AQA
Questions matter

Models, theories and frameworks handbook

A-LEVEL BUSINESS

(for teaching from September 2023)

The A-level Business specification includes a number of theories and models which have been included to help teachers by providing a framework for use when teaching the different topics.

The following is an overview of the various theories or models along with guidance as to how they can be used to support learning. Use this teaching guide in the classroom to engage your students, contextualise the models/theories in real-world business and prepare them for the exam.

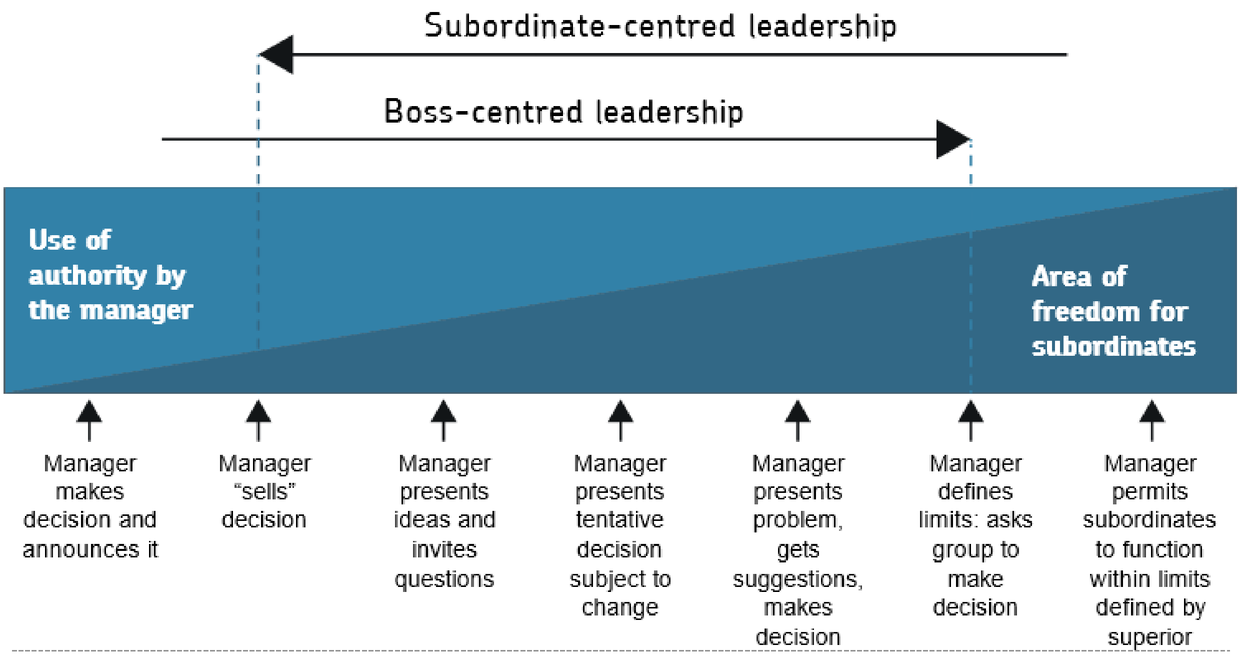
Contents

Tannenbaum Schmidt Continuum

Overview

A model that highlights the range of different management styles that may be adopted ranging from a 'tell' approach to one that involves delegation.

Model/theory



Key points

The model highlights that there are a range of styles rather than categorising management and leadership simply in terms of either authoritarian and democratic. It shows that there is a continuum.

When you can use this

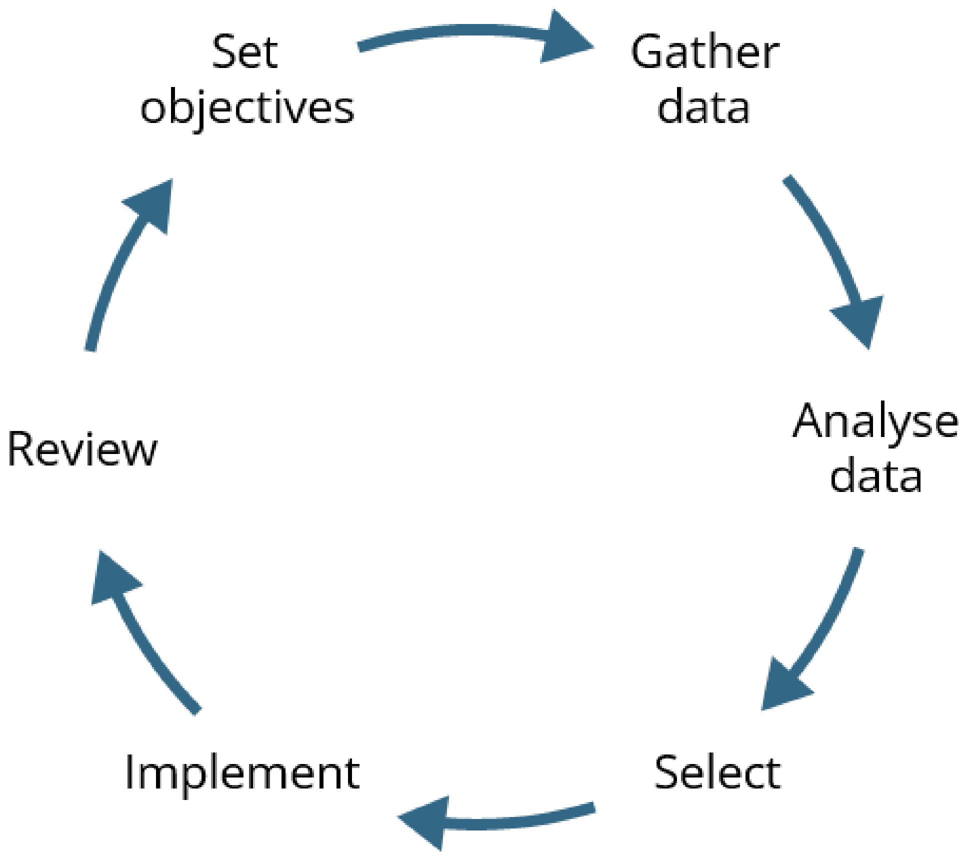
When discussing the influences on and impact of different management and leadership styles you might want to consider:

- the advantages and disadvantages of each approach
- the factors that determine what style is adopted by a manager/leader
- when a given style might be appropriate eg you might consider how different styles might be appropriate in different situations or when making different types of change.

Scientific decision making

Overview
A model that highlights the different stages in a scientific, data based approach to decision making. It outlines a logical sequential process.

Model/theory



Key points
This model takes a logical and rational approach to decision making with a series of stages that follow on from each other. Decisions need to be reviewed and this might lead to a change in objectives.

When you can use this

When discussing management, leadership and decision making you might want to consider:

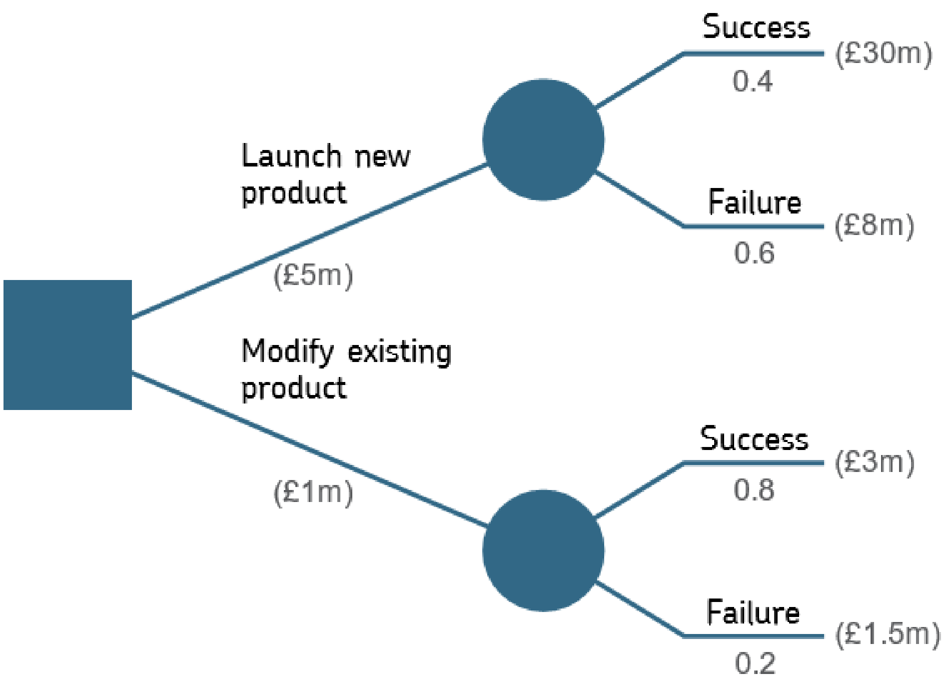
- the importance of objectives; all decisions have to be judged against the objectives
- the value of data (and this could lead to a discussion on what influences the reliability of data) in decision making; poor data may lead to poor decision making
- the need to make choices (and then discuss eg opportunity cost, risk, rewards)
- the importance of implementation – good management is not just making the right decision but also ensuring it is implemented effectively
- whether, in reality, decision making is this logical and whether the process is iterative – eg having gathered data do we review the objectives and possibly change them? Having selected a course of action do we sometimes have to go back and gather more data to check it is the right decision?
- you might consider why decisions go wrong. You could consider each of the stages of the process and consider the possible problems at each stage.

