given situation.

One of the main purposes of operations management is to produce goods and provide services. If there are tangible goods to be produced, the organization will need to consider which method of production to adopt to produce those goods. There are a variety of operations methods that an organization can consider.

Job production



This production method concentrates on producing high-quality, usually one-off, customized products that meet the specific needs of customers. It is highly specialized, labor intensive, and market oriented, with the customer often consulted at regular intervals as the production progresses to ensure it aligns with their specification. Job production can involve both small-scale, low technology projects, such as an haute couture dress, as well as large, complex projects involving high technology, such as luxury sports cars.

Job production is well suited to smaller, specialist firms as there are fewer opportunities for economies of scale and the market is not as price-sensitive, meaning higher prices are expected. However, some large scale projects, such as one-off construction developments, are associated with larger firms generating high revenue and profit levels. Either way, there is still a clear focus on meeting customer needs.

Advantages

- High-quality products allow an increased mark up.
- Personalized products bring in more revenue and increase customer satisfaction.
- There is higher job satisfaction and increased motivation among workers due to their strong commitment to the tasks.
- Job production can have a flexible production process.

Disadvantages

- Highly skilled workers and specialized machines increase the production costs.
- Production can take up a lot of time and resources.
- It can be difficult to find replacement components if mistakes are made in production as the products are uniquely designed.

Batch production

Batch production is a method of manufacturing where identical or similar items are produced together for different sized production runs. The method allows for products, from baked goods to children's toys, to be mass produced in batches with small to major changes to the product.

Changes can occur between different batches, including changes to colors, sizes, and styles. If a product needs to be altered, the change can be made between batches.

Advantages

- Products can be produced in larger quantities, reducing the overall cost per unit and achieving economies of scale.
- Companies may focus on a small group of products, leading to greater quality control and specialization.
- Labor costs are reduced, as workers only focus on a particular task or set of tasks.
- One machine can handle several different product configurations, reducing costs and allowing products to be produced according to customer specifications.
- This method lends itself to repeat orders, meaning a smoother, more consistent production flow over time.
- Batch production is also suitable for trialing new products, as a small quantity of the product can be produced.

Disadvantages

- Each batch must be tested for quality and uniformity before future batches can be produced, causing idle downtime.
- Machinery must be stopped and recalibrated between batches, causing downtime.
- Storage costs are high for large batches of the same product.
- Employees can become demotivated by lack of variety in their work.

Interesting information

A lights-out factory, also called a dark factory, is one where requirements for human activity are so minimal that the facility can operate in the dark with zero human intervention on site. As manufacturing companies consider what the 'factory of the future' will look like, autonomous production within a lights-out factory seems likely to expand across the industrial spectrum.

Lights-out factories, and more commonly, lights-out manufacturing cells, are possible because of the development and maturity of automated machines and robots, as well as comprehensive and proven manufacturing operations management (MOM) software. MOM software has the capacity to orchestrate fully automated manufacturing processes. Human stakeholders can remotely oversee lights-out operations and receive alerts to address any problems or issues should they arise.

The lights-out factory is most easily implemented for the simple mass production of a standard product on a fixed schedule. A completely dark factory becomes more difficult (though possible) as products grow in complexity and mass customization creates many product variants. Some manufacturers can gain the advantages of autonomous production without transitioning to a full lights-out factory by having a 'lights-sparse' factory floor, in which lights-out manufacturing is confined to specific operations and/or areas.

Mass production

Mass production, also known as flow production or continuous production, is the production of substantial amounts of standardized products in a constant flow along an assembly line. This is often the method companies turn to when they want to quickly produce a large number of goods to enter or be sold on the consumer market.

Due to the automated nature of mass production, the need for skilled labor diminishes, often only being required for quality control, monitoring, and maintenance. This is enhanced by the ever-growing sophistication of technology, particularly developments in robotics. As machines do not need time away from the task for rest breaks or to eat, it is common for production facilities to operate 24 hours a day, 7 days a week where necessary.

Advantages

- Mass production lowers the cost of production and labor per unit as huge technical and purchasing economies of scale can be realized.
- It takes less time to produce products.
- Quality control can increase and product variation can decrease.
- Increasing product output, convenience, and production efficiency will allow the business to produce large quantities of standardized products.

Disadvantages

- Mass production systems such as assembly lines involve high set-up costs due to advanced automated technologies.
- Ongoing costs to maintain and upgrade these systems may also come at a high price, especially if the systems are in constant use.

- Breakdowns on the production line can be costly if the assembly line is out of action for a prolonged period.
- As automation takes the role of skilled workers, there can be high employee turnover and low morale.
- Mass production can negatively impact the environment because it requires a large number of resources.
- If there is a sudden decrease in demand, the business might have a large quantity of finished products that will not sell or will have to be sold at a huge discount.

Most cars are mass produced

Mass customization

Mass customization (also known as made-to-order or built-to-order) involves the use of flexible computer-aided manufacturing systems to produce customized output. It combines the flexibility and personalization of custom-made products with the low unit costs associated with mass production.

Customers get a list of predefined features to choose from. The price of the final customized product can increase or decrease from its base price depending on the desired configurations. Nike By You, or NikeiD, from apparel manufacturer Nike is a perfect example of mass customization in marketing and manufacturing. It allows customers to personalize their own Nike products, including clothing and footwear, from colors and materials to style.

Research and inquiry

Nike was one the first sports brands to embrace mass customization with its NikeiD range. Visit the Nike website and try out the service.

What type of customers might Nike be targeting with this service?

How have its competitors responded? In your opinion, does Nike hold a competitive advantage with this service?

Advantages

- Mass customization allows customers to choose from a range of customizable design specifications, colors, structures, and patterns.
- It can attract customers and improve the brand image.

- The unit cost of products reduces as the scale of production increases.
- It ensures timely delivery using existing equipment and technologies and new programs and procedures.
- It gives brands a competitive advantage.
- It helps businesses maintain long-term customer relationships and retain existing consumers.

Disadvantages

- Depending on where the product customizations are made, there is the risk of holding many parts.
- Depending on the customizations, it may not be possible to resell the products, making handling returns difficult.
- Adding customization steps can add substantial costs to operations.

Choosing the most suitable production method

When making a production decision, there are several factors a business needs to consider that will influence the most suitable form of production.

Quantity

The operations manager will need an idea of the potential output levels they are looking to produce as this will be a key determinant of the production method. Large scale, continuous production requirements will lean more toward mass and flow production whereas bespoke one-off products will be more aligned to job production.

Technology

The level of technology available will feed into the operations manager's decision, as the production process decision depends on the technology required. For example, if there are many orders and the business doesn't have the right equipment, it may be unable to mass produce them. Ensuring the business has the right technology to track, sort, and build the products is vital.

Production timing

Continuous processes use long production cycles that could last for a long time. Long production cycles are ideal for high volume and low variety products but unsuitable for highly customized products.

Input combinations

Input combinations are the labor and capital methods that go into manufacturing a product. Before deciding how many products to produce and the method for creating them, the business must make sure the material and labor costs make business sense. Ensuring enough revenue is generated to make an adequate and stable profit helps the organization function properly.

Target market

Customers may be demanding a high level of customization and quality that requires a job production approach. However, in price-sensitive market segments, high volume, low-cost standardized products may be necessary.

Nature of the firm

Small, independent firms may be limited by the costs required to adopt mass production techniques.

Government policies

Governments may offer various incentives to businesses to stimulate investment and economic growth. By offering grants, subsidies, and tax breaks, governments may persuade some firms to make production more capital-intensive.

The nature of the product

The product itself may determine the production method; for example, one-off construction projects such as concert halls or sports stadiums will require job production.

Farms are often subsidized by governments

TOK

Should we hold companies responsible for the applications of products they create? Discuss your ideas.

Case study – Doogle's Donuts

Doogle's Donuts has already amassed a legion of fans thanks to its elaborate handcrafted donuts, with its first store regularly seeing queues stretching down the street.

Located on Leyland Street, Prescot, UK, Doogle's Donuts first opened its doors in September 2020. It sells freshly baked gourmet donuts and a variety of hot drinks.

Its owners have opened a second establishment on the vibrant and buzzing Lark Lane, in Liverpool, UK.

Founder Christian Anderson, 27, told the local newspaper, the *Liverpool Echo*: 'I'm really excited about it. The whole idea of the Lark Lane shop is so we can provide that in-house meeting space where people can meet up and socialize, I want to create an atmosphere where people can come and socialize and even do some work.'

'Lark Lane is going to be a completely different story to Prescot because there's a lot more people there – as a business, it was a good move for us to find somewhere with a bit more footfall. It was a little bit impulsive; we were walking down Lark Lane and all of a sudden, there was a shop there to let and we got on the phone straight away and arranged a meeting.

'It was the perfect space and we just went with it – you've just got to take that opportunity, even though we're a relatively young business, it was a good move for us. We want to give our customers something special.'

The new shop sells the company's popular range of gourmet donuts including the Eton Mess donut, which is a strawberry glaze topped with meringue and freeze dried strawberries; the El Bueno, which is a Nutella® glaze with white chocolate curls topped with a Kinder Bueno piece; the Homer, an original ring donut with a pink glaze and sprinkles; and the Bigscoff, which is a toffee glaze dipped in a Lotus Biscoff biscuit crumb with Lotus Biscoff sauce and a caramel Rolo center.

Christian says: 'Every donut is fresh. We call them gourmet because they are all handcrafted and we put time and energy into every donut.

IB learner profile

Risk-takers

When looking to adopt a method of production as a new business or change an existing method in place, there is an element of risk involved. Based on what you have learnt so far in the business management course, discuss in a small group ways in which a business would assess or mitigate the risk involved in decisions such as this.

'We have classics like Cinnamon Sugar, jam, and the Happy Glaze, which we thought sounded like happy days. It's nice to hear customers come in and ask for the donuts with their names.'

1 Define the terms 'job production' and 'batch production'.
2 Explain the method of production that is used by Doogle's Donuts.
3 Discuss whether Doogle's Donuts should move to a flow production method.

Practice questions

1 Define the term 'mass production'. (2 marks)
2 In reference to a real world example, explain one advantage and one disadvantage of using mass customization. (4 marks)
3 As the first honey and hive product producer utilizing sustainable practices in the United Arab Emirates (UAE), Hatta Honey puts sustainable apiculture at the heart of everything it does. From sensitizing future generations to the role of bees and their importance in the ecosystem, to educating them about the UAE's agricultural wealth and supporting ecotourism, it is one of the leading companies in the field of honey production that produces 100% natural, raw, and pure honey in the UAE.

Throughout its journey, Hatta Honey has decided to look for the purest and most natural honey, and has succeeded in partnering with the most reputable beekeepers to ensure that the honey it provides adheres to ISO, HACCP, and ESMA quality standards.

Hatta Honey offers six main varieties of honey (Sidr, Samar, Ghaf, Mangrove, Wildflower, and Oak) and utilizes batch production, operating at the premium end of the honey market, with prices starting at around $25 for a jar.

Hatta Honey is the largest honey producer in the UAE, operating more than 4,000 colonies of honeybees and producing over 20 tons of honey per season. Examine the use of batch production as a method of production for Hatta Honey. (10 marks)

HL

5.3 Lean production and quality management

Learning outcomes

At the end of this section, you will be able to:

- outline the features of lean production
- explain the methods of lean production that an organization can adopt
- distinguish between quality control and quality assurance
- explain the methods an organization can use to manage quality
- examine the impact of lean production and total quality management on an organization
- comment on the importance of an organization adhering to national and international safety standards.

The core idea of lean production is simple: to work on eliminating waste from the manufacturing process.

Waste is defined as any activity that does not add value from the customer's perspective. According to research conducted by the Lean Enterprise Research Centre (LERC), 60 per cent of production activities in a typical manufacturing operation are waste – they add no value at all for the customer.

Lean production helps manufacturers to lower costs by reducing or eliminating unnecessary movements and processes, whether those activities are performed by workers or machines. By eliminating waste in an organization's processes, efficiency is improved. In addition, helping businesses develop lean thinking cultures encourages employees to take the initiative and make improvements based on their observations and experiences.

One of the first steps to adopting lean manufacturing methods is to identify and then work to minimize the eight types of waste.

1 **Inventory:** Storing excessive inventory can be a waste of both space and money.
2 **Motion:** Both humans and machines can waste motion. For people, using excessive physical motion to reach, bend, and stretch wastes time, and can result in injury. Workstations should meet ergonomic principles and all materials necessary for task completion should be within arm's reach of employees. For machines, using large capacity machines for small batches of work or running more machines than required to complete a particular job can waste energy and time.
3 **Over-processing:** The aim of lean is to make only what is needed when it is needed to meet customer demands. Making too much too soon often results in excessive inventory. Miscommunication, misunderstanding, mistakes, and breakdowns in the supply chain can also be causes of over-processing.
4 **Overproduction:** Within the lean model, every item should be made as it is needed. This is called just-in-time (JIT) production. Overproduction is referred to as just-in-case (JIC) production, which creates long lead times resulting in high storage. The concept is to schedule and produce only what can be immediately sold or shipped.
5 **Waiting:** Waiting equals wasted time and wasted time equals lower profits. When one department must wait on another for a part, a price, or a process to be completed, production and/or service stops. Waiting disrupts production flow and can impede the effective elimination of waste.
6 **Transport:** Consider how much time is wasted by not moving products or materials in the most effective and efficient way possible. For example, it is wasteful for a company to send out its biggest truck to deliver its smallest order. Eliminating transport waste can facilitate savings in multiple areas across business processes.
7 **Defects:** Any time a batch of products does not meet specifications, time, money, and effort are wasted. In large scale manufacturing, there may not be the time to effectively use quality assurance to ensure the product has fewer defects.
8 **Non-utilized talent:** The most valuable resource in any organization is the employees. Not effectively using that resource creates waste by not recognizing and using the value and efficiency brought through skills and talent.

After assessing each area of waste, an organization can implement lean best practices that can make operational activities run more smoothly, thus improving efficiency and increasing profit.

Methods of lean production

To move toward lean production, an organization can look to adopt lean production methods. Two possible approaches are continuous improvement (kaizen) and just-in-time (JIT).

Continuous improvement (kaizen)

Kaizen is a compound of two Japanese words that together translate as 'good change' or 'improvement'. Kaizen has come to mean 'continuous improvement' through its association with lean methodology and principles.

Kaizen is an approach to creating continuous improvement based on the idea that small, ongoing positive changes can reap significant improvements. Kaizen is core to lean manufacturing and perhaps one of the best-known adopters of this approach is the Japanese motor vehicle manufacturer, Toyota, through its management philosophy 'the Toyota Way'. It was developed to lower defects, eliminate waste, boost productivity, encourage worker purpose and accountability, and promote innovation.

IB learner profile

Inquirers

Toyota is well known for its adoption of continuous improvement and has embedded the philosophy of kaizen in its business. Investigate the use of kaizen at Toyota and write a short summary on: 'What is kaizen and how does Toyota use it?'

Ten principles of kaizen

The ten principles that form the core kaizen philosophy are:

1. Let go of assumptions.
2. Be proactive about solving problems.
3. Don't accept the status quo.
4. Let go of perfectionism and take an attitude of iterative, adaptive change.
5. Look for solutions as you find mistakes.
6. Create an environment in which everyone feels empowered to contribute.
7. Don't accept the obvious issue; instead, ask 'why' five times to get to the root cause.
8. Cull information and opinions from multiple people.
9. Use creativity to find low-cost, small improvements.
10. Never stop improving.

Conceptual understanding: Creativity

Two of the main concepts that underpin creativity include:

- Originality: The idea should be something new.
- Functionality: The idea needs to possess a degree of usefulness and actually work.

How does working through the seven steps of kaizen support creativity in the workplace?

The kaizen cycle

Kaizen can be implemented in a seven-step cycle to create an environment based on continuous improvement.

This systematic method has the following steps:

1. **Get employees involved**: Seek the involvement of employees, including soliciting their help in identifying issues and problems, and solutions. Doing so creates buy-in for change. Often, this is organized as specific groups of individuals charged with gathering and relaying information from a wider group of employees.
2. **Find problems**: Using widespread feedback from all employees, gather lists of problems and potential solutions.
3. **Create a solution**: Encourage employees to offer creative solutions, with all manner of ideas encouraged. Pick a winning solution or solutions from the ideas presented.
4. **Test the solution**: Implement the winning solution, with everyone participating in the rollout. Create pilot programs or take other small steps to test out the solution.

Figure 5.2 The kaizen cycle for continuous improvement

5 **Analyze the results**: At various intervals, check progress, with specific plans for who will be the point of contact and how best to keep ground-level workers engaged. Determine how successful the change has been.

6 **Adopt**: If results are positive, adopt the solution throughout the organization.

7 **Repeat**: These seven steps should be repeated on an ongoing basis, with new solutions tested where appropriate or new lists of problems tackled.

Just-in-time (JIT)

Rather than producing goods and supplying customers from stock, JIT processes focus on producing exactly the amount the business needs exactly when their customers need it. This helps to minimize waste as stocks are not held by the business for extended periods of time, which ties up capital. JIT is covered in more detail later in this unit (5.6 Production planning).

Cradle to cradle design and manufacturing

With an increasing need to address climate change issues, businesses are looking for ways to become more sustainable in their approach to operating. With cradle to cradle (C2C) design and manufacturing, products are designed to be reused as materials for new products or to harmlessly biodegrade. Manufacturers are also encouraged to reduce their environmental impacts by conserving water and energy, and reducing pollution. The key is to become part of what is known as the 'circular economy'.

Originally developed in the 1990s by Prof. Dr Michael Braungart, William McDonough and EPEA Hamburg, cradle to cradle stands for innovation, quality, and beneficial design.

IB learner profile

Reflective

Consider your consumption habits and the goods and services you consume on a regular basis. How many of these do you think are part of a circular economy at the moment? What evidence do you have to support this? What conscious changes can you make to your consumption behavior to align it better with the circular approach?

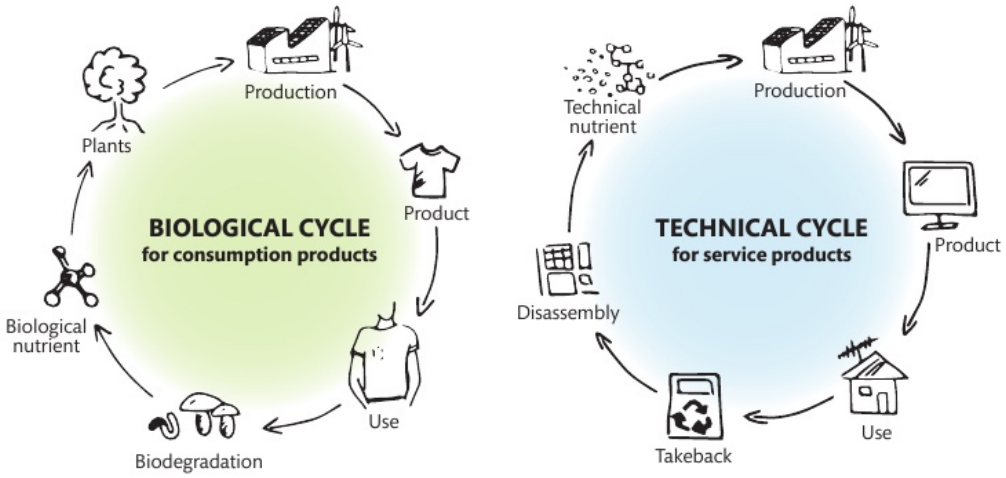


Figure 5.3 The biological cycle applies to consumption products; the technical cycle relates to service products

Toolkit connection

The product service system model focuses on the marketing of services rather than products. The provider retains ownership of the product and is responsible for ongoing maintenance, upgrade, and disposal at the end of the useful life.

Conceptual understanding: Sustainability

One element that feeds into the overall concept of sustainability is that of 'climate neutrality'. According to the European Parliament, this means 'having a balance between emitting carbon and absorbing carbon from the atmosphere', achieving net zero emissions.

The 2015 Paris Agreement states the need to achieve climate neutrality this century. Steps toward this include energy efficiency, renewable energies, green transport, biomass fueled power, carbon capture and storage (CCS), and a greater emphasis on the circular economy. Adopting a cradle to cradle design and manufacturing approach will help organizations accomplish this wider goal.

It describes the safe and potentially infinite circulation of materials and nutrients in cycles. All constituents are chemically harmless and recyclable. Waste as we know it today, generated according to the take-make-waste model, will no longer exist.

C2C advocates for two cycles to be followed in relation to consumption products and service products: the biological cycle for the former, and the technical cycle for the latter.

Consumables like natural fibers, cleaning agents, and biodegradable packaging circulate in a biological cycle that they can be safely reintroduced to after use. They turn into compost or other materials, which are in turn used to make new products. Therefore, old products do not turn into waste but into 'nutrients' for a new product.

Consumer goods such as electronic items circulate in a technical cycle. These products are already optimized during the design and manufacturing process as material resources for their next service life as new products. Components can be sorted according to their constituent materials after use and then reintroduced to a technical cycle. High quality is maintained and downcycling can be prevented.

Research and inquiry

Visit the Ellen MacArthur Foundation website and investigate what is meant by the circular economy.

Working in small groups, develop a presentation you could deliver to the school community to promote the benefits of adopting this mindset and pointing people toward ways in which they can limit the waste they produce.

Quality control and quality assurance

Quality is vital to the success of a business. Quality is the degree to which a product or service meets the specific requirements of customers.

If a business can produce and distribute high-quality products or services, then it is more likely to succeed. Ensuring quality helps to build a good reputation and increase customer loyalty. Two aspects of quality management are quality assurance and quality control (Table 5.1).

Table 5.1 The differences between quality assurance and quality control

Quality assurance	Quality control
Main objective is to prevent defects and mistakes	Main objective is to fix defects after first identifying them
Preventive technique and proactive measures	Corrective technique and reactive measures
Process-oriented: directly related to the systematic and planned activities involved in making the product	Product-oriented: related to operational activities and techniques that are used to inspect and ensure that requirements of quality have been met
Involves managing quality by defining the processes, strategies, and policies, developing checklists, and establishing standards that need to be followed throughout the course of the project	Involves following the set guidelines as the project progresses and products are being made to verify quality, discover defects and correct them
Responsibility of all the individuals involved in developing the product or service	Responsibility of a particular team that tests the product or service to check for bugs and fixes them
Statistical tools and techniques applied to end products are referred to as Statistical Quality Control (SQC) and are part of quality assurance	Statistical tools and techniques applied to processes are referred to as Statistical Process Control (SPC) and are part of quality control

Quality assurance is process-oriented, and it focuses on preventing quality issues. It provides confidence both internally to management and externally to customers, government agencies, regulators, certifiers, and third parties.

Quality control is product-oriented and focused on identifying quality issues in manufactured products that could affect customer satisfaction.

Ways of managing quality

The importance of ensuring quality within an organization is critical, and a business needs to ensure that it has suitable systems in place to monitor and manage quality. There are several ways to do this, including quality circles, benchmarking, and total quality management (TQM).

Quality circle

A quality circle comprises employees who regularly meet to solve problems, improve the quality control of products, and facilitate high standards in the workplace. The scope of their work may include issues relating to the production process, material wastage, the quality of finished and semi-finished goods and raw materials, energy consumption, maintenance, safety, and delays.

- Participation is voluntary, with the initiative to join resting with the interested employee.
- The size of the group typically varies from eight to ten members, who belong to a specific work area. Specialists from other areas can be brought in to gain additional perspectives to find appropriate solutions.

Figure 5.4 The quality circle process

- The quality circle members determine the frequency of meetings, usually at periodic intervals, such as weekly.
- There may be several quality circles operating in the work environment; however, they do not interfere with each other.
- The quality circle collects and analyzes data, then through discussions comes to a solution. The final idea is presented to the management by the group and not the leader alone.

A simple quality circle process can be seen in Figure 5.4.

Benchmarking

Benchmarking is defined as a process of measuring an organization's products, services, and processes against those of organizations known to be leaders in one or more aspects of their operations. This enables an organization to discover if there is a gap in performance that can be closed.

Benchmarking helps an organization understand how it compares to similar organizations, even if they are in a different business or have a different group of customers.

Figure 5.5 could represent an airline that is looking at its performance in terms of the average check-in time at a particular airport compared with that of its major competitor. Once the benchmark gap (the difference between the airline's current performance and that of the market leader) has been identified, the organization will aim to put in place procedures that will close the gap. In time, the airline's goal will be to surpass that benchmark and become an industry leader with superior performance.

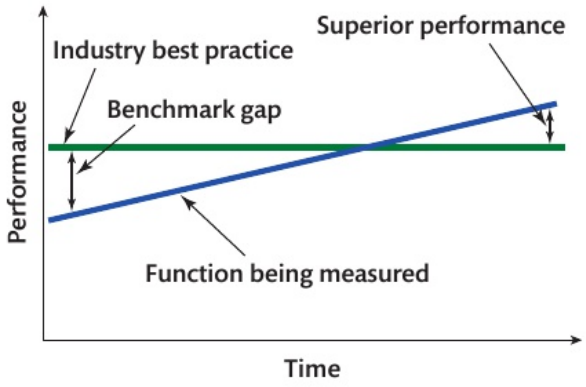


Figure 5.5 The benchmark gap

Total quality management

TQM is a management framework based on the principle that an organization can build long-term success by having all its members, from low-level workers to its senior executives, focus on improving quality, therefore helping to improve customer satisfaction. This requires empowerment of all workers in the organization, so they are free to contribute to and support this approach.

TQM requires organizations to focus on continuous improvement, adopting the kaizen approach. Long-term process improvements are the goal as opposed to short-term financial gains. As well as kaizen, other aspects of lean production will figure in this TQM approach such as the use of benchmarking and quality circles.

The principles of TQM

- **Customer first**: Providing an unrivaled customer experience in all interactions with the organization is at the forefront of the TQM framework and philosophy, and stands as the foremost pillar of success. The customer is always the main priority, from purchase through to after sales support.

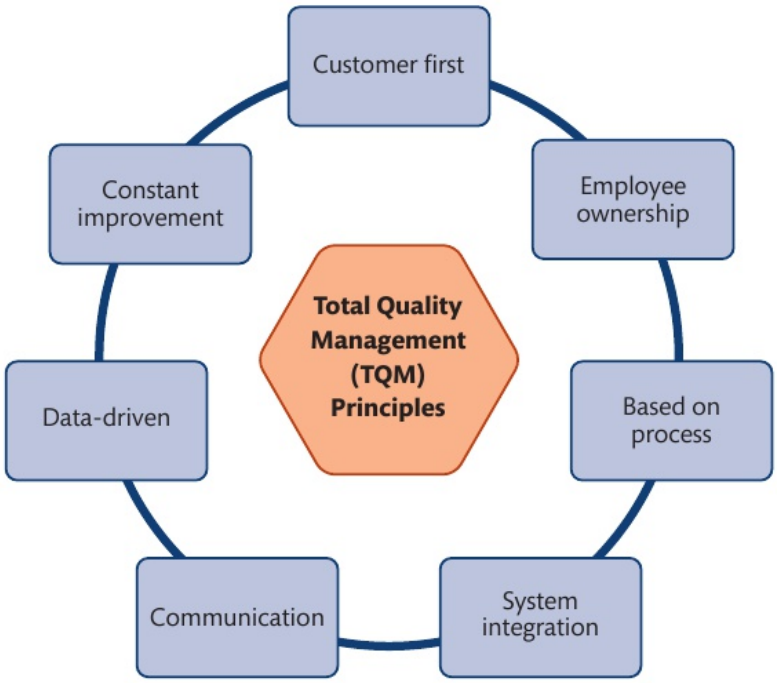


Figure 5.6 The principles of TQM

- **Employee ownership**: The TQM approach is all encompassing and requires the involvement of every team member to ensure that complete quality control is offered at every level. No single department is targeted, as the goal is to provide customers with a great experience from every level of the organization.
- **Process-based**: TQM focuses on the creation and implementation of processes that provide organizations with the ability to find success and repeat it. Quantifying success and defining the steps taken to get there are essential for successful implementation of TQM.
- **System integration**: Complete cooperation is sought across the organization through system integrations and leveraging every asset available.
- **Communication**: Communication and transparency is critical when adopting a TQM approach, as it requires every employee to be on board and add value to the team.
- **Data-driven**: Decisions are based on quantifiable facts through the leveraging of data to improve the organization. Guesswork and emotional responses will not aid this process.
- **Constant improvement**: TQM is an ongoing process that strives for perfection in how the organization operates. Although perfection is impossible, getting as close to it as feasible is the goal.

