

ACCA Paper

P3

***Business
Analysis***



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Syllabus

1. Aim

To apply relevant knowledge, skills, and exercise professional judgement in assessing strategic position, determining strategic choice, and implementing strategic action through beneficial business process and structural change; coordinating knowledge systems and information technology and by effectively managing processes, projects, and people within financial and other resource constraints.

2. Objectives

2.1. On successful completion of this paper, candidates should be able to:

- Assess the strategic position of an organisation
- Evaluate the strategic choices available to an organisation
- Discuss how an organisation might go about its strategic implementation
- Evaluate and redesign business processes and structures to implement and support the organisation's strategy taking account of customer and other major stakeholder requirements
- Integrate appropriate information technology solutions to support the organisation's strategy
- Advise on the principles of project management to enable the implementation of aspects of the organisation's strategy with the twin objectives of managing risk and ensuring benefits realisation
- Analyse and evaluate the effectiveness of a company's strategy and the financial consequences of implementing strategic decisions
- Assess the role of leadership and people management in formulating and implementing business strategy.

3. Approach to examining the syllabus

The syllabus is assessed by a three-hour paper-based examination.

SECTION A

Section A contains one multi-part question based on a case study scenario. This question is worth 50 marks.

SECTION B

Section B will consist of three discrete questions each worth 25 marks. Candidates must answer two questions from this section.

Total: 100 marks





Chapter 1

REAL LIFE EXAMPLES

1. Introduction

Before we start looking at the theories of strategic planning, it might be worthwhile looking at some well-known companies and how they have fared in the past.

2. IBM

In the 1970s, IBM was a very powerful and profitable computer manufacturer. However, by the mid-1980s it had registered one of the largest corporate losses ever made. In the space of about five years there was a complete turnaround. How did this happen? With benefit of hindsight many commentators suggest that IBM hit hard times because it misread the impact of a change of technology, namely the impact of personal computers. For a company which had made a success of manufacturing and selling mainframe computers to large businesses and governments, personal computers might have seemed to be little more than playthings. A senior executive at the time was rumoured to have commented that he couldn't see why anyone would want a computer in their home. IBM had also enjoyed very high rates of corporate growth for several decades, and once that happens to an organisation it might begin to believe that those rates of corporate growth are there for the asking. The organisation can become inward-looking and believe that it is invincible. IBM only managed to survive. It did make personal computers and laptops for some years, but those products quickly became commodities subject to very strong competition from manufacturers established in countries with cheap labour. There was little profit margin left and now IBM has almost forsaken computer manufacturing. It has become primarily a supplier of consultancy services. Consultancy services are harder to treat as commodities and have a better chance of retaining high mark-ups. They are also more difficult to source from cheap operations overseas.

3. Nokia

Until about 2008, Nokia was one of the most successful mobile phone manufacturers in the world. However, it was tied to an old operating system (Symbian) and when Apple launched its iPhone, Nokia rapidly lost market share. Nokia was sold to Microsoft in 2014 and Nokia is no longer used as a brand name for phones, having been replaced by Microsoft's Lumia brand.

Nokia moved too slowly to stay up to date with popular developments

4. Kodak

Kodak is an organisation with almost unrivalled photochemistry. It had a reputation for excellent color films. Obviously, digital photography has had a huge impact on the profitability of Kodak. The decline in Kodak's profits does not necessarily mean that Kodak did anything wrong. It might simply mean that its but its unique, excellent technology has had its



day. If you are very good at something, but then no-one wants what you are good at any more, then success will be damaged. Kodak is trying to change to other areas of the market such as cameras. However, having had a uniquely strong position in color chemistry it could be difficult to transfer your reputation and replicate your success even in related industries. For example, camera manufacturing there are powerful, long-established companies such as Canon, Pentax, Olympus, and Leica. Even though Kodak can make excellent digital cameras, it is hard to compete against those companies. Kodak might never make again the same high profits it once did.



Chapter 2

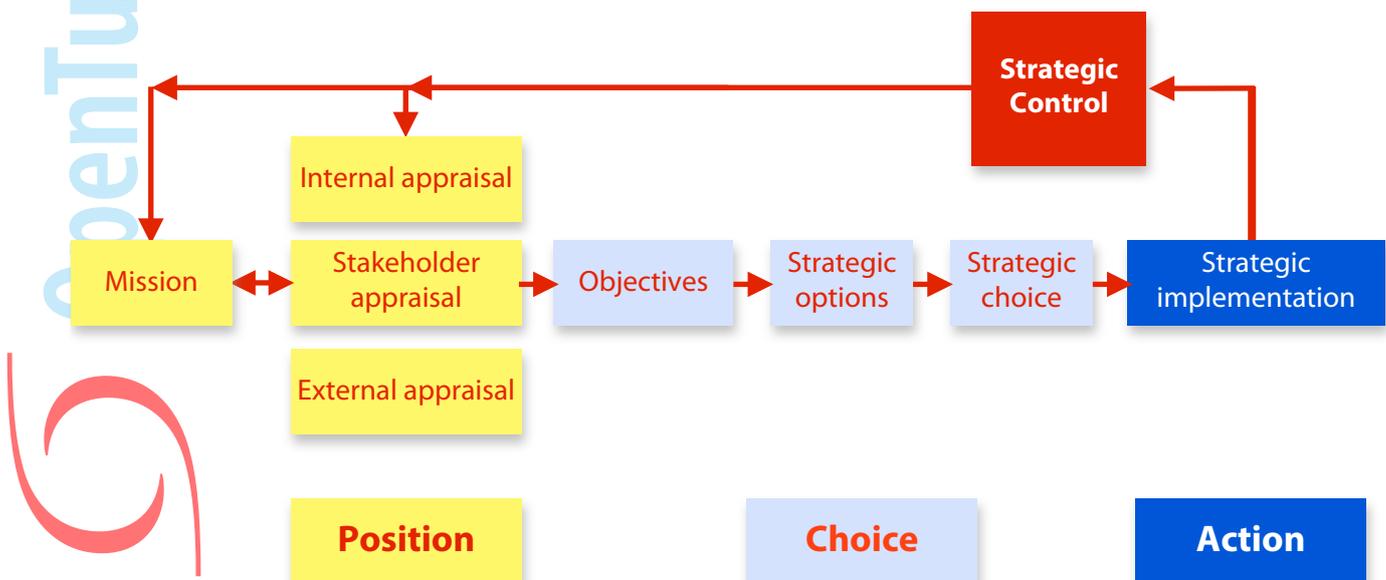
STRATEGIC PLANNING MODELS

1. What is a 'strategic plan'?

The term 'strategic plan' typically refers to a long range plan (at least three years, and often for five or longer) affecting the whole of the organisation. It should be addressing the questions of what the organisation will be doing and what it will look like in terms of size and structure in, say, five years. Some organisations use the alternative names of 'long range plan' or 'corporate plan' instead of 'strategic plan'.

2. The rational model

2.1. Diagram



2.2. Position

The rational model is an approach to strategic planning which first of all investigates the position of the organisation. To establish the organisation's position means carrying out of an internal appraisal, an external appraisal, and also an appraisal of stakeholders, that is, an appraisal of the various parties affected by the organisation and what they want from it. This stage is information gathering.

2.3. Choice

Once the current position has been established, the organisation can go on to set objectives. The objectives must take into account, for example, what the economy is doing, what competitors are doing, and what the organisation's resources will allow it to do. The objectives are what you want to achieve; the strategy, or strategic options, are how you might go about achieving that. For example, if the objective was to increase profits by 20%, one



strategy might be to take over another company. An alternative strategy might be to expand abroad. A third strategy which could possibly generate the required profit growth might be to subcontract much of the production activities.

Once the strategies have been set out and examined, one can be chosen. This will often be a compromise, for example, between high risk and high return or lower risk and lower return.

A powerful method of choosing a suitable strategy is to look at its **suitability, feasibility and acceptability**. This will be examined more fully later.

2.4. Implementation

The third stage is the action stage: strategic implementation. Everything up to here has been investigation and high level planning. Too often, perhaps, organisations feel that is enough, but without implementation of the plans, strategic analysis is a waste of time and effort. Strategic implementation is hard, sustained work. As explained above, usually strategic plans will have planning horizons of five years or so, and look at the whole organisation. Strategic plans are therefore high-level documents, but implementation is a matter of detail. The strategic plan has to be broken down by department and by year. Often these small parts of the strategic plan can be regarded as discrete projects. The project objectives and constraints can be communicated by budgets, given to each department or cost centre.

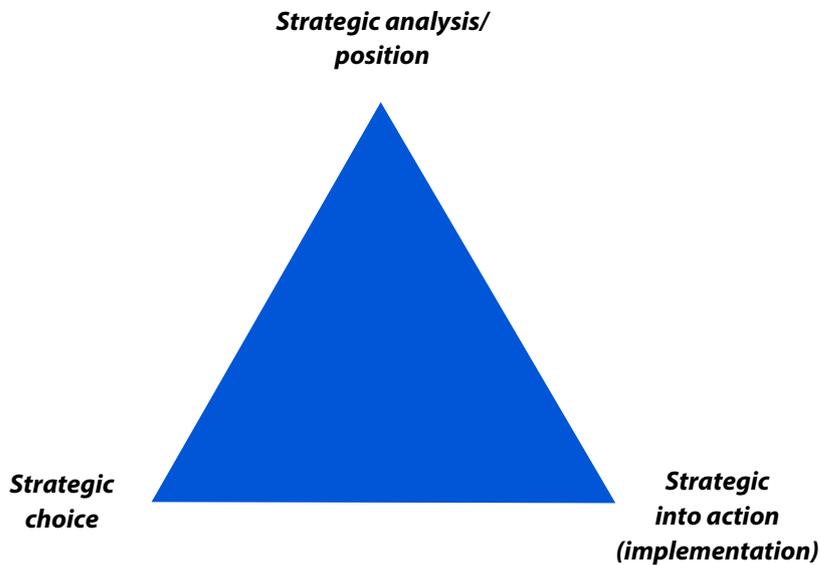
2.5. Control

If every department meets its budget the strategic plan will be realised. However, it rarely is. Not only are there inherent difficulties in the planning process, but almost certainly the environment will change, and what had been a good plan will have to be modified. This is where strategic control comes in. The plan must be continually reviewed to see if it is still relevant and also we must try to make sure the performance is appropriate.



3. Rarely linear

The previous diagram and narrative presented strategic planning as a linear process beginning with strategic position or analysis, then moving to strategic choice, and then turning the strategic choice in action. The following diagram simply illustrates that a linear process may oversimplify matters.

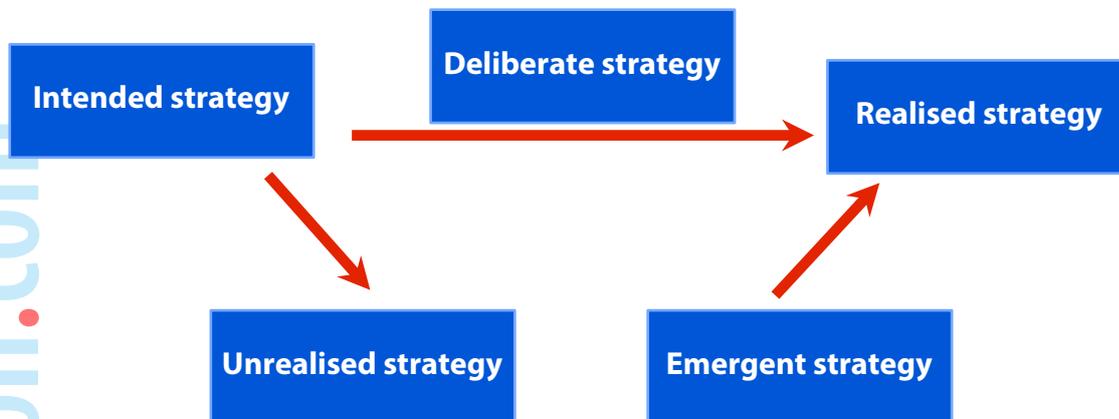


For example, once you begin implementing a strategy inevitably you find out more information and this may mean that you go back and review your strategy and make different choices. The three stages are inevitably linked and inform one another.



4. Rarely unchanging

Strategies should never be set in a stone. No one is capable of gathering all the relevant fact and making correct predictions. Random local, national and world events will intervene and mess up a carefully thought out strategy.



The terminology on this diagram is as follows:

- Intended strategy was the original plan.
- Usually some parts of that are unrealised. They are abandoned either because there are changes on the environment, or we find that we don't have the resources to carry them out. .
- Deliberate strategy is what you intended to do and actually did.
- Emergent strategies become apparent as time passes and new opportunities or threats have to be dealt with. This is the most important term in the diagram.
- The realised strategy is therefore the result of some strategies which were planned from the start, some strategies which were abandoned, and additional strategies which gradually emerged over the planning horizon.

The fact that the realised strategy will rarely be the same as the intended strategy does not mean that there must be a fault in the strategic planning process. It simply indicates that, obviously, the future is not perfectly predictable.



5. Logical incrementalism

Not everyone agrees the five-year rational plan is a proper approach to strategic planning. Adherents to incrementalism say that strategy should be small extensions of past policies. They maintain this view because they claim:

- It will be very unusual for strategic managers carefully to evaluate all options as it would be very difficult and time-consuming to do so. If all options and outcomes have not been evaluated, it would therefore be dangerous to embark on, and perhaps get locked into, a long-range strategic plan.
- It is unlikely that managers know all the relevant facts. This is known as bounded rationality. If you don't know all the facts, you can't evaluate all options. There are the 'known unknowns', such as your competitors' plans. You know there are plans but don't know what they are. There are the 'unknown unknowns' such as random events that no-one can predict. For example, the Japanese tsunami that inundated the Fukushima nuclear power station meant that some countries abandoned their plans for nuclear power stations. What is the point in detailed long-term planning when it is based on inevitably incomplete information?

Therefore, to say that you have plan for five years is a type of arrogance. It would be better making small logical adjustments as time goes by.

6. Freewheeling opportunism

The ultimate anti-planning stance is held by freewheeling opportunists. Followers of this approach do not like planning. Just as some people when going on holidays like to know exactly where they will be each night of the holiday. Others find such detailed planning anathema and that planning restricts the freedom of action. Freewheeling opportunists are often entrepreneurs. These people are going to starting businesses, but then tend to lose interest once the business matures somewhat and each day-to-day careful administration.

Although their dislike of planning probably lies deep within their psychology freewheeling opportunists will tend to justify their stands by claiming that planning imposes restrictions on the development of their organisations. They say it is much better not to plan too carefully and to grab good opportunities as they arise. Of course, a lack of planning can lead you into difficulties. Many entrepreneurs launch into businesses which turn out to be unsuccessful and which perhaps they would have avoided if they had better thought things through and planned more carefully. On the other hand, they are to be saluted. These are the people who often take a chance and who are often responsible for new and unexpected businesses which grow quickly and successfully.

Freewheeling opportunists can make decisions very quickly, but they might not have investigated the facts fully and thought through the implications.



7. The strategic lenses

The idea of looking at strategy through three lenses is an important one.



Strategy as ideas is using strategy at a high level, thinking very much “Where can we be in five years?” What will the shape of the industry be? How can we innovate? Do we need to change radically?

Strategy as experience is somewhat backward looking. It is saying that we have skills, knowhow and experience and these have made us successful in the past. The skills, knowhow and experience are part of our corporate memory. Your future strategy must, to some extent, to be guided by our past experience. To ignore our experience, to abandon our skills and knowhow could be to abandon a tremendous amount of information which has helped us to be successful and which, perhaps, we have uniquely.

Strategy as design is the careful day-to-day often top-down process of turning grand ideas into actions. Think of the strategy as ideas is a five-year plan and strategy as design as a steps that need to be taken in each of those years to realize that grand to vision. Strategy as design is closely associated with strategy implementation. This is how you move from experience to ideas.

What is important about these three lenses is that it would be wrong to concentrate overly on one of them. To concentrate purely on strategy as radical innovative ideas is to abandon too much the strategy gains that we have made in the past through our experience. Similarly, there is no point in having grand ideas if we can't bring those to fruition using careful design. By the same token relying too much on experience may make us blind to innovations that are possible, and which might be forced on us by changing technology and markets. It's important for managers to keep these three views in balance to use each of the lenses when thinking about strategy.



Chapter 3

ADVANTAGES AND DISADVANTAGES OF STRATEGIC PLANNING

1. Introduction

You will not be asked simply to reproduce the advantages and disadvantages of strategic planning but you might be asked to criticize an organisation's approach or to try to convince them to adopt a different approach to planning. The following points can then be very useful.

2. The advantages of strategic planning

The main advantages of strategic planning are as follows:

- It establishes long-term objectives to the organisation and plans how those objectives can be achieved. Most organisations, and particularly the people working in them, like to know what's expected of them. Well established objectives can be very motivating.
- The organisation is much better coordinated. If there were no planning, then production and sales and distribution could all be for different volumes. For the people working in an organisation there is a feeling of satisfaction and safety if you believe that there is a rational mind behind it and that it is well coordinated.
- Strategic planning usually means long-term planning and there are many developments which inevitably take a long time to realise. If people are always concentrating on their short-term objectives then it can be difficult for them to attend to long-term projects. A long-term plan can help people to be patient.
- Management shouldn't simply be passive. If they see something unfavourable that might be happening they can try to change that. For example, a proposed new law might be susceptible to political lobbying, or something happening in the marketplace could perhaps be changed by clever advertising. If you don't look into the future you will always be reactive. If you do look into the future it gives the opportunity to be proactive.
- The organisation is forced to look ahead. Not every development will be properly anticipated but surely making some effort to look ahead is better than stumbling forward with your eyes closed, being constantly surprised.



3. Potential disadvantages of strategic planning

The potential disadvantages of strategic planning are, perhaps not absolute disadvantages of planning, but more a result of how the planning processes is actually implemented.

- Too much time can be spent planning and not enough time to spend on action. This is paralysis by analysis. Remember nobody makes profits out of planning; profits only come from action. Some people postpone making decisions (and so exposing themselves to risk) by wanting more and more information and planning.
- Unwillingness to adapt. Some people stick to a plan no matter what. This is plainly ridiculous. No plan will remain appropriate over a time horizon of something like five years. It is essential that people are prepared to abandon parts of a plan which become inappropriate and to take on new opportunities as it become available. Retaining the capacity to be flexible should be part of planning.
- Planning has a real costs and time and money. 10 people sitting in a planning meeting for a day, represents 2 person weeks. That sort of resource allocation soon becomes material.

Remember, planning is a means to an end, not an end in itself.



Chapter 4

THE RATIONAL MODEL IN MORE DETAIL

We return now to look at the rational model and to consider each of its elements in more detail.

1. The mission

An organisation's mission is what it perceives its purpose to be. It could be an airline, a hospital, a chain of supermarkets, or a school, but all need to know why they exist and what they are for.

Nowadays it is relatively common for organisations to issue mission statements. These are short statements (no more than a page of A4) that set out the organisation's purpose and its position. For example it might be a supermarket which specialises in lower quality, lower cost goods; or it might be a supermarket which tends to specialise in higher-priced luxury goods. Those positions will often subtly be suggested in the mission statement which might make reference to value for money or quality and choice. In addition, most mission statements have several paragraphs dealing with values, culture, and ethics. All missions statements tend to be very similar in these aspects: they state that they will treat their employees and customers fairly, they will be kind to the environment, they will be honest, truthful and fine upstanding members of the community. Because many mission statements tend to be rather similar, attempting to take the moral high-ground, many observers say that mission statements have become rather devalued.

Mission statements can also contain internal inconsistencies. The main mission might be to make profits, but a subsidiary one might be to be to reduce environmental impact. Where should the balance be struck if the company wants to construct a new factory, open a new mine or fly more aircraft?

However, a mission statement can still make management think about what the true purpose of the organisation is, and perhaps to pause before abandoning what the organisation has done in the past. Additionally, if an organisation's value, culture, and ethics are believed by customers then the mission can have a role in branding. The mission can also have a role in getting employees to do what's wanted. If employees believe in the values, culture, and ethics of the organisation then they probably don't need to be supervised as carefully. They will believe in the organisation's culture, ethics and values and therefore employees can be more trusted to do what's right.



2. Stakeholders

Stakeholders can be defined as anyone affected by the organisation. It's important to know who your stakeholders are and what they want, because if the stakeholders are unwilling to cooperate you may find it difficult to put a strategy into action.

2.1. Stakeholders include:

- Shareholders
- Managers/directors
- Customers
- The government
- Employees
- Suppliers
- Competitors
- The local community

Shareholders are often regarded as dominant stakeholders because they own the company and they appoint managers. However, the interests of employees have to be looked at, as do those of suppliers, customers, the local people, government, and lenders.

The important thing to realize about most stakeholders is that what they want is often in conflict. For example shareholders want more profits, but employees want higher wages. Customers may want operations 24 hours a day, seven days a week, but employees might want to work only eight hours a day, five days a week. Customers want lower prices and higher quality; shareholders want lower costs so that the profits are higher.

Management therefore has to try and keep most people happy most of the time. To do this management has to enter into a series of negotiations with stakeholders. What's the minimum pay raise that will attract and keep employees, and stop from going on strike? What's the minimum quality and maximum price that customers will be prepared to pay before they abandon us and go to our competitors? If the local people are being harmed or in some way inconvenienced by our operations, what can we do to try and keep them onside?

There are no easy answers to this. Management has to recognise the conflicts that exist between stakeholders and try to manage them as best they can. We will also find that stakeholders are important when we come to decide which strategies might be best. The strategies have to be one which the shareholders wanted to pursue, but they also have to be strategies which other stakeholders are willing to follow. For example there is no point in adopting a strategy which means that customers abandon you, or employees leave.



3. Mendelow’s matrix

About the only tool or model available for the analysis of stakeholders is Mendelow’s matrix. This sets out on one axis the power that the stakeholder can wield, and along the other axis the stakeholders’ interest, by which we mean how likely is it that the stakeholder will take action: how active or passive are they?



- Key players: stakeholders who have high power and high interest are known as key players. Management really needs to keep those people happy. They have the power and they have the willingness to do something about it if they are upset. These stakeholders can stop any strategy in its tracks.
- Keep satisfied: some stakeholders have high power but they are unlikely to take action even if management does something which they dislike. They may be unwilling to take action because of professional or ethical reasons. For example, medical staff in hospitals are very unlikely to take industrial action. Management doesn't have to be quite as careful with these people as with the key players. However, they have to be kept satisfied otherwise they could be provoked to take action and turn into key players.
- Keep informed: people with low power but high interest have to be kept informed. They can't do much about it themselves but they might be able to influence key players to take action on their behalf.
- Minimal effort: these stakeholders have low power and low interest. Management can almost ignore these people. After all, what are they going to do if they don't like what's happening?





Chapter 5

ENVIRONMENTAL ANALYSIS

1. PESTEL

Now we are going to look at the environmental influences in organisations. We are first going to look at the macro-environmental influences, then influences specific to a particular market, and finally, influences specific to a particular organisation within that market.

The macro-environmental influences can be remembered by the acronym PESTEL. It stands for:

- Political
- Economic
- Social
- Technological
- Ecological:
- Legal.

You may have known this previously as PEST, but now we split apart political and legal and there is an extra "E" for Ecological, which for many organisations is becoming a major concern. Note that it doesn't much matter whether something like a tax rate is regarded as being political or economic: the important point is to have recognised a tax rate or a new tax as something which might affect the organisation.

Examples of PESTEL factors:

- Political: elections and changes of government, war, European Union expansion.
- Economic: interest rates, tax rates, exchange rates, economic boom or recession
- Social: nowadays the main social trend arises from changes in populations. In most western countries the birth rate has fallen and there is an increasing proportion of elderly people. This can affect recruitment but it can also affect the economies of companies that they have to support a larger number of retirees. It can of course affect the marketing of products. Products suited to older people may become more popular while those suited to younger people may become less popular.
- Technological: technological changes often come out of the blue, but once they are invented there is really no turning back. Think how the internet has profoundly affected the fortunes of organisations like travel agents. I think how banks have responded by may be closing



- branches and encouraging their clients to do more and more banking online.
- Ecological: carbon emission restrictions/taxes, more stringent laws governing air and water solution, concern about the possible effects of global warming.
- Legal: health and safety legislation, equality legislation, regulation of industries.

2. Industry convergence

A couple of contemporary environmental influences should be mentioned. The first is industry convergence. Here industries which had historically been separate for some reason come together so that more diverse others products or services are now offered by the same supplier. Examples can be airlines which now offer car hire, hotels, and insurance.

Technology can form a big part in the convergence of industries. For example in a telecommunications industry whose considerable convergence between landline, mobiles, voice over internet telephone providers and television and film companies. There is increasing convergences of products which provide mobile phone access, WiFi access, music, photographs, diaries (think of the Apple iPhone which will do all of these things. You can also see convergence in complementary products. If a company makes digital camera it might also be worthwhile for it to offer printers and computers. The pressure to converge, can be driven by consumers, who may want to go to only one source for a variety of products, or it could be driven by production and convergence of the products and technology which can lead to cost benefits.

3. The international dimension

The second contemporary influence to be aware of is the international dimension. More and more organisations have global presence. Products and services are converging so that the same products can be found in many countries. This gives the producers great cost advantages, not only in purchasing raw materials but also to cover the research and development and marketing costs.

International companies can also manufacture their products where it is cheapest to do so. Note that when a company enjoys sales on a global basis it is also usually facing competition on a global basis, and many weaker companies find it difficult to compete in that fierce environment.

Because many of the global businesses are very large and significant, governments can also take an interest in their activities. In particular, valuable grants can be offered to companies to encourage them to open manufacturing plants in certain countries. Additionally, governments may sometime protect their home industries against the foreign competition.

You will probably be aware that some people feel that large multi-national companies are bad for society. Anti-globalization protesters claim that these very large companies stifle and exploit local economies, reduce consumer choice, have an undue influence on how countries are run and are too concerned with making profit when they should give more attention to social and ecological issues.

Whether or not you believe large multinationals are good or bad, you should be aware that it is usually important for these companies to be aware of certain stakeholders' views.

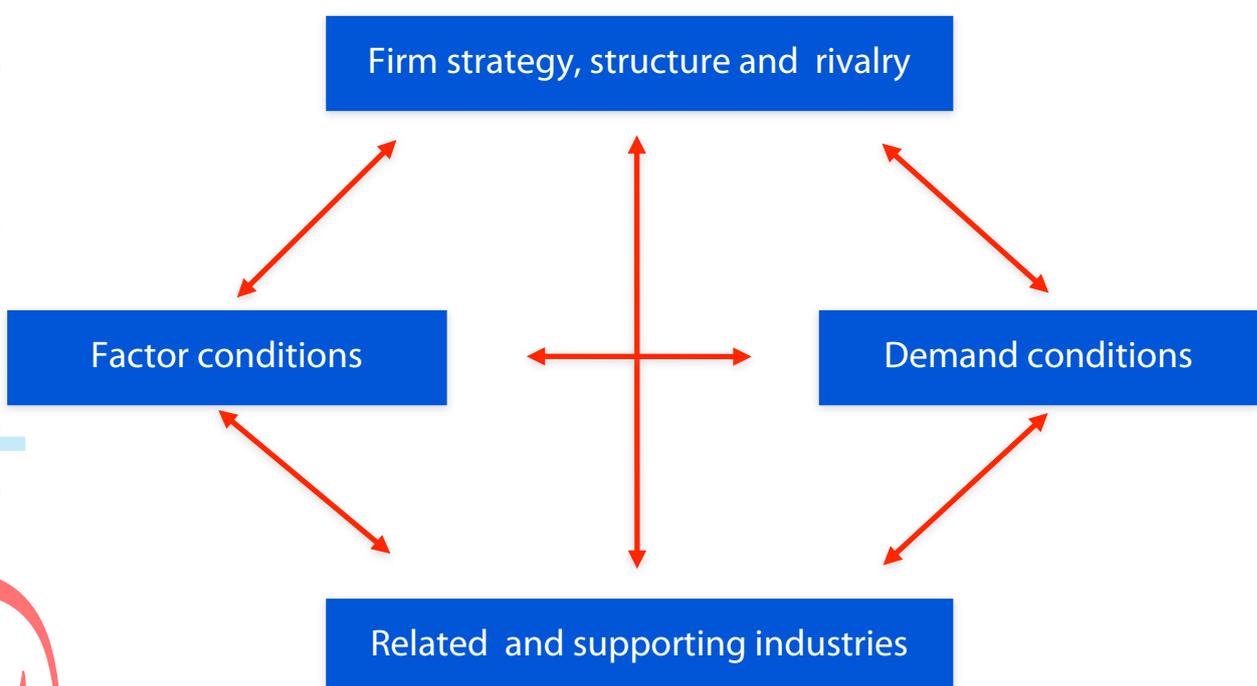


4. Porter's diamond – the competitive performance of nations

Still dealing with the international dimension, it is clear that many countries enjoy reputations for certain products and services. For example:

- Germany is associated with good car making
- Japan is strong with respect to micro-electronics and cameras.
- France is strong with respect to wine.
- The UK (at least until recently!) was associated with a strong financial services industry

Michael Porter began to wonder how countries can achieve such international reputations and he concluded that there were four influences.



Factor conditions: Some countries enjoy natural advantages. For example, France starts with an advantage in the wine industry because of its climate and soil. Finland, however, is never likely to be good at producing wine. Germany has an abundance of iron ore, ready to be used in the car and other industries. Climate and natural resources are known as basic factors. In addition, countries can develop advanced factors such as their transport infrastructure, telecommunications, and educational system. Germany, for example, has a strong tradition in engineering training and education and this gives their car industry great assistance.

Demand conditions: The first step in developing a global presence is to start at home and the impetus to do this is known as (home) demand conditions. So, it is argued that Germany produces good cars because initially the German people demanded good solid engineering. The UK had been a major trading and manufacturing nation until the mid-1900s and this led to the development of skilled financial services and law firms to support international commerce.

Firms' strategy, structure and rivalry. Concentrate on rivalry: having a monopoly in the home market is unlikely to give you a major world presence. To be world beating you have to be

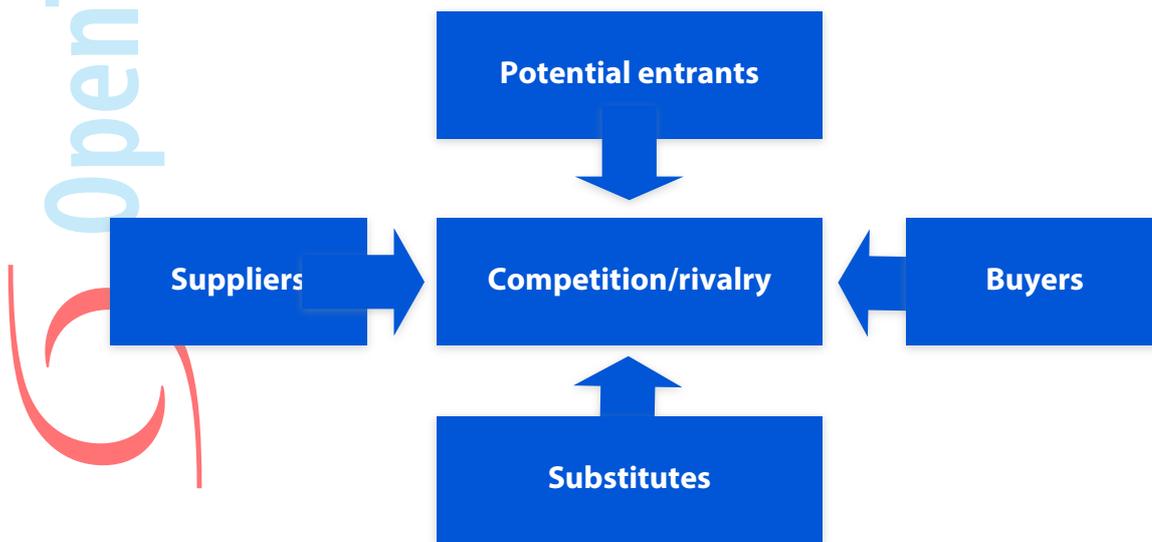


really good at home and this home excellence will allow you to compete against the best of the world. Germany is perhaps really good in making cars because it has within that country Volkswagen, Mercedes, BMW and Porsche, all of are good companies competing with one another, and this allows them to become world-class.

Related and supporting industries. Successful industries often enjoy the benefits arising from a cluster of related and supporting industries. For example in the West Coast of America there are software firms, hardware firms and research institutes. Employees move around from one firm to another and a whole centre of expertise is developed. Similarly, in Scotland in the Scotch whisky industry, farmers can provide the grain, peat suppliers provide peat to give the spirit flavour. There are factories which produce or recondition the barrels, and there are large, efficient bottling plants. Not only do these related and supporting industries form efficient clusters of industries, but also they can work together so that the products become differentiated and uniquely good.

5. Porter's five forces

Porter's five forces model is a very popular and useful framework in P3. It is used to analyze industry attractiveness. Industry attractiveness refers to how easy a business will find it to make reasonable profits. By 'reasonable profits, we mean profits large enough to compensate investors for their risks and also to make enough money to reinvest to keep the company successful. We should be looking for sustainable, long-term success.



- Rivalry: Competition, or rivalry, can range from:
 - Perfect competition, where sellers have no choice as to the selling price that is charged - they have to charge the market price.
- to
- Monopoly, where sellers have much more choice as to what price to charge. Changes in price will normally alter demand, revenue and profits. But remember, just because you have a monopoly doesn't mean you will make profits. You might be the monopoly supplier of something nobody wants.

By and large the nearer an industry gets to a monopoly the easier time its participants will have. Therefore, provided its legal, it could therefore be a useful strategy to take over a rival or to force it out of business by perhaps lowering prices temporarily. Governments tend to be wary of companies which establish powerful monopolies (Microsoft got into trouble over



Internet Explorer which it included with its Windows operating system, making it very difficult for other browsers to compete). Most jurisdictions have anti-monopoly or anti-trust legislation.

- Buyer pressure. If buyers are very powerful then they can exert pressure on prices, quality and delivery times. Selling almost all output to a few powerful buyers will be an uncomfortable situation. The more buyers you have, and the harder it is for them to switch between different suppliers the better. Businesses should try to build in switching costs, that is real costs or impediments that mean that buyers will prefer to stay with existing suppliers. Another way of trying to decrease buyer pressure is to try to enter long-term contracts with major customers. You might have to compromise on price, but get greater certainty of sales.
- Supplier pressure. Similarly, when you are buying goods from suppliers, if you have to buy a special component from a monopoly supplier you will be in an uncomfortable position. That supplier can raise prices almost arbitrarily and you have to pay what they ask. Even worse, that supplier could be taken over by one of your competitors and then you will have no supplies at all. Ideally firms should try to multi-source, and if they get really worried about assurance of supply they should think about setting up their own supply operation or perhaps taking over an existing supplier.
- New/potential entrants. Potential entrants are sitting on the edge of the industry and may be attracted in if they can see that good profits can be made. New entrants are a nuisance because they will normally try to enter with a 'splash': special introductory offers and big promotions. Existing companies have to respond to defend their market share against newcomers. Anything which keeps out potential entrants is known as a barrier to entry. Barriers to entry include:

 - A legal monopoly within the business. This is rare, but is sometimes seen. For example, many postal services operate as monopolies.
 - Regulation and licence requirements can make it hard for potential entrants to get into some business sectors. For example, setting up as a bank is relatively difficult because of the various regulatory authorities that have to give their permission,
 - The need for high capital expenditure increases risk and the difficulty of raising finance.
 - Know-how. Some businesses are complex and acquiring the necessary skills and knowhow can deter new entrants.
 - Unique, patented processes. If you own a unique, valuable patent, no one else can use it and so your position is protected. Some pharmaceutical companies can make use of drug patents to secure their positions and to make huge profits during the patent's lifetime.
- Substitute products usually arise by the advance of technology. Often the appearance of substitutes will surprise a business and take it off guard. For example, landline telephone companies thought that they were almost in a monopoly position because of the huge cost of entry to the market: digging up roads and laying landlines into our houses, apartments, and businesses would have been a considerable barrier to entry. However, then mobile telephones (cell phone technology) was invented and good telephone coverage could be achieved with much less expense. There is not much a business can do here. Once technology is invented it can't really be suppressed. Most old industries have to join the new industries to maintain their market share. So now, many conventional telephone companies also have mobile phone networks in an attempt to retain their overall market share in telecommunications.





Chapter 7

CAPABILITIES

1. Resources and competences

When analyzing an organisation's position we have to analyse its strategic capability. This is an internal quality of the organisation, and capability depends on:

- Resources (things you have like manufacturing resources, patents, people), and
- Competences (how you use the things you have).

Strategic capability (that is capability which gives sustained competitive advantage so that you do better than others in the long-term) depends on:

- Threshold capabilities, which are the minimum capabilities needed for the organisation to exist at all so that the company just survives; and then on
- Additional capabilities, which give the organisation competitive advantage.

The additional capabilities can arise from:

- Unique resources, or
- Core competences.

Unique resources are resources which one organisation has but which others don't. It could, for example, be the right to use a particular technique or patent. However, by and large, unique resources are hard to find. Many resources, such as production equipment, can be bought easily and this allows rivals to copy what is being achieved.

Core competences are ways in which an organisation uses its resources better than its competitors do and in ways that other organisations cannot easily imitate or obtain. Core competences are generally harder to identify and define, and they are therefore more difficult for other organisations to copy. Core competences will therefore usually provide a more permanent way in which an organisation can achieve and retain competitive advantage. For example, Apple has core competences in designing and developing new hardware and services such as iTunes. Other companies find Apple's competences difficult to replicate.

2. Position-based or resource-based strategies

To a large extent, traditional strategic planning has been position-based. In this approach a strategist focuses on the environment (for example using PESTEL analysis or Porter's five forces), discovers and analyses what's happening in the environment, and then reacts to that, often changing what the organisation is doing.

A more recent approach is resource-based strategy. This maintains that a strategist should focus on resources and competences. Successful combinations of resources and competences, particularly unique resources and core competences, take years to develop and can be hard for others to copy. These resources and competences are the secret of the organisation's success: they are likely to be the organisation's 'crown jewels'.



A position-based strategic planning approach can lure organisations into areas where they haven't got the appropriate resources and competences, and it makes them abandon the resources and competence which hitherto have made them successful. Why should they throw away the resources and competences in the hope of discovering others? There is no reason to think that an organisation which has been successful in one area of business through employing specific resources and competences should automatically expect to be successful in another area where entirely different resources and competences are required.

Organisations, therefore, should perhaps not abandon their resources and competences too easily. The organisation should view the future as not just something it happens to them and which renders its resources and competences irrelevant. Perhaps they can create and mould the future to make use of their resources and competences. Of course as in so many matters dealing with strategic planning, a balance is needed. There is no point in an organisation clinging to existing resources and competences when technology or public taste has advanced, and their older products and services have become unpopular. However, it is very salutary for organisations to remind themselves where their strengths lie, and not to give those up without a reasonable struggle.