Decision trees

Overview

Provides an example of scientific decision making.

Model/theory



Key points

- A square represents that a decision has to be made.
- The lines coming from the square represent the possible choices.
- The circles show that there are outcomes as a result of a choice.
- The lines coming from a circle show the expected outcomes.
- The probability shows the estimated likelihood of a given outcome.
- The probability of all outcomes must add up to 1.
- The Expected Value (EV) shows the weighted average of a given choice; to calculate this multiply the probability of each given outcome by its expected value and add them together eg EV Launch new product = [0.4 x 30] + [0.6 x -8] = 12 - 4.8 = £7.2m.
- The Expected Value is the average outcome if this decision was made many times.
- The Net Gain is the Expected Value minus the initial cost of a given choice. Net Gain of launching new product = £7.2m - £5m = £2.2m.
- To compare this Net Gain with the Net Gain of other choices, eg Net Gain of Modify

existing product = [0.8 x 3] + [0.2 x 1.5] = 2.7 -1 = £1.7m.

- Decision based on choice with highest net gain which is to launch new product [£2.2m as against £1.7m].

When you can use this

When discussing important concepts in decision making such as choices, opportunity cost, probability and risk, costs and returns, net gains, expected outcomes and forecasting you could consider:

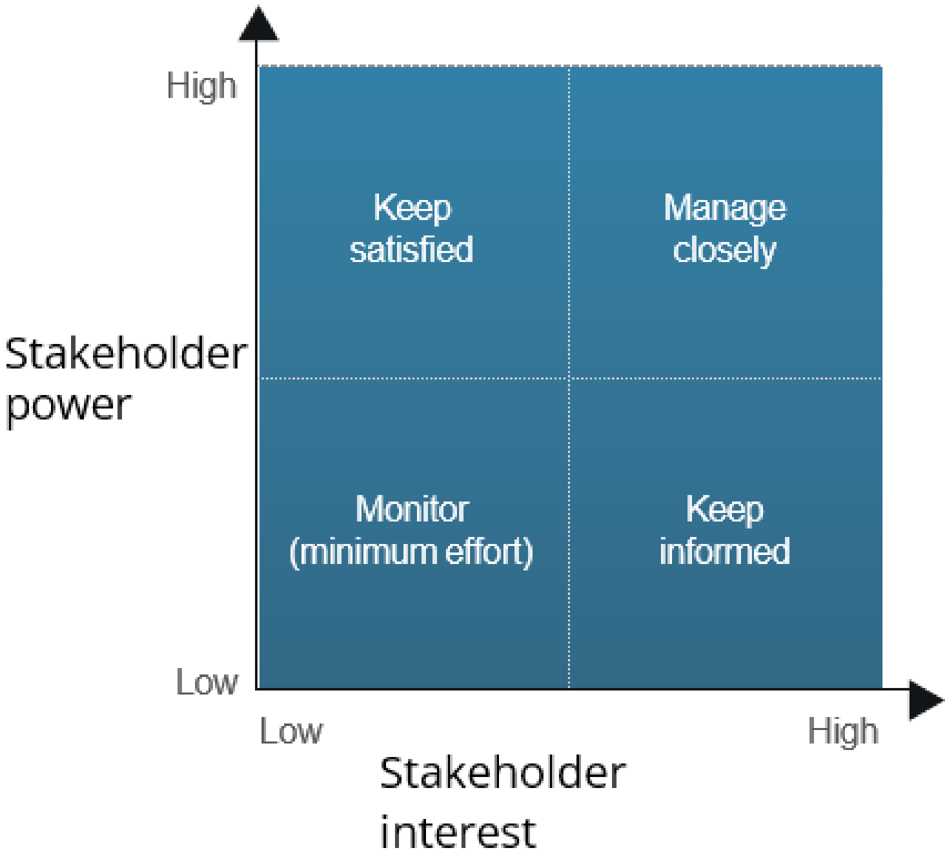
- the value of decision trees in getting managers to think through their options, the probability of different outcomes and the financial consequences
- the extent to which the financial consequences of an outcome can be accurately estimated and whether outcomes are best measured in financial terms issues could be considered in decision making such as raising the initial finance, the impact of ethics and the impact on stakeholders.

Stakeholder mapping

Overview

Categorises stakeholders in terms of their relative power and interest.

Model/theory



Key points

Highlights that not all stakeholders are equal – they vary in terms of power and influence. This might affect the way a business communicates with different groups and how much attention is paid to their views.

When you can use this

When discussing the power and influence of stakeholders, how stakeholders may affect decision making and how managers may treat different groups you might want to consider:

- the factors that affect the power and influence of different stakeholder groups
- how a business might treat different groups according to their power and interest (eg how much information they provide)
- how stakeholders might increase their power (eg employees coming together in a trade union).

Price elasticity of demand

Model/theory

The value of price elasticity is of interest to managers because:

- it influences pricing decisions
- if demand is price elastic this means it is sensitive to price. A fall in price leads to a bigger increase in quantity demanded; although the price of one unit is less the increase in sales means the total revenue earned is more
- if demand is price inelastic this means it is insensitive to price changes. In this case a price increase will increase revenue; this is because the fall in quantity demanded is smaller than the change in price
- if managers know the price elasticity they know what to do with price to increase revenue
- it provides useful information on the quantity demanded if price changes. This is important for deciding staffing, inventory controls and for planning cashflow and estimating profit and loss.

Note: what happens to profits (rather than revenue) will depend on the effect of a change in the quantity demanded and produced on costs not just whether revenue increases. An increase in revenue does not guarantee an increase in profits.

Problems of using the price elasticity of demand

The price elasticity of demand measures the effect on quantity demanded of a change in price, with all other factors held constant. In reality, many other factors will be changing as well, such as the income, the weather, the prices of other products and the marketing activities of this and other businesses. It might, therefore, be difficult to measure the price elasticity of demand although it may be possible to have approximate estimates (perhaps based in what has happened when the price was changed in the past).

Influences on the price elasticity of demand

Demand is likely to be more price inelastic if:

- the product is heavily branded so customers are not especially sensitive to price changes
- there are few substitutes
- a relatively low proportion of income is spent on this product so customers are less sensitive to a price change
- someone else is paying so customers are less sensitive to a price change because it does not affect them directly
- in the short-term customers may not find it easy to find alternatives; over time they have longer to find alternatives and demand will be more price elastic.

Things to consider

- A price inelastic demand does not mean that quantity demanded does not change at all when price changes, just that the change in quantity demanded is less than the change in price (in percentages).
- The price elasticity of demand shows how much quantity demanded changes when price changes not when income changes (this is income elasticity of demand).

When you can use this

- This is an important concept because price changes are often suggested as a common action of a business. Students need to think through the implications of a price increase in terms of the quantity demanded (and therefore output, inventory staff levels etc), revenue and profit.
- The price elasticity of demand is relevant when analysing the impact of exchange rate changes; the impact of a strong pound, for example, depends on how sensitive exports are to higher prices in their own currencies and how sensitive imports are to a lower UK price.
- When considering marketing activities such as branding and differentiation you can examine the effect on the price elasticity of demand.

Income elasticity of demand

Overview

This measures the sensitivity of demand to changes in income.

Equation

$$\text{Income elasticity of demand} = \frac{\text{Percentage change in quantity demanded}}{\text{Percentage change in income}}$$

Key points

A positive answer means that an increase in income increases quantity demanded (and vice versa). For example, with more income households may take more foreign holidays.

A negative answer means that an increase in income decreases quantity demanded (and vice versa). For example, with more income households may spend less on UK holidays as they go abroad more. If demand for a product falls as income increases this is known as an 'inferior' product.

The value of the answer (ie the size of the answer ignoring the sign) shows how sensitive demand is to changes in income. The bigger the number the more responsive demand is.

- If the income elasticity is 2 this means a 1% change in income leads to a 2% change in quantity demanded.
- If the income elasticity of demand is 0.5 this means a 1% change in income leads to a 0.5% change in quantity demanded.
- If the value of the income elasticity of demand is greater than 1 this is known as income elastic demand. If the value of the income elasticity of demand is less than 1 this is known as an income inelastic demand.

When you can use this

- when studying influences on demand
- when studying correlation (it shows how one variable changes when another one changes)
- when considering how a business might prepare for or be affected by changes in the incomes of its customers (ie, changes in revenue may be affected by demand and this in turn will influence factors such as cash flow, profit forecasts, inventory and human resource planning).

STP segmentation, targeting, positioning

Overview

Outlines the marketing process.

Model/theory

Key points

Managers must:

- analyse a market to identify the segments that exist
- select which segments they think the business should target (depending on eg relative strengths)
- decide where in the targeted markets the products should be positioned relative to competitors.