The impact of lean production and TQM

Adopting lean production methods and a TQM approach bring both advantages and disadvantages.

Advantages

- **Eliminates waste**: Lean principles aim to minimize all forms of waste, from product defects to inefficiencies in the work environment. Whether it's eliminating defects, installing better lighting, or rearranging the workspace, eliminating waste will translate into cost savings down the line.
- **Worker satisfaction**: Employees usually respond in a positive way to conscious efforts to involve them in improvement processes. When they see suggestions and ideas incorporated, a sense of ownership and satisfaction about their contribution is more likely to follow.
- **Relationship building**: Close interactions with suppliers are a feature of lean production approaches, while considering customers and working with employees are essential to TQM.
- **Just-in-time**: JIT is a strategy that suggests large inventories are wasteful of company resources. Moving toward having the raw materials purchased and delivered when production needs them, and then the finished product is sold and delivered the moment it comes off the line, ensures equity isn't tied up unnecessarily.
- **Competitive advantage**: Implementing lean production techniques and TQM introduces systems and develops skills that support changes in the workplace. Employees become nimbler in their approach, by producing work quickly, in short iterations, without waste, and delivering on time, which provides an advantage over the competition.

Disadvantages

- **New inefficiencies**: Lean techniques can be overused, and when tracking of productivity and waste starts to impact the time used for production, the solution becomes the problem.
- **Low margin for error**: Being overly aggressive with JIT scheduling can leave a business vulnerable to systemic bottlenecks. Supplier delivery issues may cut off raw materials, interrupting production flow, and maintenance emergencies can reduce the production levels.
- **Worker frustration**: Using lean methods to squeeze more economy from production can discourage workers, leading to demotivation and undermining the leadership.
- **Changing corporate culture**: The culture within an organization can take time to embrace lean production and TQM philosophy.
- **Training costs**: Relevant training and development costs will need to be accounted for to enable employees to adapt to new processes.

National and international quality standards

If a business provides poor quality goods and services, it is unlikely that it will survive long against its competitors. In addition, it can be costly as the business will have to deal with the return of goods or spend time and money rectifying problems.

Therefore, businesses will often look to adopt and abide by national and international quality standards. These provide certification and a mark of quality assurance to indicate that a minimum standard has been met in the production and provision of goods to customers.

The most well-known quality standards are provided by the International Organization for Standardization (ISO). ISO standards were created to offer guidance, coordination, simplification, and unification of criteria to companies and organizations to reduce costs and increase effectiveness, as well as to standardize product and service standards across the globe.

ISO standards have been developed and adopted by many companies in many countries out of a need and willingness to standardize quality parameters. The ISO produces documents of required standards, specifications, guidelines, or characteristics that can be used by companies to ensure that materials, products, processes, and services are suitable for their purpose. Additionally, ISO ensures that these requirements are accepted in all member countries, to ensure standardization.

ISO 9000 is a quality management standard that presents guidelines intended to increase business efficiency and customer satisfaction. The goal of ISO 9000 is to embed a quality management system within an organization, increasing productivity, reducing unnecessary costs, and ensuring quality of processes and products.

HL end

i The International Standardization Organization (ISO) is an independent, non-governmental international organization with a membership of 167 national standards bodies. It brings together experts to share knowledge and develop consensus-based, market relevant international standards that support innovation and provide solutions to new global challenges.

In London, in 1946, 65 delegates from 25 countries met to discuss the future of international standardization. In 1947, ISO officially came into existence with 67 technical committees (groups of experts focusing on a specific subject).

Online resources

Visit the 'About us' section on the ISO website and follow the story of how the ISO came to be what it is today.

Practice questions

1 Outline the features of lean production. (2 marks)
2 Define the term 'benchmarking'. (2 marks)
3 Describe two features of quality circles. (4 marks)
4 Distinguish between quality control and quality assurance. (4 marks)
5 The Coca-Cola Company is an example of an organization that adopts a TQM approach. On its website, under product quality and safety, it states:

> Food safety is integral to our gold standard of quality. Our fundamental responsibility is to ensure safety standards for the products we produce and distribute. Safety and product quality are a fundamental part of our product design, manufacturing and proactive consumer feedback processes. Our robust supplier requirements program is intended to ensure quality throughout the supply chain.
>
> We promote a culture of caring and safe behavior, reaching beyond compliance to ensure continuous improvement through hazard identification and implementation of controls to minimize risk.
>
> Our high standards are set so a quality product can be enjoyed around the world. We demand our standards and policies are met for all products we serve. This includes globally recognized standards, local regulatory needs, and where needed, establishing our own standards to protect consumers.
>
> We promote continuous improvement through innovation and collaboration with industry and partners. We have a continual program for audit and measuring.

Examine the impact of adopting TQM practices for The Coca-Cola Company. (10 marks)

5.4 Location

Learning outcomes

At the end of this section, you will be able to:
- explain the reasons and impacts of location and relocation decisions for businesses, both nationally and internationally
- discuss ways of reorganizing production, both nationally and internationally.

The late Lord Harold Samuel, a real estate tycoon in the UK, said: 'There are three things that matter in property: location, location, location.' Location is the single most important factor in the value of a house.

Likewise, choosing where to locate is one of the most important decisions a business will face. For a business start-up, this will be where to set up for the first time, whereas an existing business may be looking to move to a new location and relocate

its operations. The decision to relocate can be driven by several reasons, such as changing external factors, expansion needs of the business, market trends, or the result of a merger.

Choice of production location

The reasons outlined here are by no means exhaustive but provide an overview of some of the key factors relating to location or relocation.

Cost

At the forefront of the location decision is likely to be the costs involved. The key costs will fall under the following categories.

- **Land**: The type of land and space required by the business varies by the nature of the activity involved. Manufacturing firms will need space and may look toward suburban areas where cost per square foot is relatively less expensive. Warehousing firms need to locate close to suitable communication hubs and distribution networks. The retail end of the business will need to be where the customers are and city center locations may be preferred.
- **Labor**: Wage rates and skill levels will be important, and both will differ from region to region.
- **Transport**: Depending on whether the business is producing large or small physical products, it's essential to consider transport costs.
    - A business may be taking a bulk-gaining approach, with finished items being larger than its components. For example, a firm producing narrowboats would make sense to locate next to the canals they will be cruising on.
    - If the business is adopting a bulk-reducing approach, whereby the finished items are smaller than its raw materials, it makes economic sense to locate the manufacturing process close to the source of the raw materials to minimize transport costs. For example, a sawmill will want to be close to the source of its timber.
- **Linked industries**: Some businesses will want to be close to similar industries to benefit from a customer base and external economies of concentration. When firms within the same industry cluster together, they can take advantage of the existing infrastructure and supply networks. Moreover, skilled workers tend to shift close to such clusters for work, thereby giving firms easy availability to labor. The cost of locating in these regions may then come at a premium.

Suppliers

Being close to good local suppliers may be a factor, more so if the business is adopting a JIT method of production, whereby closeness of suppliers will help to reduce lead times on the production of final products.

Infrastructure and accessibility

Infrastructure includes all aspects of transport and communication networks in the area, as well as facilities that support industry, such as healthcare, education, utilities such as water and energy, housing, and policing.

If the business relies on frequent deliveries, then it's important to consider local transport links, particularly main roads and motorways, but also rail, water, and air.

Property rental and purchase prices are often steeper in higher density, more commercialized areas, so there are certainly cost benefits to seeking a more out-of-town location. Equally, ease of commuting for employees is an important consideration, so ensuring your location is accessible by car, public transport, cycling, and walking is important. A good location is often a critical factor in recruiting the right people into the business, particularly if they are choosing between two or more job opportunities.

Research and inquiry

DHL is a global leader in the logistics industry. Specializing in international shipping, courier services, and transportation. DHL connects people in over 220 countries and territories worldwide. Driven by the power of more than 380,000 employees, it delivers integrated services and tailored solutions for managing and transporting letters, goods, and information.

Research the logistics and supply chain management of DHL: focus on how location factors play an important part in their business operation.

To support your research, check out the various insightful videos on YouTube.

Produce a 300–400 word summary of your key findings.

Competition

Establishing which competitors are in the area and what they are offering could help inform the choice about the right location. If there is too much competition, then it may be a warning sign to look elsewhere. However, there are exceptions to this, such as car dealerships who like to be near each other as customers compare and choose the best car deal. Likewise, if the business has an element that is unique or offers an innovation, then choosing an area that already has a ripe market could be the ideal way to pick up customers very quickly and establish a presence in a new area in a relatively short timeframe.

Case study – Savile Row, London

The most important street in menswear is Savile Row in London. It's a modest row of the men's tailors that make the best bespoke and made-to-measure suits in the world.

Built between 1731 and 1735, Savile Row today houses 21 individual tailors, some of which have been there well over a century. The street is renowned as the birthplace of bespoke tailoring, and as a result people flock there to experience a service like no other.

The know-how and expertise of the craftsmen in Savile Row is unprecedented, and this has been recognized by countless icons over the years, including Sir Winston Churchill, Lord Nelson, and Prince Philip, who were regulars.

Each and every tailor on the street is different, with some rooted in the oldest of traditions and others part of the 'New Establishment'.

The street became known as the home of handcrafted British bespoke tailoring. But since the start of the 21st century, an influx of international designer labels has opened up the street's offering to include ready-to-wear and made-to-measure suiting.

Evaluate the decision by international designer labels to open their stores alongside the established Savile Row tailors.

Government

National and local governments can play an important part in a business' decision to locate or relocate in a certain area. Government can take on extra significance for those businesses looking to locate in an area earmarked for redevelopment that may currently be deprived and suffering from high levels of unemployment.

In this situation, a government may offer subsidies and attractive location packages to incentivize businesses to set up in the area. Subsidies are payments to firms that can be offset against the costs of production. Tax rebates or reductions may also be offered.

Businesses also must consider the range of laws they are subject to and impacted by, such as health and safety legislation, labor laws, and any that may be linked to planning or future development of the land.

The taxes a business must pay will also feed into location decisions. For example, in the U.S.A. in 2020, top corporate income tax rates ranged from 2.5 per cent in North Carolina to 12 per cent in Iowa.

Workforce

A business needs to find out about the skill base in the location it is considering and whether it will fulfill its needs. Employment rates are an important indicator of both skills and wage levels. If a business relies on skilled workers, it is best to go to where there is a healthy bank of talent. As employees are often a business' biggest asset, choosing a location lacking in required talent will limit a business' success.

Potential for growth

Will the premises be able to accommodate business growth or a spike in demand? Moving premises is a big upheaval and can be time-consuming and costly. Therefore, a business must know whether it is choosing a short- or long-term location. A premises' flexibility could be a very important factor regarding its suitability for future business needs.

IB learner profile

Communicators

Imagine you are looking to open a franchise of a well-known restaurant chain. As part of the application process, you are required to pitch a potential location to the franchiser for where you plan to open the business. Create your location pitch to convince the franchiser why you believe the location you have chosen will help lead to success as a franchise outlet.

Reorganizing production

Driven by changes in internal or external factors, a business may need to reorganize its production activities. To fulfill certain aspects of their production process or non-core activities, a business may use:

- outsourcing
- subcontracting
- offshoring
- insourcing
- reshoring.

Outsourcing

Outsourcing is the process of permanently allocating whole departments or jobs to an external firm. Outsourced tasks tend to be those processes that internal staff can perform but cannot because of time or people limitations. By having a third party perform the work instead of internal employees, it can lessen the firm's labor costs. Functions in sales, customer service, business development, and accounting can be outsourced.

Table 5.2 Advantages and disadvantages of outsourcing

Advantages	Disadvantages
Outsourcing can free up the business to focus on its strengths, allowing staff to concentrate on their main tasks and on future strategy.	There is a risk that delivery may be delayed or below expectations, which might damage the business' image.
Choosing an outsourcing company that specializes in the process or service needed helps the business achieve a more productive, efficient service, often of greater quality.	Confidentiality and security might be at risk as the outsourced company could jeopardize the confidentiality of data provided to them.
Cost savings achieved by outsourcing can help release capital for investment in other areas of the business.	An outsourcing contract could prove too rigid to accommodate change.
Outsourcing can give access to capabilities and facilities otherwise not accessible or affordable.	Changes at the outsourcing company could lead to friction and management difficulties.
Outsourcing can help leverage knowledge and skills for a greater competitive advantage.	The outsourcing company could go out of business.

Subcontracting

Subcontracting is the process of hiring an individual or company to complete a specific, usually specialized task that cannot be completed by the current in-house employees. Unlike outsourcing, subcontracting does not permanently assign departments or jobs to the third party, making it a temporary arrangement. Once the terms of the contract have been completed then the arrangement ends. However, it is common for firms to subcontract to the same third-party firms for future needs if they are happy with the work completed.

The two parties work closely together throughout the project, although the hiring party retains sufficient control over the entire process. This process is common in the construction industry, where building firms may subcontract to plumbing and electrical specialists.

Table 5.3 Advantages and disadvantages of subcontracting

Advantages	Disadvantages
Businesses can hire a contractor when more flexibility is needed with a specific job or task.	Contractors may cost the business more than the equivalent daily rate for employing someone.
Subcontracting can be used for one-off jobs and jobs requiring specialist expertise or fast turnaround.	By relying on contractors, the business does not acquire or develop skills in-house.
It enables staff to concentrate on the core business.	Internal staff may resent contractors being paid more money for doing similar work to them.
Some contractors can start the work or project at short notice, even when large numbers of workers are required.	If the business uses a contractor which then uses a subcontractor, the business has no direct control over the quality of subcontractors' work.
A business can specify the type and duration of contract needed for the contracted job.	Contractors may not appreciate the business culture and may lack the motivation and commitment of internal staff.
Subcontracting allows a business to obtain temporary cover for a permanent post or a work project.	

Offshoring

Offshoring is essentially a geographic activity. In what can be termed the Western developed world, goods are more expensive as the staff required to produce and distribute them are costly. By contrast, in the developing world, readily available, large, inexpensive pools of labor provide an enticing foundation for a low-cost economy.

Offshoring is the process that takes advantage of these cost differentials. By relocating production facilities from costly countries to less expensive countries, the firm can then sell goods back in the developed countries at a discount, while helping to ensure a healthy profit. Technological improvements, along with decades of productive offshoring, have helped lower the costs of consumer goods such as electronics and clothing. In addition, offshoring is also common in the service sector. The Indian IT sector has particularly benefited as Western companies have set up their call center services in the region to deal with technical queries and customer service issues. The UK banking sector was one such industry that took advantage of this.

Conceptual understanding: Ethics

Multinationals (MNCs) have adopted offshoring as a popular practice, often looking at emerging markets as attractive locations. Economic benefits are the driving force in this decision. However, it can also involve several ethical issues, such as environmental pollution, poor working conditions, and use of child labor.

Table 5.4 Advantages and disadvantages of offshoring

Advantages	Disadvantages
Offshoring production means the business has access to a greater pool of skilled labor.	Other countries may have different rules and regulations for the quality of products being produced. This can cause problems if the countries where production is being offshored have less stringent requirements for product quality.
When offshoring operations, the workload of current employees reduces, allowing them to focus on areas of development.	Although the initial appeal of offshoring can be due to the low labor costs of other countries, those costs may rise.
Offshoring processes to other countries allows the business to work closely with professionals who can help market their products to a new audience.	Sharing information between systems and locations increases the risk of a security breach. This could lead to data leaks or loss of data which can be costly to the company.
Low labor costs allow for lower prices, which improve the business' competitiveness.	When physical infrastructures are moved overseas, local employees may lose their jobs if they are not able to work in other areas of the company. This can negatively impact the local perception of the company if a lot of people lose their jobs because of offshoring.

Insourcing

Insourcing is when work that would otherwise have been contracted out is performed in-house. Insourcing often involves bringing in specialists to fill temporary needs or training existing personnel to perform tasks that would otherwise have been outsourced.

Table 5.5 Advantages and disadvantages of inshoring

Advantages	Disadvantages
Direct control over the entire development process.	Limited expertise as the business may have a small pool of experts who can work on the project.
Easy access to the team doing the job.	The business may need to manage the training and improvement of the team to enhance their skillset and technical abilities.
There are no communication issues, which may arise while working with remote teams.	
Company culture ensures that employees see the bigger picture and are dedicated to the company's growth. They share the same vision and values, which makes cooperation easier.	

Reshoring

Reshoring is the opposite of offshoring and involves the act of bringing back offshored manufacturing and other types of jobs to a company's home country. Several American and European companies moved their manufacturing facilities and service centers to Asia in search of lower costs. However, rising wages, increasing manufacturing costs offshore, and delayed design/manufacture to market times are forcing many companies to consider bringing jobs back home.

Many governments are keen to encourage reshoring, because it would boost employment and provide young adults with better job prospects.

Table 5.6 Advantages and disadvantages of reshoring

Advantages	Disadvantages
Reshoring restores some control back to supply chain managers. Rather than relying entirely on foreign suppliers to determine how and when products are manufactured, companies that reshore operations can use the opportunity to be more selective when choosing suppliers.	Bringing supply chain operations back from abroad and reclaiming control over production comes with increased complexity and costs. Companies typically must invest in new infrastructure.
Reshoring can also reduce lead times when the right stakeholders are involved. Products don't spend months in transit crossing vast oceans or get stuck in ports as the result of massive shipping container shortages.	Companies that reshore often forego important comparative advantages. They break ties with specialty partners who are better equipped to handle certain types of orders.
Reshoring can produce a smaller environmental footprint compared to outsourcing.	

Case study – British Telecom (BT)

In 2016, BT announced that it planned to recruit 1,000 staff in the UK after customers complained that they did not like speaking to staff in Indian call centers.

The group said it would ensure that at least 80 per cent of calls were answered from the UK by the end of 2016, up from more than 50 per cent previously as it was embarking on a reshoring strategy.

The telecoms giant pledged to spend £80m to improve its customer service, ranked by the regulator, Ofcom, as among the worst in the industry.

The changes began in Swansea, with a further 100 staff hired for BT's South Wales center. The remaining jobs have been spread around BT's 20 call centers throughout the UK. It planned to add another 1,000 staff in 2017.

The recruitment drive followed reports from customers that they preferred speaking to people in UK call centers rather than Indian staff based in Bengaluru and Delhi. BT said the new jobs would be 'frontline roles' in customer care.

Staff in its Indian call centers, which BT started using in 2003, were expected to be moved into positions that do not involve talking to customers. The plan was part of an effort to improve BT's standing in the tables of customer complaints, compiled by Ofcom.

The regulator's 2016 annual report on customer service showed that Sky and Virgin Media beat BT in terms of satisfaction with how complaints were handled. But while BT performed badly overall, data on how quickly telecoms firms resolved complaints undermine reports that customers find it hard to communicate with Indian call center staff.

BT beat major rivals Sky, TalkTalk, and Virgin Media for resolving broadband complaints within an hour and was ranked second for landline problems.

Libby Barr, BT managing director of customer care, said the hiring drive was a 'fantastic boost for the UK economy and many regions where we are already a significant employer'.

As well as building its customer service team, BT was also intending to change the way that it works, offering more flexible working hours, to make sure calls could be answered from the UK at the weekend and in the evenings. 'This demonstrates the commitment from everyone at BT to work together to improve customer service and to make things easy for our customers,' said Barr.

Staff had received an extra 100 hours of training to improve their response to complaints.

Technology also plays a part in BT's efforts to improve relations with customers. Systems used by call center staff have been updated, and customers can use the BT mobile phone app to check their bill or track an engineer ahead of an appointment.

1 Define the term 'reshoring'.
2 Explain two reasons why BT may have taken the original decision to offshore call center jobs to India.
3 Examine the decision by BT to reshore call center jobs back to the UK.

5.5 Break-even analysis

Learning outcomes

At the end of this section, you will be able to:

- distinguish between total contribution and contribution per unit
- explain and construct a break-even chart
- explain and present in a break-even chart the effect of changes in costs and price
- evaluate the usefulness of break-even analysis as a decision-making tool.

Break-even analysis is a financial calculation that weighs up the costs and revenues of a business to work out the number of products or services it must sell to at least cover its production costs.

A firm will break even when its total revenue equals its total costs. At this point, it is not making a profit or a loss.

Before considering break-even analysis, it is important to remind ourselves what is meant by business costs and revenues, as seen in 3.3 Costs and revenues. Production managers need a clear idea of both to decide on the viability of moving forward with a production strategy. Once both are understood, break-even analysis can be employed as part of their decision-making framework.

Costs and revenue are the key parts of the formula needed to calculate profit:

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

Although not all businesses are profit driven, for example, various not for profit organizations like charities and non-governmental organizations (NGOs), this formula is still important to them. Not for profit organizations need to ensure they cover their cost of operating so they can continue to exist and fulfill their purpose.

$$\text{If total costs} > \text{total revenue} = \text{loss}$$
$$\text{If total costs} < \text{total revenue} = \text{profit}$$

Contribution

The contribution a product makes to the overall profitability of the business is an important business tool at the disposable of a production manager. Calculating the contribution for their product range offers an insight into how the products are performing against each other and allows the business to identify which one to focus production and further investment on.

We can calculate contribution in two ways.

Total contribution for a company can be found by using:

$$\text{Total contribution} = \text{total sales revenue} - \text{total variable cost}$$

Contribution per unit is calculated by using:

$$\text{Contribution per unit} = \text{selling price per unit} - \text{variable costs per unit}$$

Worked example

Let's use an example of a golf buggy company. Here is some information about its two-seater buggy:

Selling price per unit = S$8,000

Variable cost per unit = S$4,000

Units sold = 1,000

To work out the total contribution, we first need to calculate the total sales revenue and total variable cost.

$$\begin{aligned}\text{Total sales revenue} &= \text{price} \times \text{quantity}\\ &= \text{S\$8\,000} \times 1\,000\\ &= \text{S\$8\,000\,000}\end{aligned}$$

$$\begin{aligned}\text{Total variable cost} &= \text{variable cost per unit} \times \text{quantity}\\ &= \text{S\$4\,000} \times 1\,000\\ &= \text{S\$4\,000\,000}\end{aligned}$$

Now we can use those figures in the total contribution formula.

$$\begin{aligned}\text{Total contribution} &= \text{total sales revenue} - \text{total variable cost}\\ &= \text{S\$8\,000\,000} - \text{S\$4\,000\,000}\\ &= \text{S\$4\,000\,000}\end{aligned}$$

The sales of the two-seater golf buggies contribute S$4,000,000 to the overall profitability of the golf buggy business.

To calculate the contribution per unit we can use this formula:

$$\begin{aligned}\text{Contribution per unit} &= \text{selling price per unit} - \text{variable costs per unit}\\ &= \text{S\$8\,000} - \text{S\$4\,000}\\ &= \text{S\$4\,000}\end{aligned}$$

Each two-seater golf buggy contributes S$4,000 toward the profitability of the business. This S$4,000 from each buggy can be taken away from the fixed costs to eventually lead toward profit for the business.

If a four-seater version of the golf buggy has a contribution per unit of S$5,000, the golf buggy manufacturer should focus their efforts on selling more of this model instead of the two-seater version.

The contribution per unit figure of S$4,000 for the two-seater model can be improved by either increasing the selling price per unit or reducing the variable costs per unit.

It is important to note that the total contribution of S$4,000,000 is not the profit made by the business, as total fixed costs have not yet been accounted for.

Let's imagine the business has fixed costs of S$550,000 rent, S$1,000,000 payroll, and S$450,000 overheads, totaling S$2,000,000. We can now calculate total profit:

$$\begin{aligned}\text{Total profit} &= \text{total contribution} - \text{total fixed costs}\\ &= \text{S\$4\,000\,000} - \text{S\$2\,000\,000}\\ &= \text{S\$2\,000\,000}\end{aligned}$$

It is the contribution per unit that becomes useful in break-even analysis.

Break-even formula

The break-even point occurs where total revenue = total costs. At this point the business is covering all costs and is neither making a loss or a profit. To calculate the break-even point the following formula can be used:

$$\text{Break-even point} = \frac{\text{total fixed costs}}{\text{contribution per unit}}$$

where contribution per unit = selling price per unit − variable costs per unit

Worked example

Returning to the golf buggy manufacturers, we can now use the formula to calculate the number of units the business would need to sell to break even.

$$\text{Break-even point} = \frac{\text{S\$2 000 000}}{(\text{S\$8 000} - \text{S\$4 000})}$$

$$= \frac{\text{S\$2 000 000}}{\text{S\$4 000}}$$

$$= 500 \text{ buggies}$$

The golf buggy manufacturer needs to sell 500 buggies to cover all its costs and to break even.

Remember, at the break-even point, the firm's total revenue equals its total costs. This can be illustrated further using a break-even table.

Break-even table

Using the data from the golf buggy manufacturer in our worked examples, we can produce a table of costs and revenues that will also identify the break-even point. There are a few things to note:

- Fixed costs remain the same no matter the level of output. For example, the rent of the premises (S$550,000) made up part of the total fixed costs of S$2,000,000 (payroll, S$1,000,000, and overheads, S$450,000, made up the rest). The agreed rent (usually reviewed on an annual basis) will have to be paid whether the business makes 0 golf buggies or 1,000 buggies.
- Variable costs are 0 if no golf buggies are sold as it is assumed that the raw materials and components needed to manufacture the golf buggies are not required.
- We assume that the price of S$8,000 remains fixed throughout this period.
- Revenue increases as more buggies are sold based on the price × quantity calculation.

Table 5.7 shows us that the golf buggy manufacturer breaks even at 500 units where its total costs (fixed + variable) of S$4,000,000 equal its total revenue of S$4,000,000.

Break-even charts

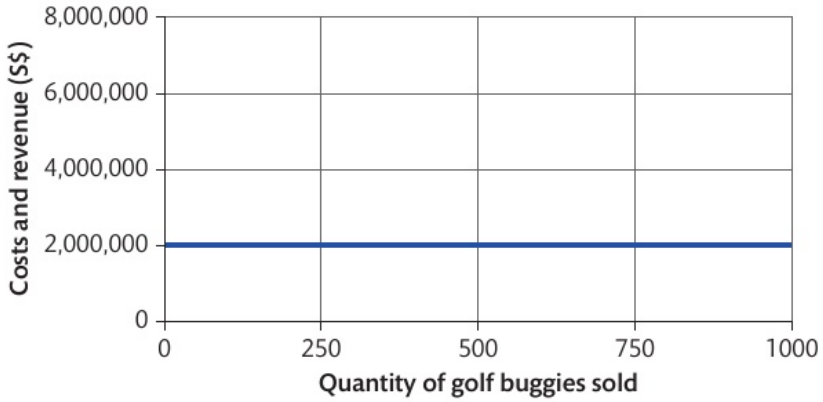
The data from a break-even table can be used to construct a break-even chart. This gives a further illustration of the break-even situation of a firm.

Table 5.7 Golf buggy manufacturer's sales, costs, and revenue figures

Output/Quantity (golf buggies sold)	Fixed cost	Variable cost	Total cost	Total revenue	Profit/Loss
0	2 000 000	0	2 000 000	0	(2 000 000)
100	2 000 000	400 000	2 400 000	800 000	(1 600 000)
200	2 000 000	800 000	2 800 000	1 600 000	(1 200 000)
300	2 000 000	1 200 000	3 200 000	2 400 000	(800 000)
400	2 000 000	1 600 000	3 600 000	3 200 000	(400 000)
500	2 000 000	2 000 000	4 000 000	4 000 000	0
600	2 000 000	2 400 000	4 400 000	4 800 000	400 000
700	2 000 000	2 800 000	4 800 000	5 600 000	800 000
800	2 000 000	3 200 000	5 200 000	6 400 000	1 200 000
900	2 000 000	3 600 000	5 600 000	7 200 000	1 600 000
1000	2 000 000	4 000 000	6 000 000	8 000 000	2 000 000

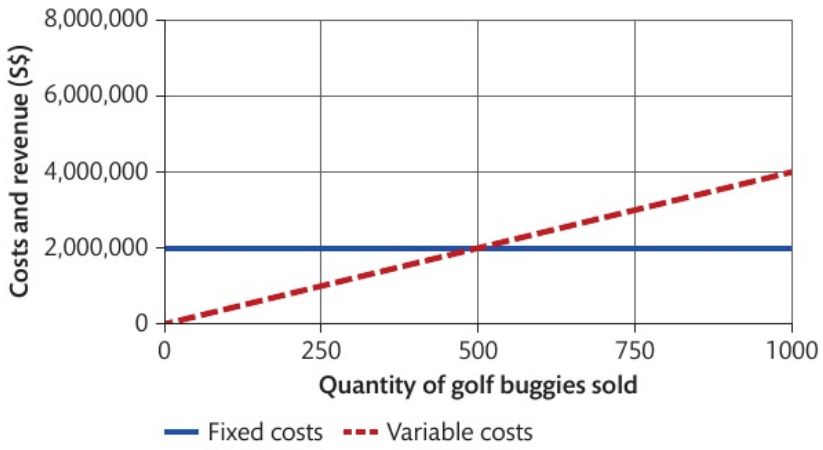
The first step is to plot the fixed cost line. For our golf buggy manufacturer, this is a horizontal line as fixed costs remain the same, at S$2,000,000, across all output levels.