3. Prahalad and Hamel

The academics most associated with respect to resource-based versus position-based strategic planning are Prahalad and Hamel. They concluded some management teams were simply more foresightful than others; some are capable of imagining products, services, and entire industries that did not exist and then giving them birth. These managers seemed to spend less time worrying about how to position a firm in existing competitive space and more time creating fundamentally new competitive space.



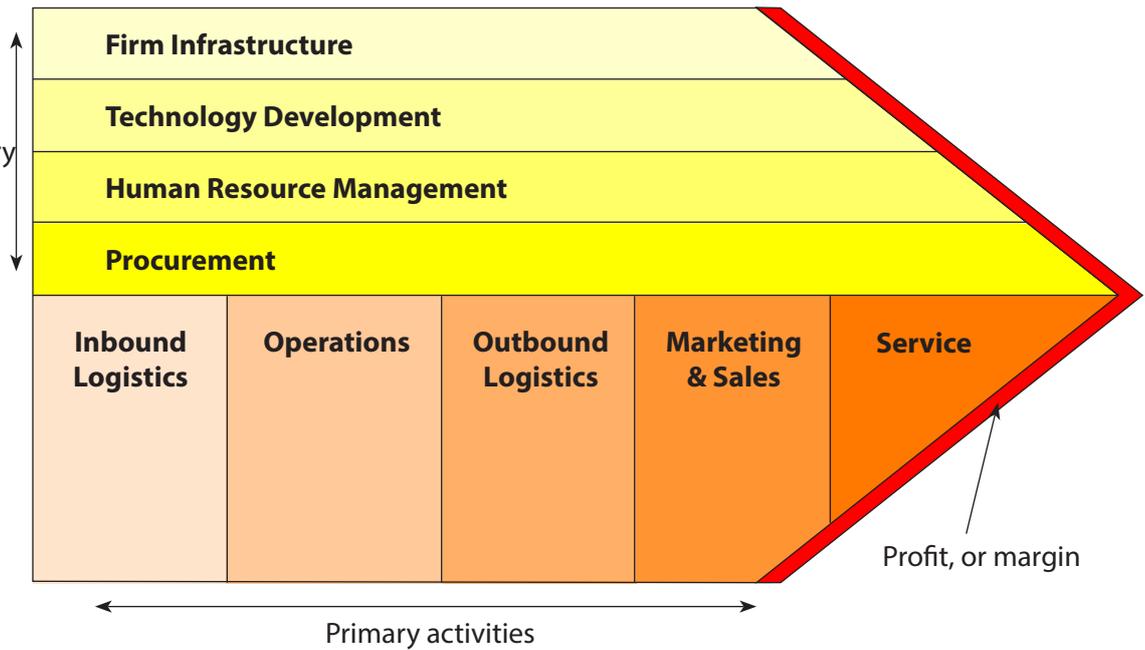
Chapter 7

INTERNAL ANALYSIS

1. Porter's value chain

Porter's value chain is used to examine how a business makes profits or margin.

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The primary activities are set out across the bottom of the diagram: inbound logistics, operations, outbound logistics, marketing and sales, and service. More or less these activities will equate to direct costs.

The support or secondary activities are set out across the top of the diagram: firm infrastructure, technology development, human resource management, and procurement. By and large they equate to indirect costs.

It has to be stressed that *activities* are shown in the diagram. However, every activity has an associated cost, and if all activities are represented there, so should all costs, and these could be allocated and apportioned, and so mapped to somewhere on to this diagram. Rent, for example could be apportioned over the operations that is the factory, the warehouse, head office, and the marketing and sales department. Similarly with depreciation, heating costs, wages and salaries.

So, all the organisation's costs can appear on this diagram. Let's say these amounted to \$10 million. The goods and services produced by the organisation will be sold, let's say for \$15 million. How come therefore buyers are willing to spend \$15 million on what cost the organisation only \$10 million? For what possible reason are customers willing to spend an extra \$5 million over and above what the goods or services cost to produce?

The extra \$5 million has to be explained somehow. It is known as 'value-added', and it is explained by arguing that the organisation accomplishes more for its customers than simply



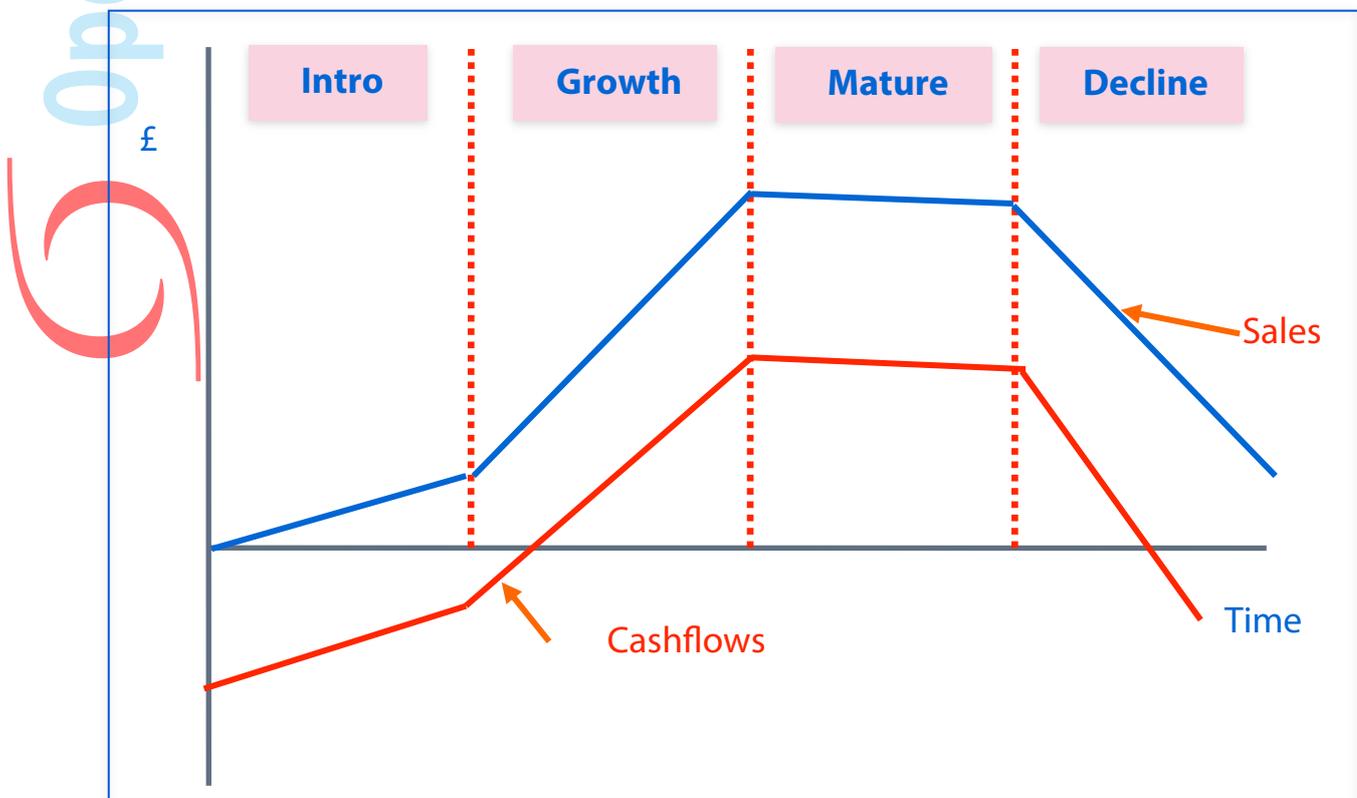
carrying out the activities and incurring the costs that can be spread over the sections of the value chain. The organisation must be doing something else. For example, it could be bringing skills and know-how to the process. Effectively it is bringing competences to the process. It could bring convenience to the buyer, allowing the buyer to keep everything bought from the organisation as a variable cost rather than taking on board many of the fixed costs. It may bring economies of scale and the buyer is willing to pay for this because it will be impossible for the buyer to replicate these on a smaller scale.

The organisation must understand what it is that adds value, as this is the reason it can make profits. Furthermore, the organisation must understand how the different sections of the value chain are linked. It could be, for example, that if more were spent on human resource management perhaps less would need to be spent on operations because employees are better trained. If more were spent on technology development perhaps less could be spent on after sales service because the quality of the finish goods was higher.

Understanding the value chain is essential for organisations so that they know how their profit is generated. It has to be said, however, that sometimes organisations make mistakes identifying what it is about their activities that adds, value for the customer and they make changes which reduce their ability to make profits.

2. The product lifecycle

The product lifecycle is a well-known diagram which purports to show how the sales revenue and net cash flows of a product change as it moves from the introductory phase through growth to maturity and then decline.



In fact, though very well known the diagram is almost useless for strategic planning. The real problem is that no product is guaranteed to follow this pattern and even if it does the lengths of the various phases on the diagram will show tremendous variation. For example, the



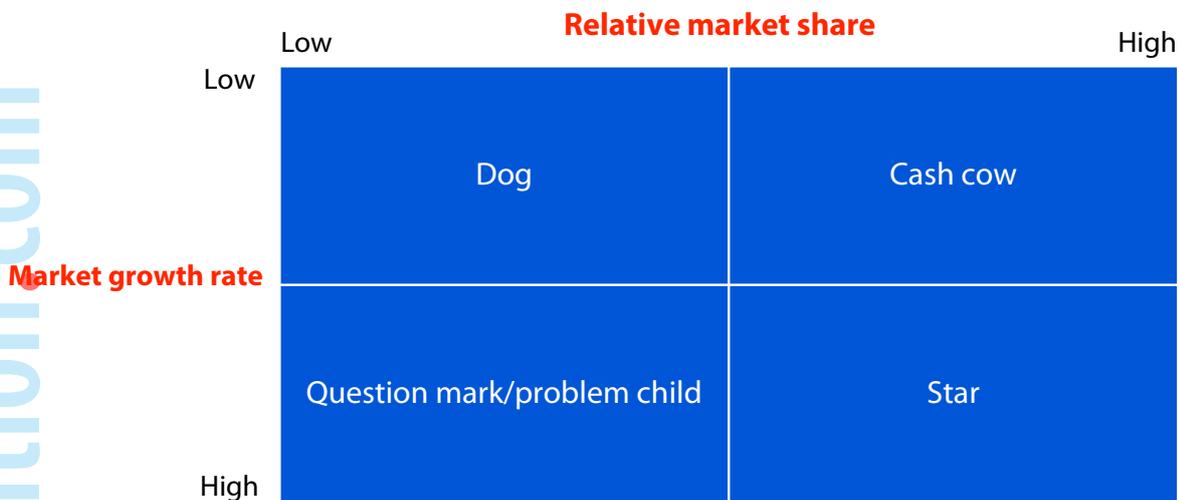
mature phase of some products can last for decades, but for others may last only a few years. What we would really like to know for strategic planning purposes is when irrevocable decline sets in. This diagram doesn't predict that. What it does do is provide us with a set of labels which can be used as a kind of shorthand. Therefore:

- **Introductory phase.** If we know that a product is in the introductory phase we know that we should want to watch sales very carefully to see whether the product is likely to succeed or not. If sales are poor emergency action is needed to try to rescue the new product.
- **Growth phase.** Here, many competitors will start coming into the market, encouraged by our success. We might therefore want to keep advertising the product strongly so that we can stay ahead of the field.
- **Mature phase.** At the mature phase there are likely to be many suppliers, and buyers of this established product are likely to be well-informed and demanding. The market is not growing, so the only way to improve market share is by stealing from competitors. Generally at this phase there is price pressure and buyers demand more for their money as they are more aware of the different features of the product. In extreme cases, there may be over- capacity in the industry and this will cause very extreme price pressure indeed.
- **Decline phase.** Businesses must be careful not to misinterpret a temporary dip in the sales as the start of the decline phase. Relatively cheap upgrades and facelifts can extend product life for a few years and that is important because usually development costs will have been already covered, as will depreciation of machinery bought for the production of that product. The additional years can be very profitable despite the product being in decline. Decline phases can last for very long times for some businesses and plenty of money can still be made there. A strategic decision has to be made as to whether or not to get out of the product quickly or whether to be the last player remaining standing, effectively becoming a monopoly player in a declining market.



3. Boston Consulting Group Matrix (BCG)

The Boston Consulting Group Matrix is another very well-known analysis tool. Note that it is sometimes known as a *portfolio analysis* and it really makes sense to use the BCG Matrix if there is more than one product (or product line) in a company's portfolio. The axes of the matrix are relative market share and the market or industry growth rate.



Relative market share = The company's market share / Largest market share

We'll go through each quadrant in turn.

- Question mark/problem child.** This product has a high growth rate but a low market share. Why is it known as a question mark or problem child? Well, the BCG analysis suggests that there is no long-term future for this product if it has only a small market share. Suppliers who have large market shares have much greater economies of scale and could easily dominate the small supplier. The question therefore is: should we get out of this product or should we try and grab a large market share? If we go for the large market share, this will require investment. It will be a heavily negative cash flow because money has to be spent on promotion, research and development or investing the margin (that is reducing the selling price to win a higher market share).
- Star products.** If the quest by the problem child for high market share is successful, the product will become a star. This isn't as good as it sounds. Although we now have a high market share (and therefore would enjoy economies of scale and are well down the experience curve), because we have one of the highest market shares, and highest profiles, competitors will be trying to steal market share from us. We will be the target for competitors also wanting to gain a high market share. Remember, if the market has a high growth rate this product is perceived as a product with a future and many companies will be anxious to get a large share of the action. Therefore, cash flow with the star product is usually soon to be roughly zero.
- Cash cows.** The initially high growth rate of products will always slow down, perhaps to zero or even becoming negative (a declining market). The product then becomes a cash cow. It's a cash cow because we still have a high market share but nearly all the initial expenses will have been written off. Also because this is now perceived as an old product, competitors will not be keen in stealing market share from us. Essentially they leave us alone. We therefore enjoy high cash inflows without having to spend a lot on promotion, or research and development, or defending our market share.
- The dog sector** is on its own. Cash cow products do not turn into dogs! This is a product which has a low growth rate and we don't have much of a market share. Therefore, get



out of it:divest. There's no point spending time effort and money achieving a high market share in an old product. So, close down the production facilities or try to sell them to another company.

There are considerable flaws in the BCG analysis. For example:

- It puts a lot of emphasis on the importance of a high market share, but there are many companies with only small market shares which are successful in the long-term. For example, the Porsche car company has a small market share when compared to Ford, General Motors and Toyota. Yet, it is one of the most profitable car companies per car sold in the world. Really, you have to define very carefully what your market is. That can be room for relatively small specialist suppliers who can continue to make good profits year in, year out.
- The second problem is to do with how the BCG is interpreted. If a product went from just being a star product to just being a cash cow product because of a slight change in market growth rate, to suddenly cutback massively on promotion, research and development, and defending the product. The interpretation must not be too black and white. If market growth rate goes from 10.1 to 9.9, with 10 being the division between star and cash cow, in reality not a lot has changed and the change in treatment of the produce should not be abrupt.
- Third, relative market share and market growth rate are probably inadequate measures. By relative market share we really mean competitive strength, but there's much more to competitive strength than just our market share. For example our brand name, or where our production facilities are located can give us very high competitive strength. Similarly, instead of just having a market growth rate what we really mean is market attractiveness. Attractiveness depends on factors such as risks and the amount of competition which is present in that market. We might prefer to go for a product which has a relatively low growth rate, but which is relatively low risks.

These criticisms do not mean that BCG is useless but, like any model, care needs to be exercised in interpreting the results. No model guarantees the truth.

Finally let's return to the name portfolio analysis. If we have lots and lots of problem children they will all require financing and where is that money going to come from? If we have almost exclusively cash cows we have a very positive cash flow now, but a few years down the line the market for those cash cows could have declined rapidly and what are we going to replace those cash flows with?

A well-balanced portfolio has some cash cows and some question marks. The cash generated from the cash cows can be used to invest in the question marks, so securing the long-term future of the company.



4. Resources

Many resources can be remembered by lists of words all starting with 'M'.

Businesses need the following:

- Money (financial resources).
- Manpower (more properly called human resources).
- Management. The need for good management should not be underestimated and it is the lack of management which often restricts small businesses, particularly family businesses, from growing.
- Manufacturing or machinery needs to be adequate,
- Markets (customers who will buy the goods)
- Marketing skills have to be adequate.
- Material, so that the goods can be made.
- Make (brand)
- Methods (knowhow)
- MIS (information technology)

When a business is planning its strategy either it must have:

- The resources in place to carry out that strategy, or
- It must be able to acquire the resources.

It certainly cannot pursue its strategy if adequate resources are not in place how can it be put in place.



Chapter 8

SWOT ANALYSIS

1. Overview

A SWOT analysis can either be used in its own right or it can be used as a summary sheet on which other findings are placed.

SWOT stands for:

- Strengths
- Weaknesses
- Opportunities
- Threats

Strengths and weakness are internal to the organisation;w

Opportunities and threats are external.

For example, an organisation might have strong resources in finance and weak resources in marketing. Opportunities and threats are external. For example there may be political threats, but the economy might be looking up and might provide opportunities. Those political and economic factors could have a reason from a PESTEL analysis.

	Strengths	Weaknesses
Opportunities	Look for opportunities that make use of strengths	Look for strategies which address weaknesses
Threats	Look for strategies which use strengths to overcome/ avoid threats	Defensive: Look for strategies which avoid threats and minimise effect of weaknesses

Once the strength, weaknesses, opportunities, and threats have been summarized an organisation then has to decide what to do with them. The point of any analysis is to stimulate action.

Certain things match well. For example, if there is an opportunity which is matched by a strength then the organisation should try to make use of that strength. However if the opportunity depended on using an area in which the company was weak, then the chances of success there are relatively low. Either avoid that opportunity or look for strategies which address the weakness. Similarly, if there us a particular threat which is matched by a strength then it should be relatively easy for the company to overcome that threat. But if there is a threat in an area where the company is particularly weak, then the company could be in some



difficulty. For example the threat might be coming from overseas imports which are particularly low cost. If our organisation is weak in manufacturing so that its costs are relatively high because of inefficient machinery it's not easy to see what the company can do to fight that threat and it will be particularly vulnerable in that area. Perhaps what it should do instead of fighting the imports face on is to try to avoid the whole conflict by, for example, moving up market. Note, however, that if it is going to move up market it must be strong in the areas of research, development, quality, and innovation.

It must be said that for many exam (particularly the 50 mark Part A question) questions when asked to assess a company's strategic position, a SWOT analysis will always work insofar as it gives you some structure in which to arrange the factors which have been described in the scenario. Note, however, that the examiner does get a little tired of SWOT analysis not supported by more detailed analysis such as five forces, BCG, product lifecycle, and PESTEL .



Chapter 9

OBJECTIVES, CRITICAL SUCCESS FACTORS AND BENCHMARKING

1. SMART

After information from both inside and outside the organisation has been collected, objectives can be set. Many diagrams showing the rational planning model have objectives at the start of the process. Although one can see a case for that (if you don't know where you are going, you don't know what information to collect) there is also a danger. There is no point in setting objectives which bear no relation to the information which has been collected and which may critically determine what is possible.

1.1. Objectives are normally described as having to be smart:

- Specific. "S" stands for stated or specific. There is no point in having an objective simply say we want to be a better organisation or we want to improve. No one is quite sure what better or improve mean. You have to be really specific and talk about things like profit, market share, gross profit percentage, waiting time.
- Measurable. "M" stands for measurable. Objectives should be measurable, meaning that objectives have to be set in numerical terms. This can sometimes give challenges, but it does mean that we are sure at the end of the period whether our objective has been met or not. There is no room for wriggle.
- Achievable/agreed/accepted. Objectives are ultimately set for people in departments, and to be effective they have to be regarded as being achievable. They have to be agreed or accepted. There is little point imposing an objective on a department or a person which is believed to be entirely unachievable: the objective will simply de-motivate people. If there is no hope of getting the objective, and that is patently obvious that it is not achievable, then why even try.
- Relevant. The objectives also have to be relevant to what the organisation is trying to do. In a profit seeking organisation there has to be some connection between the objective and improving profits. In not-for-profit organisations, there also has to be a relationship between objectives and what is that organisation is trying to do. For example, in a hospital they might be trying to increase the number of patients they see over the year. Objectives set for



medical and administration staff have to be understood as helping that ambition to be achieved. If there is no connection people feel that the objectives are simply being imposed for the sake of it, and that management has set another hoop for staff to jump through, but which doesn't really improve the organisation's performance.

- Time-limited.

If there is no time limit then people do not know by when targets have to be met or when they will be assessed. Very often they are set for periods of a year, but in strategic planning there may be three or five-year objectives.

Performance measures (indicators) need to be set for objectives both to provide targets and to allow performance evaluation.

2. Consistency of objectives

You can think of objectives as first being set at the top of the company, at its corporate level, and then flowing down through various divisions, departments and, perhaps, to individuals. It's important to ensure is that the various objectives are consistent with each other. There are three types of consistency:

- Vertical consistency simply means that if you have two divisions one has an objective of earning 3 million and other has an objective of earning 6 million, you are not going to get a corporate profit out of that of 10 million: it simply doesn't add up.
- Horizontal consistency looks between departments. For example, there is no point in having an objective which says that sales should be 10,000 units, if manufacturing can only cope with 8,000 units. Of course, there may be large inventories in or it may be possible to subcontract manufacturing, but as it stands 10,000 sales and 8,000 manufacturing is horizontally inconsistent.
- Consistent through time. There has to be consistency through time or objectives will be undermined. So, it doesn't make sense to have a gross profit percentage in 2007 of 20%, then 50 % in the next year, and then 35% in the following year. Having objectives go up and down almost randomly usually doesn't make sense and employees will feel arbitrarily manipulated.



3. Other potential problems with objectives

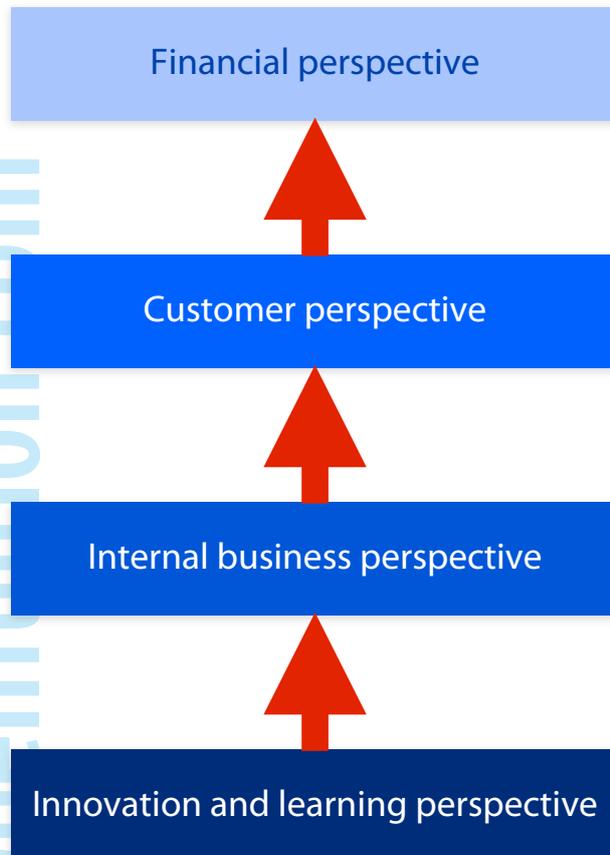
There are some other potential problems with objective setting.

- More than one is needed. You might think that in a profit seeking organisation all you need is a profit objective so that if that's achieved everything else must be fine. But that doesn't really work. It is easy, for example, to double the profit in almost any organisation in the world. How? Well, simply buy another organisation of the same size and profitability. But, that was probably not really what was meant when the profit-doubling objective was set, and even if another organisation of the same size was bought, goodness knows what's happen to the return on capital employed, the earning per share, the gearing and the other important measures that lead to the long-term success and stability of organisations. Remember, once objectives are set that's what people concentrate on. They know they are going to be judged on whether or not they meet those objectives, and other desirable elements of behavior are often then ignored.
- Secondly, in organisations there are interdependencies. The performance of one person depends on many others. It can become difficult to later decide who was responsible for achieving an objective - or more dramatically, who was responsible for not achieving that objective. You can set an objective to the sales force to sell a certain volume, but if the design department doesn't bring forward new designs and manufacturing doesn't create products of the right quality, then the sales force can't really be blamed for not achieving the objectives set.
- Short-term/long-term conflicts. Many businesses are critically judged by investors and commentators on each year's profits. Their profit targets are often published in advance and many chief executive officers would rather jump out of the window than have to admit that profits have fallen and that dividends might decrease. Accounting isn't really very good at dealing with the long-term as most accounts are simply made up for 12 months. There can be a great temptation therefore, to make short term savings like cutting expenditure on research and development, training and maintenance. These measure will boost current profits but this will certainly cause difficulties in a few years' time when no new products have been designed and the company has developed a poor reputation because staff are inadequately trained and machinery poorly maintained.
- Not all desirable attributes are easy to measure. However, remember that if the attribute is desirable then objectives must be set for them otherwise that particular behavior will be ignored, and if objectives are set they have to be measurable. For example, in service organisations many members of staff have contact with customers or potential customers. It is important that staff appear to be happy, cooperative, and knowledgeable. In other words it's important that staff morale is relatively high. Nobody wants to have to deal with surly member of staff. If morale is an important behavioral factor, then objectives should be set for that, and ways should be devised in which morale can be measured. Methods might include looking at staff turnover, sickness, absenteeism, surveys of customers, and surveys of staff attitude. But if it is not measured, it will be ignored and important attributes are ignored at the organisation's peril.



4. The balanced scorecard

The balanced scorecard was developed by Kaplan and Norton as a way of appraising companies. The approach is essentially hierarchical.



At the top of the hierarchy are the final results represented by the financial perspective and measured by factors such as cash flow, earnings per share, return on capital employed, and share price. You can think the financial perspectives as representing the final results of all the other efforts. However, these measure do **not** tell you how good financial performance was achieved.

Ultimately, a good financial perspective will depend on good profits but good profits will depend on a satisfactory customer perspective. If customers are not happy with the service they are getting then it would be difficult to make good profits, so it's important that customers think highly of us. The ways in which their opinion of us can be measured can include factors such as repeat orders, satisfaction ratings, and sales growth. If any of these are poor, presumably customers do not think highly of us and it will be difficult to make good profits in the long-term.

Why might customers think highly of us? Well, that's because we do what we do well and that's the internal business perspective. It could be that we make goods economically at a low cost per unit. It could be that our percentage reworks and measure of quality are satisfactory. It could be that when a customer places an order we deal with that order promptly and deliver the goods quickly. If customers are going to be happy with us, our internal business perspective must be good whether we are making a product or delivering a service.

And how do we do well what we do? What makes our internal business operations good? Nowadays we simply can't sit back and repeat for 10 years what's been satisfactory so far. Markets, technology, and competition all change rapidly and if we are to continue being



successful we must be good in innovation and learning. It's important for us to launch new products, to spend enough on research and development to develop patents. To spend enough on training so that our staff gain qualifications and deliver services well.

Remember this is a hierarchy. If we don't spend on innovation and learning we can't carry out our internal business processes properly in the long term. If we don't do that customers will abandon us and if they abandon us our financial future is bleak.

There should be several performance measures (indicators) for each perspective.

The balanced scorecard is extremely useful in focusing people's attention on the long-term as well as the short-term. Short-term financial perspectives are open to manipulation but customer perspectives, internal business perspectives, and innovation and learning perspectives all depend on continual expenditure and effort. There is generally no short-term solution to getting satisfactory performance in these areas and therefore objectives should be spread over all four of the balanced scorecard perspectives.

5. Critical success factors

When an organisation sets multiple objectives, particularly if it is trying to address the four elements of the balanced scorecard, it is likely to end up with very many objectives. It therefore almost certainly becomes necessary to prioritize those objectives. Essentially this is what critical success factors (CSFs) do.

CSFs can be defined as:

'Where an organisation must perform well if it is to succeed.'

For example, it could be that if an organisation doesn't hit a certain volume of sales it will never breakeven and then it doesn't really matter what other objectives may be met. If the organisation can't breakeven has got no long-term future. Let's have two examples of critical success factors:

- Airlines typically look very closely what they call a load factor, the percentage of seats filled in any flight. If you can't get enough paying passengers you may as well shut up shop.
- Retail organisations often look very closely at the amount of sales per square meter of floor area in the shop. If you can't generate enough sales per square meter nothing else is really going to work. You go into the gross profit and if you don't have an adequate gross profit you will never end up with an adequate net profit.

A second definition (Johnson, Scholes & Whittington) of CSFs is:

'Those product features that are particularly valued by a group of customers and, therefore, where the organisation must excel to outperform the competition'

This is a more market-related definition of a critical success factor and it's going a little deeper into what causes success. Note that here the critical success factor would not really be defined in terms of objectives; at a more fundamental level you are just questioning why an



organisation can be particularly successful and that will be because it supplies something unique or more successfully than the competition.

The performance indicators for critical activities are the **key performance indicators (KPIs)**.

6. Using critical success factors

Johnson and Scholes offer a six-step approach to using critical success factors.

- (1) Identify the success factors that are critical to profitability. For the sake of this discussion let's assume that the success factors are the (a) quick delivery of (b) customized products.
- (2) Identify what is necessary in order to achieve superior performance in the critical success factors. An example we are dealing with to produce customized products quickly could require fast, reliable design, computer assisted design and automated manufacturing competences.
- (3) Develop the level of critical competence so that it is good enough to give us a competitive advantage
- (4) Identify key performance indicators for each critical competence. A key performance indicator is simply a measure of how well we are at achieving our critical competence. If you don't measure performance then you can't set (improvement) targets for it and you will not know how good your performance is.
- (5) Emphasize developing those critical competences that are hardest for competitors to copy. If competitive advantage is to be worthwhile it has to be sustainable competitive advantage. This means the harder it is for competitors to copy or match certain critical competences the better, and therefore we should concentrate on those.
- (6) Monitor the firms and competitor's achievements. If you don't monitor both you have no idea how good you are and whether or not competitors might be catching up.



7. Benchmarking

Benchmarking is an essential part of judging performance. It means comparing performance or key performance indicators to a target.

7.1. There are four types of benchmarking:

- **Internal benchmarking.** Here performance is compared to an internally generated target. There has to be some reference point for that target and it could be a target based on last year's achievements or a target based on another branch or subsidiary. It could be relatively easy to generate that target, but the problem is that there is no guarantee that the target is appropriate. It could be either too hard or too easy; really some sort of external reference is needed.
- **External benchmarking.** Here you compare your performance to that seen in other similar organisations. This gives you a better reference point, but the problem in implementing this is that often other organisations will be secretive about their performance as their performance will be commercially sensitive. They are therefore unlikely to cooperate in providing you with internal data and all you might have available is data from published financial statements.
- **Best practice.** Even better rather than randomly choosing an external, similar organisation, choose the best one and compare yourself to performance there. This should cause your organisation always to strive to get better as it seeks to match the performance found in best practice. Once again the best performing organisation may not cooperate in providing you with measurement data.
- **Comparability benchmarking.** This means comparing your performance to that of other businesses, not necessarily of the same type. This obviously requires some caution as there may be very significant differences in what could be achieved and what could be expected. However, there could be some generic types of performance where this is valid. An example might be the number of days of absentees, and more sickness amongst staff. There is no particular reason to expect this to differ widely from organisation to organisation, and if it does it may indicate that one of the organisations is having morale problems.





Chapter 10

DETERMINING STRATEGY

1. An overview

There are three stages in determining strategy:

1.1. Choose generic strategy.

This is like a fundamental strategy and there are three:

- cost leadership
- differentiation, and
- focus.

1.2. Choose strategic direction.

Having decided the fundamental way in which the organisation is going to compete it then must turn to more detailed matters. The organisation can expand by:

- market penetration, efficiency gains, consolidation and withdrawal
- market development
- product development, and
- diversification.

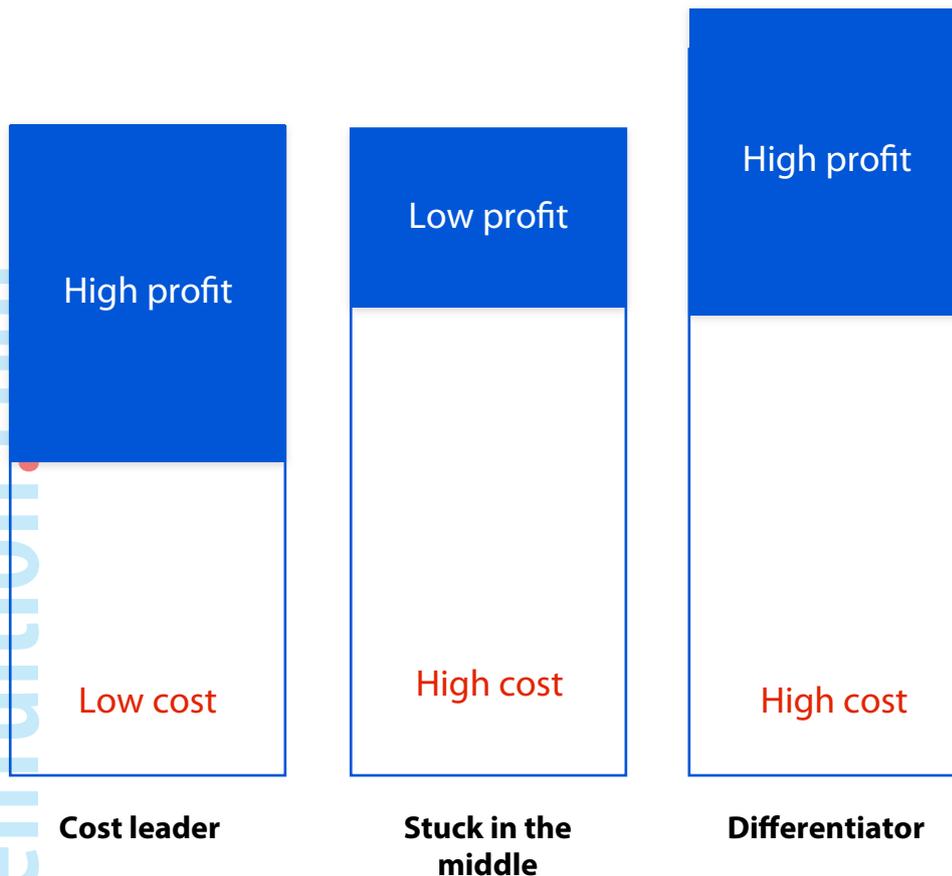
1.3. Choose how to grow.

Two main approaches:

- Organic. The organisation can grow organically, essentially internally; or
- Merger/acquisition. Acquire or merge with an already existing organisation.



2. Porter's generic strategies



Porter sets out three generic strategies:

- Cost leadership
- Differentiation
- Focus

The first two are set out above and are usually mutually exclusive. Focus is discussed later and can be applied on top of either differentiation or cost leadership.

A generic strategy is required if a company is to gain **competitive advantage**, meaning that it is capable of earning **good profits in the long term**. 'Good profits' are profits which recompense investors adequately for risk whilst allowing the company to invest in research and development, training and new machinery to stay ahead of competitors.

2.1. Cost leadership

Here a company is supplying a basic product or service into a competitive market. It can't put its prices up because the product is ordinary and there are competitors supplying equivalent products. If the selling price can't be raised, the only way the company can improve its margins is to lower its costs.

A cost leader aims to have the lowest costs of all its competitors and its competitors are liable to be **'stuck in the middle'**, squeezed between low prices and high costs, so making miserable profits. The cost leader will be much stronger financially and will have spare cash to spend on marketing, development of new products and the purchase of new machinery. It could even drop its selling prices temporarily to put extra pressure on competitors. Weaker



competitors could be forced out of the market, reducing competitor pressure and making the cost leader even stronger.

Cost leaders need to have ferocious cost controls: their only trick is keeping costs low and that is therefore where they must pay great attention. The whole culture of the organisation will be focused on cost control.

An excellent example of a very successful cost leader is the Irish airline company, Ryanair. This company is enormously profitable. The ways it uses to keep costs down include: non-reclining seats (cheaper, lighter, nothing to break down), no seat pockets (nothing to clean out after each flight), use of cheap airports, modern efficient aircraft, web-based communications with customers.

Cost leaders are not guaranteed a secure future. They are, for example, vulnerable to technological breakthrough which might allow a competitor to become even cheaper.

2.2. Differentiation

Differentiators do not aim to compete by supplying ordinary products or services. They compete by supplying better products and services for which they can charge more. Here 'better' means something which better suits a customer so that the customer doesn't mind paying more. The product could be differentiated by quality, design, features, size, reliability, brand etc.

So, the differentiator company increases its margin by raising its prices. It is not so concerned with lowering its costs – in fact its costs might be higher because of better quality products with more features.

Here, the company is much more interested in innovation and higher customer service than saving costs. Costs, of course, are important but the differentiators' trick is the ability to raise selling prices.

An excellent example of a differentiator company is Apple. This company is an excellent innovator and its products always have very high design values. Customers are willing to pay more for an Apple computer than they would for a Windows-based PCs of similar performance because of the qualities that Apple machines have.

2.3. Focus

The focus company has decided to concentrate on a small sector of the market rather than trying to address the whole market. The company might have decided to do this because it is relatively small and doesn't have the resources to target the whole market, or it might have decided to target particularly profitable segments or segments where it feels it has particular expertise.