When you can use this

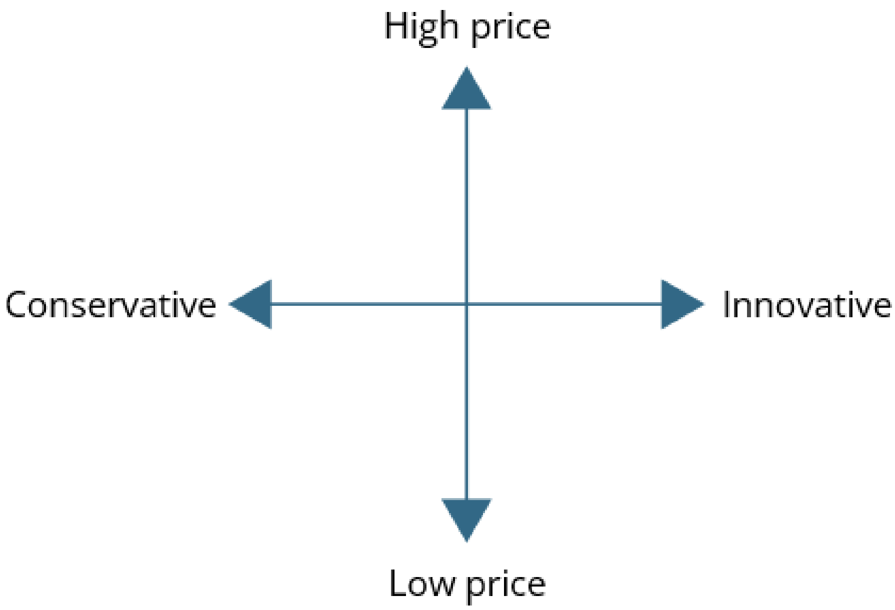
When discussing market analysis and making marketing decisions you could consider:

- how markets are segmented
- what makes a segment attractive to a business
- why a business might target relatively few or many segments
- how a business might decide to position its products (this links with market mapping)
- the nature of the marketing mix because this must link back to the target market and positioning of the product.

Market mapping

Overview
Identifies how products/brands are perceived by customers relative to other products/brands in the market.

Model/theory



Key points
Highlights that there are various criteria used by customers to judge products, eg price v quality, narrow range of products v wide range, traditional v modern. The appropriate criteria will depend on the market and how customers assess these products, eg modern v traditional, premium v basic.

When you can use this

When discussing the positioning of a product/brand. Marketing managers must analyse a market to understand what segments exist within a market, then decide which to target, and how best to position the product in the market relative to competitors.

You might want to consider:

- the different criteria customers use to assess products
- what factors might influence the positioning a business chooses
- the implication for other functional areas of choosing a particular positioning
- why a business might want to move from one position to another.

Section 3.3.3 Making marketing decisions: segmentation, targeting, positioning

7Ps of the marketing mix

Overview

Analysing the marketing mix using the 4Ps may be enhanced by adding additional elements to it. These further elements may be particularly relevant in a service economy.

Model/theory

The traditional 4Ps are: Product, Promotion, Price, Place. The specification uses the 7Ps model which also includes People, Physical environment and Process.

Key points

The 7Ps model highlights that marketing involves a wide range of activities. The 4Ps is one structure but in some situations it may be more appropriate also to analyse other aspects of a business's marketing activities.

The additional three Ps are:

People

In a service economy, the people who serve you, and factors such as how trained they are and how knowledgeable they are about the products, can be important considerations.

Physical environment
In a service outlet, the environment can influence your decisions to shop there as well as influence how long you stay and how much you buy.

Process
The process involved in a transaction can affect the customer experience. For example, is it easy to register with an online business? Is there an easy ordering and payment system?

When you can use this
When considering how a business might try to become more competitive students might want to analyse how improving the different elements of the mix could help.

Boston Matrix

Overview

The Boston Matrix is a common method of portfolio analysis developed by the Boston Consulting Group (BCG).The product life cycle shows the sales of one product over time. However, businesses often have many products and will want to have an overview of how they are doing. Product portfolio analysis involves an assessment of the position of all of the products of a business to help with planning. This assesses how products are performing in relation to market share and market growth.

Model/theory

Dogs

Features

- Low market share.
- Low market growth.

Action

Managers may need to revive these dogs or stop producing them.

Cash cows

Features

- High market share.
- Low market growth.

Actions

- These are well established products, which mean they will be generating revenue but may not need heavy investment to promote.
- Managers may say 'milk' these products, ie use the money they generate to finance other products.

Problem children

Features

- Low market share.
- High market growth.

Actions

- The market is attractive as it is growing but this product is not well established.
- Managers may invest in these products to help promote and distribute them. These products may provide significant income in the future (assuming they thrive).

Stars

Features

- High market share.
- High market growth.

Actions

- These products are doing well in fast growth markets.
- They may need some investment to support them and maintain market share; these funds may come from the cash cows.

When you can use this

- Consider where the products of a multi-product business such as Unilever or Coca Cola might fit in the model.
- Consider different portfolios, eg many dogs or many cash cows or many problem children. What are the implications of this?

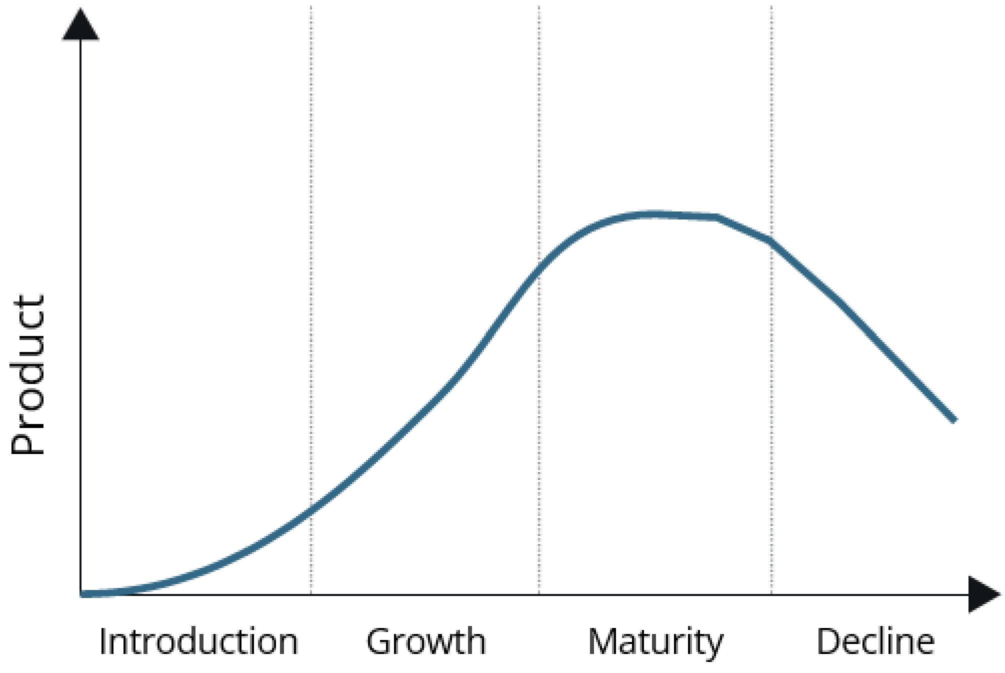
The product life cycle

Overview

This model sets out the typical stages that sales of product may go through over time. There are different versions of the model but the stages include:

- Development: this is what happens as the product idea is turned into a reality. Money will be invested developing, testing and trialling products. Many product ideas will never actually make it to launch. This is a time when there are likely to be relatively high outflows with no money coming in yet.
- Launch: this is when the product is put on to the market. It may take time to get distributors and for the product and brand to develop.
- Growth: this is when sales are growing fast as the product becomes better known and distribution increases.
- Maturity: sale growth now slows and the business will start to look ahead and decide what action to take.
- Decline: this is where sales fall.

Model/theory



The purpose of the model is simply to identify typical stages of a product over time. How long each state lasts will vary – for example, a film may reach growth within days of being launched whereas some designs may take time before becoming fashionable.

By recognising that sales will change over time managers can think about how they will change the marketing mix at different stages. For example, the price may need to be lowered when the product is at the maturity phase to maintain sales. Distribution may need to increase during the growth phase to reach more customers.

However, managers must interpret data carefully; for example, a fall in sales may be the start of the decline phase or may simply be a temporary fall.

