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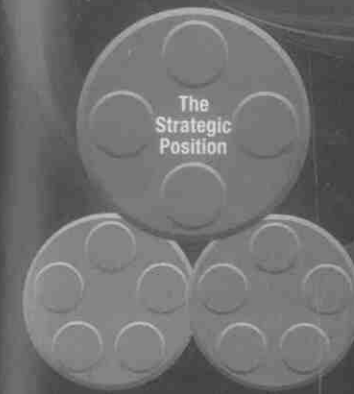


2

The Environment

LEARNING OUTCOMES

After reading this chapter you should be able to:

- → Analyse the broad macro-environment of organisations in terms of political, economic, social, technological, environmental (green) and legal factors (PESTEL).
- → Identify key drivers in this macro-environment and use these key drivers to construct alternative scenarios with regard to environmental change.
- → Use five forces analysis in order to define the attractiveness of industries and sectors for investment and to identify their potential for change.
- → Identify strategic groups, market segments and critical success factors, and use them in order to recognise strategic gaps and opportunities in the market.

Photo: Dominic Burke/Alamy Images

2.1 INTRODUCTION

The environment is what gives organisations their means of survival. In the private sector, satisfied customers are what keep an organisation in business; in the public sector, it is government, clients, patients or students that typically play the same role. However, the environment is also the source of threats: for example, hostile shifts in market demand, new regulatory requirements, revolutionary technologies or the entry of new competitors. Environmental change can be fatal for organisations. To take one example, after 200 years of prosperity, print publisher Encyclopedia Britannica was nearly swept out of existence by the rise of electronic information sources, such as Microsoft's Encarta and the online Wikipedia. It is vital that managers analyse their environments carefully in order to anticipate and – if possible – influence environmental change.

This chapter therefore provides frameworks for analysing changing and complex environments. These frameworks are organised in a series of 'layers' briefly introduced here and summarised in Exhibit 2.1:

- *The macro-environment* is the highest-level layer. This consists of broad environmental factors that impact to a greater or lesser extent on almost all organisations. Here, the PESTEL framework can be used to identify how future trends in the *political, economic, social, technological, environmental ('green') and legal* environments might impinge on organisations. This PESTEL analysis provides the broad 'data' from which to identify *key drivers of change*. These key drivers can be used to construct *scenarios* of possible futures. Scenarios consider how strategies might need to change depending on the different ways in which the business environment *might* change.
- *Industry*, or *sector*, forms the next layer with this broad general environment. This is made up of organisations producing the same products or services. Here the *five forces* framework is particularly useful in understanding the attractiveness of particular industries or sectors and potential threats from outside the present set of competitors. This chapter's key debate (Illustration 2.6) addresses the importance of industry factors, rather than business-specific factors, in determining success.
- *Competitors and markets* are the most immediate layer surrounding organisations. Within most industries or sectors there will be many different organisations with different characteristics and competing on different bases, some closer to a particular organisation, some more remote. The concept of *strategic groups* can help identify close and more remote competitors. Similarly, in the marketplace, customers' expectations are not all the same. They have a range of different requirements the importance of which can be understood through the concepts of *market segments* and *critical success factors*.

This chapter works through these three layers in turn, starting with the macro-environment.

Exhibit 2.1 Layers of the business environment

2.2 THE MACRO-ENVIRONMENT

The three concepts in this section – PESTEL, key drivers and scenarios – are interrelated tools for analysing the broad macro-environment of an organisation. PESTEL provides a wide overview; key drivers help focus on what is most important; and scenarios build on key drivers to explore different ways in which the macro-environment might change.

2.2.1 The PESTEL framework

The PESTEL framework categorises environmental influences into six main types: political, economic, social, technological, environmental and legal

www.pearsoned.co.uk/ecs KEY CONCEPT PESTEL

The PESTEL framework (Illustration 2.1) provides a comprehensive list of influences on the possible success or failure of particular strategies. PESTEL stands for Political, Economic, Social, Technological, Environmental and Legal.[1] Politics highlights the role of governments; Economics refers to macro-economic factors such as exchange rates, business cycles and differential economic growth rates around the world; Social influences include changing cultures and demographics, for example ageing populations in many Western societies; Technological influences refer to innovations such as the Internet, nanotechnology or the rise of new composite materials; Environmental stands specifically for 'green' issues, such as pollution and waste; and finally Legal embraces legislative constraints or changes, such as health and safety legislation or restrictions on company mergers and acquisitions.