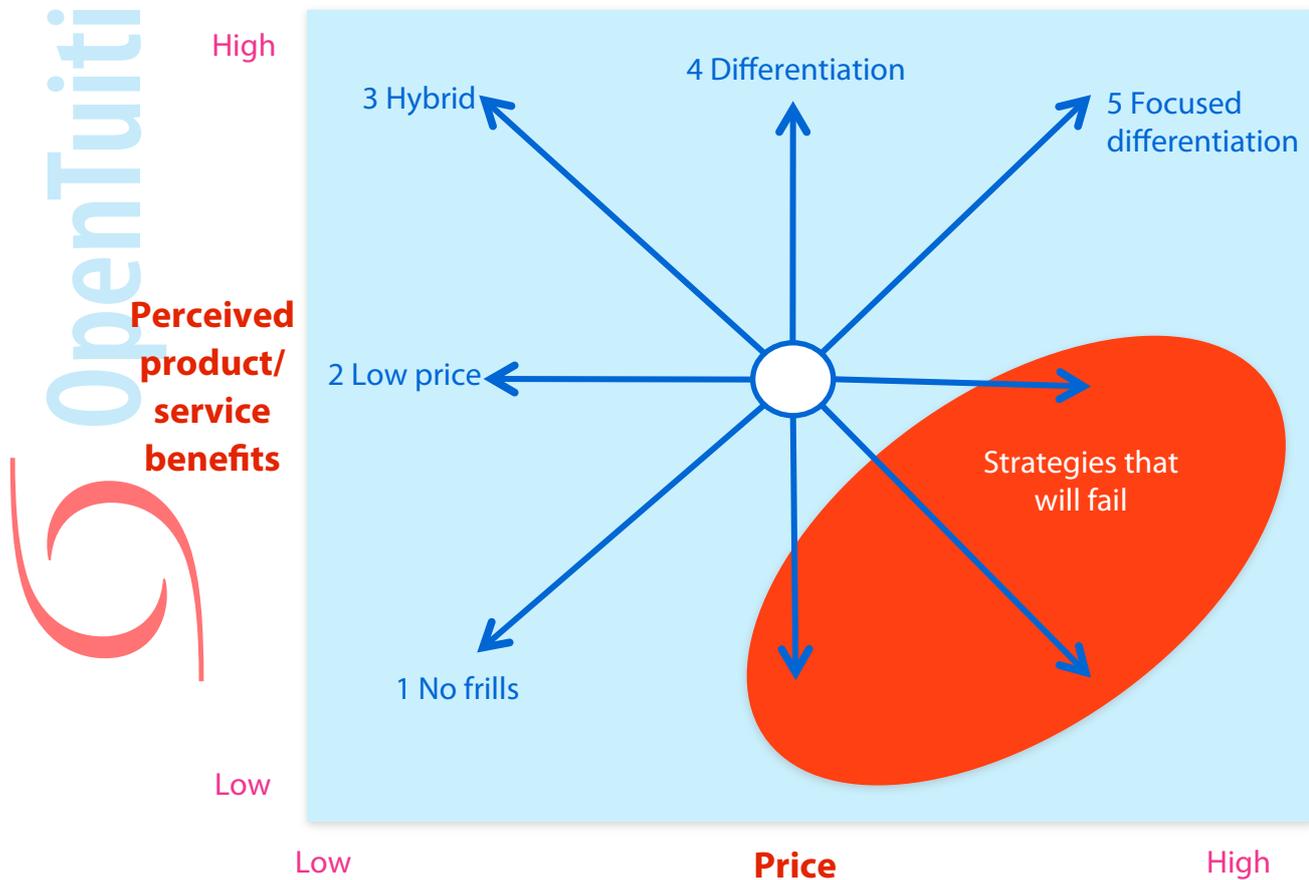
Once a company has decided to focus it still has to decide whether to be a cost leader or a differentiator. It must be said, however, that a natural combination of generic strategies is to become a focus-differentiator because if you are concentrating one or two market segments which you have got to know very well, it is probably natural that you develop products and services which are particularly attractive to those segments and for which more can be charged.



Porter's generic strategies is a model which is very useful in the P3 examination, particularly the case study. It is useful because, if a business is successful, it will be following one of these strategies. If it is not successful, then it should be advised to follow one of these strategies!

Quite often the P3 scenario presents a small company which despite a profitable history is now facing problems, perhaps from a large multinational company. Note that it is usually easier for very large companies to become cost leaders than for small companies to do so. This is because large companies can enjoy greater economies of scale and if they are international they can make goods in countries with cheaper labour. It is very difficult for a small company to drive down its costs as much and it would usually be bad advice to tell a small company to compete on cost/price. Small companies can find a niche which might allow them to survive. If they focus on a small segment of the market and differentiate their products to appeal to consumers in that market, they can make good profits even with higher costs. Also, the segment they are specializing in might be too small to interest larger players, who are usually after large mass markets and large scale production.

2.4. The strategic clock



The strategic clock can be regarded as a development of Porter's generic strategies in which additional mixes of price and product benefits are included.

- (1) At very low prices a company may be successful by offering a very basic, no frills, service. As long as people know what to expect they may well be prepared to put up with relatively low service benefits provided the price remains low. Some of the most cut-price air services may fall into this category and many have been very successful indeed. They might well face difficulties however if fuel prices increase and their fares are no longer cheap. If people have to pay a lot they usually expect much better service.
- (2) The low price option is at a slightly higher price but also providing a slightly better service you have the low price option. Again, it is primarily sold on price but hasn't pared down the service benefits as low as option one.
- (3) Option three, the hybrid is a good trick if you can pull it off. Here the price remains low, but the perceived products or service benefits are quite high. It could be argued that Skoda might fall into this category. They are very competitive in price but it has a very good reputation for quality and score very well in user surveys.
- (4) Option four is the differentiation option. Here sales are made primarily because the perceived products or service benefits are very high. People don't worry quite so much about the price. They expect to pay more but they certainly expect a higher level of service and better quality products. This is like business class on a flight.
- (5) Option five is focus differentiation, more or less a specialization. People have very specific requirements like quality, style, performance and they are willing to pay for. It is not quite that they don't mind what the price is, but it is certainly not the motivating factor. Above all they want a product or service which suits them. This would be like hiring a private jet.

The final three options will fail because one at the same time they are offering higher prices and ordinary low product and service benefits. No one in the right mind would adopt these.



3. Ansoff's matrix

After the generic or fundamental strategies have been decided on, we can turn to more detailed strategies. Ansoff's matrix is an immensely useful way of presenting the options that companies have. It can be helpful if you think that most companies wanted to increase profits and Ansoff's matrix sets out all the ways in which this could be done.

Withdrawal Consolidation Penetration Efficiency gains	Product development
Market development	Diversification <ul style="list-style-type: none"> • Related • Unrelated

In the top left quadrant the company will stay with present products and present markets. If it does that it can increase profits by first of all efficiency gains (which is a euphemistic way of talking about cost savings). It could withdraw from some markets allowing it to concentrate on other markets or just allowing it to save money. It can consolidate its existing markets. For example make its back office operations more efficient. Or it can try to gain the market share, (increase market penetration). So the company might try to raise its market share from, say, 20% to 22%. All of these options are regarded as relatively low risk and low return. The company is in its home territory both for products and markets.

Next, the company can turn either to product development or market development. An example of market development will be trying to export. An example of product development might be a washing machine manufacturer now trying to make vacuum cleaners. Both of these options are somewhat higher risks. They tend to require an amount of upfront investment, and there is no guarantee that that investment will be successful. The company is venturing into unknown territories either geographically or in terms of its product mix.

The final option, and by far the most risky, is diversification. Diversification can be:

- related for example a sister industry, or
- unrelated, sometimes known as conglomerate diversification.

We will see that, by and large, there is very little justification for unrelated diversification, but related diversification may be create some benefits, for example, by integrating supply and purchase operations and in cross marketing to each other's customers..

Remember this diagram summarizes *everything* a company can do to try to increase its profits. It therefore has very wide application in scenario questions. Most of what the company featured in the scenario may wish to do can be described in terms of one of the quadrants of Ansoff matrix.

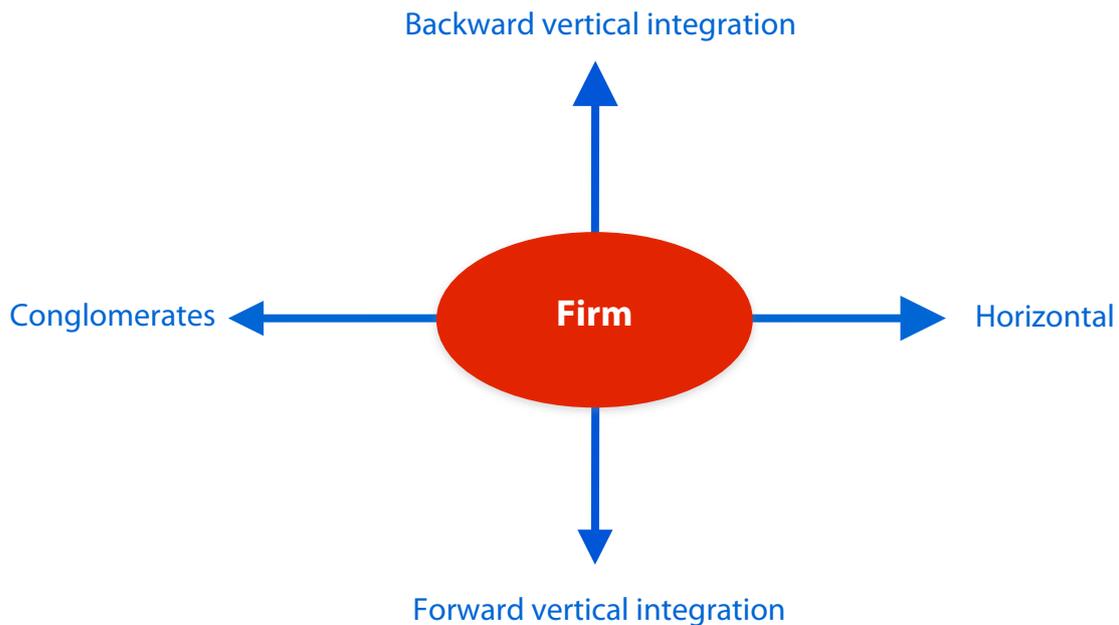


Chapter 11

DIVERSIFICATION

1. Types of diversification

This diagram shows four types of diversification.



We will deal with them in two sections, starting with conglomerate diversification.

2. Conglomerate diversification

Conglomerate diversification is unrelated diversification: the businesses which are joined together have no connection whatsoever. An example would be a supermarket joining with a car manufacturing company. What advantages might arise from this? Well, the directors of the operations are likely to say that the combined companies will probably give the shareholders a most stable pattern of returns. Diversification often smoothes the pattern of returns and profits. However this overlooks the fact that if the shareholders had wanted a stake in both the supermarket and the car manufacturer they could buy shares in those separate companies themselves. They don't need the companies to combine for the investors to enjoy a portfolio effect.

The directors might then claim that there will be cost savings or synergy. Synergy is defined by Goold and Campbell as "links between business units that result in additional value creation". However, if the businesses are truly different it's difficult to see how the cost savings or other forms of synergy could arise. Suppliers, processes, and customers will be entirely different. It will be difficult to achieve economies of scale in manufacturing or processing. There will be few opportunities, if any, for cross-marketing. It's unlikely that even the head offices can be combined. If a business which is already well-run is taken over by another one, the only way in which the value of the business can increase is if more profits are



squeezed out of it. With conglomerate diversification, it is difficult or impossible to achieve this. The only situation in which conglomerate diversification might add value is if the company taken over is badly run and its new owners can put in better management, turn the company around, and probably sell it on for an increased price, yielding the shareholders a capital gain. However, taking over an already well-run unrelated company cannot yield gains.

More often than not what happens with conglomerated diversification is that a well-run business is taken over, and as the new owners begin to meddle in things they know little about, value is therefore destroyed. There have been many occasions where a business has been bought, for example for ten million, and a few years later sold back to its original owners for perhaps only five million.

3. Horizontal diversification; backward and forward vertical integration

Horizontal diversification means expanding into a related business. For example, an airline taking over a chain of hotels. Because the businesses are related there is a real chance that the combined business will achieve efficiencies, for example, through cost savings or better marketing. You can see how the airline and the hotels could cooperate by offering accommodation when people go to the airline booking system.

Backward and forward of vertical integration are forms of related diversification. Backward vertical integration means taking over or setting up with a supplier. Forward vertical integration means taking over or setting up a distributor or customer. Obviously, the operations are related and there appear to be great attractions in vertical integration. It's very easy for a firm to say it itself, I make a profit, my suppliers also make a profit and I want their profit and therefore we will take them over. However, like many elements of strategy the real situation can be more complicated.

3.1. Let's look at some of the potential disadvantages of vertical integration.

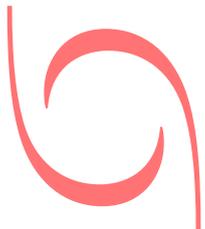
- Avoiding the discipline of the market. If you take over a supplier the chances are that that supplier becomes sloppy. Why should they become efficient, keep costs down, improve quality, when they are almost guaranteed that anything they produce is going to be bought by the next company in the group? Compare that to where a supplier has to compete to win each order with the best in the world: that really keeps them on their toes.
- Secondly, you could take over a perfectly good supplier and just by bad luck another supplier happens to have a tactical innovation. You are left with your in-house supplier who, really by luck, hasn't done quite so well. The company would rather switch and purchase from the more technically advanced supplier, but feel inhibited in doing that.
- The third potential disadvantage is that taking over or setting up either a supply chain or a distribution chain takes capital, and any capital spent there cannot be spent in the core business.
- Operating gearing is increased. When a supplier is taken over costs which had previously been all variable are now partially fixed. Takeovers mean that you acquire another set of fixed costs.
- And finally, although there is a relationship between the various companies in an integrated group, there is nevertheless a degree of diversification. The central firm could be a manufacturer, but managing the people there, getting used to that company's market, understanding the priorities of a manufacturing firm is quite



different from understanding and making a retailing firm work well. It's quite different skill set and there is still a risk of the dominant company messes it up.

3.2. Having said that, there can be certain advantages in vertical integration:

- Assurance of supply or assurance of distribution. You may remember back to the five forces analysis that two of the forces were pressure from suppliers and pressure from buyers. If you own a supplier you can't be cut out. In fact, by owning a supplier that is a monopoly supplier, you could cut suppliers to your competitors.
- There can be efficiencies. You can better integrate this supply and use of components in the supply and sale of finished products. However, many companies which have stayed separate manage to integrate their operations to a very high degree by sharing data with third party suppliers and third party customers and it's not clear there is any guaranteed advantage in integration.
- Secrecy. If you own the supplier, only you know what components are being used and you don't have to place outside orders which give clues to other people.
- Differentiation. By owning a customer you might be able to differentiate your product better. You determine precisely the components that are made and you determine precisely the way in which the product can be sold and this can help you to differentiate your products and services from others. However, there is probably nothing available in integration that isn't available by close contracts. You can stipulate in your contract for purchase or supply exactly what is needed.





Chapter 12

METHODS OF GROWTH AND PORTFOLIO MANAGEMENT

1. Takeovers and mergers compared to organic growth

Takeovers and mergers have the following characteristics:

- Quick methods of expansion.
- You can take over a ready functioning operation – useful if you are expanding into another country or product line as risk is reduced.
- You have to pay for goodwill. This will be reflected in the purchase price but is usually difficult to value.
- You can get into a bidding war with another company and end up paying too much
- There are disruption costs involved when trying to integrate the two businesses. For example, employees often feel threatened and de-motivated. Different systems have to be brought into line if cost savings are going to be realised.
- There is an asymmetry of information: sellers usually knowing more than buyers. This increases the risk to the buyer.
- Immediate need for capital either by issuing shares to the target company's shareholders or an outflow of cash.

The second main approach to growth is known as organic growth. Here the company uses its own resources from retained profits or perhaps by raising additional capital, but grows its business internally. The business that it is growing could be the same as its existing business or could incorporate an element of diversification. This method has the following characteristics:

- Relatively slow
- Popular with employees. If the business is growing, they see job opportunities and job security.
- There will be no valuation problems, you are not buying goodwill which could be destroyed later or which may never have existed
- If there is an element of diversification you have to learn as you go along. You are not buying a ready-made company with knowhow, staff, goodwill, and a customer base.
- Often there is no need for high initial expenditure



2. Other methods of growth

We now look at some other methods of growth: joint ventures, licensing, franchises, and strategic alliances.

- **Joint ventures.** In joint ventures, two companies will normally establish a third company, contributing cash assets, know-how, and personnel. Joint ventures are extremely good ways of dealing with large projects where high amounts of capital are required, where there is high risk, and where a mix of skills is essential. Joint ventures can spread the burden of providing finance and bearing the risk, and by choosing your joint venture partners carefully, you can accumulate an appropriate mix of skills. It's important at the outset that all the parties to the joint ventures know exactly what is expected of them, how profits are to be shared, and how exit from the joint venture is to be managed.
- **Licensing.** Under licensing arrangements, one company gives another the right to use a process or a trade name. For example, it's very common for brewing companies where a company in Belgium licenses a brewery in, for example the UK to make beer. There is relatively little point in making beer in Belgium, putting it into tanks or vats, and shipping it across the sea. Most of what is being shipped is water! However, if you license a company in the UK to make beer, tell them the recipe, allow them to bottle it, and market it, you greatly improve the efficiency of the operation. For the licensor (that's a company granting the license), this is a relatively low risk way of growth. They earn the money primarily from royalties and don't have to undertake any great risk in setting up production and distribution facilities overseas.
- **Franchising.** A franchise can be regarded as a more involved type of licensing agreement. Many retail and fast food organisations operate through franchises. Typically, the franchisee (that's the person who wants to start the business) buys a franchise from the franchisor. In return the franchisor provides advice and the right to use a process and trade name. The franchisor might also provide raw materials. Certainly the franchisor will impose very strict rules so that the operation to which they give their name trades in such a way that the organisation is not damaged. The franchisee manages the day-to-day operations of the franchise, buying raw materials from the franchisor and selling them. Often a royalty is paid back to the franchisor based on profit or turnover. Many people are attracted to franchises because they give the impression of running your own business yet with a safety of using an established name. It's much better if you can hoist the name of, say, McDonald's over your hamburger shop than simply using your own name. The franchisor can provide know-how, marketing and goodwill, and all of these lower the risk that the franchisee suffers. However, many franchisees find that the rules imposed by the franchisor are more inhibiting than they expected, and they end up with being little more than an employee yet bearing more of the risks.
- **Strategic alliance.** A strategic alliance can be very useful where a more formal merger or takeover is not allowed or is not thought to be wise. An example of strategic alliances is the co-operation which is undertaken by many airlines. They form an alliance, such as 'Star Alliance' and this allows their passengers to make use of different airlines and different airlines lounges, more or less seamlessly, and to collect and use their air miles in a common scheme. Such alliances are allowed in airlines where the takeover of one airline by another is often resisted on monopolistic or nationalistic grounds.



3. Portfolio management

3.1. Johnson, Scholes and Whittington

These writers described the roles that a corporate parent might play in adding value to its business units.

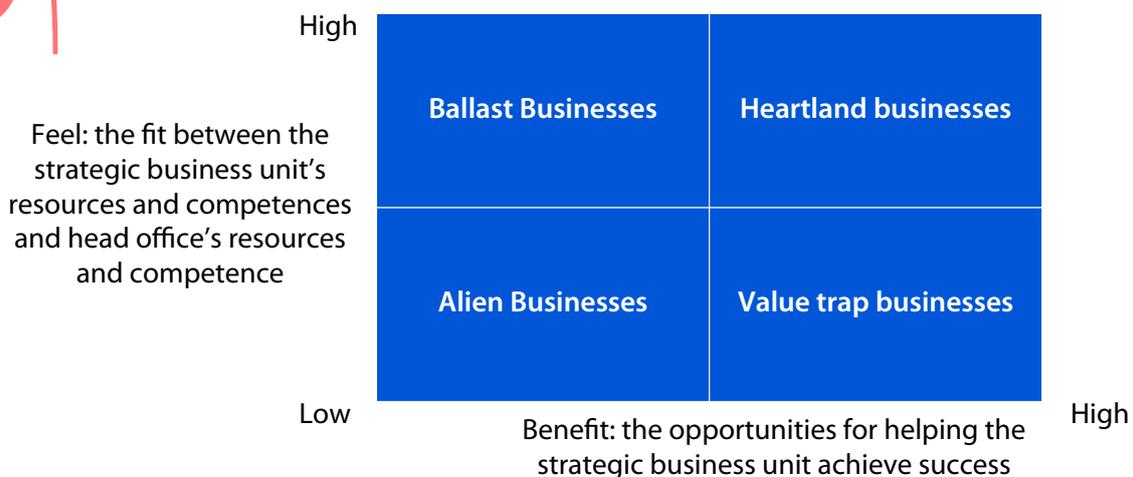
- **Portfolio managers.** Here the head office acts as an 'agent' between the SBU and the investors. Value is added by acquiring and exploiting undervalued assets, enforcing rigorous performance targets and divesting businesses when they no longer promise increasing value. This approach to adding value very much relies on financial control to make the subsidiaries perform adequately, after which they can be sold on at a profit.
- **Synergy managers.** Here, additional value is added by exploiting synergies between the various sub-units: sharing resources, increasing buying power, cross-marketing. An example could be a holiday company buying a car-hire company so that complete packages can be offered to travellers. Synergy managers will often exploit the strategic control approach to managing.
- **Parental developers.** As a parent with a child, holding company skills and expertise are used to improve performance of the strategic business units.

3.2. Ashridge portfolio display

Looking further specifically at the opportunities for parental development, the Ashridge Portfolio Display sets out two criteria that should be considered:

- (1) The fit between the SBUs critical success factors (what it needs to be good at) and what skills, resources and understanding head office could supply to help the SBU achieve those critical success factors. This is known as 'Feel'
- (2) The opportunities for helping the SBU achieve its critical success factors. This is known as 'Benefit'

These two variables are set out as a matrix:



For example, consider a pharmaceutical firm such as GlaxoSmithKline. In addition to carrying out research, this large pharmaceutical company has very valuable skills in following and carrying out the very onerous protocols in place for testing the safety and efficacy of new drugs. It also has great marketing skills.



3.3. It has opportunities to takeover or merge with a number of different companies as follows.

- (1) A merger with another large pharmaceutical company, such as Pfizer. This would be high on the 'Feel' axis because the companies do almost exactly the same things, but would be low on the 'Benefit' axis because Pfizer is already very successful and probably does not need much help from GSK. Pfizer would therefore be a ballast business and there would be no great parenting benefit arising from a merger. The companies would do as well separately as they would if combined.
- (2) A small biotech company. Good at research but without adequate resources for clinical trials and marketing. This target would be high on the 'Feel' axis as both companies are in pharmaceuticals and molecular biology, and would also be high on the benefit axis, because GSK could really help the small company to test and market its discoveries. That target would be a heartland business. Really beneficial parenting could be used to increase value.
- (3) A video-games manufacturer such as Nintendo. Very much an alien business: different business entirely and Nintendo does not need help that GSK could provide. So low 'Feel' and low 'Benefit'
- (4) A small video-games company with good products but poor marketing. Obviously, again, low 'Feel' because the activities are very different, but GSK might be lured into thinking it could add value to this company by helping it with its marketing. But therein lies the trap: you think you can help, but are likely not to be able to supply the right type of help. GSK knows about marketing, but not marketing video games.



Chapter 13

STRATEGIC CHOICE

Towards the end of the strategic planning process an organisation may have identified a number of strategies, any of which might hold the possibility of achieving the organisation's objectives. It is important to realize that it is unlikely that there is one strategy which is obviously better than all the others. One strategy might hold the possibility of higher profits but may carry with it additional risk. So how do we choose between those strategies and decide on which strategy or indeed which mix of strategies to follow?

- One of the most useful ways of evaluating strategic options is to use Johnson and Scholes method. This looks at three aspects; suitability, acceptability, and feasibility.

You will see this approach used in many ACCA P3 answers, both to evaluate future strategies and to appraise past strategies.

- **Suitability.** Under suitability, the organisation will look at whether or not the strategy plays to its strengths or whether it makes use of weaknesses. Does the strategy make use of environmental opportunities? Does it guard against threats? Is it suitable in relation to the way environmental factors and competition are changing?
- **Acceptability.** This raises the question of 'acceptable to whom?' Ultimately, this is asking if the strategy is acceptable to the stakeholders, but we already know that stakeholders, in general, do not all want the same thing. There is little point following a strategy which is entirely unacceptable to customers. There is probably little point in following a strategy which is liable to provoke wide scale industrial unrest. There is little point adopting a strategy which its shareholders don't want, for example, a strategy which markedly increases the risk of the investment. Here of course, management has to make a compromise, but at the end of the day it has to adopt the strategy which most stakeholders are prepared to tolerate.
- **Feasibility.** This looks primarily at the resources of the organisation. Do we have the money, the marketing, the management, the manufacturing and the materials available? If we don't have these important resources available and can't make them available, the strategy is simply not feasible; we can't do it and therefore it would need to be ruled out.





Chapter 14

IMPLEMENTATION

1. Recap

Let's recap on where we have got to:

We have looked at assessing a company's strategic position, collecting internal and external information. We have looked at the various strategic choices open to a company, generic strategies. We then looked at more detailed strategies such as market growth, product development, market development or diversification. Finally we have also seen how we can evaluate the various strategies that may be identified. We now come to strategic action or if you like strategic implementation. Remember that assessing the strategic position, looking at strategic choices, and then strategic action or implementation.



Although, shown again here as a linear sequence, the process will not be relentlessly linear. For example, as we said previously, when you come to implement the strategy, undoubtedly you will find out more information and you may have to reassess your strategic choice.

The remainder of these notes (and the syllabus) deals with strategic action or implementation. This is looking at the detail that has to be got right if a strategy is to be implemented.

1.1. The syllabus covers:

- Business process change: how do you persuade stakeholders to accept changes?
- Information technology: a very important driver in strategic change.
- Project management: strategies are broken down into small projects which should be more manageable.
- Financial analysis: to see what might be possible and to understand the financial effects of a strategy.
- People: often the most difficult resource to manage.
- Culture: what corporate culture (how people behave) will be appropriate for a strategy.
- Structure: how many management layers? Should the organisation be split into divisions?





Chapter 15

CORPORATE CULTURE

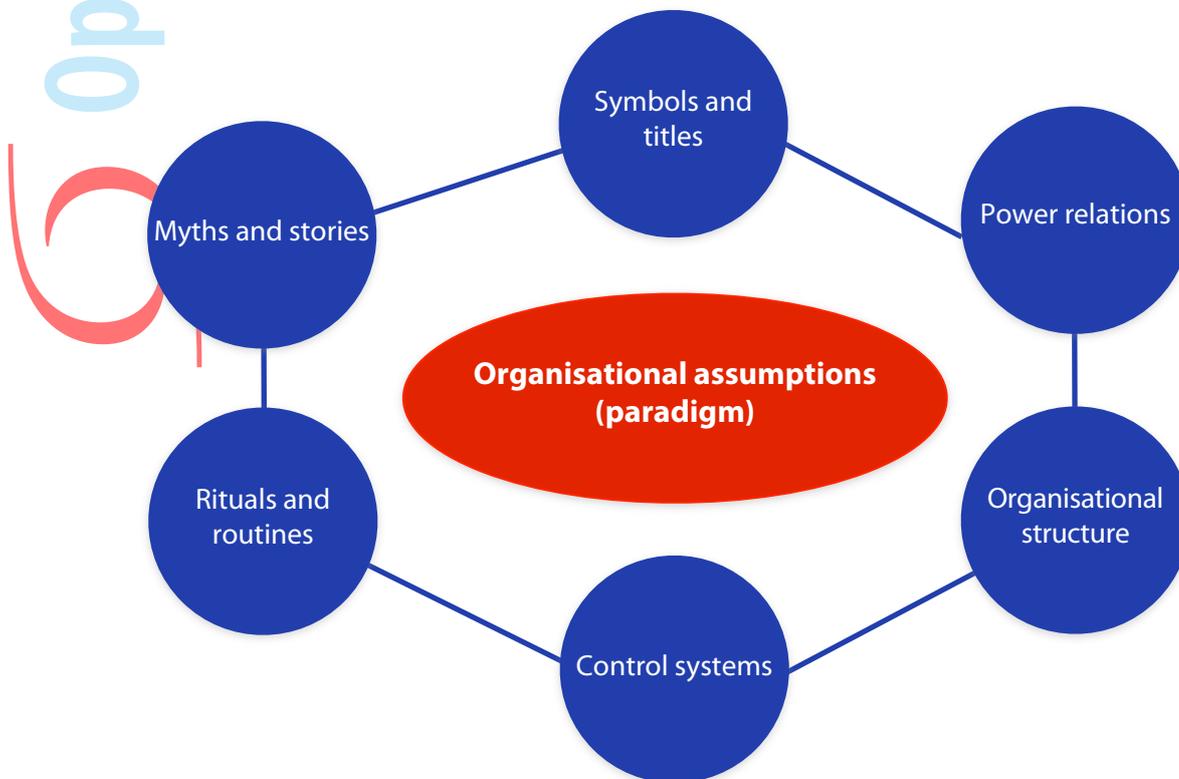
1. Why culture is important

Charles Handy defined the corporate culture as “the way we do things around here”, and culture is something to which we are all very sensitive. For example, whenever we change job, we go carefully for a little while to see how people do things: the level of formality, dress codes, how they address each other, length of the working day.

It is important for organisations to get their corporate culture right as this will affect how the organisation performs. For example, a cost leadership strategy will require close control of expenditure and might be expected to have strict manager-subordinate relationships. A differentiation strategy would require less cost control and different routines (such as ensuring very high customer satisfaction). The organisational assumptions in those types of business would also be different.

2. The cultural web

The cultural web describes the various influences that determine corporate culture:



- **Symbols and titles.** Do the members of the board have reserved parking places? Do they have very large offices or do they tend to share an open plan office with other employees?
- **Power relations.** Does your boss always tell you what to do or do you usually discuss what should be done and come to a consensus?
- **Organisational structure.** We will see later that organisations can have what is called a tall narrow shape or a wide flat shape. The tall narrow shape tends to result in organisations which are rather bureaucratic and formal; wide flat tends to produce less formal cultures.
- **Control systems.** How carefully are you controlled? How much are you allowed to use your own initiative? What reporting mechanisms are there?
- **Rituals and routines.** Some telephone-sales orientated organisations have a ritual that people, for example, ring a bell whenever a sale is made.
- **Myths and stories.** For example, how in the past the company beat a powerful competitor.
- **Organisational assumptions.** These can often be difficult to pin down, but a typical assumption is that we are the best, or we never fail or we never miss a deadline. A hospital might have the assumption that its purpose is to provide healthcare irrespective of cost.

The outer elements of the cultural web are usually the easiest to identify. You very quickly begin to appreciate the power relations, control systems, symbols and titles. However, many of these elements of culture will be relatively superficial. Usually the most important element of a culture will be the organisational assumption which is often the most difficult to identify. Therefore organisations often work hard to try to instil these assumptions in their employees.



3. Culture classification

Organisational cultures can be classified in many ways. One of the easiest is this one by Charles Handy. He describes four types of culture: power, role, task, and person.

- **Power culture.** In the power culture, all or nearly all power is concentrated in the hands of one person. Organisations with this culture often are small, perhaps family, organisations and the person who has the power is probably the founder. As organisations grow, it becomes increasingly difficult for this person to successfully wield power as there are simply too much to do and too much to know. However, even in some large organisations there can be a very charismatic Chief Executive Officer who with force of personality manages to wield great power. This can result in successful organisations, but auditors and investors should worry that perhaps one person wields too much power. Current corporate governance rules suggest that the Chief Executive Officer and the Chairman should be different people so the power at the top is spread.
- **Role culture.** As organisations grow, role cultures become more common. Role cultures are essentially bureaucracies. There tends to be great task specialization, many layers and titles, great formality. In stable environments, this can be an inefficient organisational culture, but it tends to be rather slow to adapt to change. Furthermore, employees think that their role and job title is more important than the work they actually do.
- **Task culture.** This is a more modern type of culture. Here employees do not concentrate so much on their role or title. Instead they concentrate on getting the task done and achieving organisational success. They will tend to be highly motivated, flexible, adaptable, and eager to learn.
- **Person culture.** This isn't of great importance in most organisations. It refers to an organisation where the people are really pursuing their own particular ambitions. They may have to be in a particular organisation to fulfil that, but they are not really interested in the organisation so much as doing what they want. Perhaps a talented surgeon in a hospital might fall into this category. They have to be in a hospital to make use of the infrastructure, but what they really like doing is operating and curing people. Their interaction with the organisation is kept at a minimum.



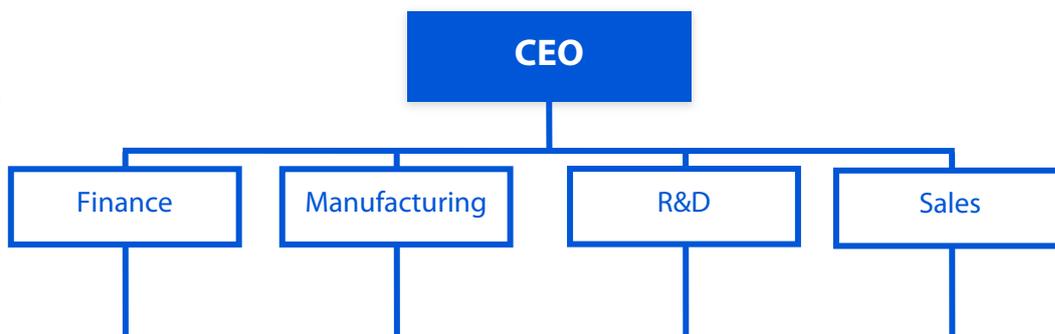


Chapter 16

ORGANISATIONAL STRUCTURE

1. Functional structure

One of the common structures found in medium-sized organisations is the functional structure. That simply means that people within the organisation are organized by a function. So there is a finance function, a manufacturing function, research and development function, sales function, and so on.



1.1. The advantages of such a structure are:

- The organisation gains great economies of scale. For example, all financial recording goes through the finance department, all manufacturing goes through the manufacturing department and so on.
- Each of these departments is likely to be large enough to be headed by a well-qualified manager.
- There is also great comfort and satisfaction for the people within these departments. They are dealing with like-minded individuals with a similar background, similar motivation, and similar skills.

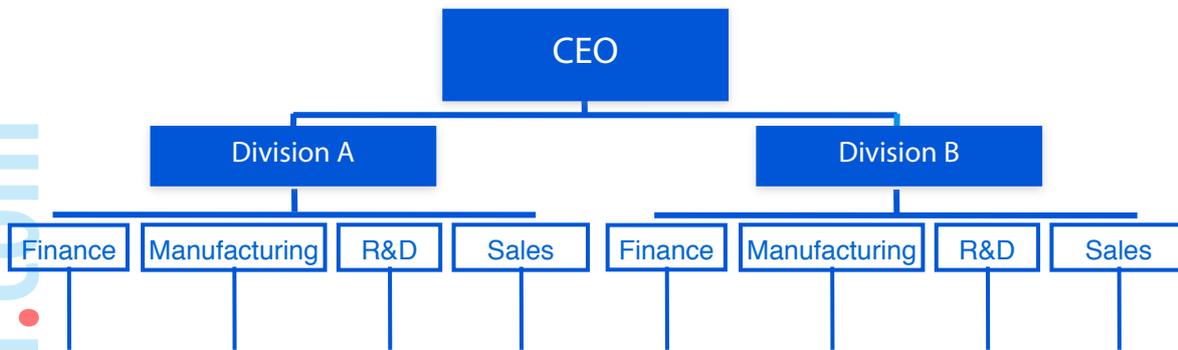
1.2. The potential disadvantages of such a structure are that:

- As the organisation grows, each of the functional departments can become very powerful and can begin to concentrate on their own interests rather than the interest of the organisation as a whole. For example, the manufacturing department could become obstructive if asked by the sales department to respond to a special order from an important customer.
- It might not be appropriate to push all similar-sounding activities through one department if the activities are, in fact, somewhat diverse.



2. Divisional structure

As organisations grow they will often develop a divisional structure. This is because growth usually involves an element of diversification in terms of product, or geographical area, or even customer.



For example, a very large chemical manufacturer could typically be manufacturing paints and agriculture chemicals. There is very little in common between these two activities: the suppliers of raw material will be different as will be the competition, customers and the manufacturing processes. It makes little sense to try and jam these together in one structure, and almost certainly it's going to be better to have a divisional structure based on products where there are separate departments for finance, manufacturing, sales, research and developments, and so on. This allows a degree of specialisation so that each division concentrates very specifically on what it does best.

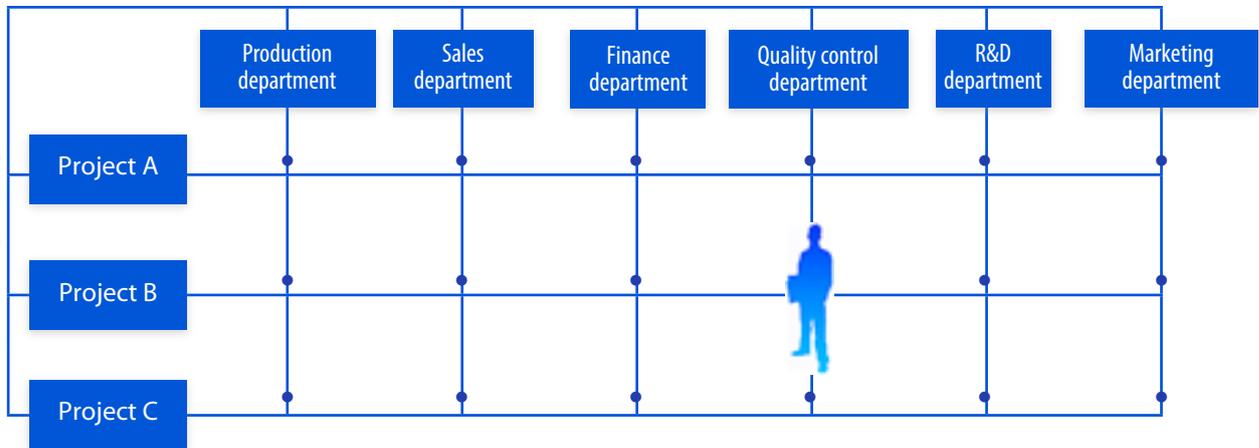
2.1. The normal bases for splitting up an organisation into divisions are:

- Product, as explained above.
- Geography, for example, the North American division and the European division
- Customer, for example some very large organisations have one division which deals with government contracts and another one which deals with private business contracts.



3. Matrix structure

Classical management theory puts great importance on what was called 'unity of command'. That is, any person should only be reporting to one boss. To have to report more than one boss was regarded as unfair: one person shouting at you is quite enough, but to have two people shouting at you is more than mortal flesh should have to bear. The matrix structure abandons that principle and recognises that a person can have two bosses.



This diagram shows someone who is part of the quality control department and who will report to a quality control manager, but who is also been assigned to project "B" and will have to report to the manager of project "B". One can easily envisage a situation where there are conflicts. If project "B" were running behind time, the project "B" manager could ask the quality control person to skip some of the tests, but that person, who is technically a quality control person, will be reluctant to do that because they have responsibilities to carry out all the tests demanded by the quality control department. So, there is one boss, the project "B" manager, who says 'Cut tests, go faster', and another one, the quality control manager, who says 'Don't cut tests, do everything as it should be done'. So what is this person to do?

Many people say that the matrix structure does not *cause* this problem and that even if we were to try to show this in a conventional functional format, there would still be two people bringing pressure to bear on the quality control person. It can therefore be argued that the matrix structure is a more honest representation of what happens in practice. No doubt we have all had situations where we have had a kind of dual responsibility and have had to try to make compromises.