When you can use this

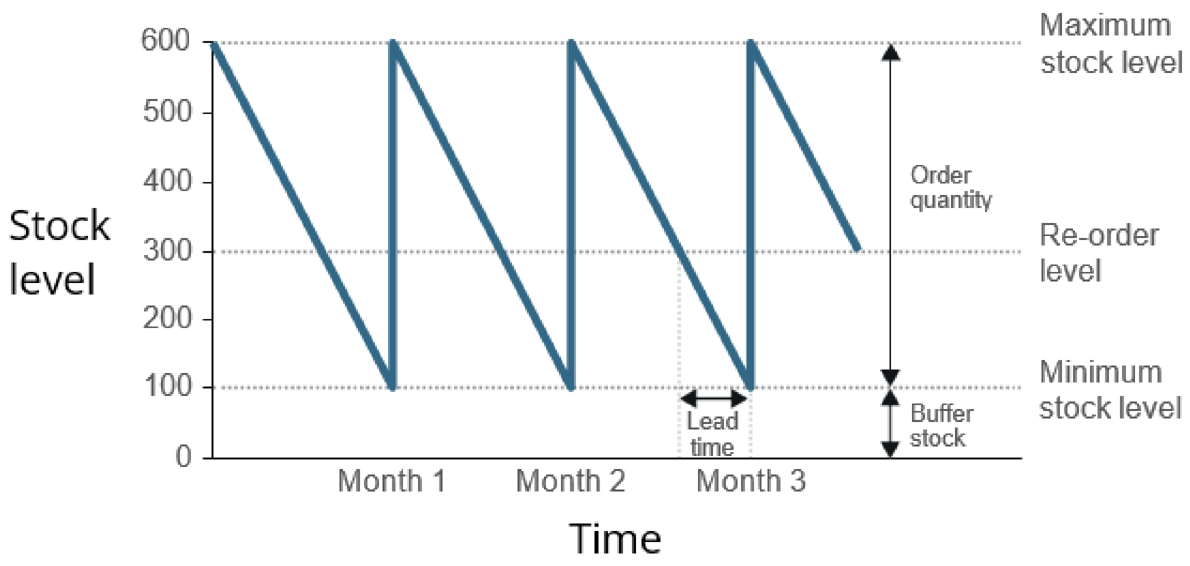
- To show how the marketing mix needs to be adapted at different stages you could get students to identify how it might change and why.
- To consider the different possible life cycles of different products: a new film, a 'fad' toy, a new pharmaceutical product, a new car. This is useful to highlight how products and markets vary considerably which is useful for application.
- To explore the relationship between marketing and other functions, eg if the business has the capacity to meet the highest level of expected sales this means there will be excess capacity in the earlier stages of the life cycle; what are the implications of this?

Inventory control chart

Overview

Highlights issues relating to inventory management such as the re-order level, re-order quantity, usage rates and lead time.

Model/theory



Key points

In the diagram above:

- inventory is re-ordered at 100 units (buffer stock)
- the re-order quantity is 500 units
- 500 units are used up each month
- a re-order is placed at 350 units
- the lead time (time from reorder to delivery) is 2 weeks.

When you can use this

When considering inventory management and factors affecting:

- the level of buffer stock
- re-order quantities
- re-order levels
- usage rates
- lead times.

You could also consider:

- what happens if usage rates increase unexpectedly
- what happens if inventory is too high or too low.

Section 3.4.5 Making operational decisions to improve performance

Motivation

Overview

Motivation is a much loved topic area by students and indeed is an important aspect of managing people.

The motivation of employees may affect:

- the commitment shown to a task
- the creativity shown in relation to a task
- the degree of cooperation if change is happening
- retention rates
- labour turnover rates.

Motivation can also affect productivity and many students use this in their arguments. However, it is worth remembering that productivity also depends on factors such as technology, skills, capital equipment and training. Being motivated does not guarantee more productivity.

Herzberg

Frederic Herzberg's studies surveyed managers and from this identified the effect that different aspects of work had different impacts on employees.

Herzberg identified three states of mind that employees might have:

- motivated (or satisfied)
- not motivated (or not satisfied or dissatisfied)
- demotivated (or dissatisfied).

Hygiene factors are those aspects of work that, if present, prevent employees being dissatisfied. These factors focus on extrinsic elements of work, ie factors outside of the job itself such as the working conditions, the basic pay, colleagues and company rules and procedures. These factors can lead to dissatisfaction if wrong eg the workplace is cold, the rules are petty or the pay is low. However, fixing these factors simply removes the dissatisfaction – you stop complaining about the cold, the low pay and the rules.

The factors that actually motivate at work are intrinsic factors – they relate to the job itself. What motivated employees were: if the job they did had the opportunity to develop themselves, to advance or to have responsibility. These motivators such as opportunities for responsibility, advancement, achievement and personal growth are very similar to what is required to meet Maslow's self-actualisation needs.

The significance of Herzberg's work – known as Herzberg's 'two factor' theory – is to highlight the need to have the right extrinsic factors in place (to prevent dissatisfaction)

and then put in place intrinsic factors to make the job itself motivating.
Watch Herzberg's classic Jumping for jelly beans videos on YouTube.

Maslow

Maslow's hierarchy of needs sets out levels of needs that people have. At any moment someone will be motivated by the desire to fulfil the next level on their hierarchy.

Maslow's work highlights that what managers may want to offer to motivate an employee will depend on where they are on the hierarchy. If an employee's social needs are met they will want to move to the next level and managers should try to meet their ego needs.

In reality, it can be difficult for managers to identify exactly where someone is on the hierarchy and it may be complex to offer different types of incentives for different employees.

Model/theory

Self-actualisation needs

- Detail: the need to achieve something for yourself.
- Managers' actions: they can delegate to give an employee responsibility.

Ego (or esteem) needs

- Detail: the need to be acknowledged and respected.
- Managers' actions: they can recognise the work of employees – this could be through praise, a certificate, a mention in the company bulletin.

Social (or belonging) needs

- Detail: the need to be part of a group or team.
- Managers' actions: this could be met through creating teams or even through social occasions at work.

Security needs

- Detail: the need to feel safe.
- Managers' actions: this may be met by offering full-time employment or a contract.

Physiological needs

- Detail: the need to survive.
- Managers' actions: this may be fulfilled through basic pay which enables employees to buy the essentials.
- Note: the work of Taylor and Maslow does not necessarily conflict. Taylor's study focused on a workforce that was likely to be at the lower end of the hierarchy and therefore basic pay met their physiological needs.

Taylor

F.W. Taylor is the founder of Scientific Management. Taylor's approach was to monitor how a task was being completed and based on this data develop the 'one best way' of completing a job. Managers would develop clear policies and procedures and train employees in how to do the task. From their studies managers would know what a realistic output per day was if employees followed the systems that were developed and had the right equipment and training. If employees produced less than this they would need training. If employees produced more than the target figure they will receive a bonus.

Taylor's approach was scientific because it was based on observation and data on how work was done; that led to the development of the most efficient process for any task. Taylor's was based on the view that money motivates people. Pay is based on the output per employees (called piece-rate). Employees would do as they were told because if they followed instructions they would be more productive and earn more.

When you can use this

The impact of changes at work on motivation are important to explore but make sure students think carefully about what the impact would be in a particular context rather than just jumping to saying it 'increases productivity'. What impact in reality would it have in different situations?

Almost anything that changes the terms and conditions of employees is likely to have an impact on employees' motivation. In a world of a knowledge economy and where we value creativity, employee ideas and cooperation motivation is clearly important.

SWOT analysis

Overview

SWOT analysis is one part of the process of strategic planning. It involves an internal and external audit which may take place before a business develops an appropriate strategy.

Model/theory

Key points

A SWOT analysis will be unique to each business (and for different parts of the business). It will change over time as conditions change and so the analysis needs to be undertaken regularly.

However SWOT analysis does not guarantee that a strategy is successful. For example, conditions may change faster than the business has realised, the wrong strategy may be selected or it may be poorly implemented.

Strengths and weaknesses

Strengths and Weaknesses are internal features of the present position of a business.

For example:
- strengths might include a good distribution network, a good cash flow position or well trained staff
- weaknesses might include an over-emphasis on the UK market or a weakened brand due to several product recalls.

Opportunities and threats

Opportunities and Threats are the possible consequences of a change in the external environment of a business.

For example:
- opportunities might include new markets opening up or economic recovery
- threats might include increased competition or greater regulation of the industry which impacts negatively.

When you can use this

When considering the strategic planning process.

One view of strategy is that organisations develop it in a scientific manner: they gather information to analyse the existing position and opportunities and threats in order to decide what strategy to adopt. SWOT analysis is therefore a vital part of this process. A business may build on its strengths and focus on the opportunities or try to protect itself against threats. In reality, a strategy may emerge over time; often the strategy that occurs is not exactly the one originally chosen.