For managers, it is important to analyse how these factors are changing now and how they are likely to change in the future, drawing out implications for the

Illustration 2.1

PESTEL analysis of the airline industry

Environmental influences on organisations can be summarised within six categories. For the airline industry, an initial list of influences under the six PESTEL analysis categories might include the following:

Political

- Government support for national carriers
- Security controls
- Restrictions on migration

Economic

- National growth rates
- Fuel prices

Social

- Rise in travel by elderly
- Student international study exchanges

Technological

- Fuel-efficient engines and airframes
- Security check technologies
- Teleconferencing for business

Environmental

- Noise pollution controls
- Energy consumption controls
- Land for growing airports

Legal

- Restrictions on mergers
- Preferential airport rights for some carriers

Questions

1 What additional environmental influences would you add to this initial list for the airline industry?

2 From your more comprehensive list, which of these influences would you highlight as likely to be the 'key drivers for change' for airlines in the coming five years?

organisation. Many of these factors are linked together. For example, technology developments may simultaneously change economic factors (for example, creating new jobs), social factors (facilitating more leisure) and environmental factors (reducing pollution). As can be imagined, analysing these factors and their inter-relationships can produce long and complex lists.

Rather than getting overwhelmed by a multitude of details, therefore, it is necessary to step back eventually to identify the **key drivers for change**. Key drivers for change are the high-impact factors likely to affect significantly the success or failure of strategy. Typical key drivers will vary by industry or sector. For example, a clothing retailer may be primarily concerned with social changes driving customer tastes and behaviour, for example forces encouraging out-of-town shopping. A computer manufacturer is likely to be concerned with technological

The key drivers for change are environmental factors that are likely to have a high impact on the success or failure of strategy

change, for example increases in microprocessor speeds. Public sector managers are likely to be especially concerned with social change (for example, an ageing population), political change (changing government funding and policies) and legislative change (introducing new requirements). Identifying key drivers for change helps managers to focus on the PESTEL factors that are most important and which must be addressed as the highest priority. Many other changes will depend on these key drivers anyway (for example, an ageing population will drive changes in public policy and funding). Without a clear sense of the key drivers for change, managers will not be able to take the decisions that allow for effective action.

2.2.2 Building scenarios

When the business environment has high levels of uncertainty arising from either complexity or rapid change (or both), it is impossible to develop a single view of how environment influences might affect an organisation's strategies and indeed it would be dangerous to do so. Scenario analyses are carried out to allow for different possibilities and help prevent managers from closing their minds to alternatives. Thus **scenarios** offer plausible alternative views of how the business environment of an organisation might develop in the future.[2] They typically build on PESTEL analyses and the key drivers for change, but do not offer a single forecast of how the environment will change.

Scenarios are detailed and plausible views of how the business environment of an organisation might develop in the future based on key drivers for change about which there is a high level of uncertainty

Scenarios typically start from the key drivers with the greatest uncertainty. Such key drivers could create radically different views of the future according to how they turn out. For example, in the oil business, key drivers might be technological change, oil reserves, economic growth and international political stability. It might be assumed that technological change and oil reserves are relatively certain, while economic growth and political stability are not. Scenarios could be constructed around different views about future political stability and economic growth. These key drivers are of course interrelated: high political instability and low economic growth are likely to go together. Constructing plausible alternative views of how the business environment might develop in the future therefore depends on knitting together interrelated drivers into internally consistent scenarios. In this analysis so far, therefore, two internally consistent and plausible scenarios could be proposed: one based on low growth and high instability, the other based on high growth and low instability.

Note that scenario planning does not attempt to predict the unpredictable: the point is to consider plausible alternative futures. Sharing and debating alternative scenarios improves organisational learning by making managers more perceptive about the forces in the business environment and what is really important. Managers should also evaluate and develop strategies (or contingency plans) for each scenario. They should then monitor the environment to see how it is actually unfolding and adjust strategies accordingly.

Because debating and learning are so valuable in the scenario building process, and scenarios deal with such high uncertainty, some scenario experts advise managers to avoid producing just three scenarios. Three scenarios tend to fall into a range of 'optimistic', 'middling' and 'pessimistic'. Managers naturally focus on the middling scenario and neglect the other two, reducing the amount

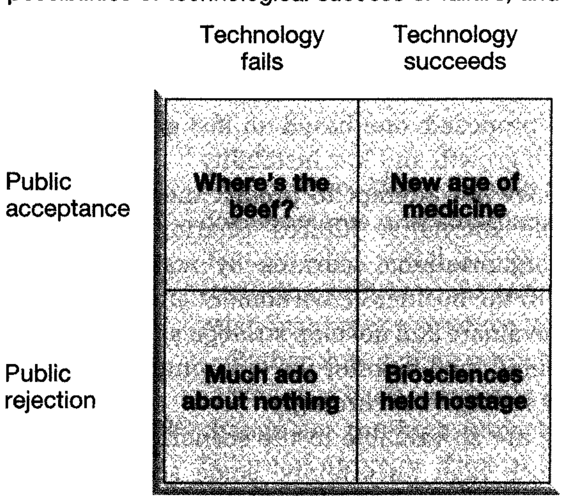
Illustration 2.1

Scenarios for the biosciences in 2020

Nobody knows the future, but they can prepare for possible alternatives.