Figure 5.7 Fixed costs



The variable costs can be added next. This line slopes upward, starting from 0, because, if the golf buggy manufacture doesn't make any buggies, it will be faced with 0 variable costs. However, as output increases, variable costs will increase for each unit sold.

Figure 5.8 Variable costs



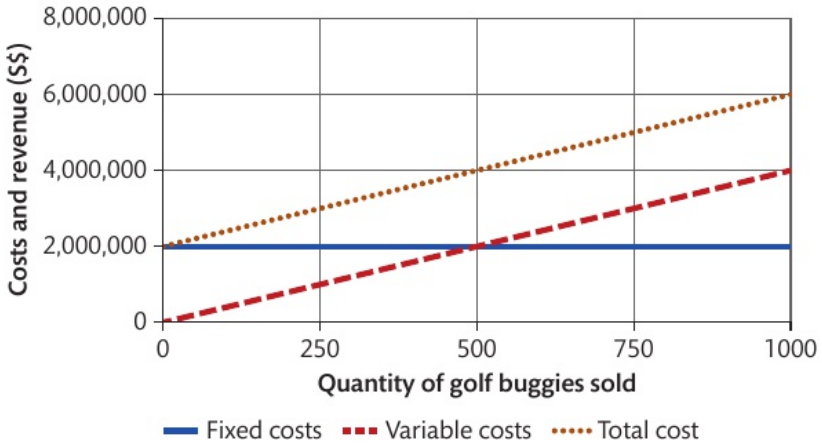


Figure 5.9 Total costs

The total cost line is added next. We know that total costs = total fixed costs + total variable costs, Therefore, the total costs line is parallel to the variable costs line, this time starting from S$2,000,000. The section between the total costs line and the fixed costs line now represents variable costs. We usually don't draw the variable cost line on the break-even chart, but it is left on as a dashed line in Figure 5.9 for illustrative purposes.

Lastly, we can add on the total revenue line. Starting at 0, as we know, if there are no golf buggies sold, then there will be no revenue for the business. As sales increase, so does the revenue, with an upward trend line. Once we have completed the total revenue line, the break-even point becomes clear at the intersection of total revenue and total costs. At this point, they are both equal and the firm breaks even. As with our break-even formula calculation and the table data, we can see this is at 500 buggies on Figure 5.10.

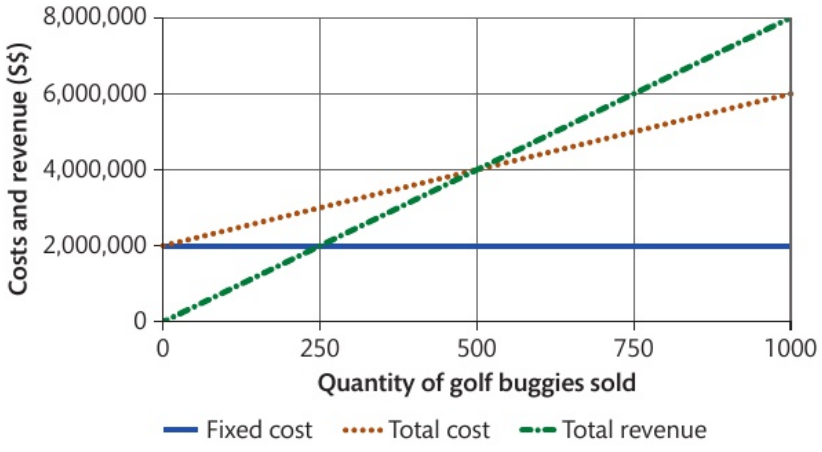


Figure 5.10 Total revenue

To the left of the break-even point, the firm is making a loss, as the total cost line is greater than the total revenue line. To the right of the break-even point, the firm enters profit, as total revenue is now greater than total costs.

Margin of safety

The margin of safety is the difference between what is sold and the break-even quantity.

For example, if the buggy manufacturer sells 1,000 buggies but the break-even quantity is 500, then the margin of safety is 1,000 − 500 = 500 buggies.

Businesses will aim to have a higher margin of safety to ensure that they make a profit. The unit contribution of the extra buggies sold after break-even quantity is achieved is a pure profit for the business as all fixed costs have been covered and only variable costs apply to the production of the extra 100 buggies.

Target profit

A business can aim to achieve a target profit and use the break-even analysis to calculate how many units need to be sold to achieve the profit objective.

Worked example

Let's look back at the example of the buggy manufacturer:

Selling price per unit = S$8,000

Variable cost per unit = S$4,000

Fixed costs = S$2,000,000

The business has the profit objective of S$3,000,000.

How many buggies need to be sold to achieve this profit objective?

The first step is to calculate the break-even quantity. We have already calculated that the break-even quantity is 500 buggies sold. We have also calculated that for each extra buggy sold after the break-even quantity of 500, the unit contribution is pure profit. This knowledge helps us to calculate the additional number of buggies that need to be sold to achieve the profit target of S$3,000,000.

$$\frac{\text{S\$3\,000\,000}}{\text{S\$4\,000}} = 750 \text{ buggies}$$

To achieve the target profit the business needs to sell 500 + 750 buggies = 1,250 buggies in total.

The assumption behind this calculation is that the price will be the same and that variable or fixed costs also will not change.

However, the business may need to lower the price to sell additional buggies or experience economies of scale to lower the variable costs. Fixed costs could also change if the business needs additional equipment to produce more buggies.

Target profit output

Target profit output can be identified on a break-even chart or can be calculated using the following formula:

$$\text{Target profit output} = \frac{(\text{fixed costs} + \text{target profit})}{\text{contribution per unit}}$$

From the example above we can calculate the target profit output:

$$\frac{(\text{S\$2\,000\,000} + \text{S\$3\,000\,000})}{\text{S\$4\,000}} = 1{,}250 \text{ buggies}$$

Target price

Target price can be calculated using the same formula.

Fixed costs = S$2,000,000

Variable costs = S$4,000

Target profit = S$3,000,000

Target profit output = 1,250 buggies

Then:

$$1250 = \frac{(\text{S\$2\,000\,000} + \text{S\$3\,000\,000})}{\text{target price}} - 4000$$

$$1250 \times (\text{target price} - \text{S\$4000}) = \text{S\$5\,000\,000}$$

$$1250\,\text{X} - \text{S\$5\,000\,000} = \text{S\$5\,000\,000}$$

$$1250\,\text{X} = \text{S\$10\,000\,000}$$

$$\text{X} = \frac{\text{S\$10\,000\,000}}{1{,}250}$$

$$\text{X} = \text{S\$8\,000}$$

$8,000 will be the target price at which the business should sell its buggies.

The effects of changes in price and costs

Break-even analysis can also be used to illustrate how changes in the price and cost variables can impact on the break-even point. This can further aid a business' decision-making process.

Changes in price

Let's say the golf buggy business has indications from the market that their two-seater golf buggy could support a price increase of S$1,000 to a selling price of S$9,000.

The break-even formula would be:

$$\text{Break-even point} = \frac{\text{fixed costs}}{(\text{selling price} - \text{variable cost per unit})}$$

$$= \frac{\text{S\$2\,000\,000}}{(\text{S\$9\,000} - \text{S\$4\,000})}$$

$$= 400 \text{ golf buggies}$$

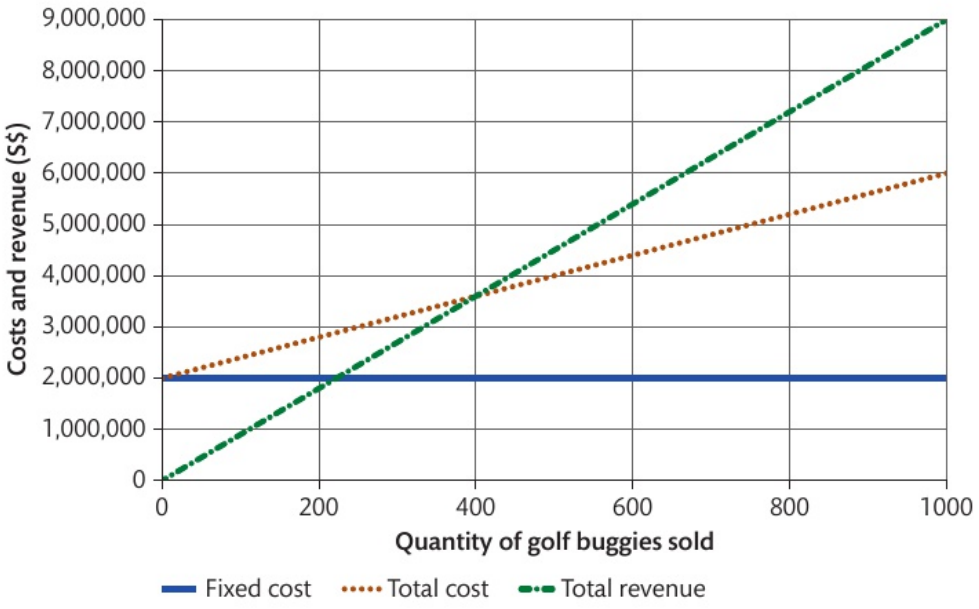
Following the price increase, it has resulted in an improvement in the break-even point, which has now reduced by 100 golf buggies. At a selling price of S$8,000, it took sales of 500 buggies to break even; now the business only needs to sell 400 to break even. The updated break-even table, Table 5.8, shows that total revenues are now increasing at a faster rate.

Table 5.8 Updated golf buggy manufacturer's figures

Output/Quantity (golf buggies sold)	Fixed cost	Variable cost	Total cost	Total revenue	Profit/Loss
0	2 000 000	0	2 000 000	0	(2 000 000)
100	2 000 000	400 000	2 400 000	900 000	(1 500 000)
200	2 000 000	800 000	2 800 000	1 800 000	(1 000 000)
300	2 000 000	1 200 000	3 200 000	2 700 000	(500 000)
400	2 000 000	1 600 000	3 600 000	3 600 000	0
500	2 000 000	2 000 000	4 000 000	4 500 000	500 000
600	2 000 000	2 400 000	4 400 000	5 400 000	1 000 000
700	2 000 000	2 800 000	4 800 000	6 300 000	1 500 000
800	2 000 000	3 200 000	5 200 000	7 200 000	2 000 000
900	2 000 000	3 600 000	5 600 000	8 100 000	2 500 000

The impact on the break-even chart is that the total revenue line becomes steeper, and the intersection of total revenue and total cost moves to the left (Figure 5.11). We can see that total revenue = total cost at 400 golf buggies. This will also improve the margin of safety and profit levels if the business maintains its previous level of sales following the price increase.

Figure 5.11 Costs and revenue after a change in price



Likewise, if the business had to reduce its prices, then more golf buggies would have to be sold to break even, with the total revenue = total cost intersection moving to the right.

Changes in costs

The golf buggy business may experience a change in either its fixed costs or variable costs that will impact the break-even point.

If fixed costs were to increase from S$2,000,000 to S$2,400,000, and the original selling price of S$8,000 remained, then we can see the immediate impact by using the break-even formula.

$$\text{Break-even point} = \frac{\text{fixed costs}}{(\text{selling price} - \text{variable cost per unit})}$$

$$= \frac{\text{S\$2 400 000}}{(\text{S\$8 000} - \text{S\$4 000})}$$

$$= 600 \text{ golf buggies}$$

With the increase in fixed costs, we now see an increase in the number of golf buggies that needs to be sold to break even. The break-even point originally occurred at 500 golf buggies; this has now increased by 100, to 600 golf buggies. Table 5.9 and Figure 5.12 illustrate this in more detail.

The impact on the break-even chart is that the total cost curve shifts upwards by the fixed cost increase and the intersection of total revenue = total costs moves to the quantity of 600 golf buggies.

Again, if the opposite was to happen and fixed costs reduced, then this would have a favorable outcome on the break-even point, lowering the quantity sold needed to break even.

IB learner profile

Risk-takers

Break-even analysis helps a business to mitigate risk and deal with uncertainty by identifying the critical value of sales at which the operation becomes profitable. It also indicates which investments to avoid or product lines that aren't likely to be profitable.

Some large, well-known companies are not profitable. Identify one of these companies, investigate why and how they continue to function, and how they manage risk going forward.

Table 5.9 The golf buggy manufacturer's figures after an increase in fixed costs

Output/Quantity (golf buggies sold)	Fixed cost	Variable cost	Total cost	Total revenue	Profit/Loss
0	2 400 000	0	2 400 000	0	(2 400 000)
100	2 400 000	400 000	2 800 000	800 000	(2 000 000)
200	2 400 000	800 000	3 200 000	1 600 000	(1 600 000)
300	2 400 000	1 200 000	3 600 000	2 400 000	(1 200 000)
400	2 400 000	1 600 000	4 000 000	3 200 000	(800 000)
500	2 400 000	2 000 000	4 400 000	4 000 000	(400 000)
600	2 400 000	2 400 000	4 800 000	4 800 000	0
700	2 400 000	2 800 000	5 200 000	5 600 000	400 000
800	2 400 000	3 200 000	5 600 000	6 400 000	800 000
900	2 400 000	3 600 000	6 000 000	7 200 000	1 200 000
1000	2 400 000	4 000 000	6 400 000	8 000 000	1 600 000

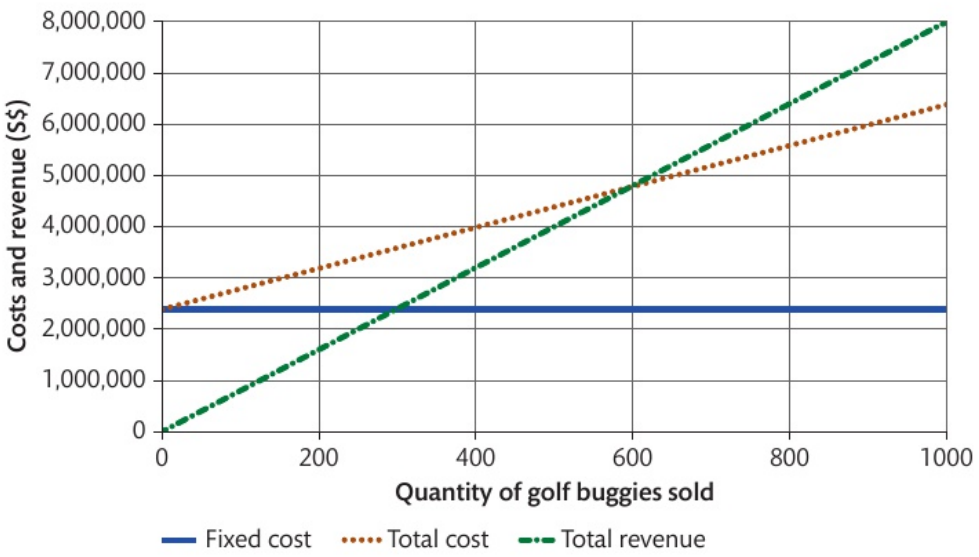


Figure 5.12 Costs and revenue after a rise in fixed costs

Instead, the golf buggy business may experience an increase in its variable costs of production. An increase in steel prices could have caused the raw materials and components needed to manufacture each buggy to increase from $4,000 to $5,500. The impact can be seen by using the break-even formula.

$$\text{Break-even point} = \frac{\text{fixed costs}}{(\text{selling price} - \text{variable cost per unit})}$$

$$= \frac{\text{S\$2 000 000}}{(\text{S\$8 000} - \text{S\$5 500})}$$

$$= 800 \text{ golf buggies}$$

This time, the increase in variable costs has resulted in a negative impact on the break-even point. Increasing variable costs lead to a steeper total cost line and this has pushed the break-even point up by 300 buggies, from 500 to 800. Table 5.10 and Figure 5.13 illustrate this in more detail.

Table 5.10 The golf buggy manufacturer's figures after an increase in variable costs

Output/Quantity (golf buggies sold)	Fixed cost	Variable cost	Total cost	Total revenue	Profit/Loss
0	2 000 000	0	2 000 000	0	(2 000 000)
100	2 000 000	550 000	2 550 000	800 000	(1 750 000)
200	2 000 000	1 100 000	3 100 000	1 600 000	(1 500 000)
300	2 000 000	1 650 000	3 650 000	2 400 000	(1 250 000)
400	2 000 000	2 200 000	4 200 000	3 200 000	(1 000 000)
500	2 000 000	2 750 000	4 750 000	4 000 000	(750 000)
600	2 000 000	3 300 000	5 300 000	4 800 000	(500 000)
700	2 000 000	3 850 000	5 850 000	5 600 000	(250 000)
800	2 000 000	4 400 000	6 400 000	6 400 000	0
900	2 000 000	4 950 000	6 950 000	7 200 000	2 500 000
1000	2 000 000	5 500 000	7 500 000	8 000 000	5 000 000

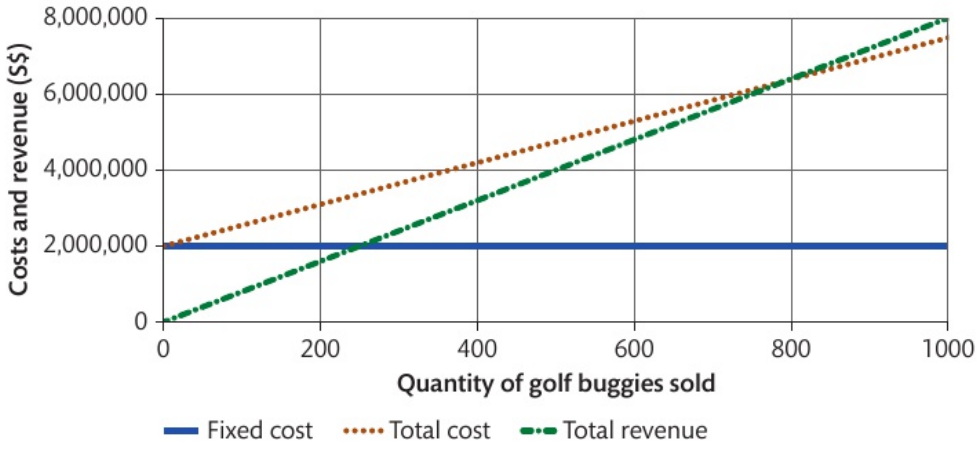


Figure 5.13 Costs and revenue after a rise in variable costs

Any increase in costs, whether fixed or variable, will lead to a detrimental impact on the break-even point if the selling price remains the same. This erodes a business' margin of safety if quantity sold does not increase from its previous level and reduces profits.

Advantages of break-even analysis

Break-even analysis offers several advantages as a business tool.

- It is quick and easy to use, showing how many products a business needs to sell to ensure a profit. Based on this, clear objectives can then be set.
- It offers an early insight into whether the product is worth selling or is too risky. A very high break-even figure may be out of reach for the business given current market conditions.
- Businesses can quickly see projected impacts on the break-even point of cost and price changes by manipulating the figures in the break-even formula.
- The break-even analysis calculations can form part of a business plan that can be presented to investors or banks to finance the business.

Disadvantages of break-even analysis

Break-even analysis is a useful tool for a business to draw on, but it does still have some disadvantages.

- It does not consider demand related issues. In the ever-competitive business environment, the demanded quantity for the product can fluctuate, so a decision to produce 300 units based on a break-even point of 250 becomes redundant if the demand for the product falls to 150 units. If the target price is too high and uncompetitive, and the demand for the product is price elastic, then the business will not be able to cover its costs and break even as the quantity demanded will be insufficient.
- Fixed costs are taken as a constant figure in the break-even calculation; however, wrong estimates can be given and large changes in production levels can lead to changes in fixed costs, such as the purchase of new machines necessary to produce the required output.

- As output rises, the business may benefit from being able to buy inputs at lower prices (purchasing economies of scale), which would reduce variable cost per unit. Therefore, variable costs per unit may not remain the same.
- Products are not always sold at the same price as output increases. Businesses may benefit from economies of scale and pass on cost savings to consumers or they may offer discounts for bulk purchases or purchases paid in cash.
- Sales and output levels do not always correlate: a business may have a buildup of stocks or a high level of wastage through the production process.
- The process becomes increasingly complex when multiple products are sold by the same business and would be a time-consuming task to complete. For example, a supermarket may sell thousands of different products.
- If a clear cost structure of a product is not available, there is no benefit in carrying out the calculation as it is likely to result in inaccurate results.

It is for some of the above reasons that break-even analysis is often regarded as a planning aid as opposed to a decision-making tool.

Case study – Giannasi Dal 1967

The passion for cooking combined with tradition has guided Giannasi since 1967 to offer the best products every day at its kiosk in Milan.

For over 50 years, Giannasi's professional and human experience has been rooted in the urban fabric of the city, making it perfectly situated for observing changes in socioeconomic and food preferences.

Giannasi's focus on selecting the best quality raw materials and guaranteeing the customer a top-level product has allowed the Giannasi kiosk to remain active over the decades, and to cope with the economic difficulties that have slowed down the sector repeatedly.

Recently, Giannasi has experienced an increase in costs. The monthly rent for the kiosk has increased from €6,000 to €7,000. The variable cost per chicken sold has risen from €2.50 to €3.50. Despite these increases, Giannasi wants to keep the selling price per chicken at €6 to retain its customers.

1 Define the term 'break-even point'.
2 Calculate the monthly break-even point for Giannasi given the changes in costs they have experienced.
3 Use the data to construct a fully labeled break-even chart.
4 Based on the current monthly sales figures, what is the margin of safety for Giannasi? Indicate this on your break-even chart.
5 Suggest two ways in which Giannasi could improve their break-even point.
6 Discuss the usefulness of break-even analysis as a decision-making tool for Giannasi.

HL

5.6 Production planning

Learning outcomes

At the end of this unit, you will be able to:

- explain what the local and global supply chain may look like for an organization
- contrast just-in-time (JIT) and just-in-case (JIC) production planning methods
- analyze a stock control chart, and label lead time, buffer stock, reorder level, and reorder quantity
- calculate and comment on the capacity utilization rate of an organization
- calculate and comment on the labor productivity, capital productivity, productivity rate, and operating leverage of an organization
- evaluate a cost to buy (CTB) and cost to make (CTM) decision for an organization.

With the increasing complexity of the manufacturing industry due to the diversity of products and services created in a globalized world, it has become ever more competitive. Material requirements planning, supply chain management, inventory control, employees, and physical space where the manufacturing happens need due consideration, requiring companies to carry out thorough production planning.

Production planning describes the process of deciding how a product or service will be manufactured before the actual production commences.

Supply chains

A supply chain is the network of all the individuals, organizations, resources, activities, and technology involved in the creation and sale of a product. A supply chain encompasses everything from the delivery of raw materials from the supplier to the manufacturer through to its eventual delivery to the end consumer.

When it comes to developing the supply chain, a business has the option to stay local or look globally.

Local

Local sourcing refers to the sourcing of products or materials from suppliers within the home country.

Sourcing local can often come at a higher price than if the business were to look globally. However, local sourcing can be easier and faster. If the business needs a quick turnaround, it might make sense to source from a local supplier who can produce products and deliver within a certain timeframe, rather than taking shipping times into account. For example, a UK boat builder may source locally grown timber for the carpentry aspects of the build as it is readily available nearby, with a short delivery time.

There is an argument that more businesses should support their local economy by sourcing products and services from local suppliers; however, the reality is that this isn't always possible. Each country has its own resources and expertise and to advance in business, it's important to source products from high-quality and reliable suppliers, even if they are based overseas. Trying to source locally when the country is not as skilled in developing the products the business needs can cause a competitive disadvantage.

Global

Global sourcing refers to the practice of sourcing from the global supply chain for raw materials, components, goods, and services across geopolitical boundaries. This procurement strategy is something businesses all over the world use, as international sourcing can help save businesses money by finding cost-effective locations to source and manufacture goods. For example, a bathroom and plumbing showroom in France may source bathroom fittings from The People's Republic of China, where there are major sanitary industry production bases in Guangdong, Fujian, and Zhejiang.

Research and inquiry

A regenerative supply chain is a concept that is becoming more prevalent in the world of business.

The regenerative supply chain first accounts for its negative impacts such as carbon, waste, and resources use. It then seeks to restore, replenish, and ultimately regenerate more resources than it requires, resulting in a net benefit to people and the planet.

Conduct some research into this concept. What examples can you find of this approach in practice?

Just-in-time and just-in-case

There are two key approaches to stock control for an organization. Just-in-time is considered the newer of the two (appearing after World War II), whereas just-in-case is seen as the more traditional approach.

Just-in-time (JIT)

The central idea with JIT stock management is that companies order products and stock to meet customer demand. Stock levels are intended to mirror actual consumption levels to minimize waste. By only ordering necessary stock the business benefits from low storage costs, allowing it to invest capital into other areas of the business. For this to work, there must be an issue-free supply chain, supported by accurate demand forecasting.

Advantages of JIT

- It reduces costs in production by reducing the need for storage or warehousing. As the exact amount of materials needed for the immediate production schedule are ordered, expenditure is optimized.
- Shorter production runs can be implemented as production is based on current demand. This also helps to maximize production capacity.
- Output is based on projected demand: this reduces the issues of excess and unsold products in the market, again reducing storage and carrying costs.

Disadvantages of JIT

- Accurate demand forecasting is not easy. Businesses need to have strong capabilities in analyzing and forming conclusions around market trends, developments in relevant industries and sectors, and gauging consumer sentiment.
- As the global supply chain has become ever more interconnected, any problems in the supply chain can create knock-on impacts at subsequent stages, leaving a business vulnerable to delays and missed orders.

Just-in-case (JIC)

Adopting a JIC stock management system means a more cautious approach compared to JIT. With JIC, businesses build up a buffer or safety stock of items, so that they can quickly respond to unexpected demand surges. The business still needs to anticipate demand but will add on extra quantities 'just-in-case'. A JIC approach works well where demand is volatile or if there is supply chain disruption.

Advantages of JIC

- The additional stock can be used to meet any unexpected demand surges or mitigate supply chain disruption, such as increased delivery times or suppliers that have run out of certain stocks (known as a stockout).
- Having the right stock available could be more profitable in the long run. It can generate more sales and gain a competitive advantage if competitors hit a stock out. These additional sales could balance the increase in carrying costs and capital invested in buffer stock.
- Being able to respond to market changes quickly due to additional safety stock puts a business in a strong position to facilitate growth.

Disadvantages of JIC

- Carrying safety stock or increasing safety stock levels impacts carrying costs. For example, more stock takes up warehouse space, increases storage costs, and ties up capital that could be used elsewhere.
- Stock with low turnover could date and become obsolete. This can mean either destroying it or selling it at a heavy discount.

Stock control charts

Stock control charts are an important aspect of inventory management and figure heavily with businesses that adopt a JIC approach. The overall goal of stock control is to maintain inventory levels at a point where the total costs of holding stocks are minimized.

A stock control chart provides a visual representation of a firm's inventory levels. This tool is used to monitor and analyze the rate at which stocks are used, when they need to be replenished, the distribution time, and delivery expectations. By using a stock control chart, an operations department can make better decisions on how to manage stock levels.

Figure 5.14 A typical stock control chart

The main features of a stock control chart (such as that in Figure 5.14) are:

- **Maximum stock level**: This represents the maximum amount of stock the business wants to hold at any point in time, usually based on the capacity of its storage facilities. In Figure 5.14, the maximum stock level is 600 units.

- **Minimum stock level**: This is the minimum amount of stock the business aims to always maintain.
- **Buffer stock**: This is the stock available to use in case of an unexpected increase in demand from customers or counteract supply shocks that may cause late deliveries from suppliers. In Figure 5.14, there is buffer stock of 100 units.
- **Reorder level**: This corresponds to the level of inventory reached that then triggers a reorder.
- **Reorder quantity**: This is the amount of new stock ordered for production. In Figure 5.14, the reorder quantity is 500 units.
- **Lead time**: This represents the time it takes from the placing of a stock order to receiving the delivery to the place of business. In Figure 5.14, the lead time is one week.
- **Usage rate**: This is the speed at which stocks are used in the production process. In Figure 5.14, the usage rate for the business is 250 units every two weeks.