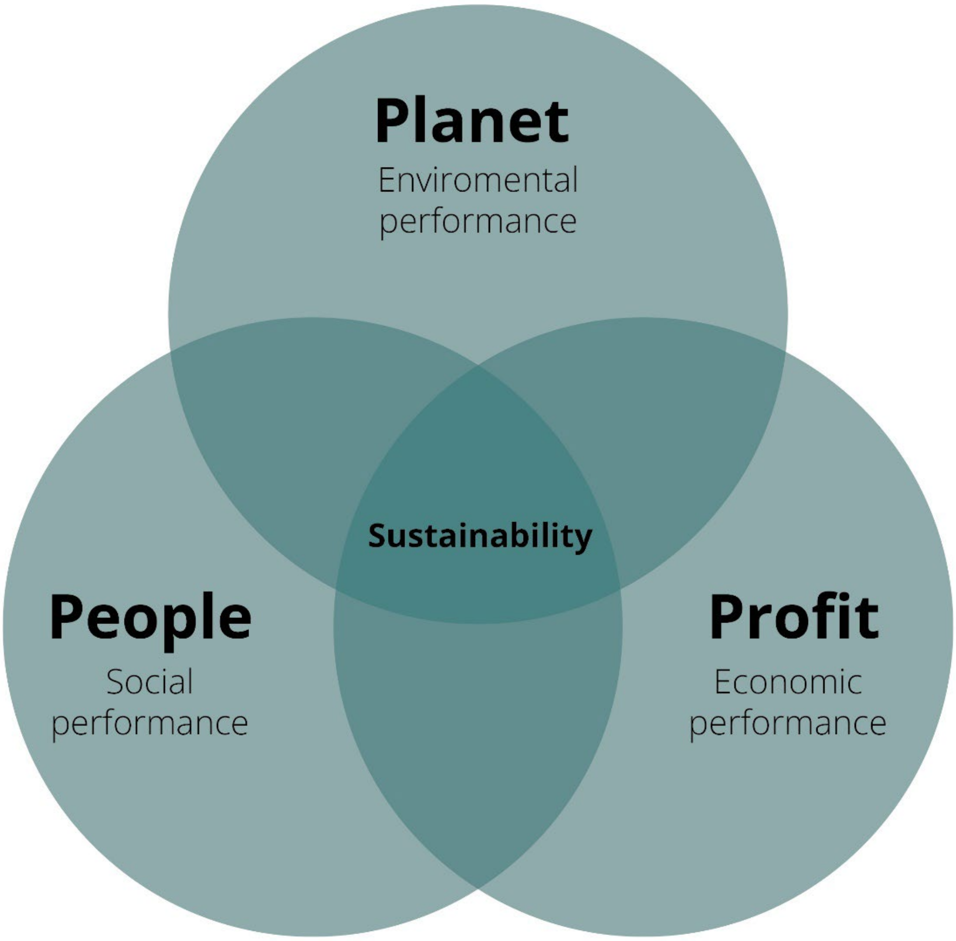
Section 3.7.1 Mission, corporate objectives and strategy

Elkington's Triple Bottom Line

Overview

Highlights that businesses may have different objectives, not just profit.

Model/theory



Key points

The Triple Bottom Line was a phrase introduced by John Elkington in 1994. The model highlights that business performance may be measured in a number of ways: in relation to its finances, its environmental impact and how socially responsible it is in relation to employees.

Elkington argued that only a company that was measuring performance in all three areas was measuring the full costs of its activities. The significance of this is that if you measure all these areas employees are likely to pay attention to them and change their behaviour accordingly (rather than just focusing on profit).

However, in reality it can be difficult to find or agree ways of measuring the impact of business on the planet and people.

When you can use this

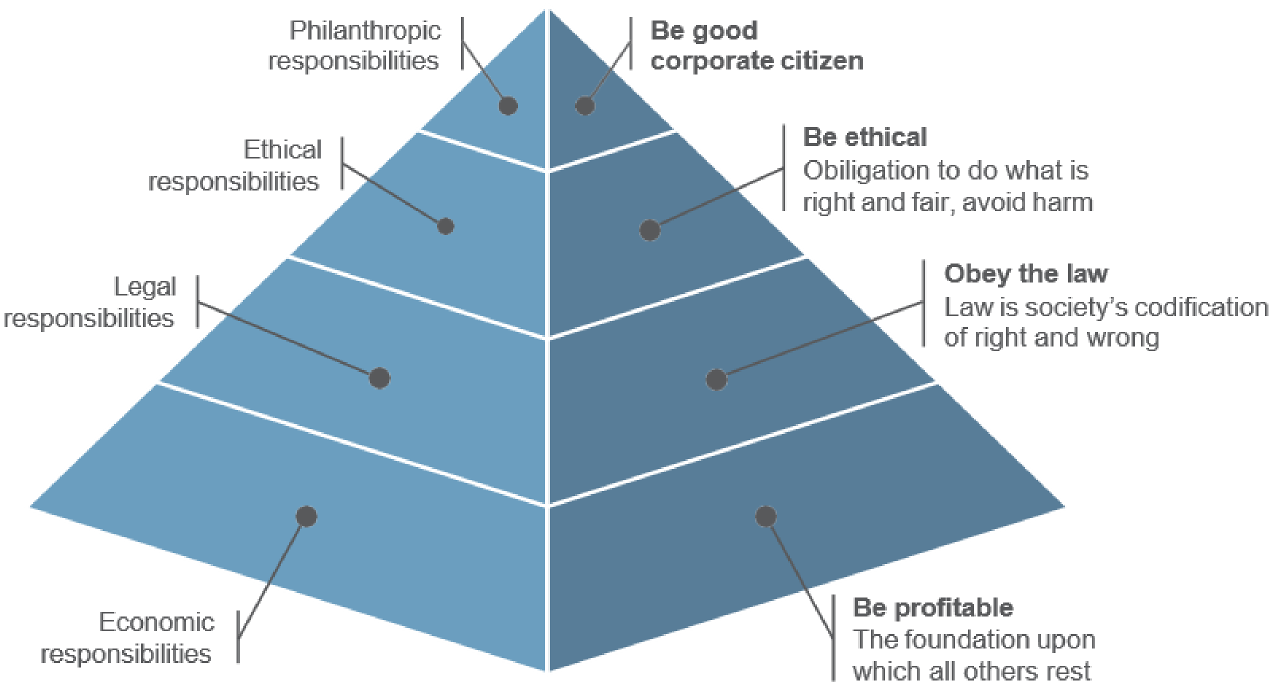
When discussing objectives, Corporate Social Responsibility and the social environment you could consider what factors might influence the objectives a business sets and why more businesses may be setting objectives linked to the planet and people as well as profit in recent years.

Section 3.7.3 Analysing the existing internal position of a business to assess strengths and weaknesses

Carroll's Corporate Social Responsibility Pyramid

Overview
Outlines the different possible aspects of social responsibility for a business.

Model/theory



Key points

According to Carroll, 'corporate social responsibility involves the conduct of a business so that it is economically profitable, law abiding, ethical and socially supportive'. Carroll produced a pyramid that identifies the different types of obligations that society expects of businesses.

The layers of the pyramid are:

Economic responsibilities

These include providing rewards to the owners, paying employees fairly and selling products at a fair price to consumers. A business has an economic responsibility to survive.

Legal responsibilities

This means that businesses should follow the law and not act illegally.

Ethical responsibilities

A business will have responsibilities over and above their legal requirements. Managers may decide to do the 'right thing'.

Philanthropic responsibilities

This focuses on businesses actively trying to help society, for example, by improving the quality of each employee's working life.

When you can use this

When discussing the responsibilities a business might accept, you might discuss what determines whether a business only accepts economic responsibilities or whether it adopts a philanthropic approach and if so why?

In addition, what are the possible implications of these choices?

Section 3.7.6 Analysing the external environment to assess opportunities and threats

Porter's five forces

Overview

In the 1980s Michael Porter analysed the competitive environment of an industry and identified five forces that he thought determined the likely profits of businesses operating within it. He originally observed that the profitability of industries varied considerably and developed the five forces model to explain why.

Model/theory

Watch the five forces that shape competitive strategy video on YouTube.

The degree of rivalry in the industry

If rivalry is intense, ie existing businesses compete fiercely with each other this is likely to push prices down and reduce the profits of the businesses.

Buyer power

If the customers of the businesses are very powerful (perhaps because there are only a few of them so they know the businesses need them as customers) they will be able to push down prices and reduce the profits of the businesses in the industry.

Supplier power

If the businesses supplying the established firms are powerful (perhaps because there relatively few of them and so they know their customers need them) they may be able to push up prices increasing their profits and reducing the profits of the established businesses that now have higher costs.

Entry threat

If it is relatively easy for new firms to enter the industry this will tend to drive down profits within the industry – if established businesses earn high profits others will enter and this will bring prices down reducing profits.

Substitute threat

A substitute in Porter's model is a product that performs the same function as the one in the industry, eg if we are examining the aluminium can industry then a glass bottle would be a substitute. If there are a large amount of substitutes, this would lead to a more competitive environment and they're likely to reduce profitability.

Common issues

Students often get muddled on supplier power and buyer power. They get confused over who is supplying whom. The key is to define the industry, eg if you are examining the passenger airline industry this means the aircraft manufacturers are the suppliers and passengers are the buyers. By comparison, if we were examining the aircraft manufacturing industry the companies making aircraft engines companies are the suppliers and the airlines are the buyers.

When you can use this

- Consider why the profits of some industries may be much higher than others (in Porter's study soft drinks earned much higher profits than hotels and airlines).
- Consider the effect of changing some of the forces in relation to the impact on industry profits.
- Consider how businesses might change their strategy to change the forces, eg how can they may reduce the entry threat.

Section 3.7.7 Analysing the external environment to assess opportunities and threats

Investment appraisal

Model/theory

Investment appraisal methods are used to assess different investment opportunities. They help managers to make a decision whether to go ahead with a project.

When considering investment options managers will consider factors such as:

- the initial costs
- the expected returns each year
- the number of years of returns
- the timings of the returns
- the risk involved.

Three methods of investment appraisal are:

- payback: this measures how long it takes to repay the initial investment
- Average Rate of Return: this measures the average annual profit as a percentage of the initial investment
- Net Present Value: this takes account of the 'time value of money' which recognises that £1 earned in five years' time is not the same as £1 earned today.