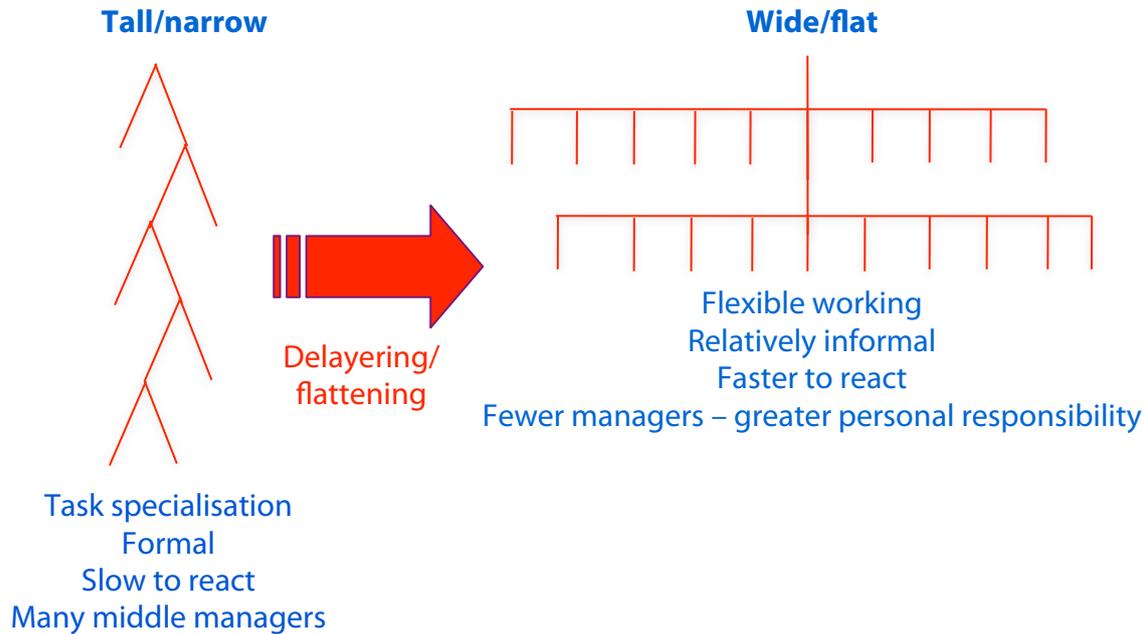
What the matrix structure allows the quality control person to do is to say, "Look, both of my managers are responsible here. It's not fair that you, who are managers, should pressurise me, who is relatively low down in the organisation, to make choices. It's for you, the managers, the project "B" manager, and the quality control manager to get together and to come to some solution for the benefit of the organisation as a whole."

Advocates of the matrix structure say, the matrix structure therefore encourages communication between various departments and projects, and that it encourages people to see that is important is that project "B" gets completed on time with the proper quality. There may well be compromises available that allow that end to be achieved, but it is for the managers of the department to reach those compromises rather than the junior member of the team who might make a decision based on which boss shouts loudest.



4. Wide flat/tall narrow

Organisations have to decide on their overall shape: whether they will be tall/narrow or wide/flat.



Over the last 10 – 20 years most have moved from tall/narrow to wide/flat. This was because tall/narrow structures were found to be:

- Inflexible and slow to adapt within fast-changing environments
- Expensive – lots of middle managers not adding much value
- Poor vertical communication. With fast changing technologies and markets it is important that new, probably younger employees have ready access to decision-makers at the top of the organisation.



5. Centralization/decentralization

In addition to, and independent from, the shape of the organisation, is the question of how power should be distributed within it. What should the balance be between centralization and decentralization?

Some decentralization is good because:

- Top managers have more time for strategic decisions.
- Better decisions: fast, made by functional experts and by geographical experts.
- Motivation of staff. Good people like to be able to make decisions and to run a department, for example.
- Training and assessment of staff. How can people gain experience if they are never allowed to make decisions?

But

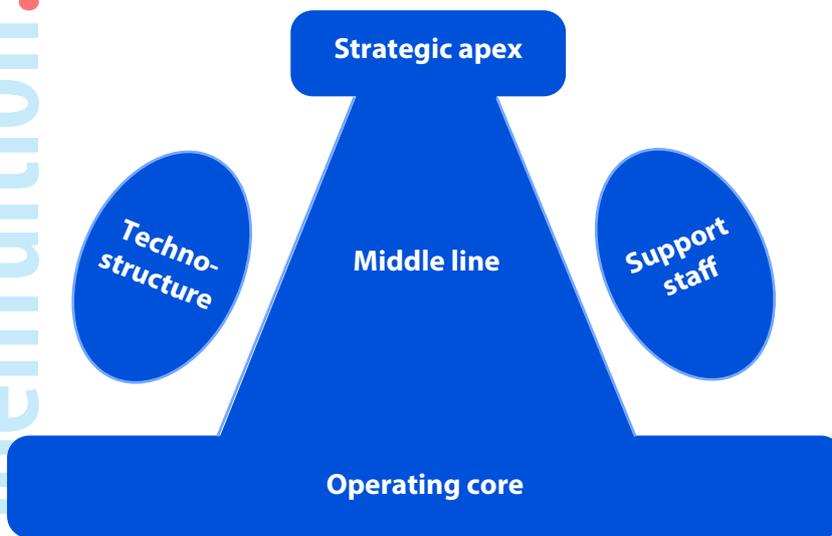
- There is a risk of poor coordination – dysfunctional decision making. One manager might make a decision (proper for that department) which does damage elsewhere in the organisation
- Some duplication of effort/services



6. Mintzberg

Mintzberg's organisational form diagrams show organisations consisting of five major parts:

- The strategic apex, for example, the board of directors.
- The middle line; the middle managers.
- The operating core, the people who actually does the work
- Support staff, like the accounts department
- The techno-structure. The techno-structure is the part of the organisation which tries to standardize procedures. The techno-structure, for example, would be responsible for writing procedures manuals, quality control manuals, accounting manuals, personnel manuals.



Mintzberg's point was that the size and importance of these five different parts of a company change depending what the company is doing. For example, a very small company, that is an entrepreneurial company, would really only have the strategic apex and the operating core. It will be too small to have much of a middle line, support staff and techno-structure wouldn't have developed yet. It's basically the boss and his workers.

The diagram as shown probably represents what is called the **machine bureaucracy** that's really an organisation dealing in mass produced products. In these organisations, the technostructure is large: quality control manuals, good financial internal control systems, health and safety rules, employee handbooks. All of these are necessary to ensure consistency in mass produced goods and the proper management of employees. The central middle line is also fairly long.

Another structure is the **professional bureaucracy** such as found in a firm of accountants or a firm of lawyers. In such a structure, the middle line is very short and the techno-structure is very small. The middle line is short because in firms of accountants or lawyers there has to be a very close relationship between the people who do the work and the partners of the organisation. Very good communication between the top and the bottom is essential because every audit or every legal case is unique.

Because every client is unique there can't be a lot of standardization. Some documents will be standard, but each job is unique. Although there might be standard documentation, the use of that documentation cannot be standardized if you are going to give unique service to each client.



Mintzberg's structures don't really tell you how an organisation ought to be structured. It's more of a retrospective description of how an organisation might be structured.

7. Boundaryless organisations

A boundary-less organisation can be virtual, hollow or modular:

- Virtual: create a company outside the organisation to respond to exceptional, often temporary market opportunities.
- Hollow: all non-core operations are outsourced eg accounting, human resources, legal services and manufacturing could be outsourced, leaving the company to concentrate on its core competence eg design of new products.
- Modular: order parts from different internal and external providers and assemble into a product.

Because market and technical conditions are changing rapidly and unpredictably, there has been growth in the boundaryless organisation as they tend to allow flexibility and fast reaction to changes.

Virtual organisation have become particularly common and there is a current trend to outsource as much as possible. A small core company of management and key employees is kept and company buys in specialist services (outsources) as and when needed from suppliers who are experts in what they do.

By keeping the permanent organisation relatively small, fixed costs are minimized and the organisation is supposed to be faster at changing and adapting to match its environment.

8. Big Data

There are many definition the term 'big data' but most suggest something like the following:

"Extremely large collections of data (data sets) that may be analysed to reveal patterns, trends, and associations, especially relating to human behaviour and interactions."

In addition, many definitions also state that the data sets are so large that conventional methods of storing and processing the data will not work.

In 2001 Doug Laney, an analyst with Gartner (a large US IT consultancy company) stated that big data has the following characteristics, known as the 3Vs:

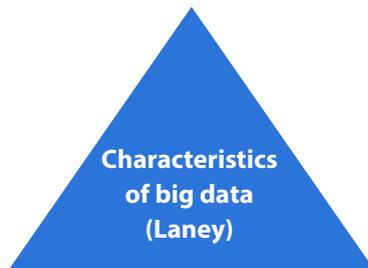
- Volume
- Variety
- Velocity

These characteristics, and sometimes additional ones, have been generally adopted as essential qualities of big data.



Variety:

disparate non-uniform data of different sizes, sources, shape, arriving irregularly, some from internal sources and some from external sources, some structured, but much of it is unstructured

**Velocity:**

data arrives continually and often has to be processed very quickly to yield useful results

Volume:

a very large amount of data. More than can be easily handled by a single computer, spreadsheet or conventional database system

The commonest fourth 'V' that is sometimes added is veracity: Is the data true? Can its accuracy be relied upon?

Volume

The volume of big data held by large companies such as Walmart (supermarkets), Apple and EBay is measured in multiple petabytes. What's a petabyte? It's 10¹⁵ bytes (characters) of information. A typical disc on a personal computer (PC) holds 10⁹ bytes (a gigabyte), so the big data depositories of these companies hold at least the data that could typically be held on 1 million PCs, perhaps even 10 to 20 million PCs.

These numbers probably mean little even when converted into equivalent PCs. It is more instructive to list some of the types of data that large companies will typically store.

- **Retailers**

Via loyalty cards being swiped at checkouts: details of all purchases you make, when, where, how you pay, use of coupons.

Via websites: every product you have ever looked at, every page you have visited, every product you have ever bought. (To paraphrase a Sting song "Every click you make I'll be watching you".)

- **Social media (such as Facebook and Twitter)**

Friends and contacts, postings made, your location when postings are made, photographs (that can be scanned for identification), any other data you might choose to reveal to the universe.

- **Mobile phone companies**

Numbers you ring, texts you send (which can be automatically scanned for key words), every location your phone has ever been whilst switched on (to an accuracy of a few metres), your browsing habits. Voice mails.

Internet providers and browser providers

Every site and every page you visit. Information about all downloads and all emails (again these are routinely scanned to provide insights into your interests). Search terms you enter.

- **Banking systems**



Every receipt, payment, credit card payment information (amount, date, retailer, location), location of ATM machines used.

Variety

Some of the variety of information can be seen from the examples listed above. In particular, the following types of information are held:

- Browsing activities: sites, pages visited, membership of sites, downloads, searches
- Financial transactions
- Interests
- Buying habits
- Reaction to ads on the internet or to advertising emails
- Geographical information
- Information about social and business contacts
- Text
- Numerical information
- Graphical information (such as photographs)
- Oral information (such as voice mails)
- Technical information, such as jet engine vibration and temperature analysis

This data can be both structured and unstructured:

- **Structured data:** this data is stored within defined fields (numerical, text, date etc) often with defined lengths, within a defined record, in a file of similar records. Structured data requires a model of the types and format of business data that will be recorded and how the data will be stored, processed and accessed. This is called a data model. Designing the model defines and limits the data that can be collected and stored, and the processing that can be performed on it.

An example of structured data is found in banking systems, which record the receipts and payments from your current account: date, amount, receipt/payment, short explanations such as payee or source of the money.

Structured data is easily accessible by well-established database structured query languages.

- **Unstructured data:** refers to information that does not have a pre-defined data-model. It comes in all shapes and sizes and this variety and irregularities make it difficult to store it in a way that will allow it to be analysed, searched or otherwise used. An often quoted statistic is that 80% of business data is unstructured, residing it in word processor documents, spreadsheets, PowerPoint files, audio, video, social media interactions and map data.



Velocity

Information must be provided quickly enough to be of use in decision making. For example, in the above store scenario, there would be little use in obtaining the price-comparison information and texting customers once they had left the store. If facial recognition is going to be used by shops and hotels, it has to be more-or less instant so that guests can be welcomed by name.

You will understand that the volume and variety conspire against the third, velocity. Methods have to be found to process huge quantities of non-uniform, awkward data in real-time.

Software for big data

Without getting too technical on this issue, a library of software known as Apache Hadoop is specifically designed to allow for the distributed processing of large data sets (ie big data) across clusters of computers using simple programming models. (Clusters of computers are needed to hold the vast volume of information.) Hadoop is designed to scale up from single servers to thousands of machines, each offering local computation and storage.

The processing of big data is generally known as big data analytics and includes:

- Data mining: analysing data to identify patterns and establish relationships such as associations (where several events are connected), sequences (where one event leads to another) and correlations.
- Predictive analytics: a type of data mining which aims to predict future events. For example, the chance of someone being persuaded to upgrade a flight.
- Text analytics: scanning text such as emails and word processing documents to extract useful information. It could simply be looking for key-words that indicate an interest in a product or place.
- Voice analytics: as above with audio.
- Statistical analytics: used to identify trends, correlations and changes in behaviour.

Google provides web-site owners with Google Analytics that will track many features of web-site traffic. For example, Google analytics on the OpenTuition.com reports statistics such as the following:

Geographical distribution of users:



Type of browser used

		626,439
		% of Total: 100.00% (626,439)
<input type="checkbox"/>	1. Chrome	300,165 (47.92%)
<input type="checkbox"/>	2. Safari	96,107 (15.34%)
<input type="checkbox"/>	3. Internet Explorer	82,165 (13.12%)
<input type="checkbox"/>	4. Firefox	70,411 (11.24%)
<input type="checkbox"/>	5. Android Browser	21,429 (3.42%)
<input type="checkbox"/>	6. Opera Mini	19,095 (3.05%)

Age of user

Age ?		Sessions ? ↓
		363,970
		% of Total: 58.10% (626,439)
<input type="checkbox"/>	1. 25-34	170,225 (46.77%)
<input type="checkbox"/>	2. 18-24	102,618 (28.19%)
<input type="checkbox"/>	3. 35-44	56,652 (15.57%)
<input type="checkbox"/>	4. 45-54	22,648 (6.22%)
<input type="checkbox"/>	5. 55-64	8,318 (2.29%)
<input type="checkbox"/>	6. 65+	3,509 (0.96%)

The final table is instructive. OpenTuition.com does not ask for users' ages, so this data has been pieced together from other information available to Google; it has been able to do this for only about 58% of users.

The analytical findings can lead to:

- Better marketing
- Better customer service and relationship management
- Increased customer loyalty
- Increased competitive strength
- Increased operational efficiency
- The discovery of new sources of revenue.



Dangers of big data

Despite the examples of the use of big data in commerce, particularly for marketing and customer relationship management, there are some potential dangers and drawbacks.

- **Cost:** It is expensive to establish the hardware and analytical software needed, though these costs are continually falling.
- **Regulation:** Some countries and cultures worry about the amount of information that is being collected and have passed laws governing its collection, storage and use. Breaking a law can have serious reputational and punitive consequences.
- **Loss and theft of data:** Apart from the consequences arising from regulatory breaches as mentioned above, companies might find themselves open to civil legal action if data were stolen and individuals suffered as a consequence.
- **Incorrect data (veracity):** If the data held is incorrect or out of date incorrect conclusions are likely. Even if the data is correct, some correlations might be spurious leading to false positive results.
- **Employee monitoring:** data collection methods allow employees to be monitored in detail every second of the day. Some companies place sensors in name badges so that employee movements and interactions at work can be monitored. The badged monitor to whom each employee talks and in what tone of voice. Stress levels can be measured from voice analysis also. Obviously, this information could be used to reduce stress levels and to facilitate better interactions but you will easily see how it could easily be used to put employees under severe pressure.



Chapter 17

MARKETING CONCEPT

1. What is marketing?

We now start to look at marketing. To understand the marketing concept or the marketing approach it's useful to contrast this with certain other approaches that might be available.

The product-led approach. For this, imagine a company which was started by a couple of engineers, clever and successful people, who are very interested in the technical qualities and the cleverness of the products they produce. They get enormous satisfaction in well-engineered, clever innovative products. Unfortunately, just because the product is well-engineered, innovative and clever doesn't mean that product will sell. No matter how much those engineers appreciate the fine details of that product it may be a product that no one wants, or a product which is too expensive.

The production-led approach puts great emphasis on high efficiencies and low down-time. That approach concentrates in making sure inventory is produced very efficiently, but unfortunately doesn't make sure that the inventory is being sold. The inventory may simply be accumulating in the warehouse.

The sales-led approach may sound okay, but what it means is great emphasis on selling what you have, even if customers don't really want it. The sales-led company will have a very high powered sales team, skilled in the arts of persuasion and getting people to sign contracts which they may later regret.

The marketing-led concept is quite different. What's important about that is that it is very outward looking. It looks to see:

- What will potential customers want?
- What do they appreciate?
- What amount of money do they think it's worth paying for the product or service we are providing?

Through market research we will establish the needs of potential customers and then develop an appropriate product to match those needs. It will stress to those customers the ability of the product or service to satisfy their needs and it will profit through customer satisfaction because it fulfills the needs of the customers.

In many ways it's a very humble approach. It's saying that the customer knows best. There is no point in making a product which we think is good if *customers* think it's not very satisfactory. It doesn't mean, of course, that it's an entirely passive process, only just taking input from customers. You can't always expect customers to be innovative and it will certainly be part of the market research process to develop prototype products to show those to customers, to see whether the customers will be interested, or to find out how those products could be changed in some way to better match the requirements of the customers. But at the end of the day, the marketing concept means finding out what do customers want and developing products or services to fulfil customer's needs.



2. Market segmentation

We have said that marketing is finding out what customers want and designing products and services to meet customers' needs. The first stage to find out whether all potential customers wanted the same thing or can the market be broken into different sections or segments. Market segmentation looks in how a market can be split up.

Commonly it can be split up according to age, sex, lifestyle, wealth, and geography. For example in the fashion market, there are quite different fashions which are bought by younger and older people. Obviously there are different fashions depending whether you are selling to male or female. Lifestyle is important, are we addressing the leisure market or are we addressing a more formal market? Wealth and disposable income are important, and it's normal for most ranges of fashions to have cheaper 'value goods' and also the more expensive luxury goods. Geography, for example simply whether people live in the north of the country or the south of the country can make a difference in the type of clothing they want to buy.

The idea of segmentation is that if you break the market up into smaller sections and you design products or services which specifically address the needs of each segment of the market, you will do better than simply adopting an approach of one product suits all. We will see later that companies may decide not to sell to all segments of the market. They may find a segment is too small, or too unprofitable, or too difficult to address. But the first stage of marketing is to carry out market research to see on what basis the market can be sensibly segmented.

3. Market targeting

After investigating market segmentation, the next stage is market targeting, that is deciding which segments of the market to attack.

3.1. Undifferentiated market targeting

The first type of market targeting is known as undifferentiated market targeting. This means that your research has shown that the market is effectively not segmented and that one product will suit all potential buyers.

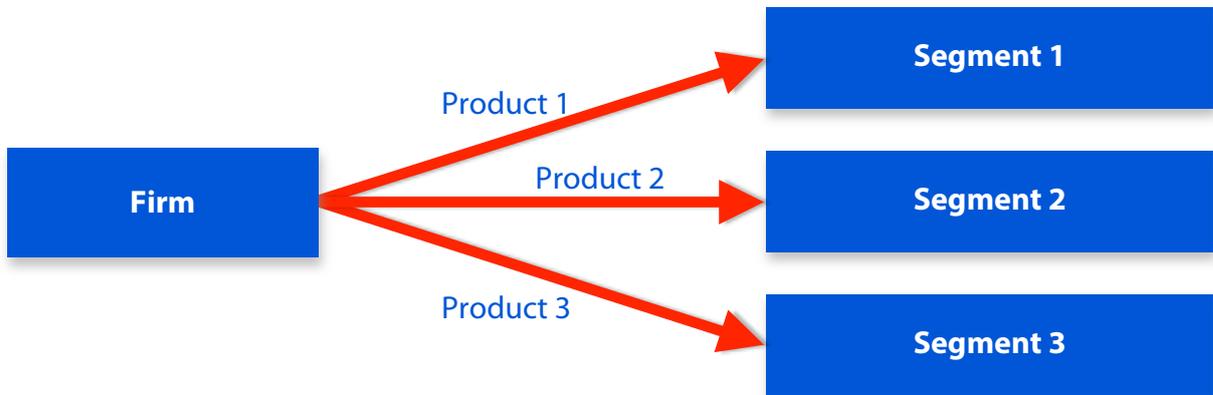


This is extremely rare; in fact it is very difficult to think of an example. Even the sale of basic products like water is to a segmented market. Some people are perfectly happy with tap water, others want mineral water, but some want still, some want sparkling. It is sold in different quantities of small bottles, large bottles, and there is whole range of flavours. Similarly with something like bread, there is white bread, brown bread, slice bread, non-slice bread, whole grain, and so on. Energy is similarly sold to a segmented market. Some people can buy electricity mainly at night time and they may receive a reduced price. Some people prefer a certainty of fixing their energy prices for a year or so. Some people prefer to buy their gas and electricity from the same supplier and they might get a discount. Nearly all markets turn out to be segmented and undifferentiated market targeting is very unusual.



3.2. Differentiated market targeting

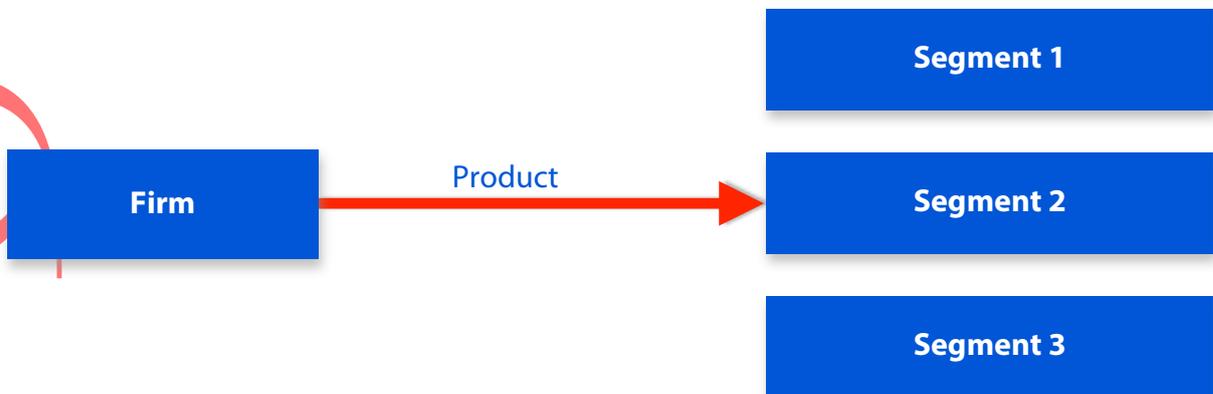
By far the most common type of market targeting is known as differentiated market targeting. Here the firm perceives that the market is segmented and designs a different product or service to suit each segment of that market.



You only have to try to buy a common consumable such as shampoo or toothpaste to see how the manufacturers have differentiated their products. There are probably dozens of products to choose from, and the manufacturers hope that by changing the product and a number of other variables that they make their product particularly suitable and attractive to one segment of the market.

3.3. Concentrated market targeting

Finally there is concentrated market targeting. This is equivalent to the strategic focus strategy and may be known as niche marketing.



The company perceives the market as being segmented, but for some reason decides to target only one, or a limited number of segments of that market. It could be that the company is too small to have a wide range of products, so concentrates on one segment. Or, the company may believe that it has particular expertise to fulfill the needs of one segment or that the company perceives that segment as being the only one that is profitable. But for whatever reason, the firm concentrates its resources in addressing the very specific needs of one or a very limited number of segments.

A good example of concentrated market targeting can be seen in a holiday industry. In the UK, a company known as the Saga Holidays has a very good reputation amongst older holiday makers. It has made to that segment of the market its own and designs holidays which it believes are particularly suitable to older people. It's unlikely, for example, that Saga Holidays will be offering a clubbing break in Ibiza.



4. Product positioning

'Positioning' means make a product or service address specific segments of the market.

Originally there were four variables or levers that could be used. These were known as McCarthy's marketing mix, or the Four Ps. Now seven Ps are often shown:

- Product
- Price
- Promotion
- Place
- People
- Process
- Physical evidence

The first four (product, price, promotion, and place) were the original components of the marketing mix and apply to the marketing of physical products. The three last ones (people, process, and physical evidence) are *additional* variables specifically to do with positioning services. When services are provided it is important to have the right people with the right attitude, whereas in manufacturing, customers might never meet employee. The process by which it is provided, and the physical evidence that something has actually happened are also important. For example, if you are booking an airline flight, you may ring up the airline and you expect to be dealt with in a helpful and friendly way by the representative. The process has to be convenient to you, you don't want to be waiting too long before your phone call is answered. Finally you expect some sort of physical evidence, such as an e-mail, to show you that the service is actually going to be provided.

4.1. Product

The first of the Four Ps is product, and this includes:

The features of the product (what it does)

- Quality,
- Design,
- Brand,
- Packaging.

For example, take calculators. Some have got simple arithmetic functions whereas others have trigonometric, scientific or statistical functions; some have rolls of paper on which calculations can be displayed. These are all different features of the product. Some calculators will be relatively cheap and perhaps very durable whereas others will be of high quality for everyday office use. Design might not be very important in calculators, but some are marketed on the basis of having a sleek futuristic looking design whereas others are more commonplace. Brand and packaging are probably not particularly important for calculators, but are very important when considering something like cosmetics or perfume where the packaging might possibly be more expensive than the contents.



4.2. Pricing

The second of the Four Ps is price. This includes not only the price itself (the price level or price point), but also discounts for bulk buying which is particularly important in business-to-business sales. Price also includes the terms, that is how long a customer has to pay. There are also various types of strategic pricing, described below.

Pricing can be more sophisticated than it first looks. For example if your customer had a very seasonal business, perhaps in agriculture, you might be able to make your product attractive to that customer if your terms of sale were arranged to match that customer's cash flow. Perhaps the customer could buy in the spring and not have to pay until the autumn when crops are harvested.

We look at pricing in more detail in the next chapter.

4.3. Promotion

There are four main types of promotion:

- Advertising
- Sales promotion
- Personal selling
- Public relations.

We are all familiar with advertising and we know that it can take place on a number of different media. For example, television, magazines, newspapers, billboards by the side of roads. Television addresses a mass audience and it wouldn't be particularly sensible to advertise a specialist product there. Those types of products would be better advertised in specialist magazine.

Billboards by the side of roads can't contain huge amounts of technical information. People can't and won't stop to read them. They can only give a very brief impression of the product and to spread knowledge of its existence and perhaps its brand name.

The internet has become a very important advertising medium. Advertisers love it because potential customers usually volunteer interest by access a particular web-site or entering a search term. The behaviour of the customer can be monitored and the advertiser usually does not have to pay until the customer clicks through on the advert.

Sales promotion is something which happens very close to the point-of-sale. You may have been in supermarkets where staff offer small portions of cheese or small glasses of wine for you to try in a hope that you will then go and purchase. Buy-one-get-one-free offers and coupons which give you money off the next purchase are also forms of sales promotion.

Personal selling is when a salesman or saleswomen, a sales representative in other words, goes around spending time with customers or potential customers trying to persuade them to buy. This is very important in business-to-business sales and, of course, it is economically justified there because often the orders placed in business-to-business sales are quite large and valuable. It only happens in business-to-consumer sales where the value of the product is particularly high. So you if went into a garage to buy a new car, for example, you will probably get the attention of a salesman, or if you are buying a pension scheme, because they are technical and very valuable over a period of 30 years or so, it can make economic sense to pay someone to sell you the product on a personal basis.



Public relations usually means good mentions in the press. Sometimes there are charitable endeavours where a local firm has made some sort of donation or lent some sort of equipment. Perhaps sponsoring the local amateur football team also falls into the category of public relations. Public relations doesn't particularly advertise a product, it tends to be rather more orientated towards giving a good impression of your organisation.

4.4. Promotion can be divided into two categories:

- Push promotion
- Pull promotion

Imagine a new product is about to be launched. Push promotion is concerned with getting the product into the shops and would use, for example, personal selling. Pull promotion is getting the public to demand that product, to go into shops and ask to buy it. That promotion could be done by advertising. For the whole promotional campaign to be successful, you need both push promotion and pull promotion to match up. There is no point in people knowing about a product if it is not available; there is no point in the product being available if nobody wants to buy it.

4.5. Place

The last of the four Ps is 'Place', meaning the place you go to buy or acquire the product. It really means distribution. Considerations to bear in mind there are:

The length of the distribution chain.

The shortest distribution chain is going directly from manufacturer to consumer and this is sometimes seen in mail order businesses. Some computer manufacturers such as Dell operated in this way for many years. It doesn't work quite so well when you come to distributing something like clothing. Even though you can have catalogues which have pictures of the garments, you really want to try them on, to see the color, to feel the material. Direct selling works particularly well with computers because they can be perfectly described by their technical specifications. By contrast, many consumer goods have a very long distribution chain, going from manufacturer to wholesaler to retailer and ultimately to the consumer. Many everyday products such as sugar, milk, butter, cigarettes follow this sort of distribution chain because it gets the goods very, very deeply and widely distributed within a community. They become available in almost every outlet. Those types of goods are sometimes called convenience goods, goods that you expect to be available in a convenient way and where you probably won't bother getting in your car to travel across the city to buy a particular brand. Butter might be a good example. By and large we take whatever butter is available in our local shop. Some types of goods however will take more trouble over and these can be called the consumer durables. Things like carpets, furniture, large electrical items. These represent significant amounts of money, they are rare purchases, which, we hope, will last for many years. There, we would bother to travel across the city to go to a major outlet which offers us comparisons of many different brands of product. So those types of goods tend to be sold through a smaller number of larger outlets.

4.6. Suitability of the outlet.

For example, if you are selling very, very high quality audio equipment, you would expect the people in the shop to be able to explain the pros and cons of different systems. Perhaps the shop should be equipped with soundproof rooms where could try different speakers out in. You wouldn't expect to buy very high quality audio equipment in your local supermarket.



5. Marketing research

Good marketing depends on good information, and this comes from marketing research.

5.1. Who are our customers? What do they want/need/appreciate/respond to?

Information is needed, not guess-work, on all of the marketing mix

5.2. There are three types of marketing research:

- Desk research
- Field research
- Test markets

Desk research uses information that has already been collected. This approach is usually relatively quick and cheap, but might not answer all your questions. Sources of information are:

- Internal – accounting department
- Internal - data warehousing and data mining
- Government – national and local
- Market research consultancies

Field research means going out and collecting specific information. A common approach is the use of questionnaires to ask people about brands, preferences and so on. It can also include product testing where new products are given to consumers to use, and those consumers are later asked about their experiences with the products.

The final piece of marketing research comes just before a new product is launched. The company might decide to experiment in a test market. So, rather than a full national or international launch, the product is tried out in a relatively small area. Test markets should be:

- Small
- Representative of the full customer population
- Stable population (a university town would often be unsuitable the population varies radically from as terms change)
- Suitable facilities. So, if you were aiming to sell your product through supermarkets and advertising it on a local radio station, your test market should have these facilities also.





Chapter 18

PRICING

1. Introduction

In the P3 exam you can now be required to describe a process for establishing a pricing strategy that recognises both economic and non-economic factors.

The influences on prices are:

- Mission and marketing objectives
- Pricing objectives
- Costs
- Competition
- Customers
- Controls

1.1. Mission and marketing objectives

A mission sets out the organisation's purpose and its feeling about its position in the market. Pricing cannot be separated from mission. An organisation might have a charitable or not-for-profit purpose, in which case prices for its products and services might be zero or heavily subsidised. An organisation might perceive itself to be 'up-market', in which case it might have to charge high prices to project quality and exclusivity.

1.2. Pricing objectives

In the shorter term there can be a variety of pricing objectives, such as generating as much cash as possible. Sometimes an organisation might reduce its prices, sustaining losses for a while, in the hope of forcing competitors to withdraw from the market.

1.3. Costs

Any positive contribution (that is when marginal revenues exceed marginal costs) helps to cover fixed costs. To make a profit, revenue has to exceed all costs. You should always consider opportunity costs and exit costs.

An opportunity cost is the revenue foregone as a result of a decision.

Exit costs can arise when trying to abandon a strategy. For example, redundancy costs.



1.4. Competition

There are four main types of market, each giving rise to a particular type of competition:

- Perfect competition. Here, suppliers must charge the market price. It is worth noting that the Internet has tended to make price and competition much more transparent and that there are sites which specialise in comparing suppliers' prices.
- Oligopoly. A small number of suppliers supplying identical product, such as petrol companies. There is little incentive to reduce prices as competitors will follow to maintain their market share.
- Monopoly. The supplier can charge whatever is wished. This is the great freedom a monopolist has: choose the price to charge so that profits can be maximised. Note that being a monopolist does not guarantee that a profit is made. You might be the sole suppliers of something no one wants.
- Monopolistic competition. This means that there are a number of suppliers of similar but not identical goods. Essentially, the products are being differentiated and therefore can command different prices. Suppliers are competing, but with different offerings.

Price competition means that consumers are motivated primarily by price and usually suppliers will have to offer low prices to succeed. Very often organisations which use a cost leadership strategy adopt price competition. Their products are ordinary, but because their costs are very low (if not actually the lowest) prices can also be kept down.

Non-price competition means that consumers pay attention not only to the price of the goods but are also influenced by other marketing mix variables such as the:

- Quality, brand and features of the goods
- Promotion activities
- Place (where the goods or services are obtained).

Essentially, organisations which follow a differentiation or focus strategy will be making use of non-price competition.

1.5. Consumers

Suppliers have to keep in mind what the end consumers are willing to pay. It is common to segment markets according to wealth so that a company will have a 'value' range of goods for less wealthy customers and a more expensive range for better-off customers, who might respond to non-price competition.

The perceived value of goods is a concept which is also related to non-price competition. For example, when buying a T shirt there is a very wide range of prices for garments which are very similar looking. We assume that the expensive T shirt with the fashionable label is 'better'



than the cheaper, more basic lines. However, often we really don't know, and might even be paying for the kudos we feel an exclusive label gives us.

Whether goods are necessities or luxuries also influences consumers' reactions to prices and price changes. The elasticity of demand of the product is a measure of how a change in sales volume is caused by a change in price. Goods that have a high elasticity of demand are very price sensitive and are likely to be luxury products that consumers are prepared to do without if the price rises too much. Goods with a low elasticity of demand are relatively unaffected by price changes and are likely to be necessities.

1.6. Controls

Some industries are closely regulated by statute and regulation, and they have little power to choose their own prices.

2. Strategic pricing

Now we will look at strategic pricing.

2.1. Price skimming

This is when a very high initial price is set for a product, for example a new electronic product. You might know that there will be a certain number of people who will be prepared to pay, let's say \$1000. After they have all bought the product you can then lower the price, say to \$900, and there will another layer of people who will be willing to pay that, and so gradually you work your way down. Price skimming is always a temporary phenomenon. Prices always fall, if for no other reason because other manufacturers will join in and bigger volumes that have to be sold.

2.2. Penetration pricing

Penetration pricing means going in with a very low initial price in a hope of getting a very high market share. With luck the high market share will give you very high volume and consequently a low cost per unit for production, and you may be able to sustain a very low market price indefinitely. Indeed, this can be a strategy to protect yourself against new entrants to the market. If you are going with a low price and win, let's say a 70% market share, it will be quite expensive for anyone else to come into the market and make as good profits as you are.

2.3. Related product pricing

This aims to get someone 'hooked' by a low initial price, then follow up prices are high. A good example of related product pricing can be seen with inkjet printers. Typically a new inkjet printer might cost around \$100, but then to renew the ink cartridges might be costing about \$70. The initial printer is almost a lost leader, the rationale being that once you have bought that, the follow-on cost of maintaining and replenishing the supplies is where the profit is going to be made.



3. Setting prices

3.1. Introduction

In an ideal world, organisations would have full information about:

- Customers – what would they pay and what is the likely demand?
- Competitors – what are their products, what are their prices and how do they compete?
- The resultant costs, revenues and profits arising from a specific price.

In practice, determining much of this information can be difficult, and again it is worth emphasising that markets are often very volatile and prices might need to be reviewed and changed frequently.

The methods of setting prices include the following:

3.2. Setting prices to maximise profits

In theory, profits are maximised when:

$$\text{Marginal cost} = \text{Marginal revenue}$$

In practice, this is almost useless advice as very few organisations will have sufficiently detailed or stable information about how revenues move, as they are affected by fickle consumers, competitor action, and economic confidence.

3.3. Setting prices to break-even

The break even volume is given by:

$$\text{Fixed costs} / (\text{Selling price per unit} - \text{Variable cost per unit})$$

or

$$\text{Fixed costs} / \text{Contribution per unit}$$

Setting a high selling price per unit will generate a high contribution per unit and this would require a smaller volume to be sold before breakeven point is reached. The company could therefore evaluate various options of prices and volume.

3.4. Cost based pricing

Here the cost per unit is determined and a set amount, or a set percentage, is added to that to give the selling price. Although useful as a guideline, the method is not sufficient because it is entirely inward looking and pays no heed to competitors or customers. The resulting prices must always be looked at with some scepticism, and the organisation must assess how those fit in with the market.



3.5. Competition-based pricing

By contrast, this approach is entirely outward-looking. It strives to match what competitors are charging and is the only option when in perfect competition.

3.6. Market-orientated pricing

In this approach, the organisation attempts to escape from the constraints of perfect competition and sells a product differentiated by features, quality, design, promotion, place and so on. Generally, higher prices are sought and are justified by products better matching a market segment's needs.





Chapter 19

PROCESS CHANGE

1. Introduction

A business process can be defined as:

“An arrangement of resources that transforms inputs into outputs that satisfy customer needs whether those customers are internal or external.”

The advantage of looking at an organisation from a process perspective is that it breaks down the barriers between departments and tries to avoid those departments being isolated so that each department concentrates on its own function rather than seeing its purpose as being part of the organisation as a whole, where the purpose of the organisation is to add value. Organisations should never be content that their processes have been perfected. Apart from anything else, technology changes and customers will demand different products or services and inevitably processes must change.

1.1. There are three levels at which processes can change:

- Automation.

This can be regarded as taking place at an operational level. Existing processes are automated and they are therefore made somewhat more efficient, perhaps more reliable, faster, and more cost-effective. For example, a supermarket system keeps track of inventory volumes as items are scanned at checkout. An order is then sent to suppliers when inventory falls below the reorder level.