Capacity utilization rate

The capacity utilization rate measures the extent to which the business is realizing its potential output capacity. The figure is expressed as a percentage and can be calculated using this formula:

$$\text{Capacity utilization} = \frac{\text{actual output}}{\text{potential output}} \times 100$$

Let's take an example of a small factory producing e-scooters. The factory size and production set up allows the manufacturer to produce 8,000 e-scooters per month. Currently, the factory output is 2,500 e-scooters per month. We can work out the capacity utilization using the formula above.

$$\begin{aligned}\text{Capacity utilization} &= \frac{2\,500}{8\,000} \times 100 \\ &= 0.3125 \times 100 \\ &= 31.25\%\end{aligned}$$

Excess or spare capacity is when a firm's output is below the maximum possible output, such in the example above. This can represent a waste of resources as the organization is spending unnecessarily on its fixed assets.

A sensible capacity utilization target is 90 per cent: resources are being used more fully, while the business still has the flexibility to have machine downtime and maintenance, and to meet sudden increases in demand.

Conversely, a capacity shortage is when a firm's capacity is not large enough to deal with the level of demand for its products. This can lead to disappointed customers through delays and loss of sales to competitors.

Defect rate

Tracking the number of defective products produced helps a business to determine the financial losses these defects cause. In addition, tracking this helps businesses to measure the overall quality of each product and the production process.

The defect rate is a measurement of how many units of production are defective out of a specific number of observed units. It can be calculated using this formula:

$$\text{Defect rate} = \frac{\text{defects}}{\text{output tested}} \times 100$$

Let's take an example of a business producing scented candles. The candle business may decide to calculate the defect rate in its next production run of 1,500 scented candles. After the production run, 18 candles were defective. Using the defect rate formula, we can calculate the defect rate as below:

$$\text{Defect rate} = \frac{18}{1\,500} \times 100$$
$$= 0.012 \times 100$$
$$= 1.2\%$$

While lower rates are ideal, there's no standard acceptable defect rate across industries. So companies must decide what their target defect rate is.

Defect rate is important because it helps businesses determine how many units per output fail quality testing. This can help a business identify any problems in quality testing or production, and determine how much each defect costs. Companies can also compare defect rates among similar or different products to determine product profitability.

Productivity and leverage

Productivity refers to how well an organization converts input (such as labor, materials, machinery, and capital) into output (goods and services). There are several productivity measures that a business can calculate.

Labor productivity

Labor productivity is the measure of how much output is produced per unit of labor input. It can be calculated using the following formula:

$$\text{Labor productivity} = \frac{\text{output per period (units)}}{\text{number of employees at work}}$$

Let's take an example of a pottery business. If the pottery firm produces 2,700 terracotta pots per week and it employs 15 people, the labor productivity rate would be:

$$\text{Labor productivity} = \frac{2\,700}{15}$$
$$= 180 \text{ units per worker per week}$$

Capital productivity

Capital productivity is a measure of how well physical capital is used in the provision of goods and services. Physical capital includes office equipment, labor materials, warehouse supplies, and transportation equipment, such as cars and trucks.

Capital productivity is calculated using the following formula:

$$\text{Capital productivity} = \frac{\text{total output}}{\text{capital input}}$$

A higher capital productivity number shows that physical capital is being used efficiently in the creation of goods and services while a lower capital productivity number shows the opposite.

IB learner profile

Caring

Labor productivity is a key efficiency measure for a business and in some modern workplaces this figure is communicated in real time to employees. Some employees under these conditions have voiced their concerns on how a constant reminder impacts on their wellbeing.

To what extent does knowledge of real time labor productivity rates create a positive workplace environment?

Productivity rate

The productivity rate, therefore, measures the amount of output from each unit of input. The formula used is as follows:

$$\text{Productivity rate} = \frac{\text{total output}}{\text{total input}}$$

Operating leverage

Operating leverage measures a company's fixed costs as a percentage of its total costs. It is used to evaluate the break-even point of a business, as well as the likely profit levels on individual sales. Let's look at two scenarios: one where an organization has high operating leverage, and another where it has low operating leverage.

A web design company has substantial fixed costs in the form of web developer salaries but almost no variable costs associated with each incremental software sale. This means the business has a high operating leverage.

A business consulting firm charges its clients on an hourly basis. This incurs variable costs in the form of consultant wages. This firm has low operating leverage.

Operating average can be calculated using the same data as break-even analysis: selling price, variable costs per unit, and fixed costs. Operating leverage can be calculated by using this formula:

$$\text{Operating leverage} = \frac{\text{quantity} \times (\text{price} - \text{variable cost per unit})}{\text{quantity} \times (\text{price} - \text{variable cost per unit}) - \text{fixed costs}}$$

For example, Alaskan Barrel Company (ABC) has the following data:

Variable costs = $30,000

Fixed costs = $60,000

Quantity of barrels produced = 1,000

Price per barrel = $100

With this data we can calculate the operating leverage for ABC:

$$\text{Variable cost per unit} = \frac{\$30\,000}{1\,000}$$
$$= \$30$$

$$\text{Operating leverage} = \frac{1\,000 \times \$70}{(1\,000 \times \$70) - \$60\,000}$$
$$= \frac{\$70\,000}{\$70\,000 - \$60\,000}$$
$$= \frac{\$70\,000}{\$10\,000}$$
$$= 7$$

Table 5.11 shows the financial results for ABC.

Table 5.11 The financial results for ABC ($)

Revenue	100 000
Variable costs	30 000
Fixed costs	60 000
Net operating income	10 000

ABC has a contribution margin of 70 per cent and net operating income of $10,000, which gives it a degree of operating leverage of 7. ABC's sales then increase by 20 per cent, resulting in the results in Table 5.12.

Table 5.12 ABC's financial results after a 20 per cent increase in sales

Revenue	120 000
Variable costs	36 000
Fixed costs	60 000
Net operating income	24 000

The contribution margin of 70 per cent has stayed the same, and fixed costs have not changed. Because of ABC's high degree of operating leverage, the 20 per cent increase in sales translates into a more than doubling of its net operating income.

High operating leverage

In a high operating leverage situation, a large proportion of a company's costs are fixed costs. In this case, the firm earns a large profit on each incremental sale but must attain sufficient sales volume to cover its substantial fixed costs. If it can do so, the entity will earn a major profit on all sales after it has covered its fixed costs. However, earnings will be more sensitive to changes in sales volume.

For example, software companies have high fixed costs in terms of labor and capital equipment, and low variable costs. The major input in the production of software is skilled labor such as software and graphic designers. Thus, any increase in sales of software products will lead to high earnings and profits provided that fixed costs have been covered.

Low operating leverage

In a low operating leverage situation, a large proportion of a company's sales are variable costs, so it only incurs these costs when there is a sale. In this case, the firm earns a smaller profit on each incremental sale but does not have to generate much sales volume to cover its lower fixed costs. It is easier for this type of company to earn a profit at low sales levels, but it does not earn outsized profits if it can generate additional sales.

For example, supermarkets have low fixed costs to cover but high variable costs. Any increase in sales results in an increase in variable costs and not much increase in profits.

▲ Supermarkets have high variable costs, with food prices being sensitive to external factors

How to use operating leverage

When using the operating leverage measurement, constant monitoring of operating leverage is more important for a firm having high operating leverage, since a small percentage change in sales can result in a dramatic increase (or decrease) in profits. A firm must be especially careful to forecast its sales in these situations, since a small forecasting error translates into much larger errors in both net income and cash flows.

Knowledge of the level of operating leverage can have a profound impact on pricing policy, since a company with high operating leverage must be careful not to set its prices so low that it can never generate enough contribution margin to fully offset its fixed costs.

Cost to buy and cost to make

A business may need to decide whether it should produce goods itself or buy those goods in. The results can influence the decision of whether to outsource production. It would not make sense for a business to produce a good if it can buy the same product for a lower price, and vice versa.

The business will need to carry out cost to buy (CTB) and cost to make (CTM) calculations, using the following formulae:

$$\text{CTB} = \text{price} \times \text{quantity}$$

$$\text{CTM} = \text{fixed costs} + (\text{average variable costs} \times \text{quantity})$$

Let's take an example of a camping and leisure business. Imagine the business is faced with a make or buy decision in relation to 5,000 camping chairs. They have the following financial information available:

Costs to make themselves:

Direct materials per chair = $4

Direct labor = $3

Variable factory overhead = $2

Fixed factory overhead = $15,000

$$\begin{aligned}\text{CTM} &= \$15\,000 + [(\$4 + \$3 + \$2) \times 5\,000] \\ &= \$15\,000 + (\$9 \times 5\,000) \\ &= \$60\,000\end{aligned}$$

Costs to buy from supplier:

Price per chair = $11

$$\begin{aligned}\text{CTB} &= \$11 \times 5\,000 \\ &= \$55\,000\end{aligned}$$

However, outside of the financial calculations that indicate whether the business should opt for CTM or CTB results, it may also consider additional factors before taking the final decision. These may include:

- the quality of the finished product from both options
- the impact on capacity utilization and ability to meet surges in demand
- the reliability of suppliers
- exchange rate movements if sourcing goods from a country with a different currency.

Some qualitative aspects can influence the decision to buy or to make. Businesses may opt to make the product or component themselves due to the following factors:

- A business maintains control over quality and costs if it owns production facilities along the supply chain, such as a coffee shop that has integrated with an organic coffee producer through a merger. In this case, the coffee shop has control over the quality and costs of coffee production.

- In many cases, businesses will choose to produce themselves instead of buying from suppliers to protect intellectual property, such as new technology development. For example, if a producer has developed a product that does not exist and is innovative, the producer will prefer to make it.
- Social enterprises or businesses with strong corporate social responsibilities might choose to produce the product in case they cannot source suppliers committed to the same principles. For them the costs to make will not be a priority as they have different objectives, such as social welfare and supporting regenerative supply chains.

Businesses might choose to buy the product or component due to the following factors:

- If the business does not have the expertise to make the product but other businesses do, it will make sense to buy the product instead of trying to make it.
- If the costs to make a product require huge capital investment, then businesses will opt for buying the product rather than making it.
- A company may have been successfully producing a similar or the same product for a long time and has an established reputation on the market. Thus, it will make business sense to decide to buy the product and establish a long-term relationship with that company instead of trying to make the product.

Case study – The Morgan Motor Company

The Morgan Motor Company provides a fitting antidote to mass-produced automotive manufacturing, bringing with it an exceptional mix of traditional craftsmanship and appropriate modern technology.

Famous the world over for its unique blend of craft, heritage and pure driving experience, the Morgan Motor Company has been manufacturing quintessentially British vehicles in Malvern, UK, for more than 110 years.

With a team of 250 employees, each Morgan is hand crafted using three core elements: ash, aluminium and leather. Every car is entirely unique, built to the highest standards by passionate craftspeople, whose skills are handed down through generations and perfected over a lifetime, bringing together heritage, innovation and cutting-edge technology.

Today, Morgan builds around 800 cars per year. There is still an unprecedented demand to own a new Morgan and this results in waiting lists for the cars. A six to twelve month waiting list is not uncommon; sometimes this can run to a couple of years.

The factory has the capacity to produce 900 cars per year but an opportunity to expand the size of the factory could be an option. Purchasing the adjoining land to the current premises would allow the factory to accommodate the potential to build 1,400 cars per year.

The Morgan Motor Company also has a successful range of merchandise that fans of the brand can purchase, including t-shirts, caps, scarves, jackets, sweatshirts and beanies. Due to successful sales, it is now re-evaluating whether it should continue to buy branded products from a supplier or bring the production in-house. The details for the popular Morgan branded t-shirts are on the following page.

Average number of t-shirts sold per year: 6,000

Cost to buy from supplier per t-shirt: £6

The projected costs of in-house production of t-shirts are:

Direct materials per t-shirt: £1.50

Direct labor: £2

Variable factory overhead: £2

Fixed factory overhead: £7,000

1 Calculate the labor productivity per year for Morgan.
2 Calculate the capacity utilization rate of the current factory.
3 Comment on the potential opportunity for Morgan to expand its factory size.
4 Using data for the cost-to-buy and cost-to-make, along with information in the case study, recommend whether Morgan should bring the production of its branded t-shirts in-house.

5.7 Crisis management and contingency planning

Learning outcomes

At the end of this unit, you will be able to:

- distinguish between crisis management and contingency planning
- explain the factors that contribute to effective crisis management
- evaluate the impact of contingency planning in a given context in terms of costs, time, risk, and safety.

Contingency planning and crisis management are concepts that complement each other. Contingency planning is the process of preparing for potential emergencies while crisis management is the response to and management of emergencies when they do occur.

With contingency planning, the business is trying to predict the possible emergencies before they could occur. A major element to that preparation is envisioning what all the potential emergencies could be. If a potential scenario was to play out with dire consequences, it is worth the business giving time and resources to prepare for its realization. Overlooking a possible category of emergency in the contingency planning phase can leave an organization poorly prepared when a crisis hits.

Once potential scenarios have been identified, contingency planning involves setting the policies and procedures that will guide an organization through its crisis management function. This may involve the production of documents and other materials that outline the steps for responding to a crisis. It could also involve simulated exercises that put the crisis management team in a real-world scenario and pushes them to make decisions. Through conducting simulated exercises, weaknesses in the crisis management procedures can be identified and then rectified.

When a crisis occurs, the organization's crisis management plan activates. Successful crisis management involves all members of an organization working to limit the impact and damage of that crisis and to restore operations back to normal as quickly as possible.

An actual crisis is unlikely to allow an exact step-by-step plan to be followed as businesses can only do so much to prepare. The various ways that real-world events diverge from the contingencies that an organization has prepared to face tests the decision-making capabilities of team members and the systems that are in place. Therefore, crisis management is a combination of planning and thriving under pressure. Crises that affect business can take many forms, such as natural disasters, environmental issues, cybersecurity threats, product recalls, employee misconduct, and conflict with interest groups.

Factors that affect crisis management

While in a crisis, an organization must be aware of certain factors that impact on the effectiveness of its crisis management response. By considering these factors, an organization is more likely to emerge from a crisis in good shape.

Transparency

The truth will always emerge, so it is important for the business to be transparent. To maintain brand integrity, a business must be proactive in its communications and admit fault when necessary. Apologies must come across as sincere. Saying something has gone, or been done, wrong is not easy, but it is a sign of strength and leadership that will help a business recover more quickly. The VW emissions scandal was one in which transparency was lacking from the start.

Communication

Communication is essential to crisis management strategy. It provides clarity and direction for employees, customers, and other stakeholders. Strategic communication stabilizes and advances the organization by inspiring confidence, earning trust, and engaging stakeholders. Clear, consistent communication is vital to successfully maintain business continuity and recover.

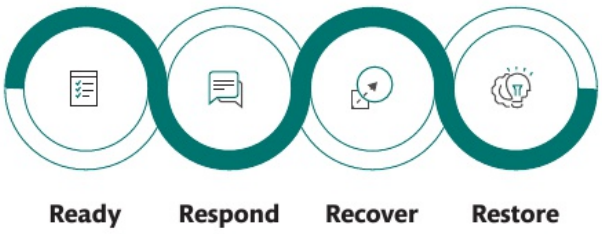


Figure 5.15 The role of communication in crisis management

Ready

During the Ready stage, communication lays the groundwork necessary for the organization to respond effectively and sustain trust. This phase happens during contingency planning.

Respond

When a crisis strikes, the organization moves to the Respond phase. At this point, strategic communication provides timely, accurate information that keeps stakeholders informed and helps to build trust. Authentic, transparent, and consistent messages help to maintain a company's brand perception and retain loyal customers and employees.

Recover

During the Recover phase, the organization will start to stabilize. Strategic communication here will help provide clarity to stakeholders on how the future might look. Even if it starts to feel repetitive, proactive and consistent communication is vital during this phase because stakeholders may still feel uncertain, even as the organization is showing signs of stabilizing and recovering.

Restore

Using strategic communication in the Restore phase is an opportunity for an organization to re-align its communication to its purpose, mission, and values, and provide the rationale for any changes made because of the crisis.

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Caring

It is important, following a crisis, that a business is seen to care and not just attempt to save its reputation. Imagine that a multi-country *Salmonella* outbreak that affects 100 people has been linked back to food products made at a confectionery factory you own. Draft a response from your company about the incident that conveys a caring approach – one which reassures customers that you are dealing with situation with the level of seriousness it deserves.

Speed

Speed is key when it comes to crisis management, and actions should be taken in a timely manner. A nimble and fast organization can work its way through a crisis, taking minimal damage along the way, compared to a competitor that is slow off the mark.

However, 'knee jerk' reactions that are not thought out can exacerbate a crisis further. Therefore, speed without direction isn't enough. If the organization has a clear understanding of its values, with a robust chain of command in place, then it can establish a clear path out of the crisis and execute that plan rapidly.

Control

In a crisis, taking control is essential to prevent further damage from being inflicted through a worsening of the situation or unhelpful and inaccurate news being spread. Often, a crisis management team will be called on to take control and manage the response in accordance with the contingency plan. In the age of 'viral' news stories, it is important for control to be established as soon as possible.

It is at this point that direction is needed, and leadership reverts to becoming more autocratic in nature. The autocratic approach is more effective when a clearly defined crisis management protocol and contingency plan have been developed. In times of crisis, people are often more receptive to taking orders and direction to safely navigate through the situation.

Impacts on contingency planning

Contingency planning requires a concerted effort from the organization to develop and there is no guarantee that it can be carried out effectively and efficiently until an actual crisis takes place. The following factors impact contingency planning.

Cost

Developing effective contingency planning involves a cost. The costs will depend on the time and level of expertise needed to formulate a plan. Often senior management will be involved and that will take them away from their everyday tasks. In addition, consultant fees can add up depending on the size and scale of a potential crisis. However, compared to the cost incurred of an actual crisis, the expenses to develop effective contingency plans may be trivial.

As contingency plans need to be regularly reviewed and updated, there is an opportunity cost in terms of time and resources. Small businesses have no resources to afford this kind of planning; large corporations have teams of employees to only consider potential crisis situations and plan for those. The costs of insurance against natural disasters or dangers related to production, such as fire, injuries, and so on, also mount up.

Time

Contingency planning is a time-consuming process to complete. Depending on the nature of the external environment, which can be ever changing, contingency plans may need to be revisited on a regular basis. In addition, time must be considered in terms of the response time to a crisis: quick action must be taken to minimize the impact of a crisis.

Risks

The level and range of risks that need to be assessed depend on the field of business that the organization operates in. For example, a chemical spill in a chemical plant carries huge risks for employees and the local community. Communication and swift measures are crucial, as well as immediate actions to prevent the loss of life and spread of pollution. The risks can be minimized with effective contingency planning.

Safety

Throughout the contingency planning process, an organization needs to be mindful of the health and safety implications, and relevant legislation in place. It should consider that in times of crisis, such as fire, people can behave in a different way than during practices or drills. Failure to adhere to laws that govern health and safety at the workplace could result in large financial penalties and liabilities for the organization.

It is not possible to predict all possible types of crises that might strike. In some organizations, contingency plans are not reviewed and updated on a regular basis. Contingency plans can be very useful to guide decisions in times of crisis, but the external environment can be quite unpredictable and can make those plans irrelevant.

Research and inquiry

Below you will find four infamous business disasters that have occurred in recent times. Choose one to research and explore how the crisis was managed by the organization. Consider costs, safety, time, and risks related to the way in which these disasters were managed.

Present your findings back to the class and ensure that you support your judgments with specific evidence.

BP Deepwater Horizon disaster

VW emissions scandal

Boeing 737 Max disasters

Facebook–Cambridge Analytica data privacy scandal

Case study – Chipotle

US prosecutors fined Chipotle Mexican Grill $25m after hundreds of customers who ate at the burrito chain fell sick, some with norovirus. The country's biggest ever penalty for food safety violations was issued after more than 1,100 people across the country became ill over a three-year period between 2015 and 2018. The company's failure to follow food safety protocols led to the food poisoning, the Department of Justice said on Tuesday as it filed the criminal complaint. Chipotle has reached a deferred prosecution agreement with the DoJ, under which it will pay the fine and avoid conviction if it complies with a food safety programme. The company was implicated in at least five outbreaks of food-borne illness connected to its restaurants in the Los Angeles area, Boston, Virginia and Ohio, the complaint said. They included norovirus, a highly infectious pathogen that can be transmitted by food workers and can cause severe illness. Symptoms include diarrhoea, vomiting and stomach pain. Chipotle failed to ensure that employees complied with food safety protocols and violated the Federal Food, Drug, and Cosmetic Act,

prosecutors said. The incidents were caused in part by employees who were sick or had recently been sick showing up for work and preparing food. Some employees reported inadequate staffing and food safety training and complained that they were under pressure to work while sick.

'This case highlights why it is important for restaurants and members of the food services industry to ensure that managers and employees consistently follow food safety policies,' said Jody Hunt, assistant attorney-general at the DoJ's civil division.

Brian Niccol, Chipotle chief executive, said in a statement: 'This settlement represents an acknowledgment of how seriously Chipotle takes food safety every day and is an opportunity to definitively turn the page on past events.'

Chipotle added that it had already improved its policies and procedures and that its food safety culture was now 'one of the finest in the industry'.

The company also opted to take a transparent marketing approach and filmed new commercials in the style of a documentary, to show customers the types of fresh ingredients and careful preparation that went into making famous dishes.

Were Chipotle able to regain customer trust? If so, how? Research other examples of companies taking action to regain trust.

5.8 Research and development

Learning outcomes

At the end of this section, you will be able to:

- discuss the importance of research and development for a business
- explain the importance of developing goods and services to address customers' unmet needs
- explain the importance of intellectual property protection in the form of copyrights, patents, and trademarks
- explain the importance of incremental and disruptive innovation for businesses.

Research and development

An organization gathers knowledge to create new products or discover new ways to improve existing products and services: this process is known as research and development (R&D). Larger companies may have their own in-house R&D team, which will test and refine products and processes before commercial use. It's also not unusual for companies to outsource this work to universities, due to a lack of in-house capacity, or to access the expertise and advanced research equipment universities possess.

Regardless of the approach a business takes, R&D involves some risks. There may be uncertainties around whether what is being attempted is technologically feasible or if it will achieve the hoped-for objectives.

The R&D process can take months or years to yield results that are of use to the organization. The process involved will vary from company to company; Figure 5.16 shows one possible approach.

1 **Foster ideas**: This initial stage involves the brainstorming of ideas, whereby members of the research team gain an understanding of issues facing their industry. This will help to identify broad areas of opportunity or concern.

2 **Focus ideas**: The initial pool of ideas may be broad and generic. The research team will need to consider the ideas that have potential and do not have insurmountable limitations. By looking at existing products, the research team can assess how original a new idea is and the scope for development.

3 **Develop ideas**: Once an idea has been thoroughly researched, a market survey may be carried out to assess market readiness. Ideas with real potential now start to gain traction and the process of turning research into a marketable product begins.

4 **Prototypes and trials**: The research team will work closely with product developers to work on how an idea can be turned into a practical product. The prototype may increase in complexity as the process develops. Production processes and sales tactics now start to enter the thought process.

5 **Regulatory, marketing, and product development activities**: As the product begins to take shape, the R&D process divides into the relevant areas needed to bring the product to market. Regulatory aspects are assessed, and work begins to meet all the criteria for approvals and launch. The marketing function begins

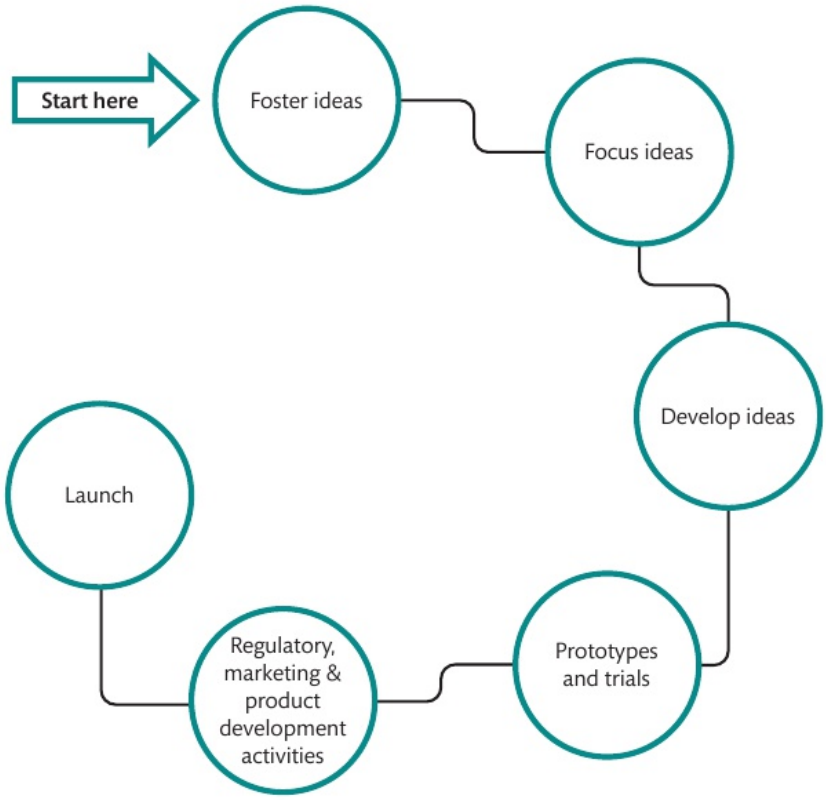


Figure 5.16 A basic R&D approach that an organization could follow

developing strategies and preparing their materials while sales, pricing, and distribution are also planned for.

6 **Launch**: The product has now developed from idea to reality and is ready for an introduction to the market.

Evaluation of the product is ongoing and may lead to possible re-designs if needed. At any point in this process the idea may be scrapped. Its feasibility may be questioned, or the research may not reveal what the business hoped for. Critical analysis is required at every stage to ensure the business is making rational decisions on the viability of the product under development.

The importance of R&D

R&D is an important consideration for a business. It provides the insights needed to develop new products and services that will have the competitive edge in the markets in which it operates. R&D can also lead to increased efficiency and reduced costs in existing processes and practices.

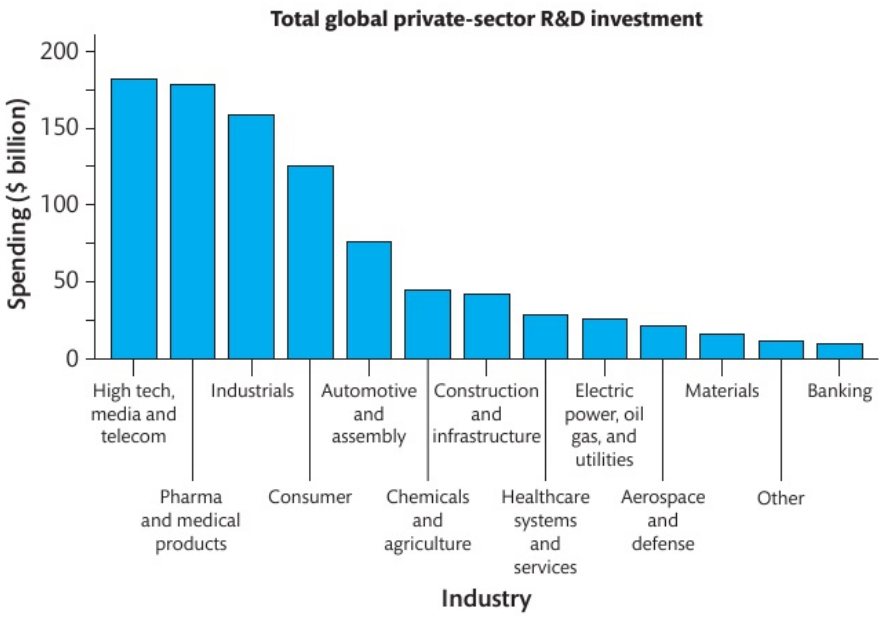
While pharmaceutical companies are often associated with large R&D spending, many industries are committing large parts of their revenue to R&D investments. A McKinsey & Company report provides an overview of how spending on R&D varies across industries, and is captured in Figure 5.17.

Companies that invest in R&D are more likely to be successful than those that don't.