Payback

This method is valuable if managers want to know how long it takes to repay the investment. If managers are worried about liquidity they will look for a short payback.

Year	Net inflow £m	Net inflow £m
	Project A	Project B
0	-10	-10
1	4	1
2	4	1
3	5	6
4	1	8

Project A

The project needs to pay back £10m. After 2 years it has earned 4+4 = £8m. This leaves £2m to be paid off. In year 3 the project earns £5m; only £2m of this is needed to pay off the initial investment. We now work out what proportion of year 3's earnings this is. £2m out of £5m = 2/5 = 0.4. We therefore need 0.4 of the year's earning. A year is 12 months so we need 0.4*12 = 4.8 months. Payback for project A is 2 years and 4.8 months. This can be rounded up to 2 years and 5 months.

Project B

We need to pay back £10m. After 3 years we have earned £8m of this so we have £2m extra needed. In year 4 the project earns £8m. We need £2m of the £8m which is 2/8 = 0.25. There are 12 months in the year so we need 0.25*12 = 3 months. Payback for project B is 3 years and 3 months.

On this basis Project A would be chosen as it has the fastest repayment.

The advantage of the payback method is that it is easy to understand and relatively easy to calculate. It is particularly useful if you are focused on the speed of repayment. However, this method does not look at the overall returns. One project may pay back quickly but then little additional may be earned. Another project may be slow to pay back but then earn high amounts later on.

In the example above, Project A has a total return of -10+4+4+5+1 = £4m; Project B has a total return of -10+1+1+6+8 = £6m. Although Project A has a quicker return, Project B has the higher overall return.

Average rate of return

This method considers the total returns of the project. It then calculates the average return per year and calculates this as a percentage of the initial investment.

Year	Net inflow £m Project A	Net inflow £m Project B
0	-10	-10
1	4	1
2	4	1
3	5	6
4	1	8
Total return £	4	6
Average return per year		
= total return/number of years	1	1.5
ARR (%)	10	15

In the example above we can see:

For Project A the total return is £4m; given that the project is expected to last 4 years the return on average is £1m per year. This means the ARR is (1/10) *100 =10%.
For Project B the total return is £6m; this is on average £1.25m. This means the ARR is (1.5/10)*100= 15%.

On average the profit per year for Project A is 10% of the investment; for Project B it is 15%.

On this basis Project B would be chosen because it has the highest average annual rate of return.

The advantage of ARR is it considers the total returns of a project and calculates an average rate of return; this can be compared with the rates of return on other projects or the cost of borrowing.

However, the ARR method does not take account of when the returns occur. For example, the ARR for Project B would be exactly the same even if the net returns were Year 1 £8m, Year 2 £6m, Year 3 £1m, Year 4 £1m. In reality, as the next method will show, the business would prefer the returns to be earlier rather than later and so a failing of the ARR is that it does not take into account the time value of money.

Net present value

This method takes account the time value of money. It considers the value of expected future returns in today's terms. It recognises that the money spent on the investment could be used in an alternative to earn returns – for example, in a bank – and considers this when valuing future earnings, For example, if the interest rate is 10% then £1 placed in a bank today would become £1.10 in one year's time. This is the same as saying that the Present Value (the value today) of £1.10 next year is £1 if the interest rate is 10%. There are several ways of explaining the Net Present Value method but one is to consider the project being assessed with an alternative such as putting money into a bank to work out the value of future expected returns in today's terms.

Year	Net inflow £m Project B	Discount factor if interest rate is 10%
0	-10	
1	1	0.91
2	1	0.83
3	6	0.75
4	8	0.68

In the above table the discount factor is taking account of the time value of money if the interest rate is 10%. It shows the value today (the present value) of £1. For example, £0.91 placed in a bank at 10% interest becomes £1 after a year because of the interest. Similarly, £0.83 placed in a bank for two years at 10% becomes £1.

The discount factor depends on the interest rate; the higher the interest rate the less that would need to be put into a bank to earn £1 in the future.

Using the discount factors we can calculate the present value (the value in today's terms) of future expected earnings from the project.

Year	Net inflow £m Project B £m	Discount factor if interest rate is 10%	Present value £m = discount factor * expected return
0	-10		
1	1	0.91	0.91
2	1	0.83	0.83
3	6	0.75	4.5
4	8	0.68	5.44

The project is expected to earn £1m in year 1. To match these earnings £0.91m would need to be placed in a bank today. This is the amount of money which if it was placed in a bank today would grow to become £1m in a year's time.

The project is expected to earn £1m in year 2. To match these earnings £0.83m would need to be placed in a bank today. This would grow over time to become £1m in 2 years.

The project is expected to earn £6m in year 3. We know that 0.91 grows to become £1 over a year due to the discount factor. If we multiply the expected return with the discount factor we get £6m *0.75 = £4.5m This means that to match the expected earnings of £6m in 3 years' time we would need to place £4.5m; this would grow at 10% over three years to become £6m.

The project is expected to earn £8m in year 4. To match these earnings £8m *0.68 = £5.44m would need to be placed in a bank today. £5.44m left in a bank at 10% interest for 4 years would grow to become £8m.
This means that to match the total expected returns of the project managers would need to place £0.91 + 0.83+4.5 +5.44 in a bank at 10%. This sums to £11.68m. This is the present value of the project. It is the sum of money which if placed in a bank today would earn the same in year 1, 2, 3 and 4 as this project.

The project only costs £10m which means it is £11.68-£10m = £1.68m cheaper than the amount required to be put in the bank to earn the same returns. £1.68m is known as the Net Present Value (NPV).

The Net Present Value (NPV) = Present Value – cost of investment. The £1.68 is how much managers are saving by doing the project rather than investing in the alternative. The bigger the NPV the better the project is compared to the alternative.

Notes

These discount factors would always be provided in an exam question if needed.

Students often confuse the method eg calculate ARR when they should be doing NPV.

Students often fail to deduct the initial cost of the investment when calculating the total returns of the project.

All investment appraisal methods are based on forecasts of future incomes and costs. The calculations are only as valid as the underlying forecast figures. The further ahead the business is looking the less reliable the numbers might be as more things can change in that time.

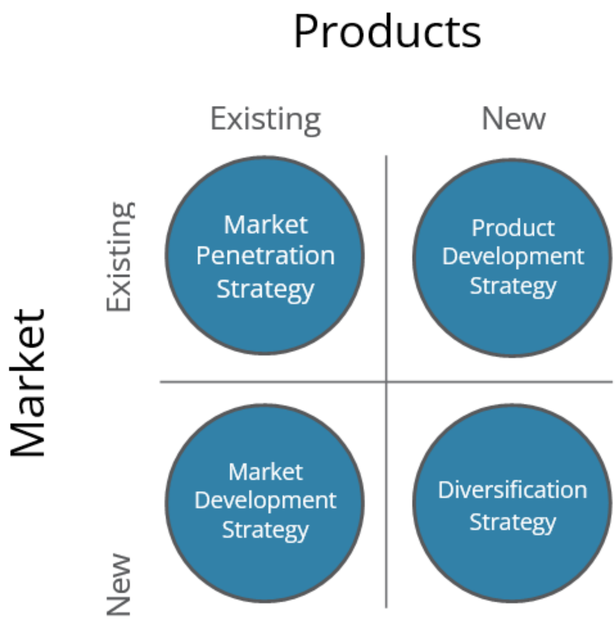
Section 3.7.8 Analysing strategic options

Ansoff matrix model

Overview

The Ansoff matrix model sets out strategic options for a business. It classifies strategies based on the products offered and the markets in which the business competes.

Model/theory



- Market penetration: in some ways this is the least risky strategy because it involves selling more of the existing products of the business. This may involve more marketing activities to generate more sales and possibly a bigger market share. However, this strategy will only work if the demand is there. It also means the business is focusing on the same customers with the same products.
- Market development: this strategy takes existing products and targets new customer segments. These may be in different regions or simply be a different target group, eg a different demographic, income or behavioural segment. A risk here is the business may not have the same knowledge of this new segment as it does of its existing segment and may not have the resources or networks to meet its needs effectively.
- New product development: this strategy develops new products for existing customers. This could be, for example, an improvement to the service provided or a new physical product. The risk here is in developing a new product; many new product ideas never reach the market. Of those that do, many fail.
- Diversification: this is a risky strategy in some ways because it involves new products and markets. However, it does mean the business is no longer reliant on its existing

products and markets which helps to spread the risks – if demand falls in one market, it has another where it is selling.

Key points

The Ansoff matrix outlines possible strategies for the business. Managers have to make the right choices, manage the risk and ensure they implement the strategy effectively.

When you can use this

- Use to highlight different strategic options facing a business.
- Analyse strategies of businesses using this framework.
- Compare and contrast different strategic options.
- Consider what would prompt a new strategy.

Porter's strategies

Overview

This highlights the strategic decisions of managers in terms of the scope of the business' activities and the positioning within the market.