- Rationalisation.

This is sometimes called process redesign. This is at a more the tactical level and can involve, for example, removing bottlenecks. An example of potential bottleneck could be seen in a supermarket environment where frequent reordering of inventories is required. A bottleneck could simply be the time it takes to produce and send out new orders. This will restrict the speed at which inventory can be replenished. One way of removing the bottleneck and rationalizing the process is for the supplier to monitor stock at the supermarket and to automatically start the dispatch process when it can be seen that the stock is approaching the reorder level.

- Process re-engineering.

At the highest strategic level, business process re-engineering is encountered. This looks at much more radical changes taking place within the organisation. It's sometimes said that moving to just-in-time inventory is business process re-engineering. Radical changes to production and ordering are required so



that the organisation no longer has to rely on inventories.

The distinction between automation, rationalization, and business process reengineering are not hard and fast. There is a continuum, but at the more sophisticated strategic end radical changes may be what are required to keep the business competitive and to successfully add value to what it's doing.

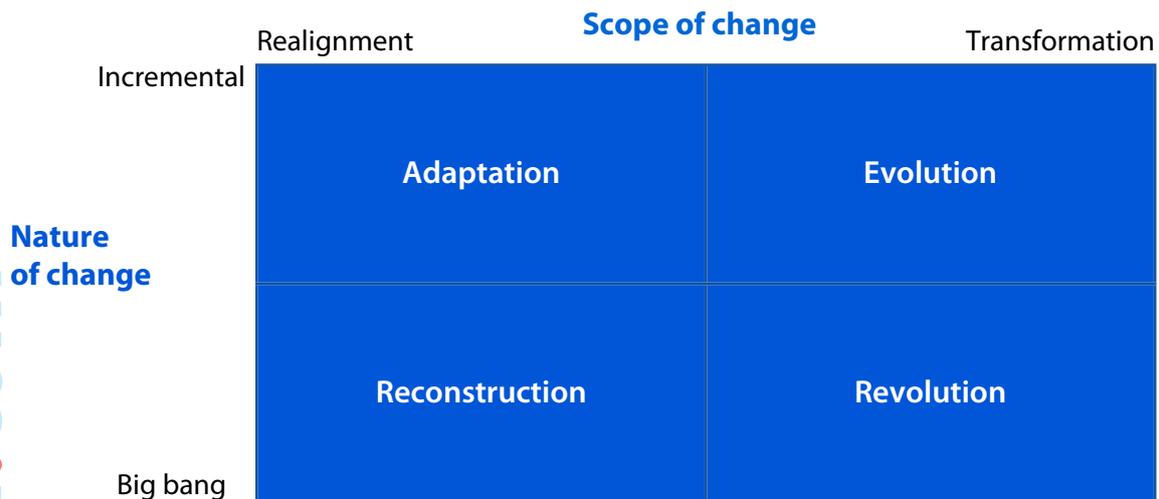
2. Redesign patterns

2.1. There are four basic redesign patterns.

- Re-engineering. This pattern relates to a fundamental rethinking starting from a zero base and building up the process from scratch. The object is to obtain major fundamental improvements in the process.
- Simplification. Here it's recognised that as time passes most processes gather elements of duplication and redundancy. Although the process may be well thought out at the start, it can grow in a rather disorganised way so that considerable inefficiencies can be created.
- Value-added analysis. Remove all non-value adding activities. A value adding activity is one for which the customer is willing to pay, one which physically changes the output in some way, for example, a manufacturing or chemical process. The activity has to be performed correctly on the first attempt: there is no value-added and having to rework products.
- Analysis of gaps and disconnects Check flows of information and products between departments. Poor communication between the various functions in the business is liable to result in non-value added activity.



3. Scope and nature of change



The scope of change relates to the size of the change and how fundamental it is. For example, if every department were being affected the scope would be transformational (large). Similarly, if the fundamental nature of the business was being changed, such as moving from being a cost leader to a differentiator), the scope would again be transformational.

The nature of the change deals with its speed.

You can remember the top two quadrants from biological terms. Adaptation means slow, small changes. Evolution means slow large changes. Because the changes are incremental, these types of change are relatively low risk as the change process can be halted or reversed if it's not going well.

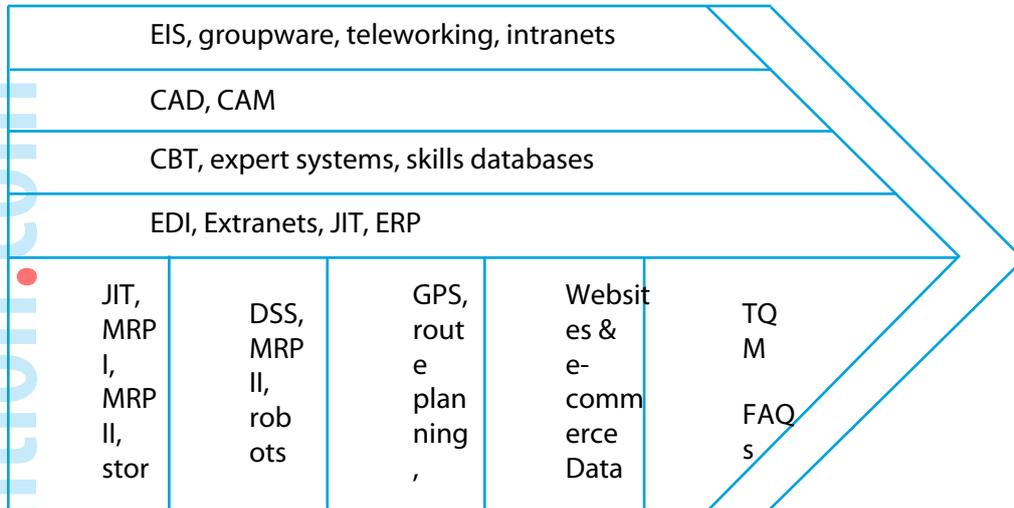
Revolution is obviously a large, fast change. There is a high risk of things going wrong.

Reconstruction is a fast change of limited consequences. Obviously its speed means that things can go wrong, but as the extent of the change is limited, any damage should be limited to relatively few stakeholders and it should be relatively easy to put it right again.



4. Value chains and IT

You may remember that the value chain depicts processes divided into primary activities and secondary activities. These activities or processes should act together in such a way that value is added and therefore profit is made. Information technology can have a profound effect on the processes carried out.



Inbound logistics. These can be affected by just-in-time inventory, MRP I means Material Resource Planning. MRP II means Manufacturing Resource Planning. Material Resource Planning means that when you get an order in from a customer, you usually know what components are going to be needed to fulfill that order and can plan for the acquisition of those. MRP II, Manufacturing Resource Planning, also looks at the scheduling of machine use and the labour requirements to make the ordered goods.

Operations. In addition to MRP II, operations can make use of Decisions Support Systems (DSS), and robots for the automatic manufacture of products.

Outbound logistics. This activity can make use of global positioning satellites for route planning and some types of products can be delivered over the internet.

Sales and marketing can make great uses for websites, e-commerce and, as mentioned before, the use of data warehouses and data mining can be extremely important in market research.

After sales service. Finally in the primary activities after-sales service can make use of total quality management and frequently ask question pages on the internet. Total quality management should reduce the need for after-sales service.

Looking at the secondary activities:

Firm infrastructure. Executive information systems and groupware allow collaboration on projects. Teleworking can allow some people to work from home or remote locations. Intranets can be used for the dissemination of the information, or for part of the firm's infrastructure.

Technology development can make great use of computer-aided design and computer-aided manufacture to get new products quickly to market.

Human resources management can make use of computer-based training, expert systems, and skills databases so that we can choose the best people for each particular project.



Finally procurement. EDI (Electronic Data Interchange) allows orders to be sent directly to the supplier's computer system. Usually that's done through an extranet. There are also just-in-time inventory systems and enterprise resource planning which tries to plan every aspect of the organisation.

5. Process change methodology

5.1. Strategic alignment

Strategic alignment is the process of linking an organisations structure, resources and competences with its strategy and its business environment. For example, if an environmental analysis shows that many customers enjoy buying over the internet then if the organisation has no e-selling capability it should certainly think about developing one. Here

- the organisation's capability is being brought into line with what its customers want and what competitors might already be doing.

It can be argued that all business change projects will begin with strategic alignment: why is the business being changed (not merely maintained) if there is no strategic need?

5.2. The business change lifecycle

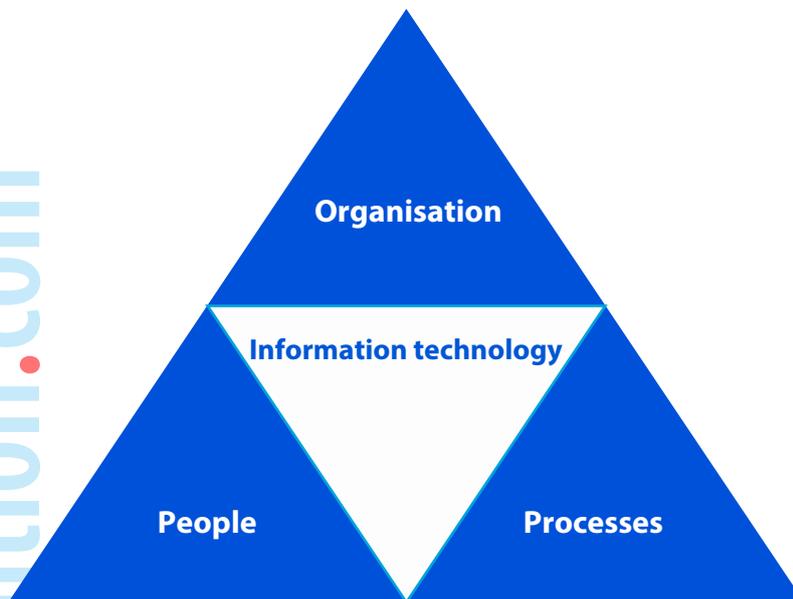
There are a number of versions of the stages that make up the business change lifecycle. Typical are the following stages:

1. **Planning:** define the goals. What will be achieved as a result of the change? Also at this stage people must be allocated responsibilities.
2. **Analyse existing activities.** This is usually an essential starting point to all business change processes. The existing systems might not be perfect but they will usually achieve at least the bare minimum required of operations which can be built on and improved. Identifying problems with the existing system will point the way to where improvements are needed.
3. **Design a new or improved process.** Explore alternatives and choose the best redesign that achieves the goals set.
4. **Development.** Redesign products and services and devise ways in which the success of processes can be measured.
5. **Implement/transition.** This will include training employees and overcoming any resistance they might have.
6. **Review** the success of the new business process.



5.3. POPIT: people, organisation, processes, information technology

This approach to business change suggests that four elements need to be considered to achieve successful business change:



- Organisation: consider the organisational capabilities and structure and ensure that these are suitable.
- Processes: How are the core business processes carried out? Analyse the value chain and understand the processes (activities) and their linkages.
- People: Roles, job descriptions, competences, motivation, rewards, culture.
- Information technology: IT architecture, IT capabilities, controls, software and information provision.

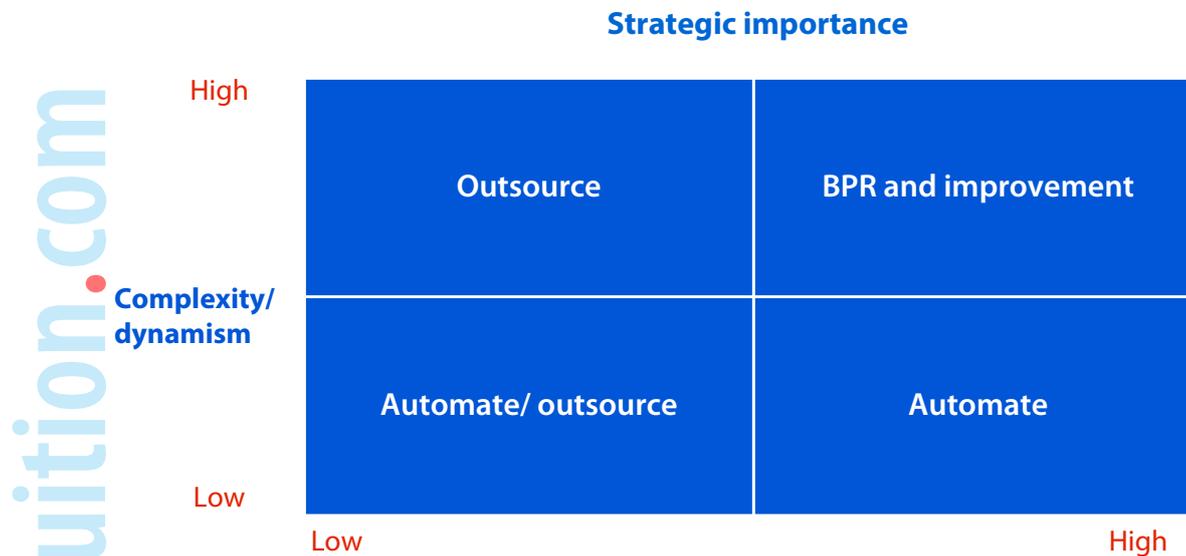
Any proposed change has to be assessed for feasibility:

- The cost and benefits of the proposed change
- Technically feasibility
- Operational feasibility
- Socially acceptability



6. Harmon's grid

It's all very well being able to classify process changes as process reengineering or process redesign or process improvement, but that classification doesn't necessarily give us any clue as to what type of changes may be worthwhile. This is where Harmon's process-strategy matrix can be useful. It uses two axes on the grid.



On the vertical axis complexity and dynamism of the process is described. (A dynamic process is one that frequently changes). Going across the grid, we have the strategic importance of that process.

Look at the top left of the grid: high complexity and high dynamism but low strategic importance. Harmon suggests that process is one which will be very suitable for outsourcing. An excellent example of such a process would be the company's tax calculations. Tax calculations are complex; they will change frequently, often every year when your budget is announced by the government. But the tax calculations are not of strategic importance; getting the tax calculation right doesn't help the company be a success or to add value. Therefore, it is suggested that the company might do well by outsourcing this process, for example, to the tax department of its auditors.

Looking at the bottom left quadrant: low complexity and dynamism (a very stable, relatively simple process) and not of great strategic importance. A good example of that could be handling the receivables ledger or doing the weekly wages and the monthly salaries. These are relatively simple calculations. Again, they are not of great strategic importance to the company, they don't help it to make more profits. They are essential administrative tasks and because they are relatively simple and relatively stable the company should think of automating it. Once automated, the process will carry on for years without a great deal of attention. Alternatively, these processes could be outsourced. Very often companies outsource the maintenance of the receivables ledger to factors or invoice discounters.

The top right quadrant holds processes of high strategic importance and which are complex, and which change frequently. Because they are of high strategic importance these processes are central to how the company makes money. It will be dangerous to outsource them. In fact, it may not be possible to outsource them and maintain the ability to add value. They can't really be automated because they are too complex and too dynamic. This is where the company should look at improvement, redesign, and business process reengineering of the processes.



Finally, the bottom right quadrant. Processes here are relatively simple and relatively stable, but they are of great strategic importance. Because they are strategically important, the company should keep them in-house. But because they are of low complexity and very stable means that the company ought to be able to automate these processes to gain efficiencies.

7. Commoditisation of business processes

The Harmon process-strategy matrix suggested that outsourcing was an option provided that the process was not of strategic importance. However, there are certain obstacles in the way of outsourcing processes successfully. It might be reasonable to outsource a process like looking after the receivables ledger which is a terribly simple process to outsource. But once we get onto more complex areas, perhaps outsourcing certain elements of research and development, or IT development, it can be difficult for the outsourcing company to make sure that it's getting what it wants.

The difficulties are:

- There is a perceived lack of comparability between internal processes and the competence of outside suppliers. For example, how do we measure or assess their competence? How do we know the limit of their competence?
- There is a lack of standardization. Therefore when the outsourcing contract goes out for tender and we get replies, it can be very difficult to compare what the various external suppliers are actually offering. For example if you are outsourcing your tax computations, do you expect a consultancy firm simply to do your routine corporation tax calculations or do you expect them to take a more active role in reducing your tax bills through legitimate means.
- The outsource company of course wants to make a profit and this means that these charges can look high. High charges can be justified provided there are clear benefits and the benefits are seen to outweigh the costs. However, these benefits are difficult to measure. How are you going to measure the expertise and skill that an outsource company brings to bear or the flexibility that it may offer you? If you can't get a clear picture of the benefits on offer then it's going to be very difficult for you to justify the costs.

If business processes could be standardized or effectively turned into a commodity, then it should be much easier for companies to outsource processes. If both buyer and supplier know exactly what's meant by a business process title then there will be no nasty surprises. It will be much easier to assess benefits and costs because the benefits are likely to be more standardized and we will see that other companies have enjoyed those. If all suppliers are offering a very similar service then it will be much easier to compare what those suppliers are offering and what they are charging.

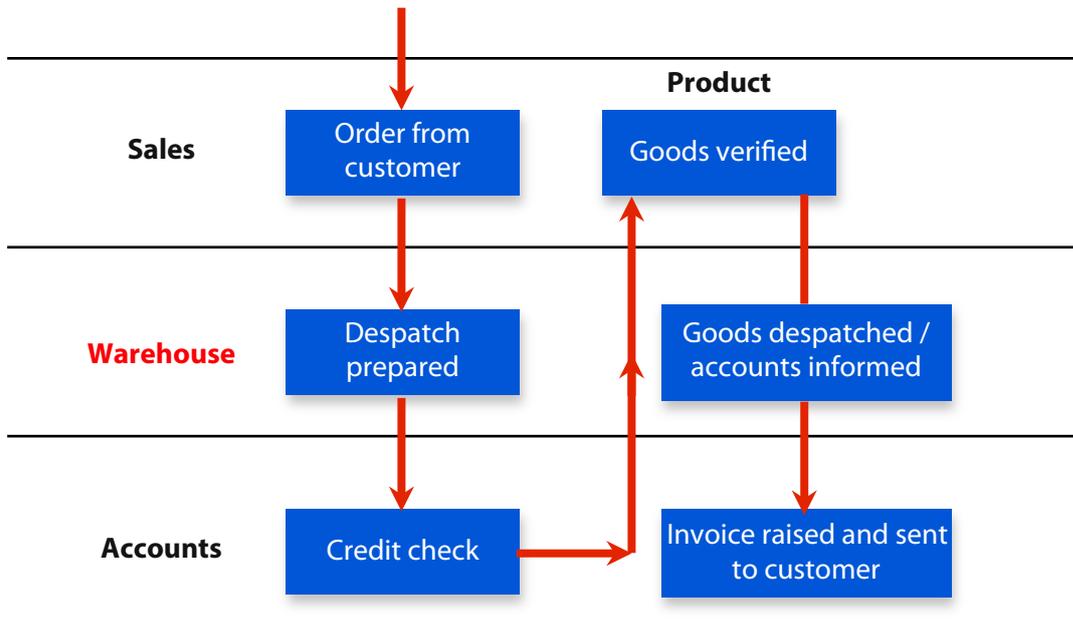
As outsourced processes become more like commodities, outsourcing should become more popular. It will be possible for the suppliers to standardize what they are offering and this should result in greater economies of scale. There should be a drop in price of outsourcing and effectively there is a virtual circle which is set up. More outsourcing drives down the price of outsourcing, which will make outsourcing more popular.

What we mean by 'commoditization' is if a company says that it wants you to run its accounting system then everyone understands what is meant by that requirement. Or if the company says that it wants you to run its human resources management process, it is fairly well-known what is meant by that. It may be recruitment, it may be the annual appraisal interviews, it may be exit interviews, it may be training, it may be psychological testing, but



until there is a degree of standardization a lot of energy is wasted and lot of confusion can be caused if we don't know exactly what is meant.

8. Swim lane diagrams



The examiner often presents a system and asks you to suggest improvements. In addition to narrative, a swim-lane diagram is often attached to back up the description. Here is a simple one. You won't have to draw one, and they are easy to understand.

Look for

- Processes happening in an illogical order
- Pointless processes
- Pointless transfers between departments of goods, documents or information.

Here:

- An obvious fault is that credit control approval happens after the despatch is prepared.
- It is not clear if the goods travel to the accounts department
- It is not clear why the goods have to travel back to sales then back to the warehouse for despatch. Can't someone in the warehouse check them?



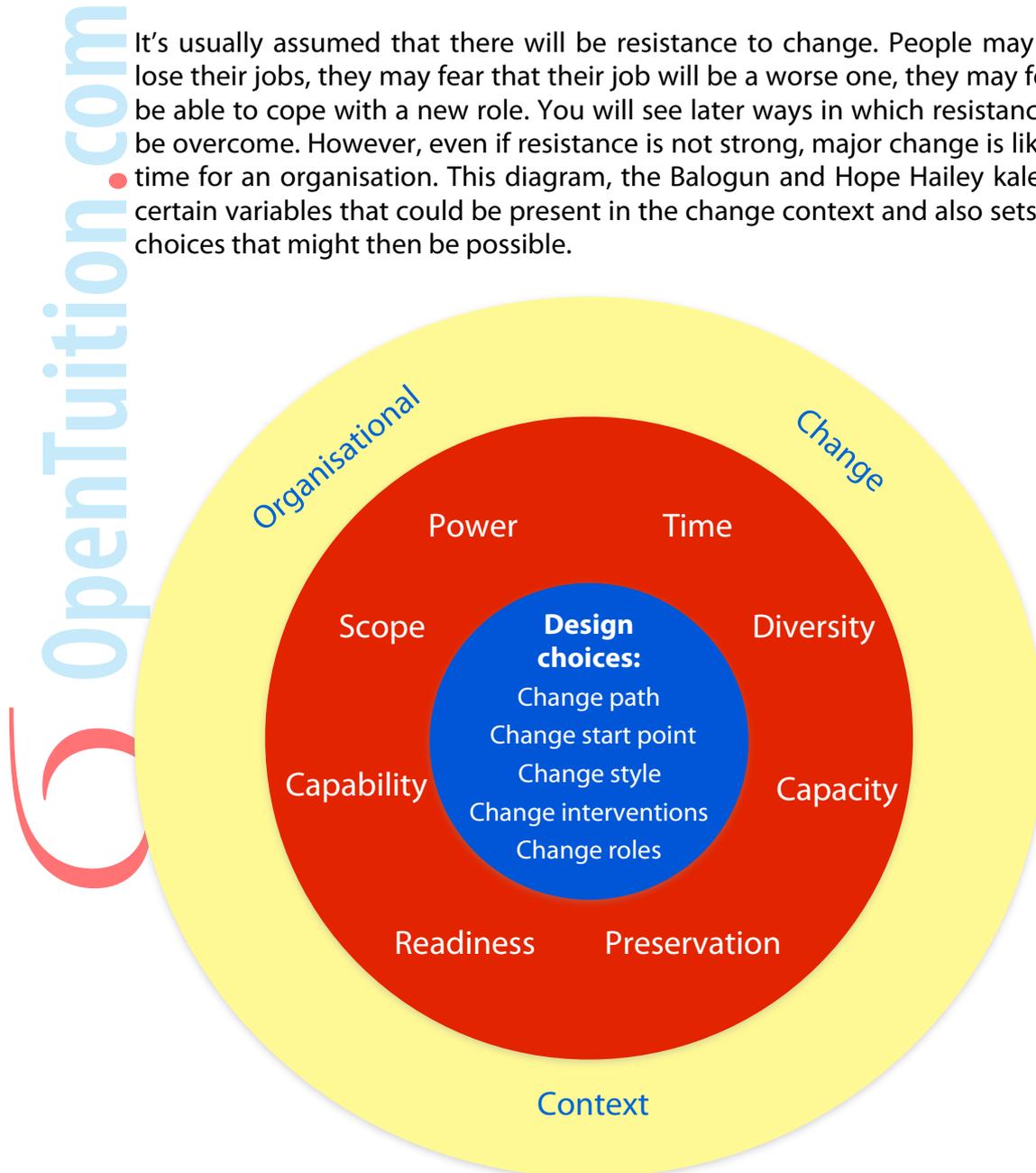


Chapter 20

CHANGE MANAGEMENT

1. Balogun and Hope Hailey

It's usually assumed that there will be resistance to change. People may fear that they will lose their jobs, they may fear that their job will be a worse one, they may fear that they won't be able to cope with a new role. You will see later ways in which resistance to change might be overcome. However, even if resistance is not strong, major change is likely to be a difficult time for an organisation. This diagram, the Balogun and Hope Hailey kaleidoscope, sets out certain variables that could be present in the change context and also sets out certain design choices that might then be possible.



1.1. Contextual features

First, we can look at the contextual features of the change, i.e. the variables that determine the nature of each change event.

- Time: What is the time span? Do we have a long time, or is it urgent? You can probably predict from this, that if a change is urgent, the change process is likely to be one where people tend to be told what to do rather than having long discussions about what should be done.
- Scope. How much of the organisation is affected? If most of it is affected then the change process is much more complex. If it is more restricted the change process would be much easier.
- Preservation. Which aspects of the organisation work well and therefore are to be retained? We must be careful not to damage those.
- Diversity. Some parts of the organisation may be keen to embrace change whereas others resisted and are protective of their current position.
- Capability. Can we do the change or we need outside experts?
- Capacity. Do we have enough resources and time, money, and expertise or do we need to buy some in?
- Readiness. Are staff members aware of the need for change, committed to it, anxious for it and ready to embrace it?
- Power. How much power does the change agent have? If that person has to keep referring upwards to get guidance, then to some extent their position and power is undermined.

1.2. Design choices

Having looked at the context (the environment) of the change and the variables determining this, we can now look at various design choices.

- Change path. What are the time scales? What is the extent of the change? How do we know when an outcome has been achieved?
- Change start point. Are we going to impose change top-down, or are we going to go to our employees and ask them to suggest what changes may be required?
- Change style. Is it going to be very dictatorial or much more participative.
- Change interventions. These can consist of educating people, communicating the need for change and cultural interventions. For example, team building or getting people to be more flexible and to be willing to work in a variety of project teams.
- Change roles. Who is going to be responsible for carrying out the change. Are we going to bring in outside consultants? Are we going to have a project team with a project leader? Is it all going to be managed by, for example the managing director,

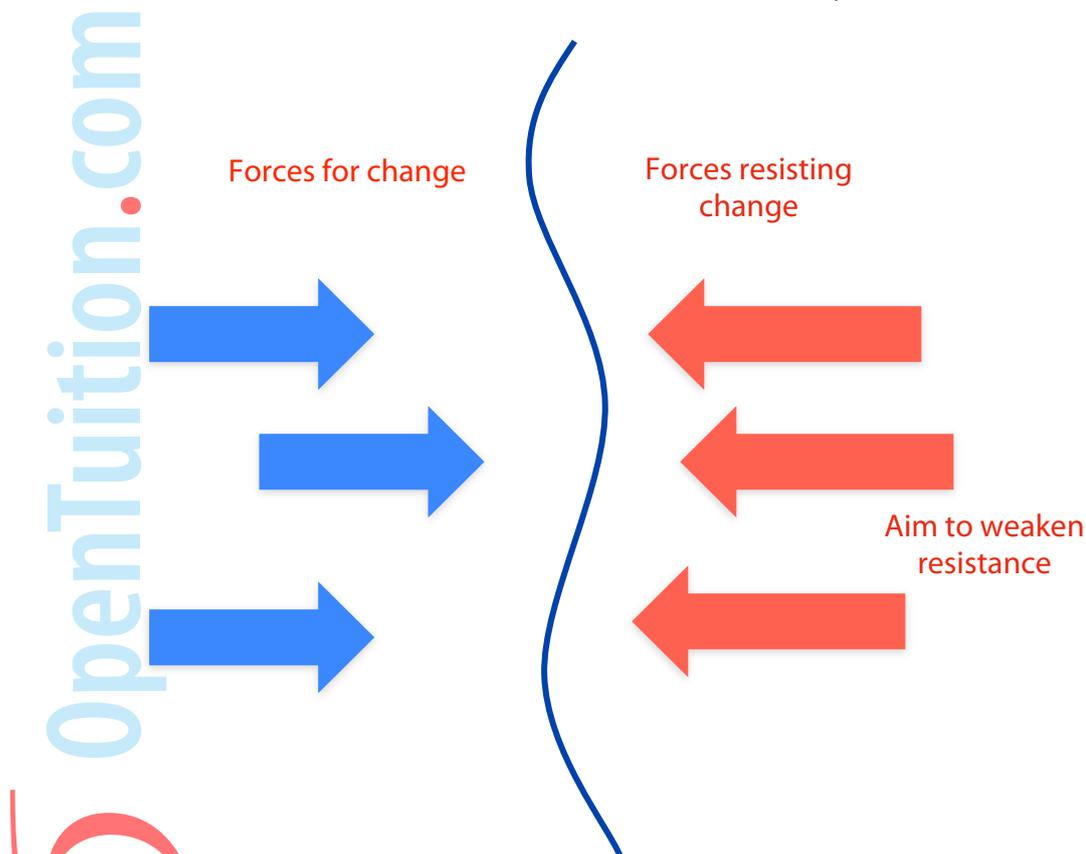
The design choices need to be made bearing in mind the contextual features that we discussed above.



2. Force field analysis

As mentioned earlier, the normal assumption is that change will be resisted by employees, and even if it's not resisted very strongly there is likely to be a period where employees are nervous and there will be a certain amount of disruption. It's important for companies to try and manage change so that disruption and resistance are both minimized. There are number of techniques that can help.

The first one shown here is Lewin's Force Field Analysis.



Lewin says that on one side there are forces for change. The assumption is that these changes will set up forces resisting them. It could be just individual employees who object or it could be more highly organized through a trade union or works council. The wrong approach, according to Lewin, is for management to push very hard one way because the chances are that the forces resisting change will just push equally hard the other way, and the whole conflict escalates so that there is a serious risk of industrial unrest and strikes and work-to-rules.

Lewin says that instead of taking on the resisting forces head-on, management should aim to weaken resistance to change. And how do you weaken resistance to change?

Well, the suggested ways are:

- Communication. Often resistance to change is there because people simply don't know what is happening. They fear for their jobs or perhaps there are no plans to make anyone redundant. If people are worried that they won't be able to cope with the new system you can say that training will be provided for everyone. Communication should also include reasons why change is needed. You could say to people that if we don't change we can't compete, if we can't compete there will a contraction of the business.



- Participation. If you explain to people why change is needed and then ask them to make suggestions about the change in the structure of the company (a kind of bottom-up approach) it is subsequently quite difficult for them to object to suggestions that they have made themselves.

3. Lewin – 3 step

Lewin's second suggestion for managing change is his three-step process which effectively is very similar to his Force Field Analysis, though not using quite the same analogy. Here he says:

- First, management must first unfreeze the current situation. Explain to people why change is needed, get them ready for change. Ideally, get them ready to embrace change.
- Secondly, you put through the changes. This can be a relatively long period where people will have to perhaps undergo retraining and restructuring.
- Third, refreeze the situation. Let things settle down, have a period of calm where things refreeze and become stable in a new environment. Above all make sure that people don't slip back into old patterns of behavior.

4. Change agent

The third approach which management should consider is the use of a change agent, who will normally be an outside consultant. Consultants can be very expensive but there can be very considerable advantages in hiring one to oversee the entire change process:

They are skilled in the process of change. They know that people would be unsettled. They know for example the importance of communication and how useful it could be if people were allowed to participate in the change process by making suggestions.

A consultant might typically visit half a dozen different companies in a year. They therefore know the types of management structure which might be suitable. They know which processes could perhaps be successfully outsourced. They therefore bring enormous knowledge and expertise to the type of change that is needed, not just to the way in which the change should be affected.

They are perceived as being independent and fair. They come to the company with a clean pair of hands. They won't be creating a good job for themselves. They won't be getting even with rivals and people they don't like within the company. They won't be trying to preserve previous changes which they put through earlier in their management career.

Management knows that if the change process goes wrong, it could be extremely serious for the company and they may feel nervous about that. Therefore, they may want someone to effectively hold their hand and to give advice; it's someone for management to transfer risk to. If after the event, management can say, "Look we went to one of the most respectable firms of consultants; we did everything we could to get this right. Okay, things aren't perfect, but there is nothing more we could have done. We had the best advice that money could buy."



5. Change styles

The styles of management change set out below, are to some extent are reworking and expansion of the designed choices in the Balogun and Hope Hailey kaleidoscope of change model.

- Education and communication
- Collaboration and participation
- Intervention – change agent retains control and delegates
- Direction – use of authority
- Coercion or edict – explicit use of power through edict

It must be emphasized that the styles of management change are not to be mutually exclusively and many change processes will use a mixture of styles. We have already mentioned the styles in the first two bullet points above - the importance of communication, participation, collaboration, and educating people as to why change is necessary.

Intervention is where the change agent may retain overall control, but delegates the change process to various people within the organisation.

How fierce is it the control retained going to be? Well, the change agent whether an internal manager or an external consultant could simply tell people what to do. The change agent for example, could tell someone that they must save cost of 10% but then leave it up to them as to how they do it or the change agent will be more direct and say you must save costs by cutting 10% of your workforce. That's direction or use of authority.

This can go even further; the change agent could for example, simply close down one of the departments or one of the factories. Essentially, that's coercion or edict, the explicit use of power: you simply announce this department will close at the end of the month.

You may think that the use of an edict is not an absolutely desirable way in which changes should be put through, but remember it does depend on the contextual features. What is the situation? If the company is facing bankruptcy then coercion and edict may be the most suitable style for change because it is very quick. If however you have to respond to complex changes in the market and the changes in technology, then coercion and edict could be very dangerous as you may drive away your best people and, in fact, you may not know what changes are required anyhow. It may be your workforce with the best ideas and the expertise. Therefore education, communication, collaboration, or participation in that context of change may be far more successful.





Chapter 21

DATA, INFORMATION, KNOWLEDGE AND IT

1. Data, information and knowledge

We now turn to look at the roles that information technology can play in modern businesses. First, we have to go through a number of definitions.

- Data; data is raw fact. For example, a list of all the entries in the sales ledger, a list of all invoices, or a list of the heights of all people in a particular city is data. Generally speaking, data is not of itself particularly useful: it is not yet informative. It is not very accessible, there may be too much of it. Before it is made useful, normally some sort of processing has to be performed on it. The processing could simply be summarization or it could be more complex.
- Information. Data with meaning is known as information. So the receivables ledger total, the total for each customer, age listings, and average of the height for all the people in a particular city is information. We can probably do something with that information. In particular, we can probably use it to make certain decisions that would be difficult to make had the data simply remained as raw fact.
- Knowledge. Although data might be processed into information that information could rest unseen in a file. If that's all it happens to information it's pretty useless. Before the information becomes really useful it has to get into people's minds. People have to read it; they have to think about it. Then it becomes knowledge. Knowledge can be defined as information in someone's mind.

1.1. There are two types of knowledge:

- Explicit knowledge. Generally that's the knowledge which is written down. We know where to find it, we know what it is. It has been captured.
- Tacit or silent knowledge. Information that people don't even know they possess.

For example, a sales representative is likely to know who the important customers are and roughly what their turnover is in a year. The sales department will probably know their address and perhaps even their telephone number. All of that is explicit knowledge, and it is probably written down on a database somewhere. However, what makes a good sales representative as opposed to a merely average sale representative is the ability of that person to make additional sales and this is likely to rely upon tacit or silent knowledge. The salesman may know what that person has been planning. The salesman may know how to get on with a particular buyer in another business. The salesman may know what soccer team that person supports and this gives the sales representative a way of getting into a conversation in an informal way which can then later on be turned to the subject of placing an order. The salesman will know who likes to be phoned up out of the blue, who don't like to be phoned up. The salesman will know who makes decisions quickly, who makes decisions slowly. None of that information is likely to be written down, but it's very, very important. It's what makes the sales representative particularly effective.



2. Knowledge management

The importance of knowledge, in particular tacit knowledge, has now been recognised. Knowledge management is the process of:

- Uncovering or discovering knowledge
- Recording it
- Distributing it to those who may require it
- Levering it, thus making knowledge acquired for one purpose useful for another purpose
- Ensuring that the knowledge is updated and remains current.

When manufacturing was very important in most economies, products could be closely defined. The product and its make-up was essentially explicit knowledge. Now more and more of many economies depend on service industries, and capturing what makes a good service is much more difficult. How do we get on with clients and customers? What do they want? What do they appreciate? All of that is much more likely to be tacit knowledge than explicit knowledge. Furthermore, if there is greater staff turnover the chances are that staff will leave and they will take with them important tacit knowledge, thereby impoverishing the company they have left.

IT, for example internets can be important in knowledge management. But many experts will maintain that what is really effective in knowledge management and in particular uncovering tacit knowledge is the telling of anecdotes i.e. stories. It used to be 20 years ago, that most people would take a lunch hour and may well have gone to the staff canteen where they would sit with others and they would relate stories about their working day, about clients, about products.

Now, it is perhaps more common for people to spend their lunch hour at their desk with a sandwich. They don't meet other people in a relatively informal atmosphere to exchange knowledge, and the best way to exchange tacit information is often by the relating of stories.

3. Infrastructures to support business information systems

3.1. Transaction processing systems (TPS)

The first business computer applications were for recording transactions such as wages and salaries processing, the production of sales invoices and receivables ledger accounting. These systems are known as 'transaction processing systems' and they automate existing operations allowing greater accuracy, more speed and cheaper processing.

3.2. Management information systems (MIS)

Once transactions are recorded in a computer it is easy to analyse those transactions to produce information that could be useful for management and IT operations then became known as 'management information systems'. For example, once the sales ledger is computerised it is easy to produce aged receivables listings.

The systems could also be programmed to make simple decisions such comparing inventory levels to production plans to enable automatic stock ordering or approving new orders by



comparing credit limits to customer balance and new order value. The simple decisions are known as 'programmable' or 'structured' decisions, meaning that there is a well-defined way of getting to the correct answer. MIS primarily allows companies to keep their costs down, helping them to move towards cost leadership, through a combination of automation and rationalisation.

3.3. Decision support systems (DSS)

Not all decisions are structured. For example, there is no definitively correct way to draft next year's budget or to decide on the selling price of a new product. DSS help managers to make decisions.

A good example is seen in the use of spreadsheets where financial models created on spreadsheets allow managers to try out "what if?" experiments where they try out different combinations of assumptions and try to home in on a credible answer.

More sophisticated DSS systems can combine, for example, computer aided design and computer aided manufacturing systems to enable new products to be brought to market more quickly. Data warehousing (recording historical transaction data) and data mining (trawling through that data to learn more about customers' preferences and buying patterns). Both of these techniques can help with differentiation and focus strategies.