Advantages of R&D

- **Quality improvements**: Focusing on improvements in products and services through R&D can lead to high levels of quality, which helps to ensure customer satisfaction and build retention.

Figure 5.17 Global private sector R&D spending by industry, 2018 ($, billion)



- **Competitive advantage**: R&D spending helps businesses to stay ahead of the curve by constantly innovating and improving; this provides a significant advantage in the marketplace over their competitors.
- **First mover advantage**: Through investing in R&D, a business may develop a completely new product; this could result in a first mover advantage, which refers to an advantage gained by a company that is first to introduce a product or service to the market.
- **Sustainable practices**: R&D can help a business to identify ways to reduce its negative impact on the environment. This may foster adoption of sustainable practices and contribute to corporate social responsibility.
- **Increased efficiency**: R&D can yield efficiency savings that can allow tasks to be completed more quickly and accurately. Time and money saved can then be reinvested into the business.
- **Increased productivity**: Alongside efficiency benefits, R&D can lead to an increase in productivity as new processes and methods are discovered and implemented, resulting in increased profits.

Disadvantages of R&D

- **Cost**: R&D is an expensive process with no guarantee there will be a commercial opportunity as a result from it.
- **Small firm disadvantage**: Larger firms can invest more heavily in R&D, which is likely to leave smaller firms at a significant disadvantage, limiting their ability to compete.
- **Varying budgets**: R&D budgets are often the first ones to be cut when the business environment becomes challenging, such as in recessionary periods.
- **Opportunity cost**: Businesses face a decision on how best to invest their time and money; choosing to spend large amounts on R&D creates an opportunity cost, as that money could have been invested elsewhere in the business.

Research and development spending also has wider benefits for the economy. Developing new products and services creates new employment opportunities. R&D can lead to entirely new industries, creating even more jobs and driving economic growth.

Research and inquiry

Which companies spend the most on R&D?

Make a note of which industries these companies operate in. What notable successes have resulted from that R&D spending? To what extent have these successes been able to recoup the R&D investment for the business?

Innovation

Innovation can take the form of a product, service, business model, or strategy that is both novel and useful. Innovations may simply be new features added to an existing feature – it doesn't have to be a major breakthrough in technology.

Identifying unmet needs

By identifying unmet needs, companies know exactly where to focus and what to do to create a unique position in the market. This dramatically increases success in branding, innovation, and growth. Therefore, to create new value, refresh their brands, differentiate, and grow, companies must figure out the unmet needs of customers.

Businesses can look to identify customer's unmet needs in several ways:

- **Identify industry trends**: A business can identify key trends that may disrupt their industry based on customer needs.
- **Perform a competitive analysis**: This provides a business with current intelligence on vital new features and functionality that customers are looking for and that competitors think will be the next big thing.
- **Mine business data**: Chat logs, purchase history, reviews, forums, and social media are a fantastic source of consumer opinions, needs, desires, and complaints, just waiting to be converted from an unmet need to a new product or feature.
- **Conduct interviews**: Today's best innovations have been discovered by simply taking the time to pay attention to a customer's unmet need.
- **Conduct ethnographic research**: The objective of this type of research is to gain insights into how users interact with things in their natural environment.
- **Conduct quantitative research**: This can include usage data and attitude research.
- **Conduct voice of customer (VOC) research**: Real-time feedback through 'voice of the customer' interactions to track what customers are saying and latch onto new trends quickly.

Incremental innovation

Incremental innovation can be defined as a series of small improvements made to a company's existing products or services. These tend to be lower cost improvements over time that help to further differentiate a company from the competition while building on its current product offering.

The Gillette razor is a classic example of incremental innovation; it has been through small changes over the years since it was first introduced in 1900.

Likewise, from more of a technological perspective, the iPhone is an example of incremental innovation as the design has changed little since its introduction in 2007. However, small improvements have been seen from model to model, whether this be storage capacity or camera quality.

Figure 5.18 The Gillette razor throughout the years

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Principled

Innovation in business has the goal of getting existing and new customers to purchase products. Often the product a new product replaces is perfectly usable and still being used by consumers. After purchasing the latest product, consumers often discard the old one without a second thought. Many businesses are now taking a principled approach by engaging in buy-back and trade-in schemes. Identify and explore how businesses are adopting this approach and moving towards a circular economy.

Disruptive innovation

Disruptive innovation can be defined as a process in which new entrants challenge incumbent firms, often despite inferior resources. This can come about in a couple of ways. Overlooked segments may be targeted by entrants, with a product considered inferior by the incumbent's most-demanding customers. In time, the product may move up-market as it improves. Alternatively, companies may create a market where no market exists and turn non-consumers into consumers.

Netflix is an example of disruptive innovation. The business started out by mailing out DVDs to customers who wanted a Blockbuster style experience at home, where they could browse through titles and request them without having to travel to the video store to hire them. However, after it experienced a level of success in the marketplace, it decided to restrategize its business model. Netflix then moved from mailing DVDs to streaming films instead.

The decision to grant customers access to streaming movies online meant that Netflix could officially displace Blockbuster from the market, and it went out of business. For many people across the world, Netflix is now their official movie streaming platform.

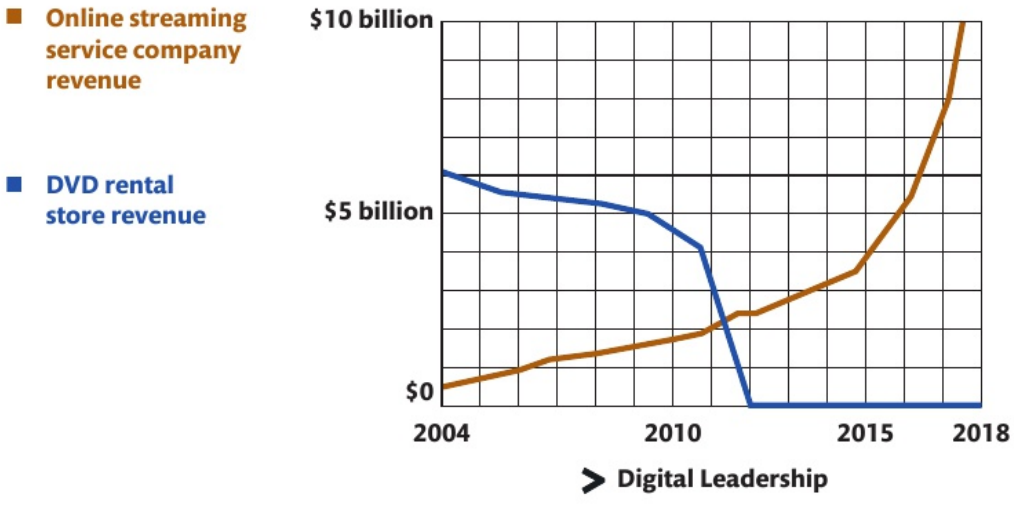

Figure 5.19 Revenue of streaming service against DVD rental store

Case study – Uber

After a year of multibillion-dollar fundraisings, bans in cities around the world and massive expansion, Uber, the ride-hailing app provider, has become Silicon Valley's poster child for disruption. The five-year-old company has revolutionized the taxi market in more than 230 cities in 51 countries without owning a single car. Its marketplace connects drivers of regular cars and taxis with passengers through its smartphone app, backed by a 'big data' team that tries to ensure a ride is never more than five minutes away. Led by co-founder Travis Kalanick, Uber has crushed competition from other ride-sharing start-ups and taxi unions alike, delivering a valuation of $40bn as it raised $1.2bn in new funding in December. This war chest allows it to slash fares as part of its attritional battle to win market share from rival apps and incumbent cab services. Its success has seen San Francisco taxi rides fall by two-thirds in less than two years and caused Hailo, a London-based taxi app, to exit North America complaining it was impossible to compete with Uber's pricing tactics.

Some of Uber's drivers have also complained they are forced to work longer hours to make the same amount of money. A backlash has begun. Regulators, particularly in Europe, have launched probes into the company's operations, while sometimes Uber disrupts itself. In November, one of its senior executives said Uber should hire investigators to dig up information about the 'personal lives' of critical journalists. The comments created a firestorm of criticism. The incident led many to ask whether the company's corporate culture, embodied by the man at the helm, would prove to be its Achilles heel. Mr Kalanick has spoken of Uber fighting political campaigns to expand into cities against taxi drivers' resistance. To this end, he hired David Plouffe, a former adviser to President Barack Obama, as his head of policy in August. 'I don't subscribe to the idea that the company has an image problem,' Mr Plouffe told Vanity Fair. 'I actually think when you are a disrupter you are going to have a lot of people throwing arrows.' And as it races towards a $10bn

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Before Netflix, HBO MaxGo, and Amazon Prime, there was Blockbuster.

During the 1990s and early 2000s, Blockbuster was the premier video rental company in the U.S. However, more dynamic services emerged, and customers complained about the late fees levied by Blockbuster. Eventually, it went bankrupt.

David Cook opened the first Blockbuster store in 1985. At its peak in 2004, there were 9,000 stores across the world earning $5.9 billion in revenue. Blockbuster turned down the opportunity to buy Netflix in 2000 for $50 million.

By 2013, after failing to keep up with its competitors and after various buyouts, the company filed for bankruptcy.

Today, one store remains in Bend, Oregon, which has now also turned into an Airbnb. The standalone Blockbuster has become a novel tourist attraction but does have a loyal customer base of 4,000 accounts. In 2020, it partnered with Airbnb to allow fans to stay up to three nights with four of their friends for just $4 a night.

revenue target next year, Uber is not satisfied with taking on taxis alone. From burgers in Beirut and cycle couriers in New York to kittens in Seattle, it is already experimenting with moving more than just people.

Research another example of a company that could be considered a disruptive innovator.

Property protection

Intellectual property rights

Intellectual property rights (IPR) are the rights given to people for their ideas and creations. They usually give the creator an exclusive right over the use of their creation for a certain period. IPR promote innovation and creativity, which in turn generates jobs and improves competitiveness. IPR enable authors, artists, designers, inventors, and other IPR owners to benefit when others use their creations and inventions. Figure 5.20 provides an illustration of where the consideration of intellectual property comes into the invention and creation process.

There are several measures in place to protect innovative ideas and assets.

Patents

Patents grant an exclusive right for a new technical invention. Once obtained, a patent holder can grant a license to somebody wishing to produce a copy of the invention in return for a royalty payment (a fee paid to the patent holder).

Copyright

This ensures that authors, composers, artists, film makers, and other creators receive recognition, payment, and protection for their work, such as paintings, books, films, and music.

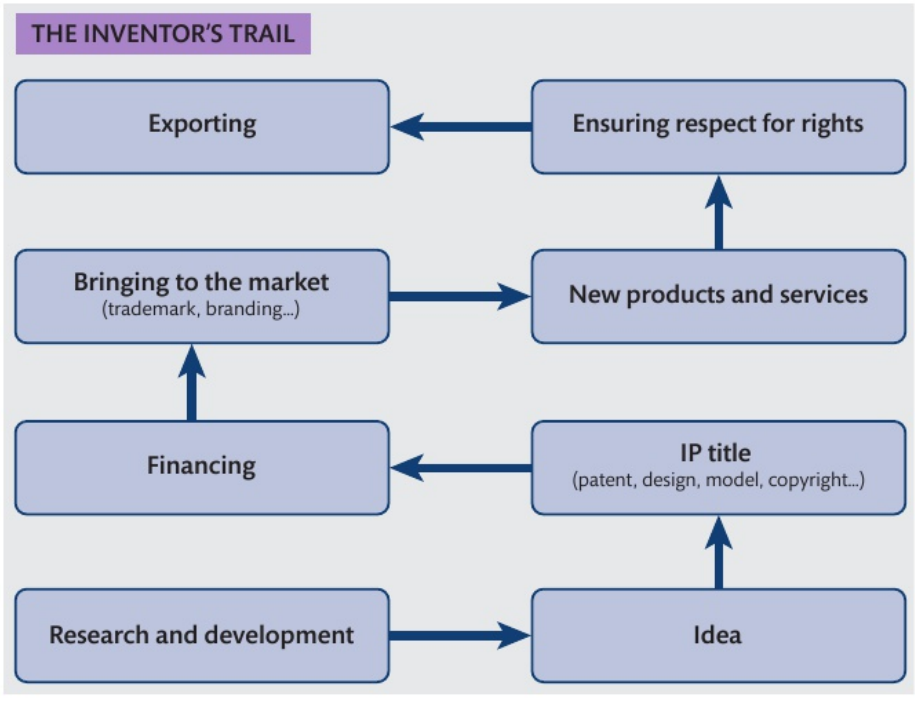


Figure 5.20 The invention and creation process

Interesting information

Copyright protects the creative work of the owners but only for a certain amount of time. Copyright protection starts as soon as a work is created. However, once the copyright has expired, anyone can use or copy the work.

The length of copyright depends on the type of work produced. This table shows how long copyright lasts in the UK.

Type of work	How long copyright usually lasts
Written, dramatic, musical, and artistic work	70 years after the author's death
Sound and music recording	70 years from first publication
Films	70 years after the death of the director, screenplay author, and composer
Broadcasts	50 years from first broadcast
Layout of published editions of written, dramatic, or musical works	25 years from first publication

Trademarks

A word, logo, or symbol can be protected through a trademark, which then prevents its use by competitors.

Registered design protection

The outward appearance of a product can be registered as a design for protection, for example, the shape of an armchair, smartphone, or car. This only relates to the shape or appearance of the product. It gives the owner the exclusive right to the design of the product to deter others from copying it.

Geographical indications

The name of a location that is associated with a product can be protected, which acts as an assurance that the product has been produced in a particular place, often to a specific recipe or traditional practice. Examples include Prosciutto di Parma, Scotch whisky, and Champagne.

Trade secrets

This is a valuable piece of knowledge that is closely guarded either by the business or within the industry, which provides a competitive advantage over rivals.

Research and inquiry

There are many examples of companies with trade secrets. KFC's original recipe is considered to be top-secret. The company takes extra measures to ensure the secrecy of the herbs and spices used, including guarding the recipe within a high-security safe surrounded by various other security measures. There is a strict limit

on employee access to the knowledge of the secret ingredients. To increase the security of the original recipe, production of the secret mix of herbs and spices is split across two different manufacturers.

What other famous examples of closely guarded trade secrets can you find? Work with a partner to research an example and report back to your class.

Practice questions

1 List in order the six steps of the research and development process. (6 marks)

2 Distinguish between incremental and disruptive innovation. (4 marks)

3 Explain two ways in which a business can protect its intellectual property. (4 marks)

4 In 2020, Dyson announced its plans to double its portfolio of products and enter entirely new fields by 2025 taking it beyond the home. To enable these plans, Dyson committed to a £2.75 billion investment plan into new technologies and new products over the five year period. The investments focused in Singapore, the UK, and the Philippines, and were backed by plans to hire additional engineers and scientists in fields such as software, machine learning, and robotics.

Dyson stated it would invest further into research in the fields of robotics, next generation motor technology, intelligent products, machine learning, connectivity, and material science. A key focus is the commercialization of Dyson's proprietary solid state battery technology, which it developed in the US, UK, Japan, and Singapore. It promised safer, cleaner, longer-lasting, and more efficient energy storage than existing batteries.

The announcement came one year after James Dyson scrapped his electric car project, revealing that it left him £500 million out of pocket. But, it turns out, it wasn't in vain. Apart from the introduction of new staff with different skills, many of whom still work for Dyson, the research and development the company made into battery technology, he says, was invaluable.

Evaluate the decision by Dyson to invest £2.75 billion into new technologies and new products over a five year period. (10 marks)

5.9 Management information systems

Learning outcomes

At the end of this section, you will be able to:

- define the term 'management information system'
- outline what is meant by data analytics, databases, cybersecurity, and cybercrime
- suggest ways in which VR, AI, internet of things, and big data can be used by businesses
- compare and contrast a range of customer loyalty programs
- evaluate the use of data to manage and monitor employees
- examine the use of advanced computer technologies and technological innovation on business decision-making and stakeholders.

What is a management information system?

Management information systems (MIS) are tools used to support business processes, operations, intelligence, and technology. MIS are designed to move data and manage information; in turn, data-driven reports are produced that help businesses make the right decisions at the right time.

MIS categories

There are now many specialized MIS available to businesses.

- **Executive information system (EIS)**: Senior management use an EIS to make decisions that affect the entire organization. Executives need high-level data with the ability to go into the details as necessary.
- **Marketing information system (MkIS)**: A marketing team uses a MkIS to report on the effectiveness of past and current campaigns, and to use the lessons learned to plan future campaigns.
- **Business intelligence system (BIS)**: Operations use a BIS to make business decisions based on the collection, integration, and analysis of the collected data and information. This system is like an EIS, but both lower-level managers and executives use it.
- **Customer relationship management system (CRM)**: A CRM system stores key information about customers, including previous sales, contact information, and sales opportunities. Marketing, customer service, sales, and business development teams often use a CRM.

A CRM can record a variety of information about each customer and their transactions

- **Sales force automation system (SFA)**: This is a specialized component of a CRM system that automates many tasks that a sales team performs. It can include contact management, lead tracking and generation, and order management.
- **Transaction processing system (TPS)**: A TPS completes a sale and manages related details. On a basic level, a TPS could be a point of sale (POS) system, or a system that allows a traveler to search for a hotel and include room options, such as price range, the type and number of beds, or a swimming pool, and then select and book it. Employees can use the data created to report on usage trends and track sales over time.
- **Knowledge management system (KMS)**: Customer service departments can use a KMS to answer questions and troubleshoot problems.
- **Financial accounting system (FAS)**: This MIS is specific to departments dealing with finances and accounting, such as accounts payable and accounts receivable.
- **Human resource management system (HRMS)**: This system tracks employee performance records and payroll data.
- **Supply chain management system (SCM)**: Manufacturing companies use SCMs to track the flow of resources, materials, and services from purchase until final products are shipped.

Data analytics

Many businesses collect vast amounts of data every day but, in their raw form, these data don't mean anything. This is where the role of data analytics comes in. Data analytics is the process of analyzing raw data to draw out meaningful, actionable insights, which are then used to inform and drive smart business decisions.

A data analyst will extract raw data, organize it, and then analyze it, transforming it from incomprehensible numbers into coherent, intelligible information. Having interpreted the data, the data analyst will then pass on their findings in the form of suggestions or recommendations about what the company's next steps should be.

Businesses need to be aware of the ethical concerns surrounding data collection and how that information can be used. For example, insurance companies collecting data about customers may result in higher insurance premiums.

TOK How might the methods used in R&D be limited by ethical considerations?

Research and inquiry

The General Data Protection Regulation (GDPR) is the toughest privacy and security law in the world. Although it was drafted and passed by the European Union (EU), it imposes obligations onto organizations anywhere if they target or collect data related to people in the EU. The regulation came into effect on 25 May 2018. The GDPR levies harsh fines against those who violate its privacy and security standards, with penalties reaching into the tens of millions of euros.

Visit the GDPR website.

How has the introduction of GDPR impacted the way businesses gather and use the data they hold about customers?

Databases

A database refers to a collection of logically related information organized so that it can be easily accessible, managed, and updated. Databases are generally accessed electronically from a computer system and are usually controlled by a database management system. The database administrator is the individual responsible for managing a business' databases, including database security, access control, backup, and disaster recovery.

Cybersecurity and cybercrime

For each kind of crime in the analog world, there is an equivalent in the digital world. For instance, theft of property or identity can occur digitally. Hostage taking, ransom holding, attacks on critical infrastructure – these crimes in the physical world have a cybercrime equivalent in the virtual world.

There are several ways that cybercrime can hinder businesses.

Increased costs

To protect themselves, firms may incur any number of costs, including:

- cybersecurity technology and expertise
- notifying affected parties of a breach
- insurance premiums
- public relations support
- hiring legal experts to remain compliant with cybersecurity regulations.

Hiscox, a well-known insurance company, reported that 6 per cent of companies paid a ransom in 2019 because of ransomware attacks, totaling $381 million in losses.

In addition, if customers decide to sue a business as a result of their data being compromised following a cyberattack, the business may have to pay damages as an outcome of such civil action.

Because of the digitization of society, there is an increasing reliance on technology. Everything from public transportation to utilities uses automation and networked systems to keep it functioning; even roads and bridges have sensors. In an interconnected and digitally enabled world, everything needs to be secured.

The 2022 (ISC)² Cybersecurity Workforce Study found that 3.4 million more cybersecurity professionals are needed globally. The number of new ransomware variants identified in the first half of 2022 increased by nearly 100% compared to the previous six-month period. According to one estimate, the global cost of cybercrime will grow from $8.44 trillion in 2022 to $23.84 trillion in 2027.

The Organisation for Economic Co-operation and Development (OECD) estimates that technological advances will transform one billion jobs in the coming decade. Cybersecurity workers are sought after, and the field is continually evolving, so organizations must provide continuing education and career growth opportunities.

As society become more dependent on technology, cybersecurity becomes critical to ensuring a sustainable future, which could help to change the world for the better.

Operational disruption

Cybercriminals can use multiple ways to disrupt a company's normal activities, from infecting computer systems with malware that erases high value information, to installing malicious code on a server that blocks staff or customer access to the business' website.

Disrupting business as usual is the favored tool of so-called 'hacktivists', who also breach the computer systems of government agencies or multinational corporations to call out a perceived wrong or increase transparency.

Altered business practices

Companies must think about how they collect and store information to ensure that sensitive information isn't vulnerable. Many companies have stopped storing customers' financial and personal information such as credit card numbers.

Customers are increasingly concerned with knowing how the businesses they deal with handle security issues. Having clear security protocols in place can increase the likelihood of customers frequenting a company's website and going on to make a purchase.

Reputational damage

Companies that fall victim to larger cyberattacks risk their brand equity and reputation becoming tarnished. Trust in the business from both customers and suppliers can be difficult to regain when technological infrastructure has been compromised.

In 2014, criminals compromised the data of JPMorgan Chase's banking customers. Hackers gained access to the names, addresses, phone numbers, and email addresses of 76 million household accounts and 7 million small business accounts.

In addition to reduced trust, it has been found that the share prices of compromised companies fell an average of 3.5 per cent following an attack.

Lost revenue

As a result of a cyberattack, businesses may experience a sudden drop in revenue, as customers move elsewhere to protect themselves against cybercrime. Companies can also lose money to hackers who extort their victims.

Stolen intellectual property

A company's product designs, technologies, and go-to-market strategies are often among its most valuable assets. Much of this intellectual property is stored in the cloud (which is explained in more detail later in this section), where it's vulnerable to cyberattacks.

Research and inquiry

There have been increasing numbers of high-profile cyberattacks on businesses as organized crime groups become ever more sophisticated with their hacking techniques.

Research cyberattacks on businesses that have made the news in the past year. Think about:

- To what degree was the business and its customer base affected?
- How did this impact the reputation of the business?
- How much did the cyberattack cost the business?
- What steps has the business taken to prevent future cyberattacks?

Critical infrastructures

For a business to run an MIS, it needs to ensure that it has critical infrastructures in place.

Artificial neural network

An artificial neural network (ANN) is an attempt to replicate the brain's network of neurons so that the computer may learn and make judgments in a human-like manner. They are computational models, or algorithms.

Neural networks are the new, smarter way of identifying hidden patterns within data sets and making predictions based on them. Neural networks have a vast array of business applications and have been helping businesses in automating tasks that were previously done manually.

Marketing and eCommerce

The recent rise of 'big data' makes ANNs highly useful for marketing. Marketers can use these tools to find and reach customers more effectively, which benefits them in the following ways:

- consumer behavior predictions
- creating and understanding the more complex buyer segments
- automating marketing
- creating content.

These tools, given enough data, can deliver more precise insights and predictions, allowing marketers to make better strategic decisions.

An example of this is the personalization of product recommendations in online stores, such as Amazon. The system analyzes the user's past behavior, purchases, what similar products they've viewed for more directed recommendations, and other actions, to provide a more comprehensive marketing strategy.

Retail and sales

By using ANNs, retail and sales-driven companies can engage in:

- **Demand forecasting**: This identifies when consumers will require a product or service, and how to provide continuous product availability and on-time deliveries.
- **Sales forecasting**: This identifies when and what a customer is most likely to buy. As a result, businesses can identify and understand the factors that contribute to higher sales in retail stores, as well as estimate future sales numbers.

Finance and banking

Neural networks can also be applied to automate processes in banking and finance.

Among other things, ANNs can be used to:

- predict future exchange rate fluctuations
- predict business failures
- assess debt risk
- approve credit
- approve mortgages
- detect fraud.

Citibank has set up a neural network that aims to detect fraudulent transactions on credit cards.

Security

ANNs can be used to:

- detect fraud
- detect and prevent malware and viruses
- prioritize alerts to send to the relevant people
- detect spam
- moderate content
- detect distributed denial of service (DDoS) attacks.

A system set up to detect DDoS attacks can watch out for patterns such as many requests coming from a single IP address, or many requests at once from random IP addresses.

Insurance

Insurance companies make use of neural networks to forecast future loss ratios and adjust premiums, helping to increase their profit margin.

Some uses of neural networks in insurance include:

- the forecasting of future loss ratios and premiums
- adjusting future premiums
- detecting fraudulent claims.

The insurance company Allstate uses neural networks to pick out 'accident-prone' drivers and give them an appropriate rate.

Logistics

Neural networks are used in logistics to help with everything from packaging to shipping.

Neural networks can:

- help package products
- be used in routing to help determine the best route for a truck driver
- identify defects in the production line
- be used in dispatching to help with the packaging of items for transportation
- balance out an assembly line by assigning jobs to workers based on their skill sets.

Data centers

A data center is a facility composed of networked computers, storage systems, and computing infrastructure that organizations use to assemble, process, store, and disseminate large amounts of data. A business typically relies heavily on the applications, services, and data contained within a data center, making it a critical asset for everyday operations.

Case study – Volkswagen

Volkswagen (VW) Group has announced the aim of making its data center operations net carbon-neutral by 2027.

To achieve this goal, the group has expanded its computing capacities at Green Mountain, a Norwegian operator of CO_2-neutral data centers. With this expansion, one quarter of VW's global data center operations will run carbon-neutrally, the company says. This corresponds to annual CO_2 savings of 10,000 tons.

If VW achieves the goal for its data centers to be net carbon-neutral by 2027, this would be three years earlier than foreseen in the European Green Deal, under which European data center operators agreed to make their data centers climate-neutral by 2030.

All servers at Green Mountain run on 100 per cent renewable electricity generated by hydropower and are cooled naturally by the adjacent fjord.

'Given the rising demand for computing power and data storage to enable Volkswagen Group's NEW AUTO strategy, a sustainable IT roadmap with ambitious goals is paramount to systematically reduce our carbon footprint. With data centers being the biggest contributor of carbon emissions in IT, expanding our computing capacity at Green Mountain is a strong lever to make our data center operations carbon-neutral by 2027.'

'We appreciate the renewed trust Volkswagen has placed in us and are pleased to support them on their journey toward full carbon-neutrality,' said Tor Kristian Gyland, CEO of Green Mountain. 'Together we share the same vision of a more sustainable future.'

For the new site at SVG1-Rennesøy, Green Mountain converted a former high-security NATO ammunition storage facility into a unique 22,600 m^2 high-security mountain hall colocation data center. The infrastructure has been designed to be expanded up to 2 × 26MW, with Volkswagen using 3MW of capacity. For the cooling, which in traditional data centers accounts for 40 to 80 per cent of the electricity required to power the servers, SVG1-Rennesøy takes advantage of the adjacent deep-water fjord. The fjord is 100 meters deep, at which depth there is a constant water temperature of 8 degrees Celsius all year round.

Conceptual understanding: Sustainability

As the world becomes increasingly digital, data centers and data transmission networks are using more and more energy. According to the International Energy Agency (IEA), data centers used between 1 per cent and 1.5 per cent of global electricity consumption in 2021.

In Norway, 98.9 per cent of electricity production is renewable, with the majority generated from hydropower. Hydropower has both a minimal carbon footprint and a marginal ecological impact. The Norwegian government vigorously promotes the utilization of power from renewable energy sources for new branches of industry, for example, in climate-neutral data centers. Tax breaks, low energy prices, and stable political conditions make Norway an ideal location for green IT.

Volkswagen says it was the first automaker to commit to the Paris climate agreement back in 2018. By 2050, the company aims to be net CO_2 neutral. In its core business, the VW Group intends to achieve a 30 per cent CO_2 reduction by 2030. Today, more than 90 per cent of Volkswagen's external power supply for its European manufacturing sites already comes from renewable energies.