Model/theory

		Competitive advantage	
		Lower cost	Differentiation
Competitive scope	Broad target	1. Cost leadership	2. Differentiation
	Narrow target	3a. Cost focus	3b. Differentiation focus

Key points

Michael Porter analysed the different strategies that businesses might adopt.

Porter argued that the position of a business relative to competitors within its industry determines whether its profitability is above or below the industry average. The ability of a business to earn above average profits depends on whether it has a sustainable competitive advantage.

There are two basic types of competitive advantage a firm can possess: low cost or differentiation. A business may adopt these strategies in many different segments or focus on a specific niche. A business that is not a cost leader or is not differentiated is likely to be 'caught in the middle' and not be profitable.

Cost leadership

When adopting a cost leadership strategy a business aims to become the low cost producer in its industry. It may try to achieve this position through economies of scale, patented technology that makes its processes more efficient or by gaining control over supplies. If a firm can achieve and sustain overall cost leadership, then it will achieve above average profits if it can charge similar prices to its rivals.

Differentiation

If a business adopts a differentiation strategy it seeks to be unique in its industry. It chooses one of more benefits that buyers value and seeks to meet these better than competitors. In return, it charges a premium price.

Focus

If a business adopts a focus strategy it concentrates on one segment within the market. The target segment may be different from the rest of the market because buyers have unusual needs.

When you can use this

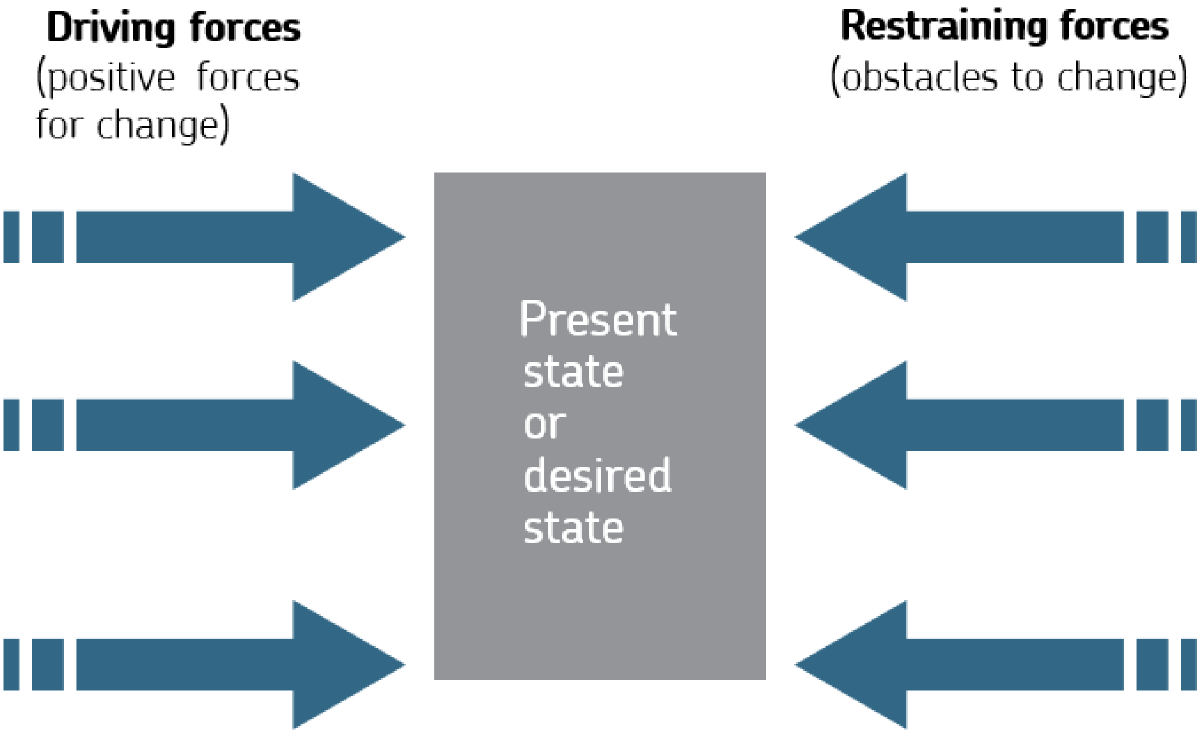
When teaching strategic choices you could discuss why a business chooses one strategy rather than another and what enables a business to retain a competitive advantage over time. You could also discuss the link between the overall strategy of a business and the functional decisions.

Lewin's force field analysis

Overview

Highlights that at any moment there are forces for and against change. The model identifies how change may be brought about.

Model/theory



Key points

Highlights that at any moment there are forces for and against change. Change may be brought about if the forces for change increase (eg due to more competitors, worsening results, more customer complaints) or less restraining forces (eg funds become less of an issue, employees understand the need for change more).

When you can use this

When discussing the issues involved in bringing about change, eg introducing a new strategy you might want to consider:

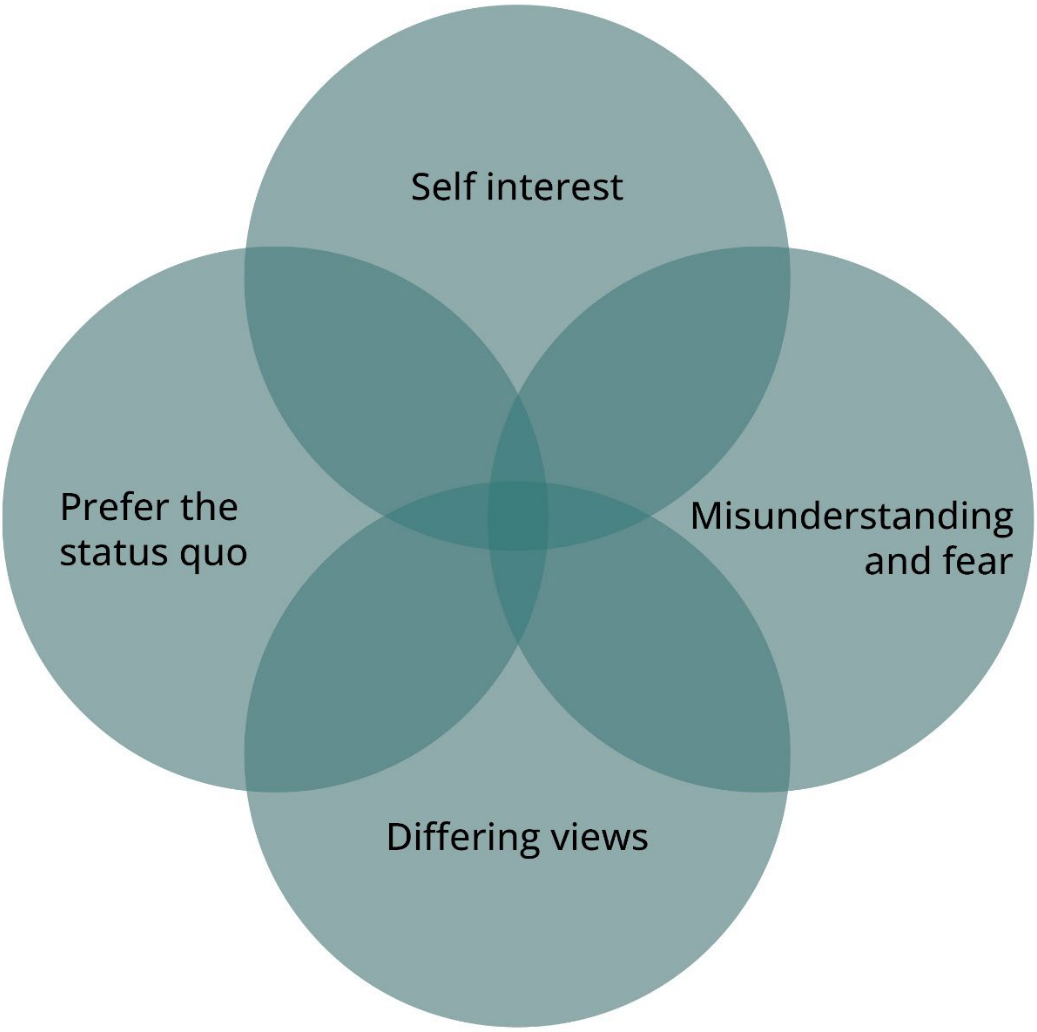
- how the pressure for change might increase (eg worsening financial results, more complaints or more competition)
- how to reduce the forces resisting change (eg through more incentives to change or providing more finance).

Kotter and Schlesinger's reasons for resistance to change

Overview

Identifies four types of reason why people resist change.

Model/theory



Key points

The study highlights four reasons why people resist change:

1. Self-interest – they would be worse off if the change occurred, eg lose their job
2. Fear and misunderstanding – they do not trust the managers' motives
3. Different assessments – they understand the reasons for the change but disagree with them; they may think they have a better plan
4. Prefer things as they are; they do not like change.

1. Self-interest

They would be worse off if the change occurred (eg lose their job).

2. Fear and misunderstanding

They do not trust the managers' motives.

3. Different assessments

They understand the reasons for change, but disagree with the changes; they may think they have a better plan.

4. Prefer things as they are

They do not like change.