3.4. Executive information systems (EIS)

These are aimed at senior managers and they have a particular emphasis on giving access to external information that is needed for operational and strategic planning (eg through the internet and access to external databases). Executive information systems also emphasise flexibility so that executives can see company data in a wide variety of ways and they can 'drill down' to greater detail when needed.

3.5. Databases

Databases are by far the preferred way to hold data. Databases allow a wide range of users and applications to use the data flexibly and to update it. Each user can be given a unique, personalised and relevant view of the data which they can easily search and manipulate. Centralising data into databases means that data is held once only so is easier to update and everyone sees a consistent version.

Access to databases needs to be carefully controlled and backups are immensely important. If the database is damaged, all an organisation's data could be lost.

3.6. Expert systems

These were an attempt to capture an expert's skills so that expert decisions could be made automatically. They are used where there are complex programmed (structured) decisions to be made such as working out pension entitlements and options.

The increasing reliance on computers by all levels within a company requires careful design of the information technology (IT) infrastructure. IT usually refers to the hardware: computers, connections, disk storage.



3.7. Networks

Only the very smallest of businesses will have stand-alone computers ie computers not connected to other computers. Even in small businesses employees need to share data and very soon after personal computers were invented networks of computers were introduced. There are two main types:

- Local area network (LAN): Here the network extends over only a relatively small area, such as an office, a university campus or a hospital. The small area means that these networks use specially installed wiring to connect the machines.
- Wide area networks (WAN): Here the network can extend between several cities and countries. Each office would have its LAN, but that connects to LANs in other offices and countries using commercial, public communications systems. At one time this would have been done by the organisation leasing telephone lines for their private use to transmit data from office to office. However, this is expensive and inflexible and the common system now used is known as a virtual private network (VPN)

VPN's allow data to be transmitted securely over the internet between any two locations. Information will pass over many different circuits and connections but the system gives the impression that you are operating over a dedicated, private communications link: hence the name: virtual private network. For example, an employee working from home or a hotel can access the company system as though being in the office. Because data is being transmitted over public systems it is particularly vulnerable to interception and it is very important that adequate security measures are in place to safeguard the data.

There are three essential steps in the security measures:

- Access control and authentication this ensures that unauthorized users do not access the system. Typically this will be accomplished through a log-in procedure.
- Confidentiality this ensures that data cannot be intercepted and read by a third party whilst being transmitted. This is achieved using encryption.
- Data integrity this ensures that the data has not been altered or distorted whilst in transit. To ensure this, the message could have special check digits added to ensure that the data complies with a mathematical rule.

3.8. Centralised and decentralized (distributed) architectures

Consider an office local area network. There are three main ways in which the data and processing can be arranged: centralized, decentralized (distributed) and hybrid.

Centralised systems. In these systems there is a powerful central computer which holds the data and which carries out the processing.

The main advantages of such systems are:

- Security: all data can be stored in a secure datacentre so that, for example, access to the data and back-up routines are easier to control.
- One copy of the data: all users see the same version of the data.



- Lower capital and operational costs: minimal hardware is needed at each sites. There is also less administrative overhead.
- The central computer can be very powerful: this will suit in processing-intensive applications.
- They allow a centralised approach to management. For example, a chain of shops needs to keep track of inventory in each shop and to transfer it as needed. There is little point in a shop that is running low ordering more if another branch has a surplus.

The main disadvantages of such systems are:

- Highly dependent on links to the centralised processing facility. If that machine fails or communication is disrupted then all users are affected.
- Processing speed: will decrease as more users log-on
- Lack of flexibility: local offices are dependent on suitable software and data being loaded centrally.

3.9. Decentralised (distributed) systems.

In these systems, each user has local processing power and will hold data locally.

The main advantages of such systems are:

- Resilience: if one machine breaks down, others are unaffected.
- Easy expansion: simply add another computer.
- Flexibility: local users can decide which programs and software should be installed to meet local needs.
- They are more useful where each location can operate more or less separately from others.

3.10. The main disadvantages are:

- More difficult to control: data storage and processing are in many locations and correct access, processing and back-up of data are more difficult to enforce.
- Multiple versions of data: user might have their own version of data that should be uniform.
- Potentially higher costs: each local computer has to have sufficient processing power and each location might require an IT expert.

Hybrid systems. In these systems some data and processing are local centrally and some centralised. For example, web-browsing and word-processing might be local but critical business applications might be centralised.



3.11. Client-server and peer-to peer systems

These concepts are similar to centralised and decentralised, but are not quite identical.

In a client-server arrangement, a powerful computer (the server) is dedicated to providing a service to other computers in the network (the clients). Typical services provided are:

- File storage (file servers)
- Handling printing (print server)
- Handling the sending and receiving of emails (mail servers).

There is an element of centralisation here, but although files might be held centrally on the server they will often be processed locally. For example, a report will be held on the server, but when it is being edited it is downloaded to the user's local machine (client). The edited version will be saved back to the server where other users can then access it. Obviously there will be great disruption if the server fails. Access rights to files are set centrally and typically enforced by users' log-on information.

Traditionally, in client server networks each client would have had a copy of, say, Word for Windows. Documents would have been downloaded from the server for local editing then saved back to the server. The disadvantage of this is that each machine in the network needs a copy of Word. Not only was this initially expensive, but if the company were upgrading its software all copies of the program had to be changed. Inevitably different machines ended up with different software versions.

With cloud computing, this approach has changed. There is only one copy of the software on the server within a web-based interface. Users log into the web system and their processing is then carried out on the server or a 'cloud' of servers. It appears to each user that they have a local version of the software, but what they are really seeing is the program operating in the server. As more processing is needed more cloud resources can be used and this gives users great flexibility.

Client machines can be 'thin-clients' (ie not powerful) as they do not have to store much data and software nor do they have to carry out much processing. Hardware, software and maintenance costs are greatly reduced, though the system is vulnerable to service disruption.

Hotmail and Gmail provide examples of this approach. Whenever you want to write an email you log into the web email account and the processing is carried by the system's computer cloud – not your computer. All it has to do is to handle the interface.

In peer-to-peer networks, two or more computers are connected directly without the need for a server. Access rights to files are given by individual users to specified other users. This is a simpler system to set-up, requiring no specialist operating system or specialist staff and many home systems are like this. It is a much more distributed system than client server systems and has therefore has back-up and security issues.



4. Controls in IT systems

IT poses particular risks to organisations' internal control and information systems. This can lead to their operations being severely disrupted and subsequently to lost sales, increased costs, incorrect decisions and reputational damage.

4.1. Risks include:

- Reliance on systems or programs that are inaccurately processing data, processing inaccurate data so that they report inaccurate, misleading results.
- Unauthorized access to data leading to destruction of data, improper changes to data, or inaccurate recording of transactions.
- Particular risks may arise where multiple users access a common database on which everyone in the organisation relies. The data could be incorrectly amended and all users will be affected.
- The possibility of IT personnel gaining access privileges beyond those necessary to perform their assigned duties.
- Unauthorized changes to data in master files. For example, changing a selling prices or credit limit.
- Unauthorized changes to systems or programs so that they no longer operate correctly and reliably.
- Failure to make necessary changes to systems or programs to keep them up-to-date and in line with legal and business requirements.
- Potential loss of data or inability to access data as required. This could prevent, for example, the processing of internet sales.

4.2. Controls in computer systems can be categorised as general controls and application controls.

General controls:

These are policies and procedures that relate to the computer environment and which are therefore relevant to all applications. They support the effective functioning of application controls by helping to ensure the continued proper operation of information systems. General IT controls that maintain the integrity of information and security of data commonly include controls over the following:

- Data centre and network operations. A data centre is a central repository of data and it is important that controls there include back-up procedures, anti-virus software and firewalls to prevent hackers gaining access. Organisations should also have disaster recovery plans in place to minimise damage caused by events such as floods, fire and terrorist activities.
- System software acquisition, change and maintenance. System software refers to operating systems, such as Windows or Apple's OS. These systems often undergo updates as problems and vulnerabilities are identified and it is important for updates to be implemented promptly.
- Application system acquisition, development, and maintenance. Applications systems are programs that carry out specific operations needed by the company – such as calculating wages and invoices and forecasting inventory usage. Just as much damage



can be done by the incorrect operation of software as by inputting incorrect data. For example, think of the damage that could be done if sales analyses were incorrectly calculated and presented. Management could be led to withdraw products that are in fact very popular. All software amendments must be carefully specified and tested before implementation.

- Access security. Physical access to file servers should be carefully controlled. This is where the company keeps its data and it is essential that this is safeguarded: data will usually endow companies with competitive advantage. Access to processing should also be restricted, typically through the use of log-on procedures and passwords.

4.3. Application controls:

Application controls are manual or automated procedures that typically operate at a business process level, such as the processing of sales orders, wages and payments to suppliers.

These controls help ensure that transactions are authorized, and are completely and accurately recorded, processed and reported. Examples include:

- Edit checks of input data. For example, range tests can be applied to reject data outside an allowed range; format checks ensure that data is input in the correct format (credit card numbers should be 12 digits long; dependency checks where one piece of data implies something about another (you have probably had a travel booking rejected because you inadvertently had a return date earlier than the outward date); check digits, where a number, such as an account number, is specially constructed to comply with mathematical rules.
- Numerical sequence checks to ensure that all accountable documents have been processed.
- Drop down menus which constrain choices and ensure only allowable entries can be made.
- Batch total checks.

On-line, real time systems can pose particular risks because any number of employees could be authorised to process certain transactions. Anonymity raises the prospect of both carelessness and fraud so it is important to be able to trace all transactions to their originator. This can be done by tagging each transaction with the identity of the person responsible.

Cyber-espionage is also a growing threat. Governments, competitors and criminals attempt to steal intellectual property or information about customers and contracts. Quite obviously the theft of valuable know-how will undermine a company's competitive advantage and it is essential that for organisations to defend themselves as far as possible against these threats.



Chapter 22

THE INTERNET AND E-BUSINESS

1. The internet

The internet will be familiar to most of you. The very fact that you are using the OpenTuition site proves that. The internet is basically a network of networks, connecting many millions of computers. Those computers host websites and each website has unique address known as a uniform resource locator (URL). Typically, these begin with www, so that www.bbc.co.uk will access the BBC website held on a computer in the UK. To relate the URL to the physical location of a website, that is the precise computer which is holding the web pages, an index is accessed.

Almost certainly you will be familiar with most of the functions of a website:

- Marketing. For example, when you 'Google' something and you put in for example, "ACCA tuition" you will get lists of companies who provide ACCA tuition and that's marketing. The great thing about it is it tends to be very specific. You have taken the initiative of putting in ACCA tuition and it hands you a lists of relevant sites.
- FAQ pages. Many companies put up frequently asked question pages as a form of service.
- Selling. Some companies like Amazon will sell over the web.
- Information provision. Web sites can provide information about companies, for example many large companies make their annual reports available online.
- Feedback. Sites can also be used to receive feedback and queries from clients and most sites have some sort of e-mail facility built into them, perhaps to reach a general enquiry destination or a particular person in the organisation.
- External links. Many sites have links to other sites. These allow you to travel through the internet from one site to another, gradually building up information.
- Advertising. Many web pages host adverts for other companies. For example, if you go to an airline website, the chances are you will see adverts for hotels and car hire firms there as well.

Many internet sites use cookies. These are small bits of code which are downloaded to your computer. They keep a track of the pages on the website you have visited. When you go back to that web page at some later date, the cookie is used to direct you towards page you might be particularly interested in based on your previous visits.

Remember if your computer is connected to the internet, the internet is connected to your computer. If you can access other sites, there is a chance that other sites can access you. To prevent this, you should use a firewall. This prevents unauthorized access to your computer which could, for example, allow others to download confidential information from your files or even to alter some of the information which you have recorded.



2. The 6Is of e-business

E-business, particularly internet sites, can provide the following:

- Intelligence. Companies routinely track every click made by a visitor to their internet site. If someone has logged in, information becomes even more useful as you know exactly what that person was interested in, they know what they may have bought in the past, and they can direct new marketing campaigns in a very individual basis.
- Individualization. Everyone's experience on a website can be made different either by choosing to visit different pages or by the website suggesting that you visit different pages.
- Interactivity. You go back and forward through a website putting items into your shopping cart, removing them from the shopping cart until you are happy with the results.
- Integration. When you place an order this can be integrated into the manufacturing process so that immediately production is started on the items you have ordered. Or, if you were booking hotel room or an airline seat, immediately you press the purchase button, the seat or the room is reserved for you.
- Independence. This means that businesses are largely independent of geography. When you visit a website you don't necessarily know where the company is located. To all intents and purposes, the Internet gives the company a world wide presence.
- Industry. E-business can restructure the industry. For example, in the travel industry there has been a huge restructuring because there is much less need for travel agents and you can go directly to airline or hotel sites.

3. E-business patterns

The following e-business patterns have been observed:

- E-shopping, for example a site like Amazon which sells books, CDs, and increasingly hardware of various sorts.
- E-auctions and the best known one is the site eBay where members of the public or trading organisations can put up goods for sale and other members of the public bid against for another..
- Reintermediation and disintermediation. Disintermediation means getting rid of a middleman. So instead of going to a travel agent you could go directly to an airline site to book a flight. Reintermediation means putting back a middleman so that, for example the site Expedia allows you to compare different flights from different airlines. It's a new form of intermediary.
- Countermediation is where the providers offer service, themselves set up an intermediary. An example is Opodo which is run by several of the large airlines. When you go to that site, the site shows only flights provided by the owners of the site.
- You can advertise other people's goods and services, usually earning an advertising fee when someone clicks on the advert, clicking through as it is known. This is very popular with advertisers as it means only when somebody goes and visits a site do they have to pay for the advert. And indeed the internet is taking a lot of advertising revenue from commercial television which inevitably has a much broader brush approach.



- You can advertise your own goods and services - electronic catalogues. You can give someone access to inventory records so that they know whether or not something is in stock and whether it's worth ordering it. The Amazon site displays some very clever advertising, when you buy a book it will suggest other titles you might like based on what other people have bought. It also lets you submit reviews about books and hearing from other readers is a very powerful form of advertising.
- E-procurement; this is very popular in businesses such as supermarkets where when the amount of stock on the shelves falls below reorder level immediately an order is placed with the supplier.
- Customer relationship management. This means building up an ongoing relationship with a customer, making the customer feel welcome, valued and recognised.

4. Relationship marketing ladder

Firstly, what's meant by relationship marketing? A useful distinction can be drawn between:

- Transaction marketing, and
- Relationship marketing.

Transaction marketing focuses on the product, and develops the marketing mix (product, price, position, and place) according to the needs customers satisfy when they buy the product. However, this approach looks at one transaction at a time. You may well have developed a product which suits a particular segment of the market, but that doesn't mean that you build that segment of the market into a loyal following.

Relationship marketing goes further. It seeks to attract, maintain, and enhance customer relationships by focusing on the whole satisfaction experienced by the customer when dealing with the firm. It's not satisfied simply with one-off transactions, one-off sales. It wants ongoing close relationship with the customer. Payne's relationship marketing ladder shown here describes how the relationship with customers can develop.



First of all, before the customer has actually bought anything, they are merely a prospect. Someone in the sales representative hopes will eventually place an order and whom the sales representative may pursue, but this person is not yet a customer.



Then they become a customer, a first-time purchaser. If they become a repeat purchaser they will become a client. If they are really pleased they may become very enthusiastic about your product and then begin to advocate your product to other people so that if asked for advice they will advise other potential customers to go your firm.

And the final level is being a partner. At this level one has almost done away with the us/them division between supplier and customer. Both parties see a mutual dependence and see success through cooperation and satisfaction gained by both parties from the ongoing relationship.

5. Customer relationship management software

What customer relationship management does can best be illustrated by an example.

A client rings up and the incoming caller number is recognised and it brings up to customer's details on the screen. Those details show the name, address, telephone number of the customer and also the main personnel with whom we deal. It will give the job title of these people and may give their spending authorities. It may also contain information about their likes, dislikes and interests so it is possible to make relatively easy conversation with them. It will show a history of the products bought. The name of the product, the date of the purchase, the amount paid. This would be extremely useful, let's say, in a software company allowing it to suggest an upgrade which is now available for some products that the client had.

It will also contain a diary where a summary of previous conversations can be noted. It gives the client the impression that the company they are dealing with is well-organized. If you can look at the diary and know that the client phoned up last week with this query, then that's definitely impressive. It's not at all impressive if the client has to explain yet again why they are phoning. You can also set alerts if you promised to ring the client back next week. How else are you going to remember it?

The emphasis here is on building a relationship, making the client believe that you know them, that you know the products they have, and the problems they have. It can be used for e-marketing and e-commerce. It can allow sales to be automated and certainly gathers very valuable information about the client. It's very effective communication within the company. It doesn't matter who answers the phone, if relevant information about the client is brought up, it gives the client the impression that they are dealing with a joined-up company. Finally, it's a very important mechanism for knowledge management. At a very simple level, we are simply noting down conversations with the client and this is available to everybody in the organisation.



6. Barriers to e-business

Although there are many advantages to e-business, whether setting up a website, permitting e-procurement and e-marketing or customer relationship management, there are also certain barriers to e-business so that not every organisation embraces it with the same enthusiasm.

Typical barriers are as follows:

- Set up costs. To set up a website, particularly one which will permit e-commerce, could be rather expensive. Like all investment decisions, one has to be convinced that the cost is outweighed by the benefits and not everyone might be convinced that this will be the case, or at least certainly not for a sophisticated system. It is of course very easy and cheap to set up a very simple website, but you perhaps have to be a little bit careful that a very simple website may actually do your organisation some harm. It may give the impression that your organisation is not sophisticated and not capable of more complex transactions.
- Type of business. Some businesses which rely very much on personal relationships and on supplying services more than supplying products, may find that the use of e-business is rather restricted.
- Running costs. These might be perceived as being too high. Hardware is required to host the website and you might have to employ experts to update the website consistently and in a timely manner. The website is a continuous window for the public to peer through, and if it's not up-to-date then it begins to look very shoddy.
- Time. The time to plan and to set up the system may be an impediment. And additionally, if there are no in-house skills, the time to communicate what is required and to pay consultants may be regarded as being too high.
- Suppliers and customers may simply not be interested. One could perhaps argue that if you are dealing with the customer base which is predominantly older people who are less comfortable with e-business and web browsers then the return you get from setting up a sophisticated web page could be very little.
- Security worries. Some people have security worries. This could be customers who are frightened to put in their credit card numbers or it could be the company itself which is frightened of its systems being accessed illegally and damage being caused. Proper firewalls, passwords, and encryption should cut this risk down very substantially.





Chapter 23

ACQUIRING SOFTWARE

1. Packages and bespoke software

Broadly there are two ways of acquiring software.

- Buy an off-the-shelf, ready-to-go package
- Bespoke software, where specific software is designed and developed.

Packages are usually:

- | | |
|---|---|
| <ul style="list-style-type: none"> • Cheaper. | <p>The development cost will be divided over many users.</p> |
| <ul style="list-style-type: none"> • Instant. | <p>Packages tend to be available now. They are already been developed.</p> |
| <ul style="list-style-type: none"> • Reliable. | <p>Provided you don't buy a package which has just being launched, you are almost guaranteed that the major bugs and problems have been rectified.</p> |
| <ul style="list-style-type: none"> • Well-supported. | <p>The supplier of package software will almost certainly have to provide good support as part of the marketing effort. One person in the support department will be able to look after many clients and therefore providing support is relatively cheap.</p> |
| <ul style="list-style-type: none"> • Updated. | <p>As part of the sales contract, package providers will almost certainly undertake some form of updating. If it's a tax or financial package, almost certainly it will have to be updated every year as new budgets and tax rules are announced. With bespoke packages, one user will have to bear all the expenses of updating.</p> |

However, a package might not do exactly what a company wants. Also, note that a package will not really enable a company to distinguish itself or differentiate itself from its rivals who may all have the same packages and therefore provide almost the identical services to clients.

If you want to do something unique, something clever, then you may find that the investment in developing a bespoke package is worthwhile. But be warned: it will be expensive and it might never work.



2. Criteria for choosing software

Software, whether package or bespoke, should be assessed according to the following criteria:

- Functionality: what does it do?
- Response times: normal and peak loads
- Reliability: what 'down-time' might we expect?
- Compatibility: with existing hardware and software
- Scalability: as the organisation grows, can the same software be used or added to?
- Usability: how easy is for staff and customers to use?
- How easy to update for different requirements?
- Cost.

3. Criteria for choosing a software supplier

The software house should be assessed on the following criteria:

- Financial stability
- Size – will it be able to cope with large clients? Will it give attention to small ones
- Expertise
- Reputation
- Sometimes location of offices is important for support
- Other clients – perhaps if it deals with competitors there could be a conflict of interest.



Chapter 24

PROJECT MANAGEMENT

1. Characteristics of projects

Now we are going to look at project management. But before we can do that, we need to have some idea of what is meant by the term 'Project'. We tend to recognise the project intuitively, but projects of certain important characteristics.

- First of all, they are really by definition non-routine. They are different from one's day-to-day activities. They will have specific starting and ending points.

Secondly, they are usually addressing novel or unique challenges, something which you haven't done before and will probably never be asked to do again.

Projects usually have project teams and the team members will normally be from different departments with different backgrounds, so these people may have different priorities. They may want different things from the project. They will use different terminology. They will have different outlooks, for example, different attention to detail, different sense of urgency, different attitudes towards quality, and differ in views on costs.

Fourthly, for most projects though not all, there is no benefit until the project is finished. Usually, half a computer system, or half a factory, or half a system of quality control will be rather useless. Therefore, many projects are characterized by a period of spending and effort, and only much later, perhaps after several years, will we see whether the project works and whether the benefits we had hoped for are actually realised.

All of these characteristics of a project should worry you. Its non-routine, its novel, there are people from many backgrounds who have not worked together before. There is no benefit until the project is finished. Therefore the risk attaching to projects can often be very great. We need, carefully how to control the project and its scope otherwise we will simply have wasted the organisation's effort and money.



2. Projects and strategic plans

A strategic plan is typically for a five year time-horizon and for whole organisations. To implement that as a single task is impossible and it must be broken down into a series of smaller tasks. Each task is a project and each will have a planned:

- Start date
- Duration
- Finish date
- A relationship to other projects: after some, before others etc
- A cost
- A person responsible
- A closely defined set of outcomes
- Stages of a project

The stages of a project can be described in a number of ways. For example:

- Initiation/initial screening
- Risk assessment. There are four responses to risk: transfer (eg give this part of a project to a sub-contractor; avoid (do not undertake the project); reduce (for example by running a pilot operation first to see how things work on a small scale; and accept (live with the risk as business always has some risk).
- Business case
- Project plan
- Executing
- Monitoring and controlling/project milestones
- Closing: delivery/review



3. Project gateways

A relatively modern approach to project management has introduced the term 'project gateways'. This is particularly associated with large government projects.

Down the left side of the diagram below is set out another way of looking at project stages. The gateways are reviews that have to be passed before the project can progress further. Note that Gateway review 0 is carried out continuously: each part of the project might have progressed fine, but the whole project could have become irrelevant.

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Develop a business case			Gateway review 0: Strategic assessment – a continuous process
←	Gateway review 1:	Business justification	
Develop delivery strategy			
←	Gateway review 2:	Delivery strategy	
Undertake competitive procurement			
←	Gateway review 3:	Investment decision	
Design, build, test			
←	Gateway review 4:	Readiness for service	
Establish service			
←	Gateway review 5:	Operational review/ benefits realisation	
Close project			

Each review should ensure that the project does not progress further unless earlier stages have been satisfactorily completed.

4. The business case

A business case should be prepared for any project. This will show how profits can be increased (in a profit-seeking organisation), or how service levels could be improved in a not-for-profit organisation

Possible techniques include:

- Cost / benefit analysis
- Net present value/payback/ROCE
- Sensitivity analysis and risk analysis
- Forecasting techniques
- Expected values
- Decision trees

Usually costs are easy to budget. However, often benefits are intangible (such as customer service level) and are much more difficult to quantify with any precision.

For example, how would you quantify the benefits arising from a major training project? You might firmly believe that the project is worthwhile, but could you prove it in advance?



Ward and Daniels identified four types of benefit:

- **Observable:** impossible to measure and often unexpected. For example, a new IT system may allow staff to complete their work more efficiently will lead to better morale and lower staff turnover. The benefit can be seen but would be difficult to measure.
- **Measurable:** can be measured but not predicted. For example, better stock-control could reduce stock-outs and so improve a company’s reputation. Sales increases can be measured, but would be very difficult to predict.
- **Quantifiable:** measurable and predictable. For example, calculations that show that the average volume of stock held should decrease by 20% if a new stock control system is introduced.
- **Financial:** the financial benefit can be assessed and predicted. Once a benefit has been quantified, making the last step to predicting financial benefits is relatively easy: a 20% lowering in stock volume will probably reduce stock-holding costs by 20% also.

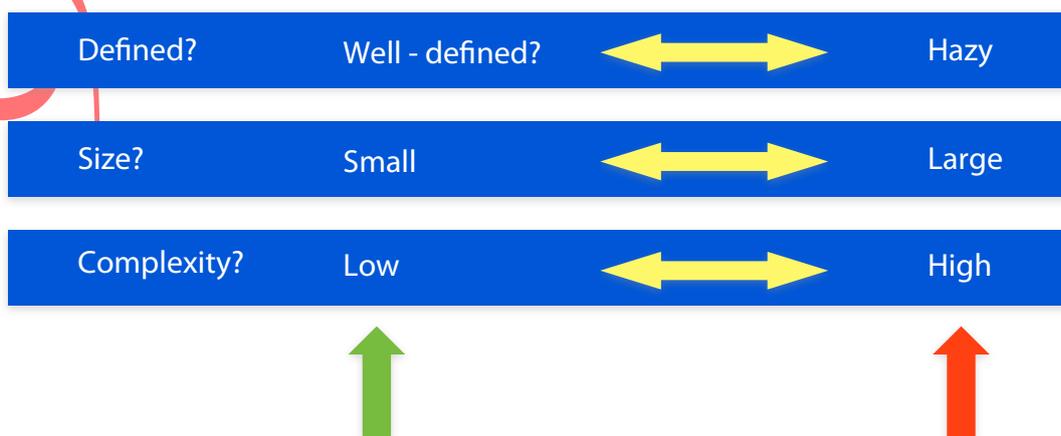
Once the financial benefit has been assessed this can be put into a DCF calculation to appraise the project.

The benefits really begin to be more easily dealt with once they change from measurable to quantifiable because predictions are needed for DCF calculations. Methods for making this transition include:

- Pilot operation. Try out the new system in one branch, measure the improvements and assume these will be available company-wide.
- Simulation. Based on mathematical models.

Observing improvements found by other users. Be careful a vendor does not simply show you the most delighted user who might be completely uncritical of the new system.

5. Project risk



It’s important to be aware of project risk because high risk projects should be more carefully monitored for cost, time, quality, and scope. There are three obvious variables affecting project risk.

- How well defined is the project? If you were to embark on a project which was defined as something like “we want to improve the inventory system”, really we have to ask what on earth that means. What does the word ‘Improve’ mean? Does it mean going all the way to just-in-time inventory, does it mean automatic reordering, does it mean



having fewer stock-outs, does it mean lowering the average inventory value? A project defined as "improved inventory" is very hazy, and hazy projects are full of risks. Basically, we have no idea what its scope is, and if we have no idea what its scope is we will find it's susceptible to what is called project drift. In other words the objectives and deliverables of the project are never really defined, or keep changing, and we will get hopelessly lost.

- The size of the project. You can easily see that if a project were simply something to do with the receivables ledger that is relatively small. If it goes wrong, it's only the receivables ledger which is affected. If it's however to do with the whole of the accounting system and it goes wrong then all of the accounting system is going to be affected with large-scale disruption.
- Complexity. If the technical complexity is low, it's a fairly well-understood problem, there are well-understood solutions to those problems, and we are on pretty safe ground. If however the project is cutting-edge and rather experimental, no one has really much experience of it before, and involves many different stakeholders, you can see that the project risk is much higher.

So if you are in charge of a project which is not well-defined, it is hazy, it's large, it's very complex, you might like to think about finding a new job.

6. Project initiation document

The project initiation document addresses : Who? Why? When? How? What?

It is an immensely important document and accomplishes the following:

- Defines the project, its scope and its deliverables.
- Justifies the project: cost/benefit analysis; risk analysis.
- Secures funding for the project, if necessary.
- Defines the roles and responsibilities of project participants: sponsor, manager team.
- Gives people the information they need to be productive and effective right from the start: assignments, schedule, human resources, project control, quality control.

First, what is the project? The initiation document defines the project. It sets out the scope of the project and its deliverables. Only by setting out deliverables in advance can we possibly judge after the event whether the project has been successful or not? It justifies a project both in terms of cost benefit analysis and also risk analysis. Remember a project could potentially show substantial benefits, but if it was at very high risks we might prefer not to embark upon it. If necessary we have to secure funding for the project to see it right the way through bearing in mind that most projects yield no benefits whatsoever until they are completed successfully.

It defines the roles and responsibilities of the project participants. The project sponsor can be regarded as a person to whom the project belongs and very often is a person or department which is providing the funding. The project manager has got day-to-day responsibilities for looking after the progress of the project and that manager in particular will be looking after a project team. Do not underestimate the skills required of a project manager. They will probably be in charge of a diverse group of people; they will be working to time, cost, and quality standards. They have to liaise with the sponsor. They have to interpret what is wanted, from time to time they may have to reach comprises with the various stakeholders.



And finally it gives people information; they need to be productive and effective right from the start of the project. It will assign responsibilities. It will set out a schedule perhaps on a network diagram. It will ensure that the right people are there at the right time. It will establish ways of controlling the project in terms of time, money, quality, and scope.

7. The project manager

This is the person in charge of the running of the project – tracking resources, controlling, leading, inspiring, negotiating, reviewing, resolving disputes. It is an immensely challenging job and requires personal qualities such as:

- Leadership abilities, including the ability to motivate
- Technical ability in running projects and in the subject matter
- Negotiation ability to negotiate with project sponsors (those who are paying), project team members and suppliers.
- Reporting on progress and difficulties
- The ability to stay calm in a crisis
- Excellent communication
- Ability to delegate to team members.

8. The project team

A team can be defined as:

“A group of people with a full set of complementary skills required to complete a task, job, or project.”

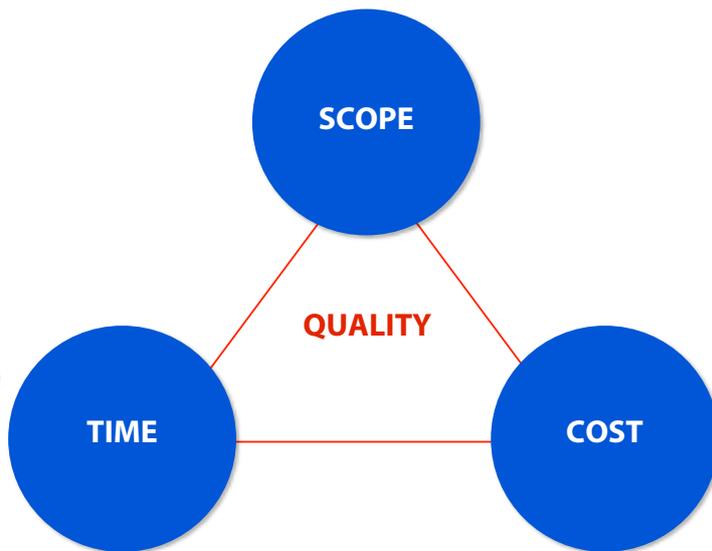
Teams usually work best if they:

- Are fairly small
- Are united in what they want out of the project
- Have the right mix of complementary skills
- Have the right mix of personalities

This can be difficult to achieve because they will be drawn from different backgrounds and departments and are likely to have different priorities for project outcome. It is an important task of the project manager to get the diverse team members to work well together.



9. Project management: the variables



This is a useful diagram which depicts the problems of project management. It says there are four variables, the time or deadline, the cost, the scope or extent of a project, and the quality we have to achieve.

The diagram first states that if you change one of these variables we are bound to affect the others. So if you want the project to be done more quickly you may have to spend more money, you may have to limit scope, or you may cut corners and quality. If you want the project to be done more cheaply at a lower cost it may take longer, you may reduce its scope, and again you might compromise quality.

Furthermore, even if you are not adjusting one of these variables, most projects will have one of them as a priority. It might be that above all we have to have something done within a deadline and if we concentrate tremendously on getting the project done within a deadline, inevitably we may compromise costs, scope, and quality. Similarly, if the project were to do with public safety and the quality of the output was to be the highest possible standard, then we have to be aware there is a danger that the project will take too long, it will be very expensive, or we compromise on its scope.

9.1. Controlling cost

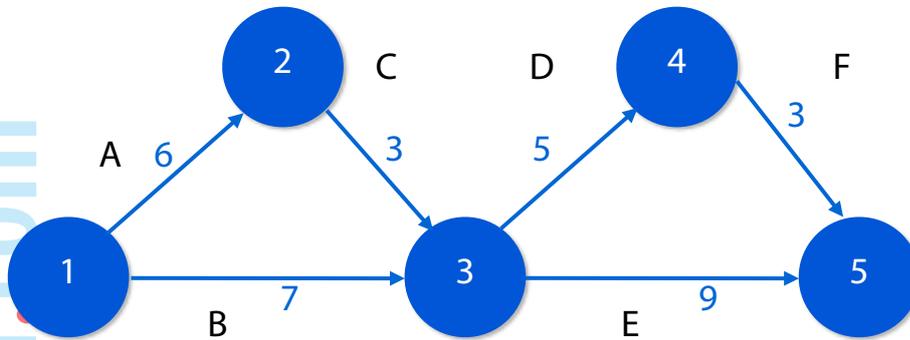
Costs are relatively easy to track: give each project a cost-code so that material, labour and overhead costs can be booked to it.

Cost codes could be created for every activity that makes up the project so that more detailed monitoring could be undertaken and actual costs compared to budgeted costs.



10. Critical path analysis – Network diagrams

Critical path analysis and network diagrams can be used to monitor and control the time a project is taking. You won't have to produce one of these in the P3 examination, but it's best to be aware of the technique.



ACDF	17	
ACE	18	← Critical path length
BDF	15	
BE	16	

Here we have a project which consists of five activities, A, B, C, D, E, and F. Each activities or small step of the project if you prefer has a time associated with it. So activity "C" takes three weeks say, activity "D" takes five weeks.

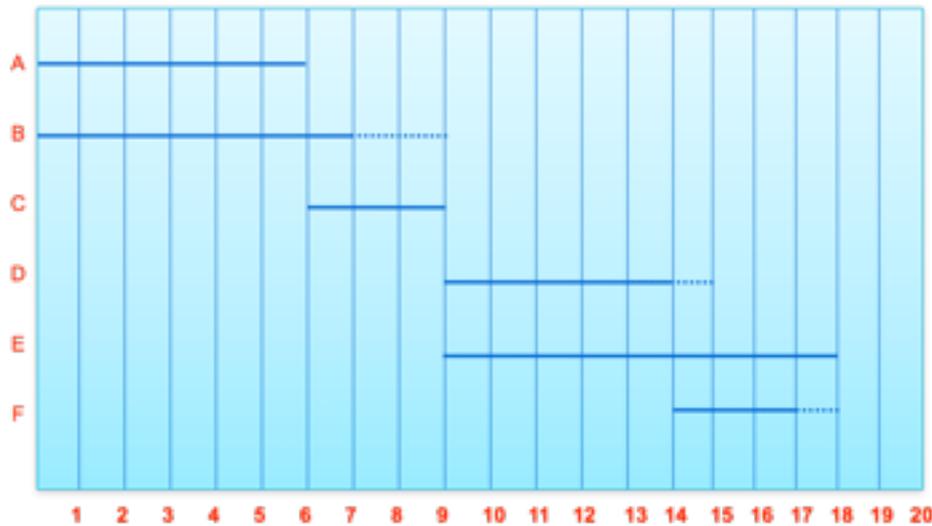
You then arrange the activities in a way that they can be done. Here, the diagram is saying that we can start the project with activities "A" and "B" happening simultaneously, but activity "C" can only be done after activity "A" has been completed, and activities "D" and "E" can only be started after activities "C" and "B" have been completed. When you get to point five in the diagram, the whole project is being completed as all activities have been completed.

You then look for longest pathway through the network. Here they have all been listed out and we will see that ACE is the longest pathway. The length of those activities adds up to 18 and this means that the project cannot be done in less than 18 weeks: this is a critical path length.

Activities "A", "C," and "E" make up the critical path and these are the activities we have to look at very carefully. If "A" or "C" or "E" were to take one extra week then the whole project completion will be delayed by a week. We have no flexibility whatsoever in critical path activities. However, look at activity "B." "B" takes seven weeks, but it is not going to matter if it were to take eight or nine weeks. We still have to wait for "A" and "C" to be completed and they take nine weeks before we should start worrying about "B." So activities which are not the critical path have got some flexibility associated with them and we need not manage those quite so closely. What we might like to do is sometimes to shift resources from activity "B" to one of the critical activities in case it was going a bit slow and was jeopardizing the overall completeness of the project.



11. Gantt chart



This Gantt chart is simply an alternative representation of the previous network diagram. Here the time and week goes along the bottom of the chart and activities go down the side of the chart. This shows we can start activities "A" and "B" together. We can start activity "C" as soon as "A" is completed, but we can't start "D" until "A," "B," and "C" are all been completed. The dotted lines show the amount of flexibility we have over the duration of the non-critical path activities.

12. Benefits realisation

Projects are undertaken with the hope that benefits will exceed costs – indeed that was the business case made even before the project commenced. The primary objective of benefits realisation is to establish which benefits have been delivered and which have not. Undelivered benefits are investigated and remedial action may be taken. Unanticipated benefits may have also emerged and these are also considered in the reviews. Lessons learnt are fed back into the benefits management process.

Just because a project is delivered on time and within budget does not mean that benefits will automatically arise. For example, a new, powerful IT system could have been successfully implemented, but if no-one uses the advanced and improved facilities, no benefits will arise.

The project manager should carry out tasks such as

- Demonstrations and presentations
- Training
- Preparing user guide/procedures manuals
- Managing and championing change
- Providing guidance

Any project implies that there will be change and to gain benefits affected stakeholders must be prepared to change. So, if the project redesigned the web-site, customers have to feel happy using that otherwise they might abandon the organisation. Customers have to be prepared to change. Changing the way people think, work and manage is a difficult task, but unless that is accomplished the project is in danger of being successfully technically delivered



but it never gets implemented. It is essential to ensure that benefits envisaged at the start are realised at the end.

13. Benefits owner

A benefit owner is the person who has responsibility for defining, agreeing and delivering the benefits set out in the business case. The benefit owner should be a person who has authority to make business decisions which help deliver the benefits: without benefit owners, benefits are unlikely to happen. Many projects which have promised cost savings have not delivered them because no-one had responsibility for making those savings.