1 Define the term 'data center'.
2 Explain two advantages to VW of locating its data centers at Green Mountain in Norway.
3 Discuss possible reasons why a vehicle company, such as VW, needs huge amounts of computing power and data storage for its business operations.

▲ Companies that provide cloud computing services own and maintain server rooms all over the world

Cloud computing

Cloud computing is the delivery of IT resources over the Internet. It is often pay-as-you-go, meaning that business don't have to buy, own and maintain physical data centers and servers. Instead, they can access a range of computing services, like storage, and databases from cloud providers such as Amazon Web Services (AWS).

Organizations from a variety of industries and of different sizes are finding that the cloud has a wide range of uses. A few of these include virtual desktops, software development, disaster recovery, data backup and testing, big data analytics, and customer-facing web applications.

Video game makers have grown exponentially through cloud computing; they use the cloud to deliver online games to millions of players around the world.

Advantages of cloud computing include the following:

Agility

Easy access to a broad range of technologies means businesses can innovate faster and build things that may previously have been unachievable.

Lower costs

The cloud allows businesses to trade fixed costs (such as data centers and physical servers) for variable costs, and only pay for IT services as they consume them. The variable costs are much lower due to economies of scale compared to what a business would have to pay on their own.

Near-instant global release

Businesses can expand to new geographic regions and deploy globally in minutes. AWS has infrastructure all over the world; so businesses can deploy applications, as an example, in many physical locations with just a few clicks.

Virtual reality

Virtual reality (VR) is a computer-generated virtual world that utilizes three-dimensional (3D) imagery and interactivity to create a realistic, immersive environment for the user.

The experience typically involves a headset and other interactive devices such as gloves or handheld controllers to allow users to interact with the virtual environment. Increasingly affordable headsets are bringing VR closer to mainstream usage. Combined with the ability to meet with users instantly from anywhere across the globe, this trend could eventually see typical business processes shifting to a VR environment, making it a powerful tool in business.

IB learner profile

Open-minded

Being open-minded is a willingness to try new things, or to consider new ideas. In which aspects of your everyday life might there be an opportunity for virtual reality to play a bigger role?

Uses of VR in business

VR offers great potential in business particularly within training. The ability to create true-to-life immersive scenarios is a key advantage. VR has strong applications particularly within healthcare. With the ability to reset scenarios and correct mistakes, VR provides surgeons with the opportunity to practice complex procedures.

VR can also be utilized within manufacturing industries such as food production with the ability to simulate and test each stage of the process or the capabilities of different machinery. VR enables businesses to understand how performance could be maximised through experimenting with various conditions and parameters, in a less expensive way than conducting tests in real life. This is also a much safer and quicker alternative.

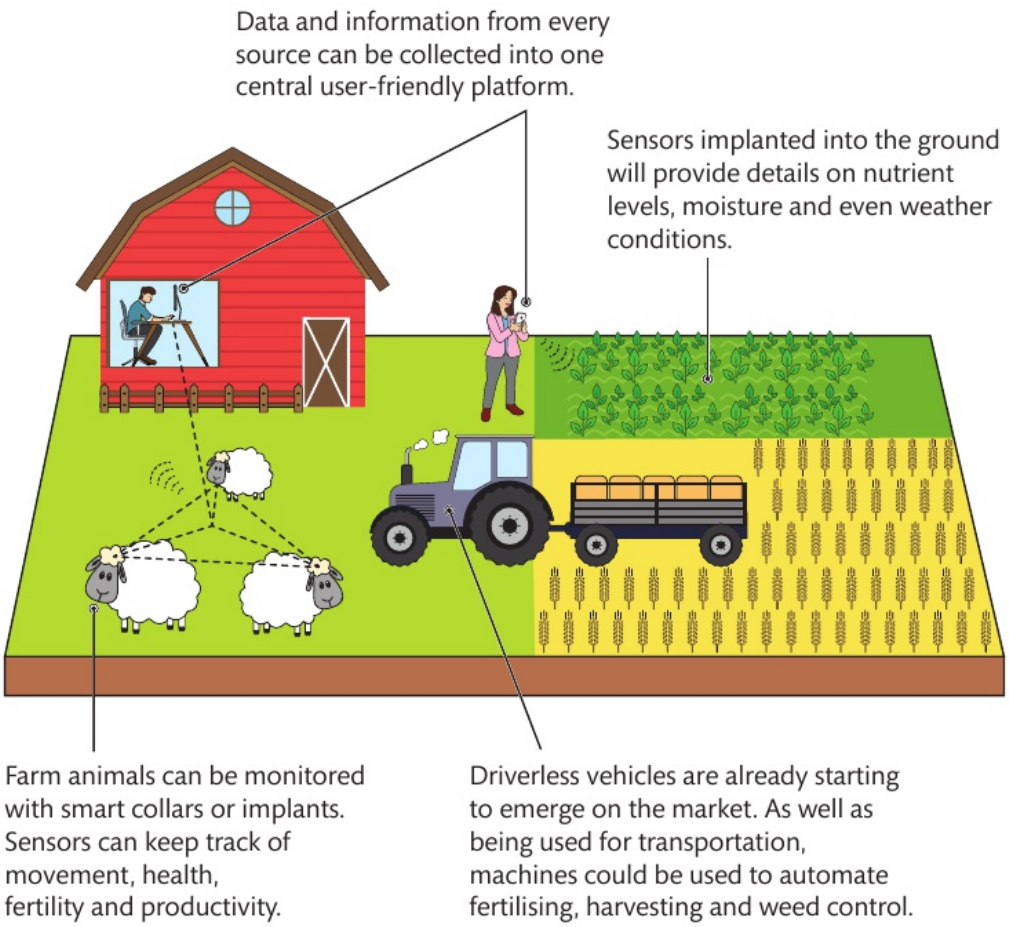
The opportunities in marketing and customer service are also significant. VR provides the opportunity to create an immersive experience for the launch and exhibition of products and services. Customers could attend launch events of new products or test drive a new car in a virtual scenario, all whilst remaining in their own home. Instead of interacting with chatbots, customers could contact sales assistants in virtual environments which could more closely match the experience of talking with a real person.

Despite these advantages, it is likely that customers will still want to trial and evaluate physical products, particularly if they are large or expensive. Using VR may begin to form a key part of marketing plans, but in the near future it is unlikely to become a direct replacement for the real experience.

The internet of things

The internet of things (IoT) describes the network of physical objects – 'things' – that are embedded with sensors, software, and other technologies for the purpose of connecting and exchanging data with other devices and systems over the internet. These devices range from ordinary household objects to sophisticated industrial tools. The number of IoT connected devices is predicted to grow to over 22 billion by 2025.

The agricultural sector is embracing this technology to increase productivity and yield levels. Figure 5.21 shows the ways in which a connected farm uses IoT.



▲

Figure 5.21 The connected farm

Research and inquiry

The IoT is reinventing the automobile by enabling connected cars. With IoT, car owners can operate their cars remotely by, for example, preheating the car before the driver gets in it or by summoning it by phone. Given the IoT's ability to enable device-to-device communication, cars will soon be able to book their own service appointments.

The connected car allows car manufacturers or dealers to turn the car ownership model on its head. Historically, the manufacturer's relationship with the car ended once it was sent to the dealer. With connected cars, automobile makers or dealers can have a continuous relationship with their customers.

Conduct your own research into connected cars and produce a short report detailing how IoT is changing the ownership experience for car consumers.

Artificial intelligence

As of 2021, 86 per cent of CEOs have said that artificial intelligence (AI) in business is a mainstay in their offices. Adopting it will likely mean the difference between thriving and surviving. Three key domains exist where AI is utilized in business.

- **Automation**: Manually repetitive tasks are almost obsolete. Employees can now help to build the business by being able to focus on tasks that add real value.

- **Data analytics**: Analytics allow organizations to mine data to gain insights into repetitive patterns for better business outcomes.
- **Natural language processing (NLP)**: NLP helps search engines to be more intuitive and makes chatbots, which are found on most sales sites, more insightful and customer centric.

These various aspects have been adopted differently across different business contexts.

Sales and customer service

A report by *Harvard Business Review* says that companies using AI for sales can grow leads by more than 50 per cent, reduce call time by 60–70 per cent, and costs by 40–60 per cent.

- **Demand forecasting**: AI can look at when and where client demand for products is set to increase and determine ways to take advantage of those trends to boost sales.
- **Lead scoring**: AI uses historical data to help businesses identify and prioritize leads and convert more of those hot leads into sales.
- **Sales rep chat/email bot**: Chatbots are said to improve sales by up to 67 per cent. They can start the conversation by tailoring a message, making it simple for customers to interact right away or come back later.

Finance

- **Personal finance**: AI is helping institutions offer financial guidance via chatbots for improved wealth management solutions.
- **Consumer finance**: AI helps banks reduce fraud as it can monitor transactions and target irregularities in them to determine if they are legitimate or fraudulent.
- **Corporate finance**: AI can help lower loan risk by being able to assist underwriters to better predict possible defaulters and the negative financial implications.

Supply chain management

A 2021 McKinsey report stated that SCM solutions based on AI will assist organizations in their desire to tackle the challenges of market volatility and the environmental impact of supply chains.

Digital marketing

- **Online advertising**: AI can determine which digital platform would be best suited for marketing the business.
- **Personalized user experience**: AI makes it possible to understand the likes and dislikes, behavior patterns, and activities of millions of people every day to improve the user experience and create improved and more profitable customer relationships.
- **AI-powered chatbots**: Chatbots can answer multiple customer queries simultaneously and that answer can be personalized to encourage users to buy right there and then.
- **Predictive analysis**: AI can predict a customer's future actions by studying their past behavior and characteristics, allowing marketers to use the data to create campaigns that attract more customers and convert them into paying customers.

- **Content generation**: Through processing several terabytes (TB) of data and analyzing thousands of pieces of content, AI can create content that looks like a human wrote it.
- **Email marketing campaigns**: AI can help a business tailor its message using behavior and preferences as a reference point.

Project management

- **Automate repetitive tasks**: Gartner, a tech consulting and research company based in the U.S., predicted that, in 2021, AI augmentation generated $2.9 trillion in business value and recovered 6.2 billion hours of worker productivity.
- **Use historical data**: AI can mine historical data and use it to perform calculations and predictions and make the results more accurate and effective.
- **Perform risk modeling and analysis**: If things change suddenly, AI can demonstrate the possible impact using data on how those similar changes impacted previous projects.
- **Increase decision-making speed**: AI is programmed to follow only specific, rule-based workflows. This means anything standing in the way of 'on-time delivery' of a project can be quickly addressed.
- **Optimize resource scheduling and allocation**: Figuring out who is available to work on a project based on their current capacity can be time-consuming. AI can now perform those tasks on its own.

Product design and development

- **24/7 development**: Robots don't need to take breaks, which facilitates the rapid expansion of production capabilities to meet worldwide evolving customer demands.
- **Cost reduction**: Leveraging AI technologies can help organizations allocate their resources more efficiently, make better forecasts, and reduce inventory costs.
- **Quick decision-making**: Machines can collect and process structured and unstructured data in a fraction of the time it would take humans to perform the same task. The data gathered can help determine consumer activity, allowing companies to anticipate future needs and make quicker production decisions.

Human resources

- **Talent acquisition and development**: AI algorithms can screen applicants, maintain databases, and arrange interviews without requiring human input.
- **Orientation of new recruits**: AI can customize procedures to keep track of important contact details and processes, and other tasks like verification of legal documents.
- **Training recruits**: Using relevant data from a job description, AI can assign appropriate training to the employee.
- **Enhancing employee experience**: AI can be implemented across the employee lifecycle, from recruitment to HR service delivery and career pathing, resulting in a personalized employee experience.

IB learner profile

Knowledgeable

We have considered how artificial intelligence is aiding businesses across a range of sectors and functional areas. Now build up a picture of how the use of artificial intelligence is enriching the consumer experience.

Create your own information sheet on this topic that develops your understanding across a broad range of consumer experiences.

Big data

Big data refers to large, diverse data sets that, when analyzed computationally, can reveal patterns, trends, and associations, especially relating to human behavior

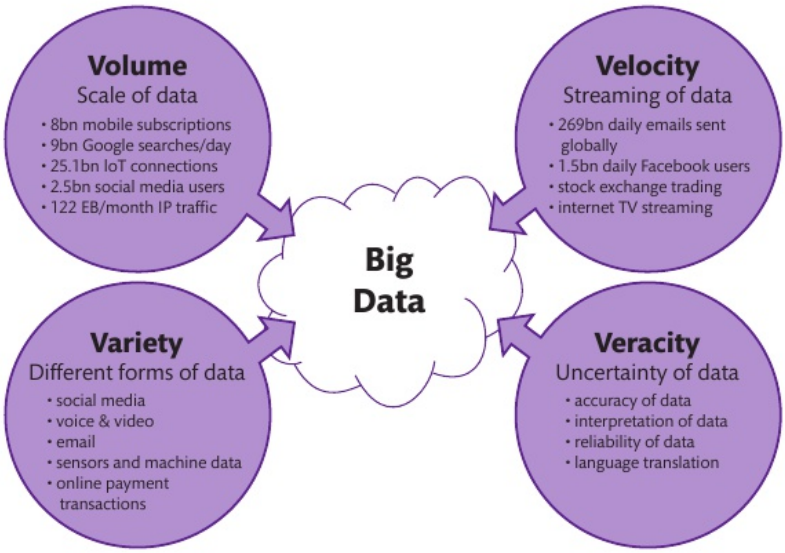


Figure 5.22 The four dimensions of big data

and interactions. These trends and patterns identified can then be leveraged by businesses to inform business decisions. The four dimensions of big data are presented in Figure 5.22.

Volume: There is a lot of it.

Velocity: It needs to be analyzed quickly.

Variety: It comes in many different formats.

Veracity: It can be difficult to understand.

TOK To what extent is big data changing what it means to 'know your customers'?

Customer loyalty programs

According to Shopify, more than 90 per cent of companies have embraced some type of customer loyalty program. Loyalty programs have become an effective tactic for increasing revenue. The same study by Shopify identified that as many as 84 per cent of consumers are prepared to stick with a brand that offers a loyalty program, with 66 per cent saying their spending behavior changes with the ability to earn rewards.

The cost to businesses of retaining customers who repeat their purchases is a lot less than trying to acquire new customers. This is one of the main drivers for brands to invest in loyalty and rewards programs.

Most customer loyalty programs fall into one of four categories: points-based, tiered, paid, and value-based programs.

Points-based loyalty programs

This type of loyalty program is one of the most common. It allows customers to build up points with every purchase, which can then be redeemed for free gifts, cashback toward purchases, along with a variety of other perks. In addition, customers can earn points from engagement on social media, birthdays, leaving reviews, or through gamification.

i Gamification is the strategy by which companies add typical elements of game playing (i.e., point scoring, competition, etc.) to their systems and services in an attempt to engage and stimulate users.

Some service companies, like hairdressers and coffee shops, use loyalty stamp cards

The UK supermarket chain, Tesco, has been operating its Tesco Clubcard scheme since 1995. Customers collect points on food, fuel, fashion, and more, in store and online. Points can then be converted into vouchers to spend in store or with partner companies.

Tiered loyalty programs

Tiered customer loyalty programs allow customers access to different benefits depending on their rank. The business may rank membership based on the amount that a customer spends or the frequency of use. This provides customers with an incentive: the higher their tier, the more exclusive and better rewards they'll receive.

Emirates Airlines operates a Skywards rewards program. Customers build up their tier miles with every flight they take, moving through the levels from Blue to Silver, to Gold, and finally to Platinum. Rewards include priority check-in, airport lounge access, priority baggage delivery, and chauffeur service to and from the airport, among other things.

Paid loyalty programs

Paid loyalty programs give customers immediate and ongoing benefits for a participation fee. These fees may be one-off or paid on a recurring basis.

Amazon Prime is an example of a paid loyalty program. A monthly fee provides customers with access to free delivery, Amazon music, and Amazon's Prime Video streaming service. Amazon Prime customers are the first to get access to sales events, special offers, and extended discounts.

Value-based loyalty programs

The idea behind a value-based loyalty program is to connect with customers on a deeper level. It involves donating a percentage of purchase costs to charity or welfare programs.

Advantages and disadvantages of loyalty programs

It is important for a business to be aware that implementing a customer loyalty program comes with both advantages and disadvantages to consider.

Advantages

- With a carefully planned loyalty rewards program, a business will encourage return customers.
- Loyalty programs reward the most valued customers with what they love while also having a platform to promote new items.
- The business gains valuable insight into their customers' behavior and has a direct platform to communicate with those customers.

i

In 1793, a merchant in the USA started giving out copper tokens, which could be collected then exchanged for items in the store, the first loyalty program. In 1872, the Grand Union Tea Company started to give tickets to customers. For every four tickets collected, the customer could exchange them for one pound of tea.

From the 1930s until the late 1980s, S&H Green Stamps were trading stamps in the USA. Customers could exchange the stamps for products from their rewards catalogue. In 1972, United Airlines launched the first frequent-flyer program.

At the moment, Starbucks® Rewards is a popular loyalty program. In 2022, there were a reported 28.7 million active Starbucks® Rewards members, which equates to a 16% year-over-year growth in its loyalty program since its launch.

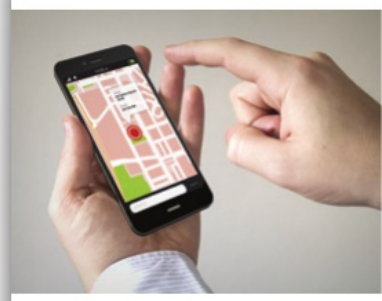
Disadvantages

- Good rewards cost the business money and time.
- Managing data can be difficult or costly.
- The business may negatively impact or anger the most valued customers if there is a need to end the program.

The use of data to manage and monitor employees

Digital technology is now as common as a pen in the modern-day workplace and has, in many business environments, completely replaced it. However, despite the benefits that technology and digitization bring to the workplace, unions and academics are claiming that 'digital Taylorism' is taking root and threatening the fundamental benefits of the ongoing 'digital transformation'.

'Digital Taylorism' refers to the vast array of digital tools being used to oversee workers and the business operations they are working in. Its aim is to focus on process improvement, by monitoring and collecting as much data as possible, to better inform decisions relating to specific goals and productivity.



Innovations in technology have made it increasingly easy for managers to quickly and cheaply collect, process, evaluate, and act on large amounts of data. With big data, Taylorism has spread across industries and business functions.

The problems caused by digital Taylorism

Employers in the logistics industry use extensive and intensive data-driven systems that control fleets and employees. Sensors are used to track location, timing, driving, and other aspects of performance. Complex algorithms, analytics software, and other management system components generate intelligence that is then used to instruct truck drivers. A study by Cornell University concluded these intense management systems reduce workers' autonomy and can ultimately lead to sleep deprivation and speeding.

Technology allows sophisticated performance management of employees. Businesses, both large and small, use digital tools to create continuous streams of data for employee appraisal. Constant monitoring and the addition of peer review to supervisor feedback can create overly competitive, and sometimes hostile, dynamics between employees.

As discussed in section 2.4, in Taylor's era (the late 19th and early 20th century), workers were aware when they were being observed by management with stopwatches and notebooks. In today's business environment, surveillance is increasingly hidden. A cashier at a fast food franchise who makes sales using a virtual cash register app on their tablet may be unaware of the programs running in the background, logging keystrokes, recording audio or video, transmitting data, and continuously rating performance. Employees may know that their work smartphones monitor their calls, texts, and internet browsing, but they may not know that the device also communicates geolocation data, allowing tracking of their movement all day, every day.

The use of data mining to inform decision-making

Data mining has emerged in response to the need for organizations to find a way to take advantage of the large amount of data stored in databases, from which traditional analysis methods are unable to extract useful information. Data mining works

through technology based on algorithms that convert large amounts of raw data into meaningful information and new knowledge that can be used to inform decision-making. It is used for a variety of purposes, such as to improve customer experience, increase profitability, and reduce risks.

Advantages of data mining

- **Gathering of reliable information**: It can be used in marketing research to determine what products customers might be interested in and then make those products available to them.
- **Identification of trends**: Through the identification of correlations between products, consumers, suppliers, and other aspects of the business, the organization can highlight trends that might not have been identified before, or at least help it to make more accurate predictions.
- **Aids decision-making**: As more data is collected, the accuracy of data mining becomes greater, which helps to improve decision-making.
- **Detection of risks and fraud**: Data mining can help identify risks and fraud that may not be detectable through traditional means of data analysis.
- **Speed of analyzing large data**: Data mining can be used to analyze data that was previously too difficult to obtain due to the sheer volume or type of information.

Disadvantages of data mining

- **Data mining tools are complex and require training to use**: Data analytics is a complicated process and often requires people with training to use the tools. The barrier to entry for data analytics can discourage small businesses from using this technology.
- **Data mining techniques are fallible**: Data mining doesn't always provide accurate information. There are many ways to analyze data and some are more accurate than others. There may be information missing from a database that is needed to create a complete analysis.
- **Rising privacy concerns**: This is a major disadvantage to data mining. Traditionally, companies would only share personal data with other companies to provide a service. Now, many people are worried that their personal information is being sold to third parties without their knowledge.
- **Data mining requires large databases**: Data mining requires large databases to be effective. For example, if an email list contains 100 people, the data from those emails will not be enough for data mining. If the list contains 100,000 people, then there will be more information available and data mining will be more successful.
- **Expensive**: Data mining can be a very expensive process. For example, companies must hire additional employees and technology specialists to ensure that the data mining is done correctly. Many businesses must invest in advanced data mining software, which can also be expensive.

The ethics of management information systems

Several ethical issues arise from MIS and technological innovation.

Misuse of personal information

How do businesses use personal information? Everyone's digital footprint continues to grow. As people browse websites, make online purchases, post on social media, or submit information and preferences via online forms, personal information is being given and collected. Businesses use this information to hyper-personalize marketing and product offerings. This raises the ethical dilemma of whether such data gathering is violating consumers' right to privacy. Often, consumers are required to indicate that they have read the terms and conditions of the website before submitting any data. These terms and conditions should explain how the business plans to use the data provided.

Misinformation and deep fakes

In the 21st century, we can keep up with real-time events and news as it breaks. Celebrities and political figures share opinions on social media without checking the facts, and those opinions can be further spread whether accurate or not. Online information does not always go through the thorough quality control process used for published newspapers and books. A business could use and accept this information when making decisions.

Lack of oversight and acceptance of responsibility

Organizations may operate a blend of their own and third-party technologies. This may lead to some confusion over where the responsibility lies for governance, use of big data, cybersecurity, and personal consumer information.

Use of AI

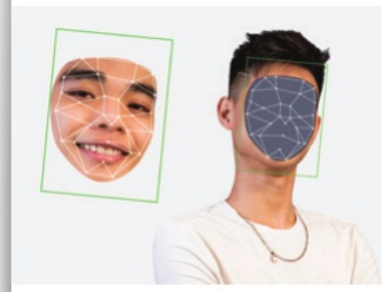
The use of AI raises ethical questions when it comes to the potential for it to replace jobs, the use of facial recognition, contact tracing, and location tracking, along with the potential for bias to be built in by programmers.

Autonomous technology

Self-driving cars and drone deliveries bring concerns with allowing programmed technology to operate without oversight. There may be too much trust placed in the technology by consumers without fully understanding it.

Practice questions

1 Identify two types of management information system (MIS) a business may use. (2 marks)
2 Describe what is meant by 'data analytics'. (2 marks)
3 Suggest two ways in which artificial intelligence might be utilized in business. (4 marks)
4 Choose two businesses that operate a loyalty program. Compare and contrast the loyalty programs for both the customers and the businesses involved. (10 marks)



Conceptual understanding: Ethics

In 2021, at UNESCO's General Conference, the 193 Member States adopted the Recommendation on the Ethics of Artificial Intelligence. This aims to protect and promote human rights and human dignity, and to be an ethical guide to building respect for the rule of law in the digital world.

TOK

What are the moral implications of possessing large amounts of information about consumer behavior?

Summary

In this unit, you have learned:

- Operations management links to other functional areas of a business.
- It is important to select the right method of production to meet the needs of the business.
- Adopting lean production practices can help to eliminate waste and improve efficiency in how a business operates.
- There are reasons for and impacts of location and relocation decisions for businesses on a local, national, and international level.
- Break-even analysis can help decision making.
- Production planning tools and methods can aid a business.
- Business can take different approaches to crisis management and contingency planning.
- Research and development is important for a business.
- Management information systems play an integral role in a modern business operation.

Introduction

This section will focus on the assessments for the IBDP business management course. This includes overall tips for success, and explanations and specific guidance for the:

- External Assessment examination papers
- Internal Assessment business research project
- Extended Essay in business management.

Much of the information in this section comes from the IBDP Subject Guide and teacher support materials. It is organized and presented in a student-friendly manner, and includes additional tips and explanations where appropriate.

Overall success in business management

While a strong foundational knowledge of business terminology, principles, and theory is required for success in business management, the sheer quantity of content can become overwhelming if you try to memorize this content as disparate facts.

Successful IBDP students take an open, inquisitive, and holistic approach to the subject, focusing on conceptual understandings and connections within the context of business case studies and real-life organizations. Some examples include the following:

- Creating visuals and mind maps to recognize patterns, make connections, and stimulate higher level and synergistic thinking.
- Using the key concepts of change, ethics, creativity, and sustainability to make connections across topics.
- Applying business knowledge to specific business organizations.
- Analyzing and evaluating real-life business scenarios, decisions, and issues.

The business management aims (page 17 of the Business Management Guide) include the following:

- develop as confident, creative, and compassionate business leaders, entrepreneurs, social entrepreneurs, and as change agents
- foster an informed understanding of ethical and sustainable business practices
- explore the connections between individuals, businesses, and society
- engage with decision-making as a process and a skill.

The assessment objectives (page 18 of the Business Management Guide) include the following:

- Demonstrate knowledge and understanding
- Application and analysis
- Synthesis and evaluation
- Use and application of appropriate skills.

Keeping these aims and objectives in mind is the first key to success when preparing for and completing your IBDP business management assessments.

External Assessment

Introduction

For the External Assessment examinations, standard level (SL) students will complete two examination papers, and higher level (HL) students will complete three papers. Each paper will cover all four assessment objectives.

SL and HL students both complete Paper 1, which is based on a case study. The structure of Paper 2 is the same for SL and HL students. However, the questions may differ. Paper 3 is for HL students only.

Assessment objectives

There are four assessment objectives for this course. These are numbered and referred to as follows:

- Assessment objective 1 (AO1): Knowledge and understanding
- Assessment objective 2 (AO2): Application and analysis
- Assessment objective 3 (AO3): Synthesis and evaluation
- Assessment objective 4 (AO4): Use and application of appropriate skills

Note the progression of thinking skills from AO1 to AO3. AO1 starts with lower level thinking skills, requiring you to know, remember, and recall basic business terminology and principles. Although basic subject knowledge is essential, it will not get you very far in this course. To reach the top levels, you need to demonstrate higher level thinking skills by applying, analyzing, synthesizing, and evaluating.

The assessment objectives specify the level of understanding required for each syllabus topic. Very few topics require an AO1 level of understanding only. Most topics require you to be able to apply, explain, and analyze the topic (AO2), and many topics require you to go further (AO3 and AO4).

Command terms

There are command terms associated with each assessment objective. You should look at the command term used in an examination question in order to determine the level required in their response. The table shows the command terms for each assessment objective, with the most commonly used terms in bold.

AO level	Command term	Definition (from the subject guide)
AO1	define	Give the precise meaning of a word, phrase, concept or physical quantity.
AO1	describe	Give a detailed account.
AO1	state	Give a specific name, value or other brief answer without explanation or calculation.
AO2	analyse	Break down in order to bring out the essential elements or structure.
AO2	comment	Give a judgment based on a given statement or result of a calculation.