When you can use this

When discussing the issues that are involved in bringing about change, such as introducing a new strategy, you might want to consider:

- which of these motives is significant or most important in any given situation
- how each of these reasons for resistance might best be overcome (see Kotter and Schlesinger's six ways of overcoming resistance to change).

Section 3.10.1
Managing change

Kotter and Schlesinger's model of overcoming resistance to change

Overview

Outlines some of the methods that might be used to overcome resistance to change.

Model/theory

Key points

Six methods of overcoming resistance to change are:

1. Education and communication

This approach may be appropriate if people lack information or have inaccurate information about the proposed change. Education can help people to understand why change is necessary. However, it may take time to convince people and win the argument.

2. Participation and involvement

This can help overcome change by getting people involved in the process. This means that people may have a sense of ownership and so may be more willing to get involved and make it work.

3. Facilitation and support

Some people resist change because they are afraid of it. If you can help the process of change and support people so they have the skills and resources they need to cope with it, this can help it to be accepted.

4. Negotiation and agreement

If people are resistant to change it may be possible to negotiate with them or bargain to win their agreement. This may mean compromise is needed and the form of change is slightly different (and possibly better) than originally intended.

5. Manipulation and co-option

This may involve offering rewards to win over key influential people who will then get others to agree to change.

6. Explicit and implicit coercion

If other methods are not successful or possible then you may want to force change through. People may not agree with the change but may do it because they have to. Over time, having changed their behaviour, they may come to agree with the change itself if it proves successful.

When you can use this

When teaching any form of change and how to introduce it.

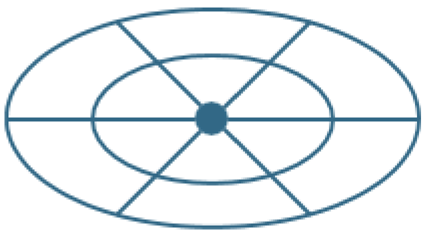
When considering how to introduce new policies and approaches. Managers need to consider the reasons for resistance and then how best to overcome them given the time and resources available and factors such as the importance of the change being accepted by others.

Handy's culture

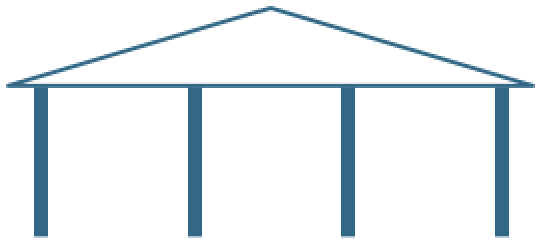
Overview

Handy outlined four types of culture: power, role, task and person.

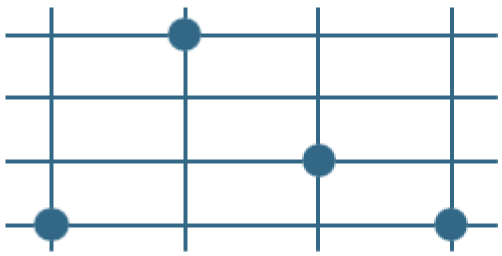
Model/theory



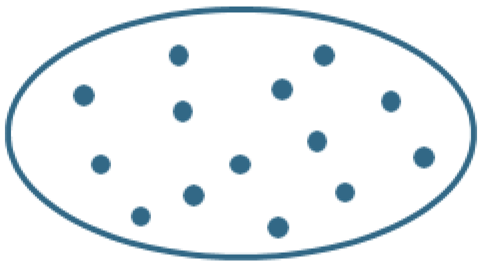
Power culture



Role culture



Task culture



Person culture

Key points

Features of these types of culture include:

Power culture

A centralised culture which focuses on key decision makers. May occur in small businesses where the founder dominates; may come under stress if a business grows and cannot all be run from the centre.

Role culture

More formalised culture with jobs having clear rules and procedures. Individuals know their position within the hierarchy. May be appropriate for a medium to large business in a stable environment; however, may lead to 'silo' mentality where individuals and departments do not communicate or share information.

Task culture

This is a culture where there is a focus on specific tasks and projects. Individuals are brought in to work on tasks as and when they are required, sharing ideas across functions. It may occur in organisations such as design and advertising agencies.

People or person culture

Individuals have considerable freedom to act independently. It may occur in organisations such as legal or medical practices where individuals have high levels of specialist technical expertise.

When you can use this

When highlighting different types of culture and the advantages and disadvantages of these.

When considering the suitability of different cultures for different types of business and in different environments.

Network analysis

Overview

Network analysis is used in project planning. It is one of several possible project management tools that managers might use.

To undertake network analysis managers:

- think of all the activities involved in a project (this is often a useful activity in itself to ensure all the different elements of the project have been considered)
- estimate the time each activity will take (another useful exercise the time taken will depend on the quality standard set and resources allocated)
- plan which activities can be undertaken simultaneously and which have to be done sequentially (one after the other).

Having done this, managers can order the activities to identify the quickest way that the project can be completed by identifying what is known as the critical path. Managers can also identify the float time on other activities. The float time is the time that an activity can overrun without delaying the completing of the project as a whole.

On any activity the float time is calculated by the Earliest Start Time (EST) – duration – Latest Finish Time (LFT).

When you can use this

- This topic links well to concepts of efficiency and lean production. By using network analysis managers can save time and order resources so they arrive just in time. This can improve cash flow.
- The topic also links to delegation. Managers can delegate particular activities to others; they know when to start, how long they have and what to be finished. Progress can be monitored relative to targets.
- You can consider what happens if a particular activity overruns and the consequences of this for the business.

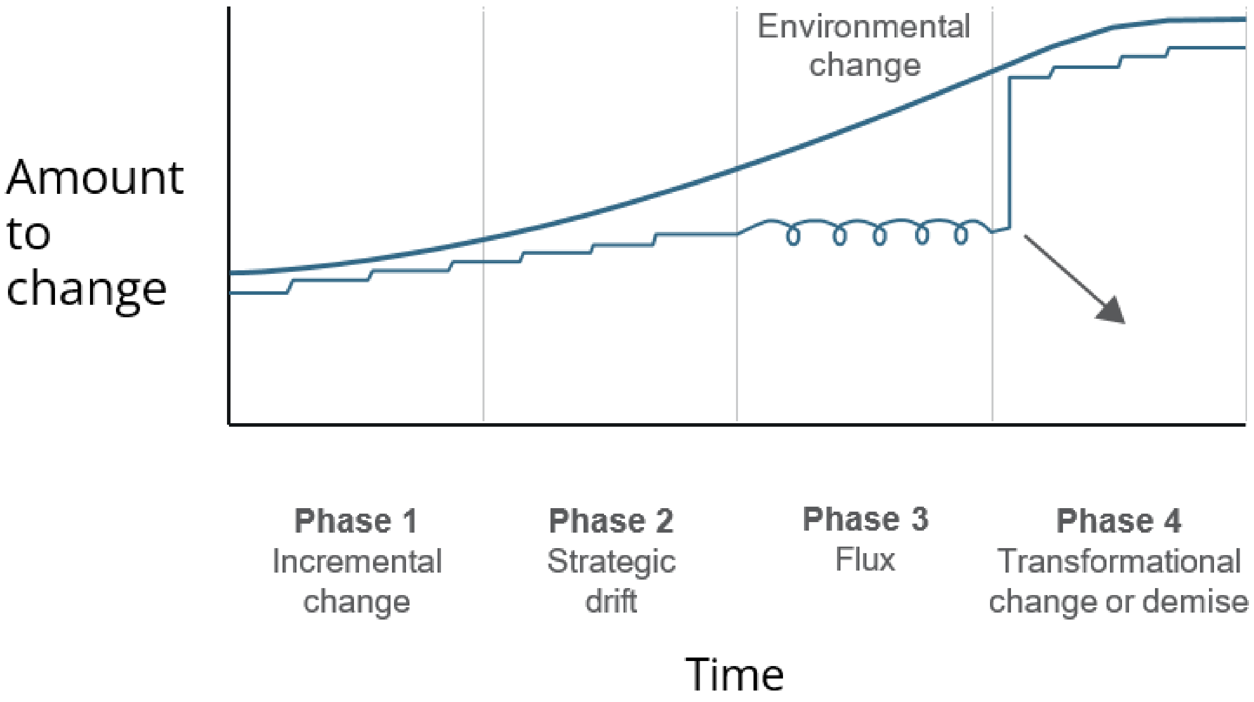
Section 3.10.3 Managing strategic implementation

Strategic drift

Overview

Strategic drift occurs when the strategy pursued by a business no longer fits with the environment around it. What may have been appropriate at one point is no longer suitable as conditions have changed.

Model/theory



Key points

The diagram above by Johnson and Scholes highlights how, as change in the environment increases, the business's strategy may become increasingly inappropriate.

The business will end up in a state of flux, ie managers are uncertain what to do as they have fallen so far behind the trends in the market. At this point, they must either make major transformational change or the business will probably die.

Examples of strategic drift include Kodak, Nokia and Blockbuster videos.

When you can use this

- When teaching strategy, strategic drift highlights that managers must continually review their strategies to ensure they remain relevant and competitive.
- When considering the importance of anticipating, preparing and reacting to change.