The benefit owner will often be the sponsor of the project – the person behind the project and who wants it to happen.

14. Benefits map

A benefits map shows exactly what has to be done to actually deliver promised benefits. The map can also be used to show how the benefits relate to the objectives of the organisation.

For example, if a project relates to the implementation of an on-line help system, the map would consist of:

- Analysis of common queries that have to be addressed.
- Writing solutions to each query
- Placing the queries and solutions in a searchable database
- Forming a link on the company's web-site where queries can be entered and discouraging telephone queries.
- Monitoring use of the system and terms entered but not found in the system

Only after the first four steps have been taken is there any hope of benefits being realised. The fifth step allows for analysis and improvement of the system.



15. Completion

15.1. The completion report

Completion involves formally accepting the project and bringing it to a close. A completion report shows the outcome of the project and is used to:

- Check that everything promised by the project has been delivered ie that the project objectives have been achieved.
- Check on any changes which had to be made to reach acceptance, and that there are no outstanding project issues.
- Deliver the final budget report.
- Arrange for post-project and post-implementation reviews.

15.2. Post project reviews and post implementation review

There are two types of review that should be carried out after the project is completed:

- A post-project review. This is about the project.
- A post-implementation review. This is about what the project achieved.

15.3. Post-project review

This examines the project looking for areas that did not go smoothly and for those that did. For example, the project might have been late and that needs to be examined to see if it could have been prevented and to learn lessons for future projects. It can also look at the performance of the project team members.

Without such a review, there is little hope of improving the management of future projects

15.4. Post implementation review

This examines what the project achieved. Before the project was started there should have been hopes and ambitions for it. These would have been set out in the business case and the project initiation document.

It is now time to see if the project has delivered anything of sufficient value, at the right cost, by the right time and which people are prepared to use enthusiastically. In other words, has the project realised benefits?

If the answer is negative, then the organisation has to critically examine what went wrong so that similar waste does not happen in the future.





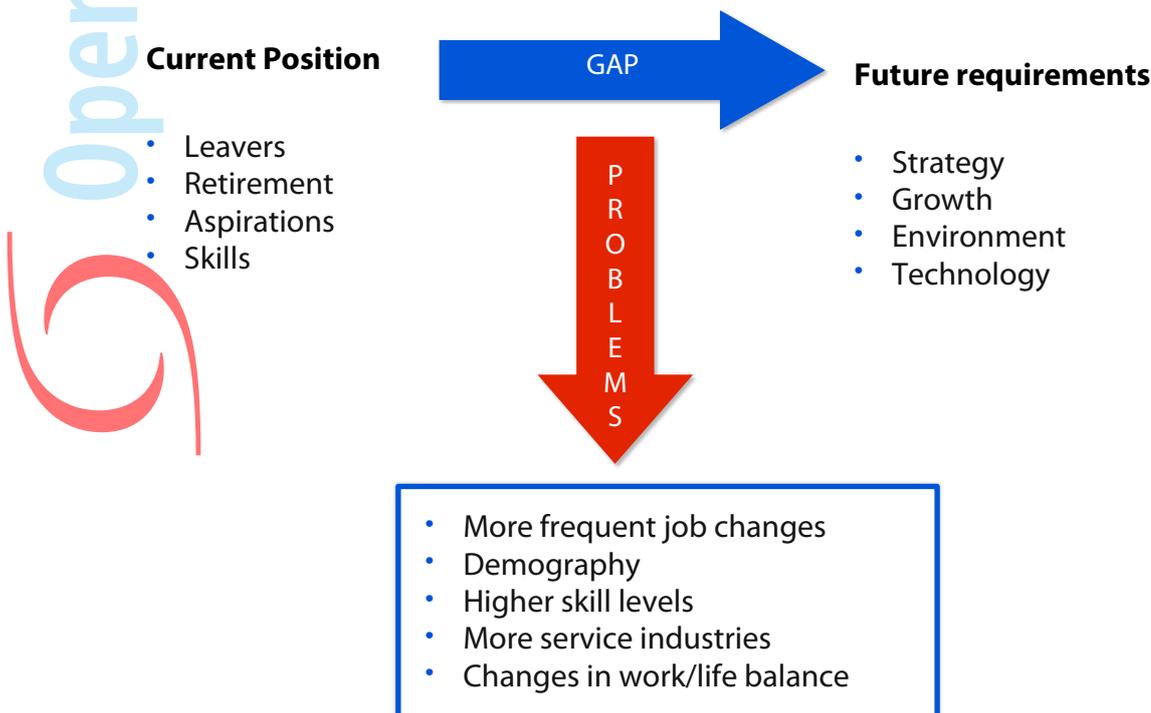
Chapter 25

HUMAN RESOURCE PLANNING - PEOPLE

1. The planning process

Human resource planning should be based on the strategic plan of the organisation. If the strategic plan suggests that we are going to be opening in most countries in Europe we will need people with the proper language skills. If we are moving organisation up market, we may need better people or at least people who are trained differently.

In essence, you need to budget. You can assess the current position: what people you have, with what skills, and look at the future requirements. The current position has to be adjusted for estimated leavers, estimated number of people who will retire, the aspirations and hopes of the people we already employ, and the sort of skills they have. Our future requirements will depend on our strategy, growth, the environment we are going to be trading in, and technological changes. Essentially, there is going to be a gap which has to be filled.



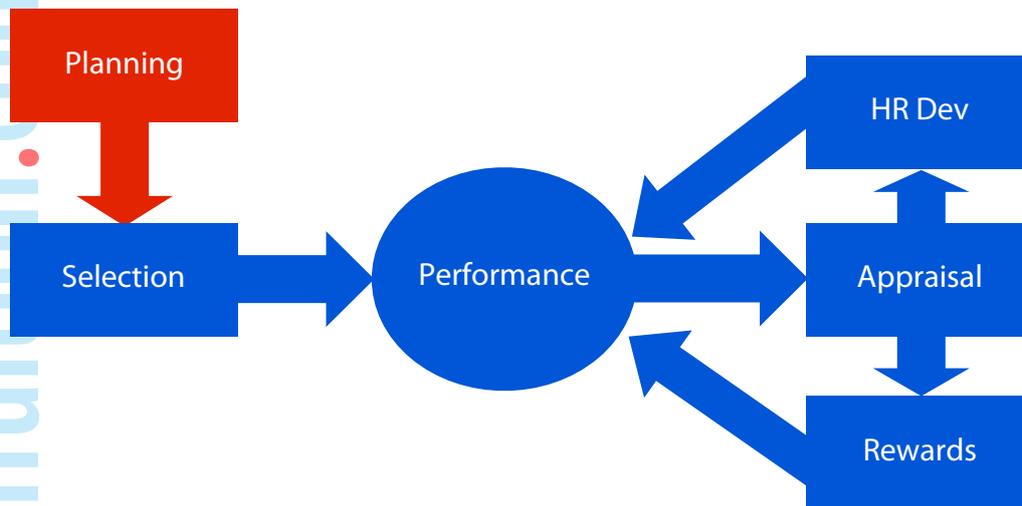
Let's say our current position showed 100 people with adequate skills, but our future requirements, our strategy suggested 500 people of those skills would be required. That's a gap of 400, but then we take into account those who may leave and retire, let's say that's another 50 people over the five years. Therefore, we are going to have to recruit around 450 people. Of course, that won't be an accurate figure, it's an estimate, but we do need to know whether our recruitment burden is something like 100 people, 1,000 people or only 10 people.



It's worth noting particular difficulties that have arisen recently with human resource planning. Changes in population, higher skill levels, a move from manufacturing to service industries, more frequent job changes, and potential changes in the work-life balance. All of these means making sure we have adequate human resources to fulfill our strategic plans can be very difficult.

2. Human resource cycle

The whole human resources cycle is summarized in this diagram.



First, there is the planning stage which we have just considered. How many people with what skills do we need to recruit over the forthcoming years?

Selection covers a large number of steps. You have to analyze the job. From the job analysis you can produce a job description: what the person will be doing. From the job description you can produce a person specification. The sort of person, skills, experience, intelligence, personality, and so on that a successful candidate must have.

Then you advertise to attract the candidates and a few of those you will interview and perhaps subject to tests for ability, intelligence, and psychology.

The successful candidate is appointed and would initially have some induction training to make them productive as soon as possible.

Then their performance will be monitored. Most organisations give their staff at least an annual appraisal where there is going to be feedback.

Arising from performance and appraisal will be human resource development: what the person might be expected to do in the next year, what training then they require, what they are interested in. Also rewards will be decided: the level of pay and perhaps their promotion.



3. HR appraisal

Employee appraisal is an important part of the HR cycle. Appraisals are normally set to three parts:

- There is a performance review, how we did over the previous period.
- A potential review, what your employer hopes you will be able to do over the forthcoming period.
- Reward review where your level of pay and conditions are set.

Some people however say that the reward review should be separate from the other reviews because rewards cannot be set purely on performance. As well as performance, reward depends on what the company can pay, the going rate for that type of job, and in some larger companies pay has to be within defined bands, and no matter how good you are, you can't be paid outside that band. So some people say that the reward review should be separated from the performance and potential reviews.

There are a number of ways of carrying out the appraisal. Sometimes these are characterized by:

- Tell. Your manager tells you how you have got on with little room for discussion or disagreement.
- Tells and sells. Your manager tells you how you got on and tries to persuade you that view is correct
- Problem-solving where employer and employee cooperate in arriving at a fair appraisal.

The last type of review is sometimes called an open review. It is as though you went into your appraisal interview and the appraisal form had not yet been completed. You and your manager go through this together deciding where you are good, where you are not so good. It is reckoned the level of communication and this type of review is much higher, and rather than an emphasis on blaming you for not doing things right, there is a problem-solving attitude aimed at how you will do things better in the future.

4. Competency frameworks

Competency frameworks are a method of describing the values, skills and abilities that are required to perform given roles. They also provide clear focus to support the development of staff in order to deliver the best possible performance.

Typically, to define a framework for a given role, there will be a general description of the competency followed by a list of attitudes, behaviours, skills and abilities that would indicate competence in the relevant area.

There can also be a negative statement at the end of each competency to indicate the sort of behaviour that is actively discouraged, as it works against the principle of continual improvement an organisation is striving for.

Competency frameworks serve several purposes which help organisations to improve and develop their staff, products and services.



	<i>Target performance</i>	<i>Actual performance</i>
Generic competences		
Fire safety	80	50
First aid	0	0
Ethics	75	75
Specialist skills		
Excel	100	80
Accounting package	80	80

Competence definition:

- Skill description
- Skill aims and objectives
- Competency levels and their definition

Evidence of employee competency:

- Date competency attained
- Trainer/assessor data
- Assessment method

4.1. Competency frameworks:

- Inform prospective recruits what is expected of them
- Inform staff of the sort of attitudes, behaviours and skills the organisation encourages when carrying out their duties
- Inform staff of what they can expect from their managers
- Can be used to shape and define the organisational culture based around strong principles of acceptable and expected behaviour
- Supports and guides staff at all levels in their development in order to maximise their potential
- The frameworks should link to some of the key strategies that drive the objectives of the organisation as these are crucial to success.

The frameworks will normally be built into appraisal methodologies and the recruitment process.



5. Motivation and job design

5.1. Scientific management

Job design can be thought of as starting with the work of Frederick Taylor (1856 – 1915) who devised 'scientific management' in the early 20th century. Until Taylor, management was reluctant to interfere with the detail of work practices.

Taylor believed that it was a duty of management to discover the best way of accomplishing tasks and then to instruct their workforce in these methods. Management's discoveries were to be based on scientific methods such as trying out different approaches and measuring the results, for example, by timing operations and analysing their component parts. As a result of these investigations, workers should become more productive – and boost their earnings.

Often management's scientific experiments concluded that maximum productivity was achieved by breaking down processes into small steps and then requiring each worker to repeatedly carry out one step only. When this approach was combined with Henry Ford's invention of the production line (where workers had little control over the speed at which they had to work) the jobs were repetitive, low skilled, pressurised, and neither satisfying nor motivating.

5.2. The human relations school

In the late 1920s and the 1930s Elton Mayo supervised a series of experiments at Western Electric's Hawthorne factory. These became known as the 'Hawthorne experiments'. Although there is considerable criticism of the methodologies and conclusions drawn from the Hawthorne experiments, two of their widely believed discoveries were:

- The power of peer pressure (groups norms)
- Motivation (and performance) can be improved by establishing better working relationships and social interactions.

Peer pressure and group norms can be used to increase the performance of a worker who is in a team performance because of the disapproval of other team members if the employee lets the team down.

Motivation improvements form better working relations and interactions, for example taking an interest in employees, recognising achievement and soliciting suggestions, implying that the job specialisation production line automaton approach might not be the most successful approach.



5.3. Theories of motivation

There are many theories of motivation, but three of the earliest, dating from the 1950s, are:

- Maslow's hierarchy of needs
- Herzberg's hygiene factor theory
- McGregor's Theory X and Theory Y

Without getting into too much detail, Maslow claimed we have higher order needs, such as social needs, ego needs and self-actualisation needs. If the work environment can supply these then employees will be motivated. Herzberg suggested that after basic (hygiene) factors had been put in place, motivation at work was then caused by motivating factors such as challenge, responsibility, recognition and a feeling of advancement through learning new skills.

McGregor suggested that not everyone wants the same things from work. Theory X people like certainty and direction whereas Theory Y people prefer more challenge, risk and freedom. Managers should act accordingly so as to match their approaches to what their employees will respond to.

5.4. Job design theory

The theories of Maslow and Herzberg have a resonance with the human relations school started by Mayo. All suggest that there is more to successful work practices than simply requiring people to unthinkingly repeat simple tasks: challenge, variety, initiative, recognition and team-work are all seen as valuable contributors to motivation and productivity.

Undoubtedly there will be some situations where traditional production lines, in which each person does only a repetitive simple task, will minimise the marginal cost of production. However, those calculations would not take into account:

- The costs of recruitment and training caused by high staff turnover that is likely to result if employees dislike their jobs.
- The costs of staff shortages.
- Poor quality because employees do not identify with what they are producing.
- Disengagement of employees from trying to improve production methods.

In the 1960s and 1970s these considerations gave rise to the job redesign movement which attempted to improve jobs (and employee performance) by deliberately designing 'better' jobs. A useful way consider a job's the design elements can be seen in the job characteristic model (Hackman and Oldman, 1980) where five core job characteristics were identified:

- Skill variety: Does the job require various activities that in turn require workers to develop a variety of skills and talents?
- Task identity: Does the job allow the employees to identify with the work in hand (the finished item or service)?
- Task significance: Does the job impact other people's lives, either society in general, the firm or a sub-group within the firm?
- Autonomy (responsibility): Does the job provide the employee with significant freedom, independence, and discretion in scheduling the work and in determining the procedures to be used in carrying it out?



- Feedback (knowledge of the results of work): Is the employee provided with feedback about effectiveness and performance?

The first three, above, contribute to the meaningfulness of the work or job.

Hackman and Oldman suggested that these characteristics should produce the following outcomes:

- High intrinsic motivation, leading to high productivity
- High job performance (quality)
- High employee satisfaction
- Low absenteeism
- Low employee turnover

5.5. Job design in practice

The practice of deliberate improvement in a job's characteristics can be called 'job enrichment' of which there are three types: job enlargement, job rotation and (with rather confusing terminology) a method known as job enrichment.

- **Job enlargement** means allowing an employee to take on more tasks, but still at the same level. So if you were working on a car assembly line, instead of merely fitting the front wheels, you are now asked to fit the front and rear wheels and the bumpers (fenders). The job cycle time is increased (you would spend longer on each car), there is some more variety and therefore less boredom. Note however, that all of these tasks are at the same level: basic, repetitive assembly tasks.
- **Job rotation** moves employees round, perhaps on a daily basis, from one simple task to another. So, one day the car worker might be on wheels and bumpers, the next day the worker might be fitting the front and rear windows. The third day would be a different set of tasks. Again this introduces the employee to some additional skills (though all at the same level) reduces boredom and is perhaps beginning to give more insight into task identity: building a car.
- **Job enrichment** is a vertical change because it gives an employee some responsibility, discretion and authority that would previously been exercised by supervisors and managers. So now the car worker might be expected to perform some quality control checks as the car is being worked on, or might be responsible for reporting production problems. Not only does this increase task significance but it adds to autonomy. Feedback can also become more comprehensive.

In 1974 the Volvo car company built a new plant at Kalmar in Sweden which was based on teams of workers responsible for entire sub-units of car assembly, such as the wiring system. Encouraged by these results, the company built a much larger plant at Uddevalle where each team was responsible for entire car construction. Employees were happy, quality was improved, but productivity was reduced because this approach took about twice as long to build a car as it would in a conventional production line. Neither factory lasted for long; the final irony was that Volvo was sold to Ford (still with its conventional production lines) in 2000.

However, the extreme Volvo experiment in fully autonomous group working should not be seen as evidence that all forms of group working and job enrichment are undesirable. As explained below, Japanese work practices make use of these techniques.



5.6. Japanese work practices

Japanese work practices are important because of the great success of Japanese mass production that began in the late 1970s. There are several key components:

- **Flexibility:** frequently seen in the concept of cellular manufacturing in which a team of workers is responsible for the production of complete items. The employees are in semi-autonomous, multi-skilled teams and instead of the production machinery being arranged linearly, it will often be in 'U' shape to allow workers to be involved in variety of tasks. Fairly obviously, these arrangements promote better job-design in terms of Hackman's and Oldman's core job characteristics. The group of employees working in a cell are semi-autonomous so that they can be flexible in their approach - provided targets for quality and quantities are met.
- **Quality control:** quality is promoted by identification with the final product, peer pressure and the concept of Kaizen in which continuous small improvements are sought. Quality control circles (QCC) are an important aspect of the Japanese approach as workers meet regularly (eg at the start of each day) and discuss work-related problems such as quality, productivity and safety. Recommendations for changes can be referred to more senior managers. QCCs can greatly enrich jobs by providing outlets for higher skills, variety, task significance and feedback.
- **Minimum waste:** flowing naturally from quality control and flexibility but also promoted by technologies such as just-in-time inventory management.

5.7. Re-engineering

Automation, rationalisation and business process re-engineering (BPR) will all have an effect on job content and so job design should be taken into account during these processes. All have the potential to make employees' jobs either better or worse. For example:

Automation could remove low skilled drudgery from a job leaving the employee more time to concentrate on more interesting and demanding tasks. Alternatively, automation could remove the need for employees to exercise skill and talent and could simply turn them into machine minders.

Similarly, job rationalisation might result in employees being forced to work in a traditional production line where they have no influence on the rate that work has to be done. Or, by freeing employees from frustrating bottlenecks in the flow of material or information, rationalisation could provide employees with much greater flexibility.

BPR is the most radical type of change a business can attempt. It can be defined as:



“The fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical contemporary measures of performance such as cost, quality, service and speed” (Hammer and Champy, 1993)

5.8. Post-industrial job design

Knowledge work can be distinguished from ‘ordinary work’ by its information content, its non-routine nature and its requirement for problem-solving. Knowledge work requires knowledge workers to carry it out and these employees will be highly trained to acquire the relevant knowledge, keep it up-to-date and to use it.

Within an organisation, the knowledge that is of value to it is likely to be widely disseminated and not confined to top management. Different employees will have different knowledge specialities which will have to be combined from time-to-time to address customer needs.

- Mass production is less likely in these organisations than is providing bespoke products and services. Even if mass production were used, each product would have a short life and would soon be superseded by a new, better one.

Success for these organisations depends on:

- Flexibility to provide new products and services.
- Exploiting knowledge quickly before it goes out-of date.
- Being open to new knowledge and ideas.
- Grabbing opportunities as they arise.

The job design for the knowledge workers in these organisations must embrace these essentials. Therefore post-industrial job design would be expected show:

- Wide flat organisation structures. This is essential to shorten the distance knowledge has to flow between the bottom and top of the organisation. A shorter distance means faster and more accurate flows.
- An openness by managers to learn from new and junior employees. For example, a new, young employee is likely to know more about the importance of social media in marketing than the manager who has been with the company for 20 years.
- The quick formation of temporary teams to address new, perhaps fleeting, opportunities.
- Multi-skilled employees to provide the flexibility to form the required teams.
- Autonomy for teams to solve problems so that solutions are delivered to customers.
- Task identity so that employees fully understand the unique task that they have been assigned to.
- Feedback. Knowledge workers are hungry for feedback from managers, colleagues and customers because performance cannot be self-measured by, for example, units produced.



5.9. Ethical issues of job design

Finally, this article briefly mentions some ethical issues that can arise from job design:

- Although the article has championed how employees appreciate more challenge, autonomy and variety, these qualities also give rise to more risks for employees: they might make a wrong decision. McGregor's Theory X and Theory Y mentioned above recognised that not everyone wants more freedom. Some people want a relatively quiet undemanding job that they can go home and forget about. For these employees, job enrichment is likely to be unwelcome.
- Some aspects of redesign bring with them additional employee monitoring. For example, in call centres, employees will be expected to judge the mood of a customer and to use their judgement in how to deal with that customer. But call centres record details of conversations, how long each conversation lasts, and they often allow customers to rate the employee.
- It is important to take equal pay for equal work, equal opportunities and safe working into account. Multi-skilled teams are all very well provided each team member is properly trained so that they can carry out the required variety of tasks efficiently and safely.
- Bullying can become an issue. Teams of employees are given tasks such as completing a certain number of units in a day. They might be competing against other groups to win an award. In such an environment members of the team who are perceived as 'weak links' could be subjected to severe bullying and ridicule. Their colleagues might hope that this will force them to leave so that a better team member can be employed.
- Some writers view BPR as a fraud on employees. BPR is often driven or justified by the need to alter the business radically so as to recognise that, above all, customers must be given what they demand. Unless workers are prepared to change their work patterns (ie adopt new job designs) then they get what's coming to them: redundancy. BPR can therefore be used as a cloak to disguise other company objectives.



6. The learning organisation

6.1. What is a “learning organisation”?

If you Google “definition of learning organisation” you will be rewarded with many links. But for P3 the following is particularly useful:

“An organisation that acquires knowledge and innovates fast enough to survive and thrive in a rapidly changing environment. Learning organisations (1) create a culture that encourages and supports continuous employee learning, critical thinking, and risk taking with new ideas, (2) allow mistakes, and value employee contributions, (3) learn from experience and experiment, and (4) disseminate the new knowledge throughout the organisation for incorporation into day-to-day activities. (BusinessDictionary.com)

It is important to note that this definition refers to both individual employees and to the organisation to which they belong. We all know what individual learning is, whether pursued through self-study, formal courses or learning in the workplace. We presumably also recognise its value. However, organisational learning is not the same as the personal learning of individuals within that organisation. Certainly individual learning is a necessary part of learning organisations, but it is not sufficient.

Nor should it be assumed that a learning organisation can be created only by access to existing knowledge. Implied in the idea of a learning organisation are the ideas of:

- Transformation
- Innovation
- Risk
- Experience
- Experimentation
- Information exchange
- Flexibility
- Shared visions

An organisation might observe how rivals use existing techniques, such as observing the use of just-in-time inventory, and will learn how to employ those techniques to its own advantage.

Learning from others is useful, but often learning organisations can be expected to make original discoveries about how to do things better because the methods of improvement have not yet been conceived or devised by anyone. The development of iTunes by Apple falls into this category. No organisation had previously conceived or developed such an approach to selling and distributing music, and Apple learnt how to do it from first principles. In turn, there are other organisations which have learned how to substantially copy the Apple approach.

A learning organisation also has to be distinguished from an organisation that simply adopts change. For example, change can be instigated and pushed through by a chief executive who is convinced that his (or her) way is correct. Employees comply with the boss’s wishes, learn new working methods and new non-current assets are bought. But following a new imposed plan is not the same as organisational learning. Successful learning implies learning the right



things and learning the truth about your situation and the market so far as these can be determined.

For example, Morrisons Plc is one of the four largest supermarket chains in the UK (about 10% market share). It is particularly strong in the north of England and had a reputation for delivering very good value for money. In 2010 a new chief executive arrived with great ambitions, and one of his initiatives was to install misting machines to keep the displays of fruit and vegetables cool. It was denied that these were an attempt to move upmarket. However, they became a symbol of misdirected strategy. The chief executive left in January 2015. On 12 March 2015 Morrison announced preliminary results for the year to 1 February 2015 which showed the worst profits for eight years, down 52% on the previous year. The misting machines are soon to be removed.

It is easy to believe that Morrisons would probably have a relatively conventional hierarchical management system and that it operates in a sector that does not obviously offer great opportunities for innovation. But worthwhile innovations might be there to be learned, and it should be noted that for some time Morrisons was the only one of the big four supermarket chains not to offer online shopping. This is perhaps the one of the most significant recent developments in the supermarket business and Morrisons was slow of the mark.

6.2. The balanced scorecard

The balanced scorecard of Kaplan and Norton, as described earlier in these notes, is an approach to explaining what makes companies successful. The theory defines four perspectives, or level, that are needed:

- **Financial perspective:** this is really the reward of success. Good profits, increasing share price and high return on capital employed are all ways in which organisations chart their success.
- **Customer perspective:** the immediate cause of financial success is a happy customer base. Repeat business, growing sales and profitable prices are generally prerequisites for good profits.
- **Internal business perspective:** customers are happy when an organisation does well what it purports to do. It might be making goods at a very low cost per unit; it might be making goods of almost 100% quality.
- **Innovation and learning perspective:** this supports and sustains all the other perspectives. An organisation might currently be the lowest cost producer, but you can be sure that competitors will be trying to steal that crown, and if the organisation fails to strive for improvement, competitors will soon overtake it. Similarly, an organisation might have the most technically advanced product, but someone, somewhere will discover a better product. No organisation can afford to stand still and it must continually learn and discover what innovations might be useful.

Learning organisations are not guaranteed success, but an organisation that eschews learning will be doomed to failure.

Peter Senge argues that leadership in a learning organisation cannot be in the traditional top-down pattern in which leaders are assumed to possess special, unique talents and insights. In dynamic environments there is no reason to think that leaders have more knowledge than anyone else about what is needed to maximise the chance of success.

For example, consider an organisation where the CEO has worked up through the ranks over the last 25 years. How likely is this CEO to appreciate the power of social marketing tools such



as Twitter and Facebook? Of course, the CEO will have heard about these, but is relatively unlikely to use them heavily. In contrast the new recruit, fresh out of university, will probably have used these intensively and will have seen their power and potential. Of course, new recruits will not have a monopoly of wisdom either and also need to learn skills such as marketing, accountancy, law and human resources management.

A degree of humility and openness is needed by all. Leaders are still needed to ensure a culture and structure in which individual and organisational learning can take place.

6.3. Knowledge management

Knowledge management is very relevant to the concept of the learning organisation and this article concludes by talking briefly about that.

- The definition of knowledge is also difficult. Oxford Dictionaries defines it as:

“Facts, information, and skills acquired through experience or education; the theoretical or practical understanding of a subject.”

So, someone has to have acquired facts, information and skills and must understand those.

Knowledge can be divided into two categories:

- **Explicit knowledge:**

information “we know we know”, or know where to find it. Usually this information is recorded and, once it is, the knowledge is relatively safe. It can be subjected to searches; it can be transmitted and shared. For example, the way factories make products is substantially based on explicit knowledge because there will be engineering diagrams, definitions of the composition of plastic and metals, and Pantone numbers will define colours.

- **Tacit knowledge:**

information we do not know we know. This information is likely to be locked in someone’s mind. It is not recorded anywhere else and therefore it is difficult to safeguard and share that information amongst the whole organisation. If that employee moves to another employer, they leave none of their important tacit knowledge behind. Even the employee who possesses this knowledge might not be aware of its existence or importance.

To take an example. Give a recipe for baking a cake (explicit knowledge) to two people. Both follow it exactly, yet one cake could be inedible and the other delicious. Both bakers have used the same explicit knowledge but the successful one must have done something different. If you ask that person they might now know what the secret of their success is. Perhaps they mix the ingredients more quickly, but that difference is opaque to them because they are simply doing what they always do.

As many businesses move from being more production-based to more service-based the importance of tacit knowledge has increased. For example, it is relatively difficult to capture and define what makes a hotel or restaurant welcoming and therefore successful. Yet it is important to try to discover and learn the secrets of success. Once again, the qualities that make a hotel or restaurant successful now might not be those that will make it successful in



the future. For example, the degree of formality expected by guests changes over time and there aren't many smart restaurants that now expect ties to be worn, whereas that was once the norm. It was important for changes in guest expectations and behaviour has to be identified and the organisations had to learn new rules if they were going to stay successful.

In 1996 Nonaka and Takeuchi introduced the SECI model for extracting tacit knowledge and enabling the organisation and its members to share and to learn from it.

There are four steps:

- **Socialization** (tacit to tacit): interaction between individuals; observing successful individuals; sharing experiences; brainstorming; coaching.
- **Externalization** (tacit to explicit): tacit knowledge gleaned from socialisation is written down in documents so that it is safeguarded can be spread more easily through the organization.
- **Combination** (explicit to explicit): recorded knowledge is sorted, edited and combined to form methodologies and best practice guidelines. Think of this step as developing procedures and instruction manuals.
- **Internalization** (explicit to tacit): As explicit sources are used, absorbed and learned by individuals and the organisation the knowledge is internalized and becomes automatic behaviour.

Learning organisations have to pursue all knowledge, both explicit and tacit.

An organisations which refuses to experiment, or to listen to challenging ideas, or to accept that others might know better is refusing to learn and its future is likely to be short.



Chapter 26

INTEGRATED REPORTING

1. Introduction

Integrated reporting (IR) has been developed and promoted by the International Integrated Reporting Council (IIRC), a global coalition of regulators, investors, companies, standard setters, the accounting profession and non-governmental organisations. IR has been introduced to many ACCA professional level syllabuses.

Appendix 1 shows a summary of the definition, aims, guiding principles and contents of an integrated report. If you are not familiar with these you should read through that summary before going on. Note that the IR framework is principles-based with the aim of achieving a balance between flexibility and prescribing strict headings and contents.

2. Relevance to the P3 paper

The emphasis of the P3 has changed since it was first examined in December 2007 and now contains more material on costing, contribution analysis, regression analysis, time series, investment appraisal, project management and information technology. Despite these accretions, the P3 syllabus can still largely be looked at as:

- Strategic analysis
- Strategic choice
- Strategic implementation

Although business analysis can be used retrospectively to see where things went wrong, a more important use is to plan for the future so that the business can identify suitable strategies that promise sustained competitive advantage. It is also important to analyse how changes can be implemented through examining business change processes and project management.

You will see that IR has many elements which easily relate to P3. The definitions of IR is:

- A concise communication of an organisation's strategy, governance and performance.
- Demonstrates the links between its financial performance and its wider social, environmental and economic context.
- Show how organisations create value over the short, medium and long term.

It is useful to imagine yourself investigating a company about which you know nothing to decide whether or not you want to invest in it. Going to the latest annual report and financial statements would probably be your starting point, but you will be left with many unanswered questions – certainly if the company shows the minimum information required by law and the accounting and financial reporting standards. You will learn relatively little about the company's business activities (though segmental reporting helps), their competitors, their future plans or how they intend to achieve sustainable competitive advantage. IR aims to fill the gaps so that existing or prospective investors better understand the company.



The following IR Content Elements are particularly relevant to P3:

- Organisational overview and the external environment
- Opportunities and risks
- Strategy and resource allocation
- Business model
- Future outlook

Adding some detail and examples to these elements:

3. Organisational overview and the external environment

What does the organisation aim to do? Who are the major stakeholders? Where is it located? How is it structured? What external events will affect it most?

Fairly obviously the organisation's mission, stakeholder analysis, organisation chart and a PESTEL analysis would be relevant to this section of the IR. Think of this section as setting the context of the organisation and providing some background detail.

4. Opportunities and risks

These must cover both internal and external matters. The traditional SWOT analysis usually categorises opportunities and threats (risks) as external, but it is essential to also look internally. A weakness (for example arising from gaps in new product development) is a risk to future revenues. Similarly a strong brand name creates greater opportunities for future revenue streams. Historically, the board of companies would tend to emphasise a company's opportunities, but investors cannot make an informed decision about an investment without an appreciation of the associated risk. Some risks can be quantified (for example, by sensitivity analysis) but it is unlikely that quantified amounts would appear in an IR. A qualitative indication should be provided about both internal and external risks. The report should also mention how the risks are being managed and mitigated.

5. Strategy and resource allocation

Does the organisation intend to develop new products, set up new factories or expand to new markets? Perhaps it intends to move up-market to escape the fierce competition it currently faces at the lower end. This section of the IR can make extensive use of Porter's generic strategies, Ansoff's Matrix and the value chain. In the UK at the moment many supermarket chains are having to reassess their long term strategies in response to cheaper foreign supermarkets that have opened. In addition there is a change of shopping habits because many more customers now prefer to go more frequently to local stores rather than once a week to a very large store on the edge of town. It would be valuable to investors to be told how their company is going to respond to these changes in the market, how much it might cost to achieve the new strategies and by when the strategic shifts should be achieved.



6. Business model

An organisation's business model is "its system of transforming inputs, through its business activities, into outputs and outcomes that aims to fulfil the organization's strategic purposes and create value over the short, medium and long term." (IIRC). The value chain is particularly relevant here: it explicitly sets out inputs, processes and outputs and requires organisations to understand how value is added so that profits can be made. If a company does not understand where it adds value then the company is existing in a temporary state of good fortune. It is making profits now, but does not understand why, so chance of continued success must low.

Inputs are the major inputs such as raw material or human resources. Outputs are the key products and services. The business activities include not just the manufacturing process, but also how the company innovates, carries out its marketing, what its after-sales services are, • how it delivers its goods and how it acquires, trains and retains staff.

7. Future outlook

An integrated report should answer the question: What challenges and uncertainties is the organization likely to encounter in pursuing its strategy, and what are the potential implications for its business model and future performance? (IIRC)

PESTEL and a five forces analysis are likely to be particularly relevant here. For example, if you were a stakeholder in a conventional television company you should want to know how the company will address challenges from internet-based companies such as Netflix.



8. Appendix

8.1. Definition:

- A concise communication of an organisation's strategy, governance and performance.
- Demonstrates the links between its financial performance and its wider social, environmental and economic context.
- Show how organisations create value over the short, medium and long term.

8.2. Its aim is to:

- Enable more effective decision making at board level.
- Improve the information available to investors.
- Encourage more integrated thinking and business practices.

8.3. Guiding principles

The following Guiding Principles underpin the preparation of an integrated report, informing the content of the report and how information is presented:

- **Strategic focus and future orientation**

An integrated report should provide insight into the organization's strategy, and how it relates to the organization's ability to create value in the short, medium and long term, and to its use of and effects on the capitals

- **Connectivity of information**

An integrated report should show a holistic picture of the combination, interrelatedness and dependencies between the factors that affect the organization's ability to create value over time

- **Stakeholder relationships**

An integrated report should provide insight into the nature and quality of the organization's relationships with its key stakeholders, including how and to what extent the organization understands, takes into account and responds to their legitimate needs and interests

- **Materiality**

An integrated report should disclose information about matters that substantively affect the organization's ability to create value over the short, medium and long term

- **Conciseness**

An integrated report should be concise.



8.4. Content elements

An integrated report includes eight Content Elements that are fundamentally linked to each other and are not mutually exclusive:

- **Organizational overview and external environment**

What does the organization do and what are the circumstances under which it operates?

- **Governance**

How does the organization's governance structure support its ability to create value in the short, medium and long term?

- **Business model**

What is the organization's business model?

- **Risks and opportunities**

What are the specific risks and opportunities that affect the organization's ability to create value over the short, medium and long term, and how is the organization dealing with them?

- **Strategy and resource allocation**

Where does the organization want to go and how does it intend to get there?

- **Performance**

To what extent has the organization achieved its strategic objectives for the period and what are its outcomes in terms of effects on the capitals?

- **Outlook**

What challenges and uncertainties is the organization likely to encounter in pursuing its strategy, and what are the potential implications for its business model and future performance?

- **Basis of presentation**

How does the organization determine what matters to include in the integrated report and how are such matters quantified or evaluated?

- **Reliability and completeness**

An integrated report should include all material matters, both positive and negative, in a balanced way and without material error

- **Consistency and comparability**

The information in an integrated report should be presented

- on a basis that is consistent over time; and
- in a way that enables comparison with other organizations to the extent it is material to the organization's own ability to create value over time.





Chapter 27

FORECASTING

1. Forecasting techniques

Forecasting is important in strategic planning because a strategic plan or a budget inevitably means trying to look into the future and estimate, costs, volumes sales revenues and so on.

It is important to be able to interpret the results, use the results and be aware of where caution might be needed when relying on estimates.

Techniques covered are:

- Linear regression and coefficients of determination
- Time series analysis, using moving averages and exponential smoothing
- Decision trees

2. Linear regression

Linear regression is a method of fitting the best straight line through a set of points. In business, typically the line would connect points showing:

- Cost and volume
- Selling price and sales volume
- Hours worked and units produced

Linear regression will give constants which fit a line of the type:

$$y = ax + b$$

where: y is the dependent variable (cost, hours, volume sold)
 x is the independent variable (units made, selling price).

The constant 'a', for example, could be the additional cost for each additional unit made; 'b' would be the cost even if no units were made (the fixed cost).



3. Linear regression - caution

Be warned: linear regression will give the best line it can through any set of points. For example, if you numbered the days in the year 1 – 365 and you noted the day each person was born and the amount of money they had in their bank account, linear regression would suggest the best relationship it could between these variables.

Obviously there would no actually be a good relationship.

To test the relationship you must calculate the coefficient of correlation (r), or the coefficient of determination (r^2).

r can vary between:

$r = +1$, meaning perfect positive correlation where all points lie on the line and as one variable increases, so does the other.

$r = -1$, meaning perfect negative correlation where all points lie on the line and as one variable increases, the other decreases.

$r = 0$ means no correlation.

If $r = 0.7$, $r^2 = 0.49$ or about 50%. This means that 50% of the change in one variable is explained by the change in the other.

Caution!

You should be aware of the following before you rely on any prediction based on linear regression:

- If r^2 is low, then one variable is not well-associated with the other, so any predictions are liable to be poor.
- The more points (readings) the better: simply more evidence for the association.
- Extrapolation (predicting outside the range examined) is dangerous as we have no direct evidence of what happens in other regions. For example, costs might suddenly increase.
- Other known influences (such as inflation) should be removed before the analysis.
- Even good correlation does not prove cause and effect: both variables might have moved together under the influence of another variable.



4. Time series analysis - components

A time series is simply one that moves with time: sales each day, rainfall each month, machine breakdowns each week.