AO level	Command term	Definition (from the subject guide)
AO2	distinguish	Make clear the differences between two or more concepts or items.
AO2	**explain**	**Give a detailed account including reasons or causes.**
AO3	compare and contrast	Give an account of similarities and differences between two (or more) items or situations, referring to both (all) of them throughout.
AO3	**discuss**	**Offer a considered and balanced review that includes a range of arguments, factors or hypotheses. Opinions or conclusions should be presented clearly and supported by appropriate evidence.**
AO3	**evaluate**	**Make an appraisal by weighing up the strengths and limitations.**
AO3	examine	Consider an argument or concept in a way that uncovers the assumptions and interrelationships of the issue.
AO3	justify	Give valid reasons or evidence to support an answer or conclusion.
AO3	recommend	Present an advisable course of action with appropriate supporting evidence/reason in relation to a given situation, problem or issue.
AO3	to what extent	Consider the merits or otherwise of an argument or concept. Opinions and conclusions should be presented clearly and supported with appropriate evidence and sound argument.
AO4	**calculate**	**Obtain a numerical answer showing the relevant stages in the working.**
AO4	draw	Represent by means of a labelled, accurate diagram or graph, using a pencil. A ruler (straight edge) should be used for straight lines. Diagrams should be drawn to scale. Graphs should have points correctly plotted (if appropriate) and joined in a straight line or smooth curve.

Tips specific to AO1 questions:

- AO1 questions are usually worth one or two marks. They can be answered successfully in one or two sentences.
- Questions should be answered fully, but you should not write more than the demands of the command term. The AO1 command term 'state', for example, requires no explanation or description.

Tips specific to AO2 questions:

- AO2 questions are usually worth more than two marks, and usually include the name of an organization in the question.

- For AO2 command term questions, the response must be applied to the stimulus, which is the case study. Responses without appropriate application are typically limited to 50% of the potential marks.
- AO2 questions can usually be answered with one or two detailed paragraphs.

Tips specific to AO3 questions:

- AO3 questions are usually worth ten marks.
- AO3 questions usually require multiple, detailed paragraphs in order to be answered successfully.
- You should take some time to organize your thoughts before you start writing (for example, write a brief outline). This can actually save you time.
- Some questions will ask you to evaluate one option, or to choose between two options. If asked to evaluate one option, you should provide at least two arguments for the option and two arguments against. If asked to choose between two options, you should provide at least one argument for and one argument against each option.
- In addition, you should do the following:
  - Provide more arguments, where appropriate
  - Apply the response to the stimulus
  - Use appropriate business terminology
  - Provide a conclusion that is more than a simple restatement of points already made, and which should address potential future action or further implications, or consideration of short-/long-term impacts of each option, or consideration of impact on stakeholders affected
  - Use appropriate paragraphing; if more than one point is made in a paragraph, a topic sentence would be the first sentence of the paragraph and should frame the paragraph so that all points within it fit, for example, 'Option one has many advantages'.
- To meet the highest markband for the 10-mark response, you should show the following:
  - Clear focus on addressing the demands of the question
  - Relevant and accurate use of business management tools and theories
  - Relevant information from the stimulus material, integrated effectively to support the argument
  - Substantiated and balanced arguments, with acknowledgment of the limitation(s) of the stimulus material.
- Some ways to provide a balanced argument include the following:
  - Short-term versus long-term implications
  - The impact on different stakeholders
  - Qualitative and quantitative arguments
  - Benefits and limitations (advantages and disadvantages).

Tips specific to AO4 questions:

- Draw diagrams and tables with a dark pencil and use a ruler where required. Label diagrams and tables fully, providing titles where appropriate (for example, for a statement of financial position or statement of profit or loss).
- Show all working for calculate questions to ensure full marks. Partial marks may be earned even if the answer is wrong.

General tips:

- You should answer the question asked and not the question you would like to have been asked.
- Avoid irrelevance. Do not repeat old essays or sets of notes, no matter how well they have been memorized.
- Do not repeat the question or repeat long passages from the stimulus material.
- Qualify statements, where appropriate (for example, with 'usually', 'probably', or 'perhaps').
- Avoid colloquial or emotive language. Write like a business analyst.
- Avoid numbered lists or bullet points. Answer with proper sentences and paragraphs. This is especially true for AO2 and AO3 questions where arguments need to be fully explained.
- Read the question again once the answer is written. Sometimes, one line needs to be added to present a clear answer to the question.
- Attempt all required questions. Examiners follow the principle of positive marking, which means they focus on what students say that is correct, not what is incorrect. Even if you are unsure, any attempt might have sufficient evidence of understanding to earn some marks.
- You should allocate approximately 2 minutes per mark.

More specific guidance for each section of each paper is provided in the following sections.

Overview of Paper 1

A summary of Paper 1 is shown in the table.

	Standard Level (SL)	Higher Level (HL)
Time allowed	1 hour 30 minutes	
Format	There are two sections for Paper 1 (Section A and Section B) based on the pre-released statement and unseen case study. All structured questions must be answered in Section A. Students answer one extended response question from a choice of two in Section B. Most questions will be qualitative, although some minor calculations could be part of the assessment.	
Marks	Section A is worth a total of 20 marks and Section B is worth a total of 10 marks. The total maximum marks for Paper 1 is 30 marks.	
Weighting	35%	25%
Topics	SL content and toolkit items from the syllabus, and contemporary business topics from the pre-released statement. (HL extension material and topics will NOT be included in Paper 1.)	

Paper 1 is the same for SL and HL, but the weighting differs. This is because HL students complete an additional External Assessment in Paper 3.

For Paper 1, a pre-released statement will be provided three months before the examination, which includes some contemporary business topics and the first 200 words of the case study.

How to prepare for Paper 1

The pre-released statement contains the following:

- A list of contemporary business topics related to the Paper 1 case study that you will want to have some basic familiarity with. In addition, a list of additional terminology that you will want to know may also be provided.
- The first 200 words (approximately) of the case study. Remember, the entire case study of approximately 800 to 1,000 words will be provided along with the questions in your examination.

In addition to reading and re-reading the pre-released statement, here are a few more ideas to help you prepare for Paper 1. Note that your ability to complete these activities will depend on the type of information provided in the pre-released statement.

- **Expand business vocabulary**: Scan the pre-released statement and identify any important business terms. This can include terms used to describe contemporary business topics and any terms from the IB syllabus. Create flashcards or vocabulary games to learn and review business terminology. English learners can translate key words into their first language.
- **Make it visual**: Create mind maps, charts, or diagrams to make sense of the information being provided and to make important connections.
- **Create a timeline of events**: List the events provided in the first 200 words of the case study in chronological order and include a date, if it is provided.
- **Conduct a stakeholder analysis**: Getting to know a story (i.e., a case study) requires knowing the characters involved. Conducting a stakeholder analysis will be an excellent way to develop a more in-depth understanding of the case study and an excellent way to practice applying business theory. In addition, when asked to analyze and evaluate business decisions, it is recommended that you consider multiple viewpoints. Place the person, and groups of people involved in the case study, into the correct stakeholder category. Explain the 'interests' of each stakeholder. Stakeholder categories include managers, employees, shareholders, customers, suppliers, competitors, government, and special interest groups.
- **Prepare a situational analysis**: In order to make good business decisions, and implement effective business strategies, managers must understand the situation or environment of their business. Paper 1 will most likely ask you to evaluate a business decision or strategy. In order to do this effectively, you must understand the situation or environment of the businesses involved in the Paper 1 case study. To accomplish this task, it is advised to prepare a SWOT and/or a STEEPLE analysis. Note that since only the first 200 words are given ahead of time, only a partial analysis may be possible. In addition, additional research may need to be conducted to find relevant external factors.
- **Explain the marketing mix**: The first four Ps of the marketing mix (product, price, promotion, and place) are applicable to all businesses. The three additional elements of the marketing mix (people, process, and physical evidence) are most applicable to organizations involved in the service industry. Explain as many of the marketing mix elements as possible for the Paper 1 case study.
- **Apply other business tools, theories and techniques**: Although only the first 200 words have been provided, you may be able to apply additional business tools,

theories and techniques to the information provided in the pre-release statement. Some questions to consider include:

- What would a business plan for the Paper 1 case study look like?
- Are growth strategies being considered?
- How could Ansoff's matrix be used to evaluate these growth strategies?
- Does the organization offer multiple products/services?
- How could the Boston Consulting Group matrix be used to analyze these products/services?
- Does the organization utilize any circular business models?

Tips for success for Paper 1

Paper 1 contains two sections. Section A includes structured questions from all units and uses AO1, AO2, and AO4 command terms. You must answer all questions in Section A. In Section B, you need to answer one out of two AO3 extended response questions.

You need to manage your time. This is a skill that can be developed. You should make judgments about time allocation based on the number of marks, the command term, and the space allotted. If you are struggling with a question, you should leave it and go back to it only after you have completed the rest of the questions. You need to ensure you have enough time to complete the 10-mark extended response question.

You should spend approximately 50 minutes on Section A and approximately 35 minutes on Section B, leaving 5 minutes for checking answers and making changes. Although Section A is worth 20 marks and Section B is worth 10 marks, the 10-mark question in Section B needs more thought and planning than other questions.

In Section B, you should select one question and answer it fully. You should avoid answering more than one question. This usually results in shallow responses to all questions as time is not well spent. Examiners mark all responses and submit the one with the highest mark to include in the final result.

Paper 1 gives you an opportunity to develop your confidence and gain momentum for the rest of your examinations. The pre-released statement will give you some idea of what the paper is about, and the use of command terms will make expectations clear.

Overview of Paper 2

A summary of Paper 2 is shown in the table.

	Standard Level (SL)	Higher Level (HL)
Time allowed	1 hour 30 minutes	1 hour 45 minutes
Format	There are two sections for Paper 2 (Section A and Section B) based on unseen stimulus with a quantitative focus. All structured questions must be answered in Section A. Section B includes structured questions and extended response questions. Students answer one question from a choice of two in Section B.	

Marks	Section A is worth a total of 20 marks and Section B is worth a total of 20 marks. The total maximum marks for SL students for Paper 2 is 40 marks.	Section A is worth a total of 30 marks and Section B is worth a total of 20 marks. The total maximum marks for HL students for Paper 2 is 50 marks.
Weighting	35%	30%
Topics	Content and toolkit items from the SL syllabus.	Content and toolkit items from the syllabus including HL extension material.

The format of Paper 2 is similar for SL and HL students, and the questions may be the same or different. HL students will answer more questions in Section A, and the Paper 2 topics will includes HL extension material.

How to prepare for Paper 2

You will not be given pre-released information on Paper 2. You should prepare for Paper 2 by doing the following:

- Ensuring you have a comprehensive understanding of the terms, theories, tools, and techniques outlined in the syllabus with a quantitative focus
- Applying business knowledge to specific business organizations
- Developing higher level thinking skills such as analysis and evaluation.

Most of the quantitative aspects of the course are in Unit 3 Finance and accounts. However, additional quantitative topics can be found in other parts of the syllabus including:

- HL Labor turnover
- Salaries and wages
- Market share and growth
- HL Sales forecasting
- Break-even analysis
- Toolkit items
  - Descriptive statistics
  - HL Contribution
  - HL Critical path analysis
  - HL Simple linear regression.

The formula sheet containing formulas for ratio analysis, investment appraisal methods, capacity utilization (HL), and productivity rate (HL) will be provided. However, many formulas from the course will not be provided. These include the presentation of financial statements, such as statements of profit or loss, statements of financial position, cash flow forecasts, and budgets. You should practice quantitative questions throughout the course, in preparation for Paper 2.

Tips for success for Paper 2

Paper 2 contains two sections. Section A includes structured questions from all units, and uses AO1, AO2, and AO4 command terms. You must answer all questions

in Section A. In Section B, you need to answer one out of two questions. Section B includes AO1, AO2, and AO4 questions, and may also include an extended response AO3 question.

Whenever answering quantitative questions requiring calculations, you should include any working. Sometimes, showing working is required for full marks (the examination paper will indicate this). Examiners apply the 'own figure rule', which can only be applied when workings are shown.

SL students should spend approximately 40 minutes on Section A and approximately 45 minutes on Section B, leaving 5 minutes for checking answers and making changes. Although Section A and Section B are each worth 20 marks, the 10-mark question in Section B needs more thought and planning than other questions.

HL students should spend approximately 55 minutes on Section A and approximately 45 minutes on Section B, leaving 5 minutes for checking answers and making changes. The 10-mark question in Section B needs more thought and planning than other questions.

In Section B, you should select one question and answer it fully. You should avoid answering more than one question. This usually results in shallow responses to all questions as time is not well spent. Examiners mark all responses and submit the one with the highest mark to include in the final result.

The Business Management Guide contains a business management toolkit. The tools can be used in Section B to enhance responses to AO3 questions. Some of the tools are for SL and HL students, while others are for HL students only.

Overview of Paper 3

Paper 3 is for HL students only. A summary of Paper 3 is shown in the table.

	Standard Level (SL)	Higher Level (HL)
Time allowed	Not applicable	1 hour 15 minutes
Format		Students will answer three questions based on unseen stimulus material of a fictitious social enterprise.
Marks		Question 1 is worth 2 marks, question 2 is worth 6 marks, and question 3 is worth 17 marks. The total maximum marks for Paper 3 is 25 marks.
Weighting		25%
Topics		Content and toolkit items from the syllabus including HL extension material.

How to prepare for Paper 3

Paper 3 assesses important business management skills such as strategic analysis and evaluation within the context of a social enterprise. You should ensure you

have a full understanding of the idea of a social enterprise, its characteristics, and its variations.

Investigating social enterprises operating locally, nationally, and globally can provide you with important insight into the different ways social enterprises can operate. Connections can be made to the triple bottom line framework (people, planet, and profit) and the 17 sustainable development goals (SDGs) adopted by the United Nations.

The key concepts of change, ethics, sustainability, and creativity can be applied to social enterprises. Given the nature of social enterprise activity and its impact, class discussions could be held to consider ethical issues, creativity, and sustainability challenges and opportunities faced by social enterprises. You could research how social enterprises respond to changes inside and outside the organization due to changes in the external environment.

Paper 3 aims to develop your abilities to problem solve and to act as change agents. It aligns to the IB mission and the aims of the business management course. Making active and meaningful contributions within the local community (for example, volunteering for a social enterprise) can provide further insight and help you to prepare for this paper.

Tips for success for Paper 3

You need to answer three questions in Paper 3. Question 1 is worth 2 marks and requires you to describe the human need in the stimulus material. This is an AO1 question and can usually be answered in one or two sentences.

Question 2 is worth 6 marks and requires you to explain the key challenges facing the social enterprise in the setting of the stimulus material. This is an AO2 question and can usually be answered in one or two detailed paragraphs. Usually, two challenges need to be explained, with each challenge worth 3 marks:

- One mark for identification of the challenge
- One mark for explanation of the challenge
- One mark for application to the social enterprise in the stimulus material.

Some common challenges facing social enterprises include the following:

- Lack of funding/ability to raise finance to start the social enterprise or to continue to trade and grow
- Focusing on the social objective and not focusing on profits means the social enterprise may not be commercially viable
- Low levels of public knowledge about social enterprises generally, and the aims of a particular social enterprise
- Lack of a proper business strategy, as some social enterprises are not run like a business
- Not having a substantial support structure as they are a relatively new business entity
- Marketing challenges to increase awareness of the social enterprise and their specific objectives, including funding but also time and expertise issues
- Lack of business knowledge and leadership knowledge of the entrepreneur starting the social enterprise
- Unclear messaging about what the social enterprise is trying to achieve
- Inability to create effective partnerships with other organizations.

Question 3 is worth 17 marks and requires you to recommend a future plan of action for the organization. This is an AO3 question and will require several detailed paragraphs. The Business Management Guide has a business management toolkit. Tools from it can be used to enhance responses to this question.

Question 3 will be marked using the following assessment criteria.

Criterion A: Use of resource materials
To what extent does the student use the resource materials provided to effectively support the recommended plan of action?

Marks	Level descriptor
0	The response does not reach a standard described by the descriptors below.
1	The response makes limited reference to the resource materials provided or the resources identified have been used ineffectively to support the recommended plan of action.
2	The response makes some reference to the resource materials provided or the resources identified have been used in a superficial way to support the recommended plan of action.
3	The response makes reference to most of the resource materials provided to support the recommended plan of action.
4	The response makes reference to all resource materials provided to effectively support the recommended plan of action.

Criterion B: Business management tools and theories
To what extent does the student's plan of action effectively apply appropriate business management tools and theories?

Marks	Level descriptor
0	The response does not reach a standard described by the descriptors below.
1	The response demonstrates limited application of appropriate business management tools and theories.
2	The response superficially applies appropriate business management tools and theories.
3	The response satisfactorily applies appropriate business management tools and theories.
4	The response effectively applies appropriate business management tools and theories.

For Criterion B, some business tools and theories you can use to answer the question include but are not limited to:

- Marketing mix
- Porter's generic strategies
- Force field analysis
- Ansoff matrix

- BCG matrix
- Product life cycle (extension strategies)
- Motivation and leadership theories.

It is expected that you apply at least two business tools or theories appropriate for the context to get full marks (for example, two elements of the marketing mix).

Criterion C: Evaluation
To what extent does the student effectively evaluate the expected impact of their plan of action on the relevant areas of the business?

Marks	Level descriptor
0	The response does not reach a standard described by the descriptors below.
1-2	The response is largely descriptive with limited analysis or evaluation of the expected impact of their plan of action. There is limited reference to the relevant areas of the business.
3-4	The response analyses the expected impact of their plan of action with some reference to the relevant areas of the business. There is some evidence of evaluation but it is not sustained.
5-6	The student effectively evaluates the expected impact of their plan of action on the relevant areas of the business and considers the trade-offs between those areas.

For Criterion C, there are several ways to carry out a balanced analysis and demonstrate effective evaluative skills. These include the following:

- Selecting and using the information provided to substantiate claims
- Considering any assumptions underpinning the arguments and implications
- Considering multiple stakeholder perspectives
- Including quantitative and qualitative arguments
- Examining short-term and long-term implications
- Addressing benefits and limitations (advantages and disadvantages).

Criterion D: Sequencing of ideas and plan of action
To what extent are the student's ideas and plan of action sequenced in a clear and coherent manner?

Marks	Level descriptor
0	The response does not reach a standard described by the descriptors below.
1	The response is limited in its sequencing of ideas and plan of action.
2	The response consists of ideas and plan of action but these are not always sequenced in a clear manner.
3	The response effectively sequences appropriate ideas and plan of action in a clear and coherent manner.

For Criterion D, you are expected to use headings/subheadings and fit-for-purpose paragraphs, including an introduction and a conclusion.

General study tips

To study successfully, you should keep in mind the following tips:

- Studying and revising for tests is an individual process. Every student has a different level of understanding and brings different interests, experiences, and abilities.
- The key to success is for you to think through, monitor, and make steady progress in developing study techniques that works for you.
- Revision should be an active process, and it is something that you can control.
- Create a study schedule and stick to it. You should build in breaks (for example, exercise).
- The quality of revision sessions is more important than the quantity.
- Find a quiet place to study. You should eliminate distractions (for example, turn off cell phones and log out of social networking websites).
- Become familiar with the command terms and the related guidance provided in the previous sections. Being familiar with the command terms will help you to know what a question is asking and how much detail to provide in the answer.
- Start with the list of topics, tools, and theories that could be in the examination (for example, syllabus and toolkit). Then, go through them and categorize, consolidate, compare, contrast, and interpret the topics and concepts.
- Summarize and consolidate understanding of a particular topic (for example, create a mind map or diagram).
- Review previous assessments and the feedback provided.
- Practice answering past exam questions.
- Consider forming a study group with classmates. Working together will benefit you and your classmates.
- Contact classmates or the teacher with questions. Asking questions is a great way to learn and prepare for any exam.

Internal Assessment

Overview of the Internal Assessment (IA)

A summary of the IA is shown in the table.

	Standard Level (SL)	Higher Level (HL)
Time allocation	Approximately 20 hours of teaching time	
Word maximum	1,800 words	
Format	Students will need to complete a business research project about a real business issue or problem facing a particular organization using a conceptual lens.	
Marks	25 marks using seven assessment criteria	
Weighting	30%	20%
Topics	Content and toolkit items from the SL syllabus.	Content and toolkit items from the syllabus including HL extension material.

SL and HL students complete a business research project for the IA. The requirements, time allocation, word maximum, and assessment criteria are the same for SL and HL. SL students will be expected to apply content and toolkit items from the SL syllabus, while

HL students can also apply HL extension material. The IA has a weighting of 30% for SL students and 20% for HL students. The difference is due to the fact that HL students complete an additional External Assessment in Paper 3.

Requirements

For the IA, you choose a business organization and investigate a real-life issue or problem that the organization is facing. You demonstrate your understanding of the subject outside the constraints of a written examination. The specific requirements for the IA are:

- select a real business issue or problem for their business research project that relates to any part of the syllabus
- refer directly to a single business organization but may consider industry-wide issues that impact on that organization
- provide a research question for the business research project that could either be forward looking or backward looking
- base their research on primary and/or secondary research, selected for its suitability, depth and breadth
- attach to the business research project three to five supporting documents from which the majority of the information for the project has been obtained
- produce a business research project that does not exceed 1,800 words
- fully reference all supporting documents and additional sources and include them in a bibliography.

You need to analyze the selected business issue or problem through a conceptual lens, using one (and only one) of the key concepts (change, ethics, sustainability, or creativity). The conceptual understanding is very important and should be integrated throughout the research project.

Approaches to learning (ATL) and learner profile connections

Although this is an independent project, you have to demonstrate **social** or collaboration skills in order to be successful. In the early stages, you will need to work closely with the teacher in order to establish an effective topic question. During the process, you will be working with your classmates and the teacher to understand the requirements and the criteria. Towards the end of the project, you will submit a rough draft and receive feedback. It is critical for you to learn from and respond to that feedback, and ask any follow-up questions.

Success in the IA in business management requires you to **communicate** your ideas effectively. You may need to practice verbal communication, for example, communicating with the teacher in order to establish an effective topic question, or interviewing a business manager. A successful IA comes down to producing an organized and well-written research project within the word count.

You have to demonstrate **thinking** skills throughout the IBDP. The IA is a way to showcase understanding of the subject, not only basic knowledge and understanding of terms and theories, but also the higher level thinking skills of analysis and evaluation. You need to formulate coherent arguments about the chosen business issue or problem by applying relevant business theories, tools, and techniques. You also need to demonstrate conceptual thinking by connecting a key concept with the organization you are studying.

You need to conduct **research** for your IA – the IA for business management is called a research project. You will need to use all of your information literacy skills to identify the information needed, gather the information, analyze and evaluate the information, then use the information ethically and effectively by citing your sources. You have to gather three to five supporting documents that are relevant, sufficiently in-depth, and present a range of ideas and views about the business issue or decision being investigated.

Introductory activities

You may be introduced to the requirements and criteria of the IA as early as the end of year 1. Student activities may include the following:

- Initial reading: This can include the above sections and the relevant section of the Business Management Guide (pages 51–58).
- Creating a timeline of events: The main tasks include writing an initial proposal, conducting research, updating the proposal, writing a complete rough draft, and submitting the final research project. When creating the timeline and deadlines for these tasks, the teacher should consider the school calendar and allow for sufficient coverage of course content prior to the final deadline.
- Q & A sessions: You should be encouraged to ask questions to clarify the process. Former (or Year 2) students may be used to provide advice and guidance.
- Checking for understanding: Simple multiple choice or true/false questions may be used to make sure you understand the basic requirements of the IA.
- Agreement form: More formal communications may be sent to students (and parents) outlining the process and upcoming deadlines, and requiring their signature.
- Reviewing samples and applying the criteria: After being introduced to the IA, you can develop your understanding of the criteria, and the requirements of the research project, by applying the criteria to sample IAs (for example, from the teacher support material), and comparing your marks with examiners' comments.
- Mind map topic question ideas: To get started, consider the following questions: What organizations are you interested in? What interesting business articles have you read in the past? Have you written about any recent business issues or decisions that you would like to pursue in more detail? You should try to list as many ideas as possible. You should not edit the list, but try to write the topics in the form of a question. Narrow down your list to the top three, then conduct some initial research (for example, visit the company website, read relevant new articles, etc.) to decide which topic question is best. Discuss these ideas with the teacher.

Initial proposal

You should take some time to plan your research project and communicate your ideas to the teacher by writing an initial plan or proposal, although this is not a formal requirement. The initial proposal should include the following:

- Topic question
- Theoretical framework
- Supporting documents.

Each of these are explained in more detail below.

After submitting an initial proposal, you may need to update your proposal after receiving feedback and appropriate guidance from the teacher. You should be encouraged to follow the inquiry cycle throughout this project by creating a plan (or proposal), acting on that plan, reflecting on the action, then starting the process again by refining the proposal. Ongoing dialogue and regular check-ins between you and the teacher is recommended.

Topic question

Selecting a topic question can be the most difficult step in the IA process, and is probably the most important. You need to work closely with the teacher when determining your topic question, and understand that it may take several tries before getting it right.

The best IAs are focused on a specific topic, allowing you to answer in depth and make judgment(s). You should avoid topic questions that lead to a simple description of past events or are too broad.

You need to choose a key concept to apply as a lens in your analysis. This key concept does not need to be in the topic question, but will need to be clearly indicated on the title page.

For example, 'Should Company Y change its manufacturing to outsourcing?' is a better question than 'What human resource strategies did Company Y use last year?' This is because the first question is more specific and encourages higher level thinking such as analysis and evaluation. The key concept of change can be used. The second question is more broad and encourages a descriptive approach.

Another example is 'How can airline X successfully target segment Y?' This is better than 'What marketing strategies does airline X use?' In the first question, the key concept of sustainability can be used in the analysis as a conceptual lens.

Some other examples of IA topic questions include the following:

- To what extent will restaurant A's implementation of a healthier menu be a successful marketing strategy? (Key concept: change or ethics)
- In which ways is the acquisition of Company B by Company A a beneficial long-term investment? (Key concept: change or sustainability)
- Should XYZ use diversification as their primary strategy to raise profits? (Key concept: change or sustainability)
- Should Company C continue to use social media to penetrate the Asian auto-market in the next 3 to 5 years? (Key concept: ethics)
- To what extent has Cafe X's innovative pricing strategies contributed to their success in the Asian café market? (Key concept: creativity or sustainability).

Most good topic questions:

- are simple and focused
- encourage analysis and evaluation rather than just a description
- require thought and research to answer.

Sufficient resources must be available for the business issue or problem chosen for the research project. Therefore, it is usually best to select a larger, multinational corporation.

You can choose the same organization as other students, but you will need to conduct your own research and perform your own analysis. If the same organization is used for the Extended Essay, then the topic should be from a different part of the syllabus. It is the teacher's responsibility to ensure that the research for the IA and the EE is not the same.

To summarize, you should select a topic question that:

- you find interesting
- is focused on a real business issue or problem
- is realistic in terms of resources available
- allows you to meet the requirements and criteria for this assessment (for example, Does it allow you to apply a key concept and business theory/tools in depth in less than 1,800 words? Does it allow you to show your analytical and evaluative skills?).

Selection of tools and theories

After selecting your topic question and key concept, you should consider which business theories, tools, and techniques to apply in order to answer the question. You should focus on Criterion C: Selection and application of tools and theories. A description of this criterion is provided in the Business Management Guide: 'To what extent does the student effectively select and apply business management tools and theories that are relevant to the research question?'

For you to reach the top level, the teacher and the IB examiner need to be able to determine the following in your IA: 'The business management tools and theories are effectively selected and applied with clear relevance to the research question.'

You may want to select more than two tools and theories. But you should not select too many, as you will want to apply them in depth. Students who apply five or more tools and theories usually end up applying them superficially in order to stay within the 1,800 word count.

The best place to start is the business toolkit and the course syllabus. As you go through the list of tools and syllabus content, you should consider which will help answer the topic question and provide a greater insight into the situation.

Two questions given in the Business Management Guide are:

- 'Should company Y change its manufacturing to outsourcing?'
  The project could examine areas within business management such as operations management and human resource management. A toolkit item such as STEEPLE analysis could be used to analyze the external factors affecting the decision. A make or buy analysis could also be used.
- 'How can airline X successfully target segment Y?'
  The project could examine business management topics such as market segmentation, promotion, and measures of financial success. A toolkit item such as Porter's generic strategies (HL) could be used to analyze the situation.

You should be as specific as possible when identifying business tools and theories. In other words, you should not just say 'marketing', but you should identify which aspects of marketing that will be considered.

Finally, you should briefly explain the rationale for your selection. In other words, you should explain the process (calculations and analysis) that you will go through in order to answer the topic question, and why those tools and theories were selected. It is important for you to understand the purpose of a particular toolkit item or business theory and communicate this understanding in the IA.

Supporting documents

Gathering three to five supporting documents is an important step in the research project and requires close collaboration between you and the teacher. It is vital that you select the supporting documents. These cannot be provided by the teacher.

You should understand and strive towards the top descriptor of Criterion B when gathering documents. The descriptor states: 'There are three to five supporting documents that are **relevant**, **sufficiently in-depth** and provide a **range of ideas and views'**.

You must highlight the **relevant** parts of each supporting document, and all highlighted sections must be in the language for which you are registered with the IB. In addition, **relevant** supporting documents should be as follows:

- Contemporary in nature and published within three years prior to submission (for example, May 2024 candidates should choose documents published after April 2021)
- Focused on the topic question, and ideally the organization being studied
- Not general textbooks and class notes – these can be used, but are not appropriate to use as a supporting document.

To select supporting documents that are **sufficiently in-depth**, you should:

- use reliable and credible sources, for example, you can use the OPVL (origin, purpose, value, limitation) strategy when evaluating sources
- avoid documents that are too short and lack sufficient detail
- avoid documents that are too long, providing less relevant information (supporting documents should not exceed five A4 pages).

To select supporting documents that present a **range of ideas and views**, you should:

- avoid choosing documents that are published by a single company, author, or type of source
- look for documents that provide opposing or critical viewpoints
- conduct primary or secondary research, but keep in mind that primary research is time-consuming and difficult to do well
- include at least three supporting documents, but do not exceed the maximum of five.

Examples of supporting documents include news or business journal articles, company financial statements, notes (questions and summary of answers) from interviews of key stakeholder(s), extracts from company websites, government statistics or other statistics. Only one supporting document can be a transcript of a video or audio file.

Conducting research

Academic research can be time-consuming, so you should start this process early. You should take notes and record bibliographic information (for example, title, author, date published, page numbers, URL, etc.). You should consider asking a librarian (either at school or in the community) for assistance on finding current and relevant resources. Librarians may be able to provide free access to academic databases and journals.

An Internet search can be an excellent way to start and can provide access to a variety of documents. However, you need to carefully consider the source, and any limitations and bias in the information being gathered. The range in quality of information on the Internet is vast. Reputable business news and journal publications can provide variety in viewpoints. More direct research gathered from the company website or from key decision makers from the organization being studied should also be considered. Quantitative data such as financial reports and government statistics may also be relevant.

You should be aware of ethical considerations when undertaking any research. There is a need for tact, sensitivity to other people, and respect for confidentiality. You should be polite when contacting any business professional. You could start by explaining that you are a student and telling them about your project. In most cases, you will find business professionals helpful and accommodating when they know the educational purpose behind the project.

The maximum number of supporting documents is five. However, you can use (and cite) additional sources. An effective strategy is to find more than five potential supporting documents, then select the best four or five as supporting documents. You need to label your supporting documents (for example, 'Supporting document 1') and include them in the appendix.

You should avoid gathering information from essay providers and other less reputable sources. The aim of this project is for you to engage with authentic sources and showcase your understanding and ability to apply business tools and theories.

After gathering and analyzing information, you need to use the information effectively and ethically. You need to include in-text citations consistently and appropriately when using your supporting documents and other resources. Any standard citation style can be used, and a bibliography must be included. Additional guidance for this, and any research project for the IB, can be found in subject guides and IB publications such as 'Effective citing and referencing'. Online tools such as Purdue Online Writing Lab and Citation Machine can also be used.

The drafting process

The most difficult part of the writing process is getting started. It is a good idea for you to start by writing an outline, which should make the writing process easier and quicker. It will make you think about the most logical way to go about answering the topic question, and will ensure all of the required parts are included.

The recommended structure of the research project is as follows. This can be used to develop the outline.

- **Title page**: The topic question, key concept, course name, date submitted, and word count.
- **Acknowledgements**: Optional statement to acknowledge support from the business and/or teacher.
- **Contents page**: Headings and subheadings, along with accurate, corresponding page numbers.
- **Introduction**: Background information about the business organization, a clear outline of the issue or problem under investigation, and an explanation of the methodology used to investigate the issue or problem.
- **Main text**: Findings from the supporting documents should be presented and analyzed with the help of relevant business management tools and theories. It should integrate the key concept. Subheadings should be used to provide further organization.
- **Conclusion**: The research question should be explicitly answered. The conclusion should not introduce facts or arguments that have not been discussed in previous sections of the project. It is good practice to include those aspects of the research question that have not been fully answered or that might need further investigation in order to be judged more effectively.
- **Bibliography**: Supporting documents and non-supporting documents.
- **Appendices**: Highlighted supporting documents and any additional appendix information. Any applications of tools and theories (for example, SWOT analysis) need to be in the main text.

When you start to write your first draft, you should pick a section from the main text and start writing. You should not worry too much about grammar and try not to edit heavily. It does not need to be perfect at this point. The important thing is for you to get started. You should remember that this is your chance to show off your understanding of the subject and your analytical skills. You should write like a business analyst.

The teacher can provide full feedback on only one draft. So, it is important that you submit a complete and high quality rough draft. This will allow the teacher to give specific feedback. You should use the criteria to self-assess and identify any final changes needed prior to submitting it to the teacher. After you receive the feedback, you should read through all the comments, ask for any clarification, and make a plan to respond to that feedback. Meeting with the teacher to review the feedback can be a way to save time.

The final step is to make the required changes and submit the final research project. You should do this well ahead of the deadline to avoid any undue stress. You should carefully proofread the final draft, making sure to update the table of contents and any final citations and referencing. An effective way for you to review your writing is to read it aloud or use text-to-voice software. You should use the criteria to self-assess your work and identify any final changes needed prior to submitting it to the teacher.

Once you are done, you should celebrate. Completing the IA for business management is an amazing accomplishment.

The Extended Essay

While the IA and Extended Essay (EE) for business management are both research projects, the distinction between the two should be made clear. You must ensure that your EE does not duplicate any other work you are submitting for the IBDP. In particular, the EE must not be an extension of the IA task.

Other key distinctions between the IA and EE for business management are summarized below.

- The EE has different assessment criteria to the IA. These criteria provide guidance on the direction you should take for each task.
- You may choose to investigate issues that fall outside the scope of the business management course for your EE. In other words, you may use analytical tools that are not included in the syllabus. The IA business research project must relate to the syllabus.
- The IA must refer to a single business organization. While the EE can refer to a single organization, you can also choose to focus on an industry or market in a particular region or country, or globally.
- You should use secondary data as the basis of your EE, supported where appropriate by primary research. You are allowed to base your research for the IA on primary and/or secondary research.
- For the IA business research project, you must use only one of the key concepts as a lens through which to analyze the IA. This is not a requirement for the EE. However, strategic and conceptual perspectives on the research question can add to the interest and rigor of the EE.
- For the IA business research project, only three to five supporting documents are required, whereas for the EE, there is an expectation of attempting a more academic, broader, and in-depth investigation.

Further guidance on the External Assessments, IA, and EE for business management can be found by accessing the relevant IB publications and source documents:

- Business Management Guide (First Assessment 2024). May 2022
- Extended Essay Guide (Business Management: Subject Specific Guidance). November 2022

Glossary

This is not an exhaustive list of terms that may be assessed. Any technical term within the guide can be assessed.

360-degree feedback 360-degree feedback is an appraisal method whereby evaluations of an employee's performance are collected from supervisors, subordinates, peers, and customers.

accounts In business, accounts typically refer to financial records or statements that track the financial transactions of a company.

acquisition Acquisition is the process by which one company purchases all of, or a majority stake in the ownership of, another company. An acquisition can take place through a negotiation or a hostile takeover.

artificial neural network (ANN) An artificial neural network is a computing system inspired by the biological neural networks that constitute animal brains.

assets Assets are valuable items owned by a business, including buildings, machinery, and any other inventory.

autonomy Autonomy refers to being in control of one's own behaviors and goals.

average cost Average cost is the ratio of the total cost of production to the number of items produced.

average rate of return (ARR) Average rate of return is a method of investment appraisal that expresses the average net cash flow of an investment as a percentage of the initial capital costs.

balance sheet (statement of financial position) The balance sheet provides the financial position of an organiation by displaying its assets, liabilities, and equity at a certain point in time.

bankruptcy Bankruptcy occurs when a business is judged by a court of law to be unable to pay its debts.

batch production Batch production is a manufacturing process in which groups or 'batches' of identical products go through the production steps together.

behavioral skills training Behavioral skills training is training in the blend of skills that are required in interpersonal relationships; often focusing on skills that are interpersonal, regulatory, and task-related.

benchmarking Benchmarking refers to evaluating something by comparision to an industry standard.

brand value Brand value is an intangible business asset that is the estimate of how much a brand is worth in terms of income, potential income, reputation, prestige, and market value.

break-even chart A break-even chart shows the sales volume level at which total costs equal total revenues.

break-even formula The break-even formula is: Break-even point (units) = fixed costs ÷ (selling price per unit − variable costs per unit).

break-even point The break-even point is the sales volume level at which total costs equal total revenues.

break-even table A break-even table shows the sales volume level at which total costs equal total revenues.

budget A budget is a financial plan that outlines an organization's anticipated income and expenses for a specific period of time, typically a year.

bulk-gaining Bulk-gaining is a production situation where the product gains volume or weight during production.

bulk-reducing Bulk-reducing is a production situation where the inputs weigh more than the final product.

business angels Business angels are wealthy groups or individuals who wish to invest in a profitable, privately-owned business in exchange for partial ownership.

business sectors Business sectors are categories of companies or industries that share similar characteristics in terms of their goods, services, or operations. They are divided into four main types: primary sector, secondary sector, tertiary sector, and quaternary sector.

capacity utilisation rate Capacity utilisation rate measures the percentage of an organization's potential output that is actually being realised.

capital Capital refers to the financial resources that a company or organization uses to fund its operations, investments, and growth.

capital expenditure Capital expenditure is the spending by a business on any long-term or non-current assets.

capital gains Capital gains are profits from selling an investment for more than the original purchase price.

capital productivity Capital productivity is the measure of how well physical capital is used in providing goods and services.

cash (in context of financial statement) Cash represents the value of liquids assets that are on hand (either held in a bank account or held by the business).

cash flow Cash flow is the movement of liquid assets in and out of a business.

circular economy The circular economy is a model of production and consumption, which involves sharing, leasing, reusing, repairing, refurbishing, and recycling existing materials and products as long as possible. In this way, the life cycle of products is extended.

cloud computing Cloud computing is the practice of using a network of remote servers hosted on the Internet to store, manage, and process data, rather than a local server or a personal computer.

cognitive training Cognitive training aims to exercise the brain in the skills used for thinking, reading, learning, remembering, reasoning, and paying attention. Developing cognitive skills in the workplace helps employees to understand and process new information.

community A community is a group of individuals within a certain area or with certain characteristics in common.

competence Competence refers to having mastery of tasks and learning different skills.

competitors Competitors are other businesses with similar goods or services that target the same customers.

connections Connections in business refer to relationships and networks that individuals and organizations develop to facilitate their operations, growth, and success. Business connections can take many forms, including professional networks, strategic partnerships, collaborations, and mentorships.

contribution Contribution is the difference between total sales revenue and total variable cost.

cooperative A cooperative is an organization that is owned and controlled by an association of people to meet their common economic, social, and/or cultural needs and aspirations through a jointly owned and democratically controlled business.

copyright A copyright is an intangible asset considered the intellectual property of a business for a fixed number of years. It is often used for items such as books, plays, movies, or pieces of music.

corporate social responsibility (CSR) Corporate social responsibility refers to a company's commitment to operate in an economically, socially, and enviromentally responsible way, and to contribute to sustainable development by engaging in activities that benefit the community and society as a whole.

cost center A cost center is a department, unit, or function within an organization that incurs costs but does not directly generate revenue.

cost to buy (CTB) Cost to buy is the cost incurred to purchase a ready-made product or component from an outside supplier, including the price of the product and associated transport costs.

cost to make (CTM) Cost to make is the cost incurred to produce a product, including the cost of materials, labor, and overheads.

creditor days ratio Creditor days ratio is a measure of the average amount of time that it takes a business to pay for goods and services purchased on credit from its suppliers.

creditor A creditor is an individual (or entity) that is owed money by a business.

crowdfunding Crowdfunding is the raising of finance through contributions from individuals, typically through websites and/or social media.

debtor days ratio Debtor days ratio is a measure of the average amount of time that customers take to pay for goods and services bought on credit.

defect rate Defect rate designates the portion of defective elements in relation to all items produced.

depreciate (depreciation) When assets depreciate, they decrease in value over time.

direct costs Direct costs are expenses that directly relate to the production of goods and can be traced to a specific cost object, which can be a good, a service or a department.

dividends Dividends are the portion of the profits paid to shareholders of a business.

efficiency Efficiency refers to the ability to do something in a way that maximizes productivity.

enterprise Enterprise refers to a business organization or company that is typically involved in the production or sale of goods and services for profit.

entrepreneurship Entrepreneurship refers to the process of creating, developing, and running a new business venture with the aim of making a profit or social impact.

expectancy Expectancy in business refers to an individual's belief that their effort will lead to high performance, which will in turn lead to desired outcomes or rewards.

external diseconomies of scale External diseconomies of scale is a negative impact on productivity and increased cost of production caused by factors that are not under a company's control.

external economies of scale External economies of scale is a reduction of minor expenses or reduction in the average cost per unit caused by factors usually outside of a company's control. It allows a business to be efficient and productive.

external factors External factors in business refer to the factors that are outside of the control of the company, yet have an impact on its operations, performance, and success.

external growth External growth refers to the expansion of a company through means other than its internal operations, such as mergers, acquisitions, strategic alliances, or joint ventures with other companies.

external stakeholders External stakeholders are individuals who are not employed by the business and do not have any direct involvement, but they still have an interest in business operations and undertakings. Their indirect stakes in the business can be through an agreement between different businesses, community welfare, or an interest in the product being produced. They may include creditors, customers, suppliers, and the government.

final accounts Final accounts are statements that emerge from the recording of financial transactions that capture the quantitative aspects of business activity, including the profits and loss account, and the balance sheet.

finance Finance refers to the management of money by businesses.

fixed costs Fixed costs are expenses that do not change in the short term and stay the same regardless of any change in level of production, output, or sales during the relevant period.

formative appraisal Formative appraisal is documented appraisal sessions at regular intervals throughout the term of an employee's contract, used to assess what is going well and how performance can be improved.

franchise (franchising) A franchise is a method of external growth where one business sells the right to use its brand name and sell its products to another business, in return for a fee or a share of the profits. It is an intangible business asset.

gearing ratio Gearing ratio is a measure of how much of the business is funded through long-term debt or loan capital.

goods Goods are physical products produced to be sold.

goodwill Goodwill is the value of intangible business assets, such as brand and intellectual property, which often means an acquiring company will pay more than the value of the net assets.

government The government is a group of individuals that run a country or state, gathering taxes and controlling public spending.

gross profit margin (GPM) Gross profit margin is the gross profit divided by the sales revenue, often expressed as a percentage.

growth Growth refers to the process of increasing in size, quantity, or scope over time. In a business context, growth typically involves expanding the company's operations, sales, profits, market share, or customer base.

human resources (HR) Human resources refers to the department or function within a company that is responsible for managing the organization's workforce.

indirect costs (overhead costs) Indirect costs are expenses that cannot be linked directly to a specific good, service or department.

initial public offering (IPO) An initial public offering is the first time a private company goes public through listing its shares on one or more stock exchanges. It allows a company to sell shares to investors as a way of raising capital.

inputs In business, inputs refer to the resources, materials, and equipment that are used to produce goods or services.

insolvency Insolvency occurs when a business is unable to pay debts that become due.

insourcing Insourcing is the practice of using an organisation's own personnel or other resources to accomplish a task that was previously outsourced.

instrumentality Instrumentality is an important component of expectancy theory, which suggests that employees are motivated by their belief that their efforts will lead to desired outcomes or rewards, and that their performance is directly linked to those outcomes.

intangible assets Intangible assets are the valuable items owned by a business that have no physical form or substance.

internal diseconomies of scale Internal diseconomies of scale is an increased cost of production caused by factors usually within a company's control, which may be organizational or technical.

internal economies of scale Internal economies of scale is a reduction of minor expenses or reduction in the average cost per unit caused by factors usually within a company's control. It allows a business to be efficient and productive.

internal factors Internal factors in business refer to the internal attributes or characteristics that are under the control of the company and can affect its operations, performance, and success.

internal growth Internal growth refers to the expansion of a business or organization through its own internal resources, rather than through mergers or acquisitions.

internal stakeholders Internal stakeholders are individuals who have a direct involvement in the workings of the company. They can be characterized as the members of the business and may include managers, employees, and shareholders.

investment appraisal Investment appraisal is the process of assessing the future returns of capital expenditures.

investor An investor is an individual (or entity) that puts money into a business with the expectation of gaining financial returns.

job production Job production is a production method where only one product is completed at a time. Each order is unique and meets the specific requirements of the customer.

joint venture A joint venture is a business activity in which two or more companies have invested together.

just-in-case (JIC) Just-in-case is an inventory management model in which businesses order more raw materials than they need and/or produce more products than they expect to sell.

just-in-time (JIT) Just-in-time is a manufacturing system in which materials or components are delivered immediately before they are required in order to minimize storage costs.

kaizen (continuous improvement) Kaizen is a Japanese term meaning 'change for the better'. It involves a continuous effort by each and every employee to ensure improvement of all processes and systems of a particular organization.

labor Labor refers to the workforce or employees of a company or organization.

labor productivity Labor productivity is the measure of the amount of goods and services produced by each member of the labor force or the output per input of labor.

land Land is one of the four major inputs used to produce goods and services. This input refers to the raw materials and natural resources used to produce goods and services.

lean production Lean production is a systematic manufacturing method used for eliminating waste within the manufacturing system.

leasing Leasing is when a business uses an asset in exchange for regular payments, typically over a fixed term. The business never owns an asset it is leasing.

lender A lender is an individual (or entity) that provides funds to a business with an agreed repayment schedule.

limited company (corporation) A limited company is a business where the shareholders will lose only what they have invested if the company goes bankrupt. They will not lose their personal assets.

liquidity Liquidity is the ability to generate cash or funds within a business, for example, by selling assets or through financial loans.

loan capital (debt capital) Loan capital is funds acquired by a business, usually through borrowing from financial institutions and paying the loan back in installments.

managers Managers are individuals within a business responsible for a group of staff and/or an area of the business.

margin of safety The margin of safety is the amount of sales that are above the break-even point. It indicates the amount by which a company's sales could decrease before the company will have no profit.

marketing Marketing refers to the processes and activities that a company performs to promote and sell its goods or services to potential customers.

mass customization Mass customization combines the individualistic and unique nature of custom products with the high production and sales levels of mass production.

mass/flow production Mass/flow production is the production of large quantities of a standardized product by an automated mechanical process.

matrix In business, a matrix is a structure in which employees are organized into both functional and project teams. This structure is sometimes called a 'matrix organization'. In a matrix organization, employees report to a functional manager, who oversees their work within their area of expertise, and a project manager, who is responsible for managing a specific project.

merger A merger occurs when two or more companies combine to form a new entity.

microfinance providers Microfinance providers are institutions contributing small amounts of capital for small businesses and entrepreneurs who might not otherwise be able to get any finance.

mission statement A mission statement is a concise statement that defines the purpose and primary objectives of an organization or company.

monopoly A monopoly is where one business dominates an industry and has little or no competition within a market.

multinational company (MNC) A multinational company is a company that operates in many different countries.

need A need is a requirement or necessity for survival, well-being, or growth.

net present value (NPV) Net present value is a method of investment appraisal that factors in the value of money over time.

net profit margin (NPM) Net profit margin is the profit before interest and tax divided by the sales revenue, often expressed as a percentage.

non-governmental organization (NGO) A non-governmental organization is a non-profit social enterprise that works independently without the support of any government body.

off-the-job training Off-the-job training is where employees undertake training away from their place of work, through day release, online learning, or distance learning.

on-the-job training On-the-job training is delivered while an individual is performing tasks or processes related to their particular occupation. This type of training is typically used to broaden an employee's skill set and to increase productivity.

operating leverage Operating leverage measures a company's fixed costs as a percentage of its total costs.

operations Operations refer to the processes and activities that a company performs to deliver its goods or services to customers.

outputs In business, outputs refer to the goods or services produced or delivered by a company or organization.

outsourcing Outsourcing is when a company uses workers from outside the company, allowing the company to grow its capacity quickly and cheaply.

	It is the practice of hiring workers to perform services or create goods that were traditionally performed or created in-house by the company's own employees.
overdraft	An overdraft is a form of short-term finance, provided by a financial institution, to cover any cash deficits up to an agreed amount.
partnership	Partnership is a legal form of a company consisting of two or more owners, who decide to operate a business together and share the profit and loss.
patent	A patent is an intangible asset considered the intellectual property of a business, for a set period. It is a government authority or license that gives an individual or business sole rights to make or sell a new invention or product, and excludes others from making, using, or selling an invention.
payback period	Payback period is a method of investment appraisal that accounts for the amount of time it takes to recover the initial capital costs of an investment.
personal funds	Personal funds are any financial resources held by an individual.
primary sector	The primary sector consists of businesses that extract and use natural resources to produce raw materials used by other businesses.
private sector	The priviate sector is the economy's commercial sector, mostly owned and operated by private individuals and organizations with a profit incentive.
privately held companies	Privately held companies are businesses whose shares are not openly traded and can only pass to another person with the agreement of other shareholders. They are owned by individuals or privately operated corporations. Stock shares of the company are not traded on a public stock exchange.
productivity rate	Productivity rate is a measure of business performance that compares the amount of goods and services produced (output) with the amount of inputs used to produce those goods and services.
profit and loss account (income statement, statement of profit or loss)	The profit and loss account displays the financial performance of an organization, including the income and expenses over a defined period.
profit center	A profit center is a department, unit, or function within an organization that generates revenue and incurs expenses. Profit centers are responsible for generating profit and increasing revenue for the organization.
profitability	Profitability refers to the ability of a business or investment to generate profits or financial gains over time.
profitability ratios	Profitability ratios measure the performance of a business by calculating the degree to which a business achieves financial gain from its sales. These ratios can be calculated in terms of gross profit margin (GPN) and net profit margin (NPM).
profit	Profit is the financial gain that a company or business earns from its operations after deducting all expenses and taxes.
public financial information	Public financial information is reporting provided by a company required to comply with transparency requirements and financial reporting standards according to the regulatory rules set out by the government(s).
public sector	Public sector organizations are under the control of regional and/or national governments.
publicly held companies	Publicly held companies are businesses owned by at least two individuals, and their shares are freely sold and traded on stock exchanges. The shares can be bought by anyone.
quality assurance	Quality assurance is the maintenance of a desired level of quality in a service or good, by means of attention to every stage of the process of delivery or production.
quality circle	A quality circle is a group of employees who meet regularly to consider ways of resolving problems and improving production in their organization.
quality control	Quality control is a system of maintaining standards in manufactured products by testing a sample of the output against the specification.
quaternary sector	The quaternary sector consists of businesses that provide services like consultancy, research and development (R&D), information services, or technology services.
recruitment	Recruitment is the process of identifying, attracting, interviewing, selecting, hiring, and onboarding employees.

redundancy Redundancy occurs when the job someone is doing is no longer required, and the company eliminates the position. The position is made redundant. Typically, the person doing the job is made unemployed.

relatedness Relatedness in business refers to the degree to which two or more business activities, products, or services are related or interconnected. Relatedness can occur between businesses that operate within the same industry or between businesses that operate in different industries but share common characteristics or resources.

reshoring Reshoring is the practice of transferring a business operation that was moved overseas back to the country where it was originally located.

retained profit Retained profit is the net income a business has earned after all costs and other payments to shareholders have been subtracted.

return on capital employed (ROCE) Return on capital employed is a ratio used to analyze an organization's profitability. This ratio starts with the net profit before interest and tax, expressing the net profit as a percentage of capital employed.

revenue Revenue is any money coming into a business from its sales.

revenue expenditure Revenue expenditure is the money spent by a business to generate revenue.

revenue streams Revenue streams refer to the different sources of sales revenue that firms may have in terms of the number of customers, the number of products being sold, and the number of markets in which they operate.

sale of assets The sale of assets is the sale of any buildings, machinery or inventory owned by a business to raise cash.

secondary sector The secondary sector consists of businesses that manufacture goods using the natural resources and raw materials provided by the primary sector.

self-appraisal Self-appraisal is where an employee reflects on and assesses their own performance over a period of time, often rating themselves against key performance indicators.

services Services are intangible products.

share capital (equity capital) Share capital is funds acquired through the sales of shares.

shareholder value Shareholder value refers to the financial return or profit generated for the owners or shareholders of a company, based on the company's performance and earnings.

shareholder A shareholder is anyone who owns a share of a business.

shares Shares are pieces of ownership of a business.

socio-cultural trends Socio-cultural trends refers to trends and developments in changes in attitudes, behavior, and values in society.

sole trader Sole trader is a legal form of company owned by a single individual, with no other shareholders.

stability Stability refers to the ability of a company to maintain its operations and financial health over time, despite external and internal changes and challenges.

stakeholders Stakeholders can encompass a variety of people who have an interest in the performance of a business. A stakeholder is not always someone who has money invested in the company or business. Stakeholders can include any individuals who are positively or negatively affected by the decisions a business makes. These parties have an interest in the business activities and should be allowed to advocate their interests to the business.

stock control chart A stock control chart is a visual chart that depicts the inputs and outputs of a business' inventory over time, concerning minimum and maximum stock levels.

stock turnover Stock turnover is the rate at which inventory is sold and replaced within a business. Stock turnover ratios can help managers assess and manage this important part of the business.

straight-line method The straight-line method is a way of calculating depreciation. This method involves spreading the amount of depreciation equally over the expected life of the asset.

strategic alliances A strategic alliance is an agreement between two or more organizations to work together.

strategic objectives Strategic objectives are the specific and measurable goals that an organization sets for itself to achieve its long-term vision and mission. These objectives are designed to guide decision-making, focus resources, and ensure that all actions and initiatives align with the company's overall strategy.

subcontracting Subcontracting is the practice of employing a firm or person outside a company to do work as part of a larger project.

summative appraisal Summative appraisal is a final appraisal at the end of a set period, summarizing the performance of the employee against their targets.

survival Survival refers to the ability of a company to withstand and adapt to external and internal pressures, such as economic downturns, competition, changes in consumer behavior, and unforeseen events, in order to continue operating and generating revenue.

tactical objectives Tactical objectives are specific, measurable, and achievable goals that a company sets in order to achieve its broader strategic goals. They focus on short-term performance and the steps required to achieve immediate operational success.

takeover A takeover typically occurs when one business acquires control and interest in another organization by purchasing the majority of company shares.

target price The target price is the price the business is required to charge per unit in order to meet its target profit.

target profit The target profit is the profit level a business sets itself to make, calculated using the formula: Target profit = sales revenue − total costs (TC).

tertiary sector The tertiary sector consists of the companies, organizations, and activities in an economy that provide services, such as banking, transport, tourism, etc., rather than manufacturing goods.

time value of money The time value of money is a concept that states that cash inflows received now are worth more than cash inflows received later.

total quality management (TQM) Total quality management is a system of management based on the principle that every employee must be committed to maintaining high standards of work in every aspect of a company's operations.

trade credit Trade credit is the purchase of goods and/or services through credit and not immediate cash, with future payment dates agreed.

trademarks A trademark is a symbol, word, or words legally registered or established by use as representing a company or product.

units of production method The units of production method is a way of calculating depreciation. This method is based on the number of units produced, rather than spreading the depreciation expense evenly over the life of an asset.

unlimited liability Unlimited liability is when the owner of a business is responsible for paying the complete cost of any damage or liability incurred by the business.

valence Valence in business refers to the strength of an individual's preference for a particular outcome or reward. It is a psychological concept that is used to explain why people make certain choices and how they respond to different incentives or rewards.

variable costs Variable costs are expenses that vary in direct proportion to the change in output/level of production or sales during the relevant period. For example, the raw materials needed to make a product are a variable cost.

variance Variance is the actual expenses and revenue minus the budgeted expenses and revenue. Rather than displaying a negative or positive value, the words 'favorable' or 'adverse' are used.

variance analysis In budgeting, variance analysis is the comparison of actual behavior versus planned behavior. Variance analysis can help managers monitor and control the performance of their organization.

virtual reality (VR) Virtual reality is the computer-generated simulation of a three-dimensional image or environment that can be interacted with via specialist electronic equipment such as a VR headset.

vision statement A vision statement is a concise statement that outlines the future aspirations of an organization or company.

want A want is a desire or a wish for something that is not necessarily required for survival or basic needs.

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