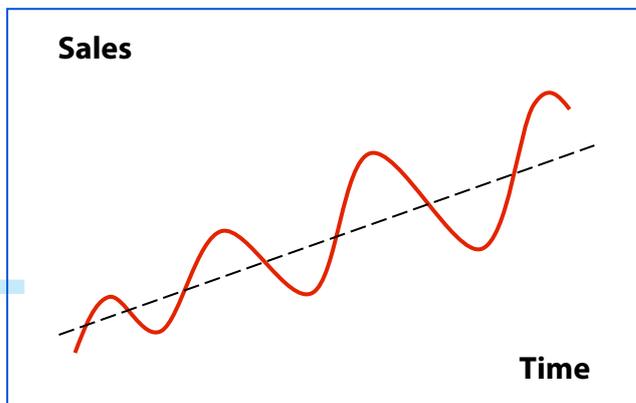
There are four components of a time series:

- The trend – an underlying increase/decrease
- Seasonal variations – regular variations with a cycle length of less than a year.
- Cyclical variations – regular variations with a cycle length of more than a year
- Random variations – irregular and unpredictable.

Time series analysis tries to analyse the first two of these.

5. Time series analysis – graph

The figure below shows a rising trend with regular seasonal variations.



6. Analysis of time series

6.1. Method 1 – moving averages

Year	Quarter	Sales (units)	4-part moving average	8-part centred moving average	Seasonal variation
1	1	4,800			
	2	2,200			
			2,975		
	3	2,400		2,720	-320
			2,465		
	4	2,500		2,490	10
			2,515		
2	1	2,760		2,590	170
			2,665		
	2	2,400		2,686	-286
			2,706		
	3	3,000		2,676	324
			2,646		
	4	2,664		2,700	-36
			2,754		
3	1	2,520		2,649	-129
			2,544		
	2	2,832		2,451	381
			2,358		
	3	2,160			
	4	1,920			

Seasonal variations

Qtr 1	Qtr 2	Qtr 3	Qtr 4
170	-286	-320	10
-129	381	324	-36
41	96	4	-26

The 4 part moving averages are calculated by:

$$2,975 = (4,800 + 2,200 + 2,400 + 2,500)$$

Then move down one quarter, dropping 4,800 and picking up 2,760

$$2465 = (2,200 + 2,400 + 2,500 + 2,760)/4$$

However, these figure are 'between' two seasons, so need to be centred;

$$2,720 = (2,975 + 2,465)/2 \text{ and so on}$$

The centred moving average is the trend figure, since the high and low seasons should cancel out.



The seasonal variation is the difference between the accrual result and the trend. The seasonal variations are then grouped by season and the average of each calculated.

6.2. Predictions using moving average results

Year	Quarter	Sales (units)	4-part moving average	8-part centred moving average	Seasonal variation
1	1	4,800			
	2	2,200			
			2,975		
	3	2,400		2,720	-320
			2,465		
	4	2,500		2,490	10
			2,515		
2	1	2,760		2,590	170
			2,665		
	2	2,400		2,686	-286
			2,706		
	3	3,000		2,676	324
			2,646		
	4	2,664		2,700	-36
			2,754		
3	1	2,520		2,649	-129
			2,544		
	2	2,832		2,451	381
			2,358		
	3	2,160			
	4	1,920			

Seasonal variations

Qtr 1	Qtr 2	Qtr 3	Qtr 4
170	-286	-320	10
-129	381	324	-36
41	96	4	-26

6.3. The trend adjusted for seasonal variations

You can see from looking at the 8-part moving average that the trend figure still moves up and down somewhat, implying that there is no strong pattern. If we thought there was a worth while and stable pattern we could say that the trend has moved from 2,720 to 2,451 in 7 jumps; this is $(2,720 - 2,451)/7 = 38.4/\text{season}$, negative

The seasonal variations are also unstable: each season has both a positive and negative variation.

If we wanted to predict the sales in quarter 2 of year 4 we could adjust 2,451, the last trend figure by four more seasons then adjust for the season t seasonal variation:



$$2,451 - 38.4 \times 4 + 96 = 2,393$$

Note that the moving average lags considerably behind the lasted figure which seems to indicate a sharp fall. Additionally, this method is criticised because of the sudden way in which an old reason is dropped and another taken up as you progress through the seasons.

6.4. Predictions using moving average results

Year	Quarter	Sales (units)	4-part moving average	8-part centred moving average	Seasonal variation
1	1	4,800			
	2	2,200			
			2,975		
	3	2,400		2,720	-320
			2,465		
	4	2,500		2,490	10
			2,515		
2	1	2,760		2,590	170
			2,665		
	2	2,400		2,686	-286
			2,706		
	3	3,000		2,676	324
			2,646		
	4	2,664		2,700	-36
			2,754		
3	1	2,520		2,649	-129
			2,544		
	2	2,832		2,451	381
			2,358		
	3	2,160			
	4	1,920			

Seasonal variations

Qtr 1	Qtr 2	Qtr 3	Qtr 4
170	-286	-320	10
-129	381	324	-36
41	96	4	-26



7. The random walk

This simply says that the best prediction of the next season is the last season. This would apply if there were no easily identified trend or seasonal variations. If everything is moving randomly, the best guess of next season's sales is probably last season's actual results. So, the prediction for quarter one of year four would be 1,920. That is obviously very up-to-date, but because the readings vary considerably, might not be a very good prediction.

8. Expected values

<i>Project 1</i>	<i>p</i>	<i>Income \$</i>	<i>p x Result</i>	<i>Project 2</i>	<i>p</i>	<i>Income \$</i>	<i>p x Result</i>
Outcome 1	0.5	1,000	500	Outcome 1	0.5	5,000	2,500
Outcome 2	0.5	11,000	5,500	Outcome 2	0.5	7,000	3,500
		Expected value	6,000			Expected value	6,000

The expected value is the sum of the outcomes weighted by the probability of them occurring.

Expected values have two main problems (apart from estimating the probabilities):

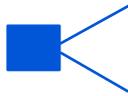
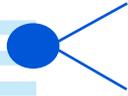
- (1) The expected value is not usually 'expected' in once-off projects. neither project above actually predicts \$6,000
- (2) The expected value does not give any information about risk. For example, in Project 1 above there is a huge difference between the two outcomes and, in particular, a very large downside risk where only 1000 of income is received, and that could be very serious for the firm. Project 2 is much safer, with a worse case expected of \$5,000.



9. Decision trees - example

Decision trees allow more complex projects and decisions to be mapped out.

The technique uses two symbols:

-  This is a decision point. There, managers can choose which route to take.
-  This is a chance point where managers have to use expected values of the outcomes. They cannot choose one route over the other.

For example:

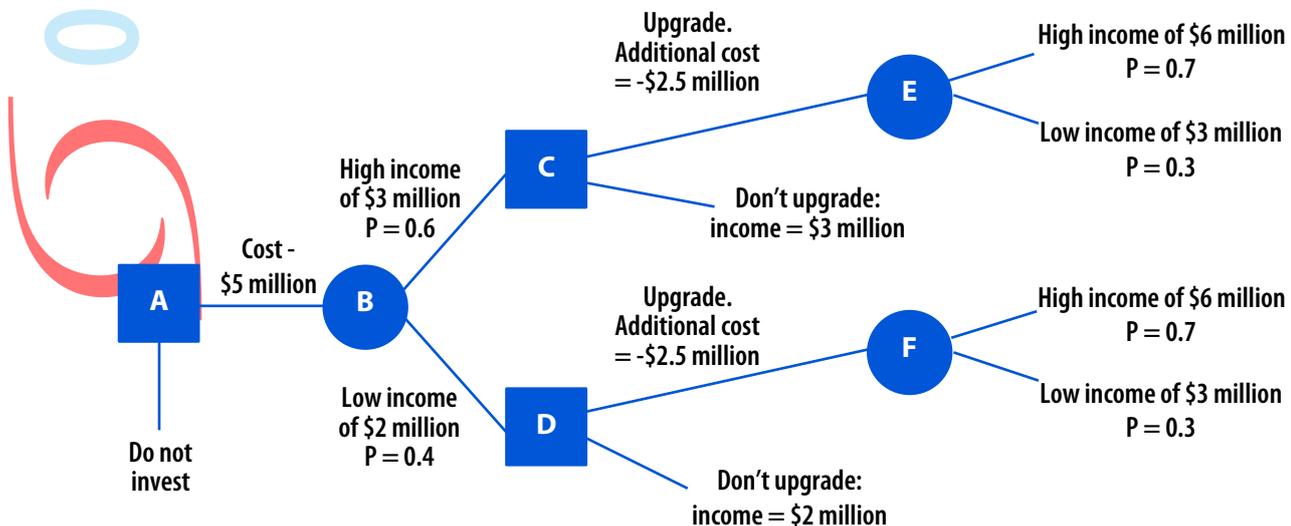
A project initially costs \$5 million and income for the first year will be \$3 million with a probability of 0.6 and an income of \$2 million with a probability of 0.4.

At the end of the second year the project could be upgraded for \$2.5 million and then income would be \$6 million with a probability of 0.7 or \$3 million with a probability of 0.3.

If the project were not upgraded, the year one income, whatever it had been, would repeat in year two.

10. Decision trees - solution

The project can be represented by the following diagram.



Having drawn the diagram, you then go to the right hand side and begin to 'roll-back' through the decisions and chance points.

Expected value at E = $0.7 \times 6 + 0.3 \times 3 = \5.1 million

Value at C is therefore:

$5.1 - 2.5 = \$2.6$ million or \$3 million. Therefore the decision at C should be not to upgrade.

Expected value at F is \$5.1 million (as for point E)



Value at D is therefore:

$5.1 - 2.5 = \$2.6$ million or $\$2$ million. Therefore the decision at D should be to upgrade.

Expected value at B is: $0.6 \times (3 + 3) + 0.4 \times (2 + 2.6) = 5.44$

Value at A is therefore $5.44 - 5 = 0.44$ or $\$Nil$, if nothing done.

Therefore, start the project. If there is high income in year 1, do not upgrade for year 2. If there is low income in year 1 then do upgrade for year 2.

11. Scenario planning

You will remember that earlier we used tools like PESTEL to help us to identify events that might occur and affect our organisation. Of course, many of the events are not certain, but we should be aware that, for example, interest rates might change, competitors might become more aggressive, a new product is licensed or a government might change. There are therefore many permutations of events that could occur and we need to try to make sense of those.

Scenario planning attempts to take into account all the things that could happen and from those to build a number of believable, alternative futures. Not all the events that could happen are likely to happen together. For example, if the government changes then we could predict that perhaps, interest rates would rise. In which case there is no point examining a scenario of new government and low interest rate – that is an implausible scenario. This greatly helps to reduce the number of ‘universes’ we have to consider and allows the organisation to concentrate on the few most likely ones.

	<i>Interest rate = 3%</i>	<i>Interest rate = 7%</i>
<i>Government 1</i>	Implausible combination	Scenario 1
<i>Government 2</i>	Scenario 2	Implausible combination

Here, the organisation would concentrate on what its response should be to each of the plausible scenarios.





Chapter 28

FINANCE

1. Managing for value

Organisations should choose strategies which offer their major stakeholders the best value in exchange for the resources used. This is known as 'managing for value'. In profit-seeking organisations this will mean maximising the long-term cash-generating capability of an organisation whilst taking account of preferences with regards to risk, stability of earnings and ethical considerations.

Choices to be made are:

- What type of capital to raise (broadly equity or loans)?
- How to invest that capital?
- How to control the company's operations?

2. Types of capital

The main sources of finance are equity and borrowings. Equity is obtained from

- The first owners
- Retention of earnings
- Issues to the public – both the initial issue and then rights issues.

Borrowings can be

- Term loans and debentures
- Overdrafts (repayable on demand)

Leasing is also a form of loan finance.

Convertibles start as loans but can then be converted into equity.

Preference shares give constant, almost guaranteed dividends.

3. Mix of capital

The real ownership of the company resides in the equity shares and these enjoy any capital gains arising from company success.

Loans and debentures are a cheaper source of finance than equity. They are less risky for investors (usually secured with constant interest) and borrowers enjoy tax relief. Therefore, some borrowing is good.



However, too much borrowing increases everyone's risk as it becomes harder and harder to be sure interest payments can be met as gearing rises. Therefore, the average cost of capital starts to rise at high gearing levels.

So, gearing must be kept at reasonable levels.

4. Investing the capital

After finance has been raised, the company has to decide how to invest it. There are two categories:

- Invest in current assets
- Invest in non-current assets

Some investment in current assets (inventory, receivables and cash at bank) is necessary to provide the organisation with liquidity. The more cash allowed to sit in a current bank account, the less difficulty the company will have paying its current liabilities as they become due. However, leaving cash in current assets is not really profit-generating.

To generate profits, capital has to be invested in non-current assets.

The company has to decide on the right balance and also has to decide on appropriate types of finance for each type of investment.

5. Match capital to asset

In general, it makes sense to raise capital that matches the life of the asset it is funding. This is what we do personally when taking out mortgages to buy property (25 years), car loans (around 3 years) or for holidays (credit card). Too much short-term borrowing means that the organisation lives 'hand-to-mouth': a high risk existence. Therefore, long-term capital is also used to invest in 'permanent' current assets.

<i>Type of asset</i>	<i>Typical finance</i>
Offices, factories, machinery	Equity, debentures
Equipment	Equity, debentures, term loans, leases
Inventory, receivables, seasonal liquidity problems	Equity, debentures, overdrafts, factors,

6. Over-trading

Businesses, particularly successful expanding ones can suffer from overtrading. As business increases more has to be invested in inventory and receivables and a business can find itself short of cash.

It is important to increase permanent capital as businesses grow.



Chapter 29

BUDGETING AND STANDARD COSTING

1. The budgetary process

The budgetary process is an essential part of planning. Indeed, a budget can be defined as a 'quantified plan'.

Budgets have the following important roles:

- Planning – a budget is a quantified plan: money, units, people, market share
- Forecasting – forecasting is a necessary step in establishing any plan.
- Coordination – all departments in the organisation should be co-ordinated and be in line with the limiting factor (principal budget factor).
- Communication – the budget is an effective way of informing departments and people what is expected of them.
- Authorisation – a budget figure (for example for advertising) authorises expenditure up to the budget amount.
- Motivation – budgets provide people with targets to aim for
- Evaluation – comparing budget to actual is the first step in evaluating performance. Sometimes performance might need to be improved; sometimes the budget might need to be changed.

2. Care in budget setting

Some care is needed when setting and using budgets for evaluation.

If the budget is too easy, performance will probably be pulled down.

If the budget is too difficult, employees can become demotivated.

If the budget is applied too strictly with no allowance for other important factors, data might be mis-reported and staff will be demotivated.

3. Standard costing

Standard costs are predetermined costs per unit of output that should be incurred under normal operating conditions.

Even if the use of standard costs does not progress to variance analysis, 'standards' are needed for budgeting. It is essential to know how much material and how many hours it will take to produce planned output and what these resources will cost.



Probably the best standards to use are 'currently attainable standards'. These should be achievable under normal operating conditions without being too easy.

4. Variance analysis

Variance analysis is a common way to try to find reasons for discrepancies between actual and budgeted performance.

You will have to know how to interpret them and to suggest their causes.

Above all it is important not to jump to conclusions when stating what caused a variance or who was responsible for them. Just because a production department used more material than might have been expected does not mean that that the operations in the production department was at fault. The purchasing department might have bought poor material, machines might be old and unreliable thus wasting some material, cheaper and worse staff might have been forced on the department and these people make errors.

5. Material variances

<i>The variances</i>	<i>Potential causes</i>
<p>Material price variance:</p> <p>Quantity of material actually used at actual price compared to what that quantity of material would cost if bought at standard price/unit.</p>	<ul style="list-style-type: none"> • Wrong standard cost/unit of material • Poor/excellent buying • Price changes since the standard was set • Exchange rate movements altering the price of imported material
<p>Material usage variance:</p> <p>The physical amount of material actually used compared to the standard amount that should be used for the actual output achieved, evaluated at the standard cost per unit.</p>	<ul style="list-style-type: none"> • Wrong standard usage/unit of production • Poor/excellent use of material • Material of different quality • Poor machine maintenance • Poor staff training



6. Labour variances

<i>The variances</i>	<i>Potential causes</i>
<p>Labour rate variance:</p> <p>The actual cost of labour paid for compared to what that amount labour should have cost if paid at the standard hourly rate.</p>	<ul style="list-style-type: none"> • Wrong standard rate/hour • Wage inflation • A different mix of labour eg better, more expensive people
<p>Labour efficiency variance:</p> <p>Number of hours actually worked compared to the standard number of hours that should be worked for the actual output achieved, evaluated at the standard rate per hour.</p>	<ul style="list-style-type: none"> • Wrong standard hours per unit • A different mix of labour • Better or worse training than expected • Good/poor supervision
<p>Labour idle time variance:</p> <p>Hours actually worked compared to hours paid for, evaluated at the standard rate per hour</p>	<ul style="list-style-type: none"> • Poor supervision • Machine breakdown • Lack of material • Poor job scheduling

7. Variable overhead variances

<i>The variances</i>	<i>Potential causes</i>
<p>Variable overhead rate variance:</p> <p>Amount of variable overhead actually paid, compared to what those hours of variable overhead should have cost if bought at standard hourly rate.</p>	<ul style="list-style-type: none"> • Wrong standard rate/hour • Different machines being used • Unexpected inflation relating to machine running.
<p>Variable overhead efficiency variance:</p> <p>Number of hours actually worked compared to the standard number of hours for the actual output achieved, evaluated at the standard rate per hour.</p>	<ul style="list-style-type: none"> • Wrong standard hours per unit • Machines of a different efficiency than expected. • Good/poor supervision • Good/poor machine maintenance .



8. Fixed overhead variances

<i>The variances</i>	<i>Potential causes</i>
Fixed overhead expenditure variance: Total amount of budgeted fixed overheads compared to total actual fixed overheads	<ul style="list-style-type: none"> • Wrong budget • Unexpected level of expenditure
Fixed overhead volume variance: Actual output in units compared to budgeted output (units), evaluated at the fixed overhead absorption rate per unit	<ul style="list-style-type: none"> • Wrong budget • Different output to what was expected.

9. Sales variances

<i>The variances</i>	<i>Potential causes</i>
Sales price variance: Actual volume sold times difference between actual and budgeted selling price	<ul style="list-style-type: none"> • Wrong budget • Different selling price to what was expected.
Sales volume variance: Actual volume sold compared to budget volume, evaluated at budgeted contribution per unit or at budgeted profit per unit.	<ul style="list-style-type: none"> • Wrong budget • Different selling price to what was expected (affects demand) • Change in marketing • Economic changes



10. Operating statement

Once variances have been calculated they can be conveniently displayed on an operating statement. Typically this reconciles budgeted profits or contribution to actual profit.

	<i>Favourable variances</i>	<i>Adverse variances</i>	<i>\$000</i>
Budgeted profit			x
Sales price variance		x	
Sales volume variance	x		
	<u>x</u>	<u>x</u>	<u>x</u>
			x
Material price variance		x	
Material usage variance	x		
Labour rate variance	x		
Labour efficiency variance	x		
Labour idle time variance		x	
Variable overhead rate variance		x	
Variable overhead efficiency variance	x		
	x	x	
Fixed overhead expenditure variance		x	
Fixed overhead volume variance	x		
	<u>x</u>	<u>x</u>	<u>x</u>
Actual profit			x



11. Example

A company buys and sells goods and has a sales budget of 10,000 units selling at \$100 each. The standard purchase price of a unit is \$70, and fixed costs (which include all costs except the purchase price of goods) are budgeted at \$200,000.

Actual results for the period show that 12,000 units were sold at a selling price of \$98. Fixed costs were \$220,000 which includes an additional \$10,000 spent on advertising.

The operating statement is therefore:

	\$	\$
Budgeted contribution 10,000 x (100 – 70)		300,000
Sales price variance (A) 12,000 x (98 – 100)		(24,000)
Sales volume contribution variance (F) 2,000 x (100 – 70)		<u>60,000</u>
		336,000
Budgeted fixed costs	200,000	
Fixed overhead expenditure variance (A)	<u>20,000</u>	
		(220,000)
Actual profit		<u>116,000</u>

Note: budgeted profit was \$100,000 (\$300,000 contribution - \$200,000 fixed costs)

Required

Outline what might have caused the three variances and include comments about the potential interdependencies of variances and what the strategies the company might therefore adopt to improve profits in the future.



12. Solution

Adverse sales price variance

This could simply be caused by market forces such as competitors dropping their selling prices, or a poor economy forcing companies to maintain or increase sales volumes by decreasing prices.

Alternatively it could be part of a more deliberate strategy to gain market share, to put pressure on competitors and to make the market less attractive to new entrants.

Potential interdependencies with other variances are discussed below.

Favourable sales volume variance

This could simply be caused by increased demand for the company's products. For example, a better economy, a competitor withdrawing or an increase in advertising.

Fixed overhead variance

It is assumed that the \$10,000 increase in advertising was deliberate, either to make a play for a higher market share or to defend the company's current position if a competitor had become more aggressive.

Interdependencies

There is probably a connection between the favourable volume variance, the unfavourable price variance and the unfavourable \$10,000 additional advertising spend. It is not possible to separate out the causes and effects using the data provided and this is something that the company should investigate further.

The most favourable outcome of the investigation would be that the company deliberately spent \$10,000 more on advertising, reduced its price as part of the campaign, and that these changes boosted demand by 2,000 units.

That was clearly a worthwhile effort because contribution increased by \$36,000 and after the additional advertising profits would have increased by \$26,000. As part of future strategies, the company should try to predict the effect of reducing selling costs further and of increasing advertising as it might be worthwhile pursuing those policies even further.

There is, of course, a danger that competitors will retaliate and that a price war begins.



13. The changing role of the accountant

Burns and Scapens have studied changes in the management accounting function and noted that it has changed focus from financial control to business support.

This means that management accountants have become more generalists within businesses and are providing an internal consulting service for managers. They have named this new role a 'hybrid accountant'.

Burns and Scapens state that there are three main forces for change:

- Technology,
- Management structure
- Competition.

These changes mean that management accountants have to understand the needs of particular managers and then work with them to extract valuable reports from the MIS. It may also require the development of different performance measures beyond the traditional measure of profit. From the organisation's perspective, the accountant will be a guide to the SBU manager to ensure that strategic goals are reflected in their performance management

In addition, the following will have influenced the role of the management accountant:

- Increasing internationalisation and globalisation
- Deregulation and privatisation of industries
- New business processes eg just in time
- A need for more rapid responses
- The increasing importance of non-financial indicators



Chapter 30

CAPITAL RATIONING AND SENSITIVITY ANALYSIS

1. Capital rationing Example

A company has \$24 million cash available and could spend this on three of Ansoff matrix quadrants.

Project 1: Market penetration: Cost \$8m; inflows \$2.4m pa for 10 years

Project 2: Market development: Cost \$10m; inflows \$3.5m pa for 10 years

Project 3: Diversification: Cost \$12m; inflows \$3.2m per year for 10 years

The company has decided to use a discount rate of 10% when evaluating their net present value.

Required

- (a) **Determine which combination of projects would maximise the company's NPV if the projects are indivisible.**
- (b) **Comment on using 10% for all three evaluations.**
- (c) **Recalculate the answer on the assumption that projects were divisible.**

Note the 10 year 10% cumulative discount factor is 6.145



2. Capital rationing Solution

(a) Project 1 NPV = $-\$8m + 6.145 \times 2.4 = \$6.7m$

Project 2 NPV = $-\$10m + 6.145 \times 3.5 = \$11.5m$

Project 3 NPV = $-\$12m + 6.145 \times 3.2 = \$7.7m$

Possible combinations	NPV
Project 1 + project 2	$6.7 + 11.5 = 18.2$
Project 1 + project 3	$6.7 + 7.7 = 14.4$
Project 2 + project 3	$11.5 + 7.7 = 19.2$

The best combination using the company's assumptions is to undertake Project 2 + Project 3 which are predicted to result in an NPV of \$19.2m

- (b) Generally, the different quadrants in Ansoff's matrix are expected to have different risk return characteristics.

Market penetration means the organisation is on its home ground (same products and markets) so risk should be low.

Market development means that the company is launching into a new, relatively unknown market, so risks are higher.

Diversification is riskiest of all and companies have a very high chance of failure.

Given the three risks characteristics of the different options, it might not be wise to evaluate all NPVs using 10%. For example, it might be appropriate to evaluate Project 3 using a 15% (a 3% risk premium). That would reduce that project's NPV to:

$$\text{NPV} = -\$12m + 5.019^* \times \$3.2m = 4.1$$

(* the 10 year 15% cumulative factor)

Project 1 and Project 2 would then show the highest NPV.

- (c) If the projects were infinitely divisible, then the approach would be to calculate the NPV per \$ needed in the capital restricted period. This gives an 'earning rate' per \$ invested and money would be allocated to the highest earning rate projects first.

$$\text{Project 1 NPV}/\$ = 6.7/8 = 0.84$$

$$\text{Project 2 NPV}/\$ = 11.5/10 = 1.15$$

$$\text{Project 3 NPV}/4 = 7.7/12 = 0.64$$

So Project 2 then Project 1 would be done in preference, leaving \$6m that would be enough to undertake 50% of Project 3.

$$\text{NPV} = 6.7 + 11.5 + 0.5 \times 7.7 = 22.05.$$



3. Sensitivity analysis Example

Here is a project appraised at a discount rate of 10%. Sales volume is estimated at 1,000 units per year.

<i>Time</i>	<i>Flow</i>	<i>\$</i>	<i>10% Discount factor</i>	<i>DCF \$</i>
0	Cost	(130,000)	1	(130,000)
1 – 4	Sales	1,000 @\$100 = \$100,000	3.17	317,000
1 – 4	Marginal costs	1,000 @\$60 = (\$60,000)	3.17	(190,200)
4	Scrap	25,000	0.683	17,075
			NPV	13,875

The NPV is positive so the conventional advice would be to accept the project. However, the sensitivity of this recommendation to the various assumptions should be examined. This is done by seeing how far an assumption can change before the NPV = 0. Each assumption has to be assessed separately.

Required

Examine the sensitivity of the solution to:

- (a) Initial cost
- (b) Selling price
- (c) Sales volume
- (d) Scrap value
- (e) Discount rate



4. Sensitivity analysis Solution

- (a) If the NPV is to be zero, the cost must rise by \$13,875.

$$\text{Sensitivity} = 13,875/130,000 = 10.7\%$$

- (b) Selling price affects the revenue figure. If its PV of \$317,000 falls 13,875 then NPV = 0 .

$$\text{Sensitivity} = 13,875/317,000 = 4.4\%$$

- (c) Sales volume affects both revenue and marginal costs: $317,000 - 190,200 = 126,800$

$$\text{Sensitivity} = 13,875/126,800 = 10.9\%$$

- (d) The PV of the scrap value must fall by \$13,875 to produce a zero NPV.

$$\text{Sensitivity} = 13,875/17,075 = 82\%$$

- (e) To work out the sensitivity to the discount rate, the IRR has to be calculated. So, NPV at 20%:

Time	Flow	\$	10% Discount factor	DCF \$
0	Cost	(130,000)	1	(130,000)
1 – 4	Sales	1,000 @\$100 = \$100,000	2.59	259,000
1 – 4	Marginal costs	1,000 @\$60 = (\$60,000)	2.59	(155,400)
4	Scrap	25,000	0.482	12,050
			NPV	(14,350)

$$\text{IRR} = 10 + (20 - 10) \times 13,875 / (13,875 + 14,350) = 14.9, \text{ or around } 15\%$$

So, the conclusion is very sensitive to the selling price, which only needs to fall by about 4.4% before the project just breaks even. Not only is 4.4% small, but the selling price must be difficult to estimate.

The cost could rise by about 10%. Not a large over-run, but at least cost is easier to predict and control than future flows.

Scrap value could fall by 82% - a large fall, but it will usually be difficult to predict the scrap amount.

The discount rate can rise from 10% to 15% (50%) and that would probably be judged unlikely.



Chapter 31

MARGINAL AND RELEVANT COSTING; ABC

1. Use of marginal and relevant costing

Marginal and relevant costing techniques are used in:

- Finding the best use of restricted resources
- Make/buy decisions
- Continuation/closure decisions
- Pricing special contracts

We will start by brief revision of what revenues and costs might be relevant

2. Identifying marginal and relevant costs

Marginal revenue is usually an easy figure to find: it is just the additional revenue from selling one more unit or from taking on a contract.

Relevant costs are more difficult. They fall into two main groups:

- Marginal costs – additional costs caused by the decision
- Opportunity costs – revenue forgone as a result of the decision

The following costs are never relevant:

- Re-apportioned current fixed overheads
- Depreciation
- Book costs
- Sunk (past) costs.

If the decision changes the pattern of cash flows, then those cash flows are relevant



Use of scarce resources

Use as an index: Contribution/unit of scarce resource needed

The higher the index the better the earning rate of the resource.

For example:

Material available = 1200 kgs

Product A: contribution/unit = \$24; uses 10 kg/unit; maximum demand = 80 units

Product B: contribution/unit = \$15; uses 5 kg/unit; maximum demand = 200 units

Solution

To make maximum demand of both products would take: $10 \times 80 + 5 \times 200 = 1,800$ kg, so material is a scarce of restricting resource.

Contribution/unit of scarce resource needed:

Product A = $\$24/10 = \2.4 ; Product B = $\$15/5 = \3.0

Therefore make B in preference to A

200 units (maximum demand) of B will consume 1000kg and generate \$3,000 contribution.

There are 200 kgs of material left, which is enough to allow 20 units. These will generate \$480

Therefore, total maximum contribution = \$3,480.

3. Make or buy decisions

When resources are limited, in order to meet full sales, it might be possible to buy in some products rather than manufacturing them. Which should be made and which bought?

The firm should first concentrate on making units where the difference between the make and buy price is greatest. But, as with the previous example, it is not absolute savings we need to look at but savings per unit of scarce resource.

Example

Material available = 1200 kgs

Product A: manufacturing cost /unit = \$20; buy-in cost /unit = \$25; uses 10 kg/unit;
maximum demand = 80 units

Product B: manufacturing cost/unit = \$25; buy-in cost = \$35; uses 5 kg/unit;
maximum demand = 200 units



Solution

Saving per unit of making compared to buying:

$$A = \$25 - £20 = \$5; B = \$35 - \$25 = \$10$$

Saving per unit of scarce resource:

$$A = \$5/10 = \$0.5; B = \$10/5 = £2$$

Therefore make B in preference.

Production schedule:

Make all 200 units of B. This will consume 1000 kgs, leaving 200 kgs

Make 20 units of A (uses remaining material)

Buy 60 units of A (assuming a profit can be made when bought in)

3.1. Closure/continuation

When considering closure decisions compare costs saved (marginal costs plus any fixed costs avoided) to revenue lost.

- It is worth closing if the costs saved exceed the revenue lost.
- It is worth continuing if the revenue lost exceeds the costs saved

4. Special contracts

The minimum acceptable contract price = the relevant costs of the contract

Example

Note carefully opportunity costs such as inventory. Say that 1000 kg of Material X was needed and that 700 kgs are in inventory. The 700 kgs cost \$10/kg, could be sold now for \$9/kg (the company has no other use for the material) and more could be bought for \$11/kg.

What is the relevant cost of the material?**Solution:**

Note that the historical cost of \$10 is irrelevant: it's a sunk cost.

If the contract were not taken up, 700 kgs of material would be sold for \$9, so $\$9 \times 700 = \$6,300$ is an opportunity cost.

The remaining 300 kgs will have to be bought for $\$11/\text{kg} = \$3,300$

Total relevant cost is therefore $= \$3,300 + \$6,300 = \$9,600$



5. Activity based costing Example

A company manufactures two products with the following cost structures:

	<i>Product A</i>	<i>Product B</i>
Expected sales volume	10,000 units	2,000 units
	\$	\$
Marginal cost	20	50
Fixed costs	50	100
Total absorption cost	70	150
Selling price (50% mark-up)	105	225

Product B is more complex to manufacture than Product A, taking twice the amount of production time and requiring more expensive components. It sells in a much lower volume than Product A. Production is carried out in a highly automated factory. The annual fixed production costs of \$700,000 have been absorbed on a simple production time basis.

However, whereas Product A is produced in batches of 1,000 units, Product B is produced in batches of only 100 units. Set-up is very complex and it is estimated that 30% of fixed costs are set-up costs incurred every time production of a batch has to be organised. The company is considering costing its products using an activity based costing approach for set-up costs.

Competing products from other manufacturers sell at \$100 for Product A competitors, and \$250 for product B competitors.

Required

- (a) Calculate each product's cost and selling price using activity based costing and comment on any changes from the original results and any implications there might be for future production strategies.
- (b) Comment on the company's current and future pricing policies.



6. Activity based costing Solution

- (a) Under ABC, \$210,000 of fixed costs will be driven by set-ups (30% x \$700,000). The remaining 70% will be absorbed as present over 12,000 units.

For set-ups:

Total number of set-ups driving (causing) the set-up cost of \$210,000 is:

$$10,000/1000 + 2,000/100 = 30$$

$$\text{Cost/set-up} = \$210,000/30 = \$7,000$$

The set-up cost in a production run of 1,000 units of A = \$7,000/1000 = \$7

The set-up cost in a production run of 100 units of B = \$7,000/100 = \$70.

The new cost structures under ABC would be:

	<i>Product A</i>	<i>Product B</i>
	\$	\$
Marginal cost	20	50
Set-up costs	7	70
Fixed costs (70% of original)	35	70
Total absorption cost	62	190
Selling price (50% mark-up)	93	285

ABC has therefore pushed more costs towards the less efficient production used for Product B. Under ABC, set-up costs absorbed into Product B cost 10 times those of Product A (previously these costs were apportioned 1:2 on the basis of time in production).

Product B is very inefficient to set-up and produce, and its costs would be radically decreased if batch sized could be increased. It is not clear why Product B is produced in such very small batches, but an obvious reason is that Product B is perishable. If it were produced in the same batch size as Product A, only two production runs per year would be needed, but that implies high, slow-moving inventory.

- (b) Summary selling prices are:

	<i>Product A</i>	<i>Product B</i>
	\$	\$
Market prices of close competitors	100	250
Original cost + 50% mark-up	105	225
New cost + 50% mark-up	93	285

If the markets and products are very competitive, then market prices will have to be, or should be, charged. So, under the original approach Product A would not have sold well at \$105 if competing products could be bought for \$100. If the company were able to introduce a degree of differentiation into its products, then it has more options. Differentiation allows non-price competition to be used. For example, a strong brand name can allow companies to charge premium prices for otherwise identical products. So, if Product A is selling well at \$105, it might be worthwhile exploring what would happen with even higher prices and more advertising.



The recalculation of the selling price under ABC shows that Product A is made more cheaply than originally thought and it would be worthwhile for the company to explore whether it was the cost leader. That would give access to a cost leadership strategy where the company can make very good profits whilst selling at the market price, or it could reduce its prices in the hope of pushing less efficient competitors from the market.

Under the conventional approach, the cost Product B, appears to have been understated and its selling price set too low – both with respect to a cost plus approach (which hopes to cover costs by a mark-up) and with reference to the market prices that seem to have been available. Under ABC, the company would like to charge \$285. That might be possible if the product could be differentiated sufficiently. Even if a selling price of only \$250 could be achieved, this is still in excess of the new total cost and well in excess of the marginal cost of production. Product B would be worth discontinuing only if the expected contribution at market price of:

$$2000 \times (250 - 50) = 400,000$$

were compensated for by a reduction in fixed costs of that amount. Given that total fixed costs are \$700,000 and most production effort is spent on Product A, it is unlikely that these savings could be achieved.



Chapter 32

RATIO ANALYSIS

1. Groups of ratios

There are several groups of financial ratios:

- Profitability
- Efficiency
- Liquidity
- Gearing
- Investment ratios

You must learn the various ratios and it is important that you are able to discuss briefly the relevance of the various ratios, and also their limitations.

Very few of the ratios mean much on their own – most are only useful when compared with the ratios for previous years or for similar companies.

Many of the ratios use figures from the Statement of Financial Position. These only represent the position at one point in time, which could be misleading. For example, the level of receivables could be unusually high at the year end, simply because a lot of invoicing was done just before the year end. Perhaps more sensible in that sort of case would be to use the average for the year. Normally in the examination you will be expected simply to use Statement of Financial Position figures at the end of the year, but do be prepared to state the problem if relevant.



2. Profitability ratios

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

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

Gross profit is the 'main-spring' of profit generation. If gross profit stays high, but net profit falls, this can imply that expenses are poorly controlled.

$$\text{Return on capital employed} = \frac{\text{Profit before interest and tax} \times 100}{\text{Total long term capital}}$$

(Long-term capital = share capital + reserves + long-term liabilities)

$$\text{Asset turnover} = \frac{\text{Revenue}}{\text{Total long term capital}}$$

Asset turnover measures how hard the assets are worked: \$ of revenue from each \$ of capital.

NB: ROCE = asset turnover × net profit margin

3. Efficiency ratios

$$\text{Inventory days} = \frac{\text{Inventory}}{\text{Cost of sales}} \times 365$$

Too high can indicate inefficient use of inventory, or inventory that won't sell.

$$\text{Average collection period (receivables days)} = \frac{\text{Trade receivables}}{\text{Revenue}} \times 365$$

$$\text{Average payment period (payables days)} = \frac{\text{Trade payables}}{\text{Purchases}} \times 365$$

Long collection periods might indicate inefficient receivable management – or agreeing longer credit to compete or win contracts.



4. Liquidity ratios

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

$$\text{Quick ratio (or acid test)} = \frac{\text{Current assets} - \text{Inventory}}{\text{Current liabilities}}$$

If too low, the organisation will have trouble paying its suppliers and employees on time.

5. Gearing

$$\text{Gearing ratio} = \frac{\text{Long term liabilities}}{\text{Shareholders' funds}} \%$$

$$\text{Interest cover} = \frac{\text{Profit before interest and tax}}{\text{Interest}}$$

The higher the gearing ratio, the greater the danger that interest cannot be paid. The lower the interest cover, the greater the danger that interest cannot be paid.

6. Investor ratios

$$\text{P/E ratio} = \frac{\text{Price per share}}{\text{Earnings per share}}$$

Different economic sectors tend to have different characteristic P/E ratios. The price/share is the current price, but the earnings per share is the EPS from the last financial statements. If the P/E is higher than expected for a sector, it means that shareholders are optimistic about earnings growth and are willing to put a relatively high price on the share. If a company's P/E ratio is low for its sector, investors are pessimistic about future earnings.

$$\text{Earnings per share} = \frac{\text{Earnings after tax and preference dividends}}{\text{Number of ordinary shares}}$$

Shareholders like to see this increase. It can decrease when new issues are made and the capital raised hasn't yet produced profits.

Paying too much for an acquisition (for example by a share exchange) can depress the EPS