In 2006, researchers at the Wharton Business School collaborated with leading companies such as Hewlett Packard, Johnson & Johnson and Procter & Gamble to produce four scenarios for the future of biosciences in 2020. Biosciences include exciting high-tech industries such as genomics, stem cell therapy, cloning and regenerative medicine. The aim was to provide a broad framework for governments, business, researchers and doctors to work within as they considered the future for their particular specialities. The Wharton team were mindful that previous high-tech domains had failed to deliver on their initial promise: nuclear power for example fell radically out of favour from the late 1970s. The future for the biosciences is far from certain.

The Wharton team identified two fundamental but uncertain drivers for change: technological advance and public acceptance. On the first, the uncertainty was about the success of the technologies: after all, nuclear power had not deliverd the cheap energy originally hoped for. With regard to the second, public opinion regarding the biosciences is in the balance, with many calling for an end to stem cell research and cloning. The possibilities of technological success or failure, and public acceptance or rejection, define a matrix with four basic scenarios.



Source: Adapted from P.J.H. Schoemaker and M.S. Tomczyk (eds) *The Future of Biosciences*, The Mack Center, 2006.

Where's the beef proposes a world in which large corporate and government research initiatives has failed to deliver hoped-for cures for diseases such as Alzheimer's and AIDS, but the public still has high expectations. Companies would be under fire and at risk of political intervention. The *Much ado about nothing* scenario is a world in which the public becomes sceptical after many technological disappointments. The result is that government funding for company and university research dries up. *The Biosciences held hostage* scenario is a very different one, in which technological successes actually frighten the public into a reaction against technology, ethical and safety concerns driving tight restrictions on research, testing and marketing. Finally, the *New age of medicine* offers the prospect of both success and acceptance, a world in which private corporations and university research labs would prosper together as they delivered breakthrough innovations to a grateful public.

The point of the four scenarios is not to say that one is more likely than the others. The Wharton team show that all four scenarios are perfectly possible. Whereas bioscience companies might easily become too focused on the positive *New age* scenario, they need to bear in mind the other possibilities. The implication is that they should be cautious in their expectations of technological breakthroughs and manage public opinion skillfully, otherwise biosciences could become the nuclear industry of the twenty-first century.

Source: http://mackcenter.wharton.upenn.edu/biosciences.

Question

Over which of the two drivers – technological advance and public acceptance – do companies have the most influence? How should they exercise this influence?

of organisational learning and contingency planning. It is therefore typically better to have two or four scenarios, avoiding an easy mid-point. It does not matter if the scenarios do not come to pass: the value lies in the process of exploration and contingency planning that the scenarios set off.

Illustration 2.2 shows an example of scenario planning for the biosciences to 2020. Rather than incorporating a multitude of factors, the authors focus on two key drivers which (i) have high potential impact and (ii) are uncertain: technological advance and public acceptance. Both of these drivers may have different futures, which can be combined to create four internally consistent scenarios of the future. These four scenarios are each given memorable titles, to facilitate communication and debate. The authors do not predict that one will prevail over the others, nor do they allocate relative probabilities. Prediction would close down debate and learning, while probabilities would imply a spurious kind of accuracy.

Scenarios are especially useful where there are a limited number of key drivers influencing the success of strategy; where there is a high level of uncertainty about such influences; where outcomes could be radically different; and where organisations have to make substantial commitments into the future that may be highly inflexible and hard to reverse in adverse circumstances. The oil industry, where companies must invest in exploring oilfields which may have lives of 20 years or more, has traditionally been a leader in the use of scenarios because it faces a combination of all four of these conditions.[3]

2.3 INDUSTRIES AND SECTORS

The previous section looked at how forces in the macro-environment might influence the success or failure of an organisation's strategies. But the impact of these general factors tends to surface in the more immediate environment through changes in the competitive forces surrounding organisations. An important aspect of this for most organisations will be competition within their industry or sector. Economic theory defines an **industry** as 'a group of firms producing the same principal product'[4] or, more broadly, 'a group of firms producing products that are close substitutes for each other'.[5] This concept of an industry can be extended into the public services through the idea of a *sector*. Social services, health care or education also have many producers of the same kinds of services, which are effectively competing for resources. From a strategic management perspective it is useful for managers in any organisation to understand the competitive forces in their industry or sector since these will determine the attractiveness of that industry and the likely success or failure of particular organisations within it.

An industry is a group of firms producing the same principal product or service

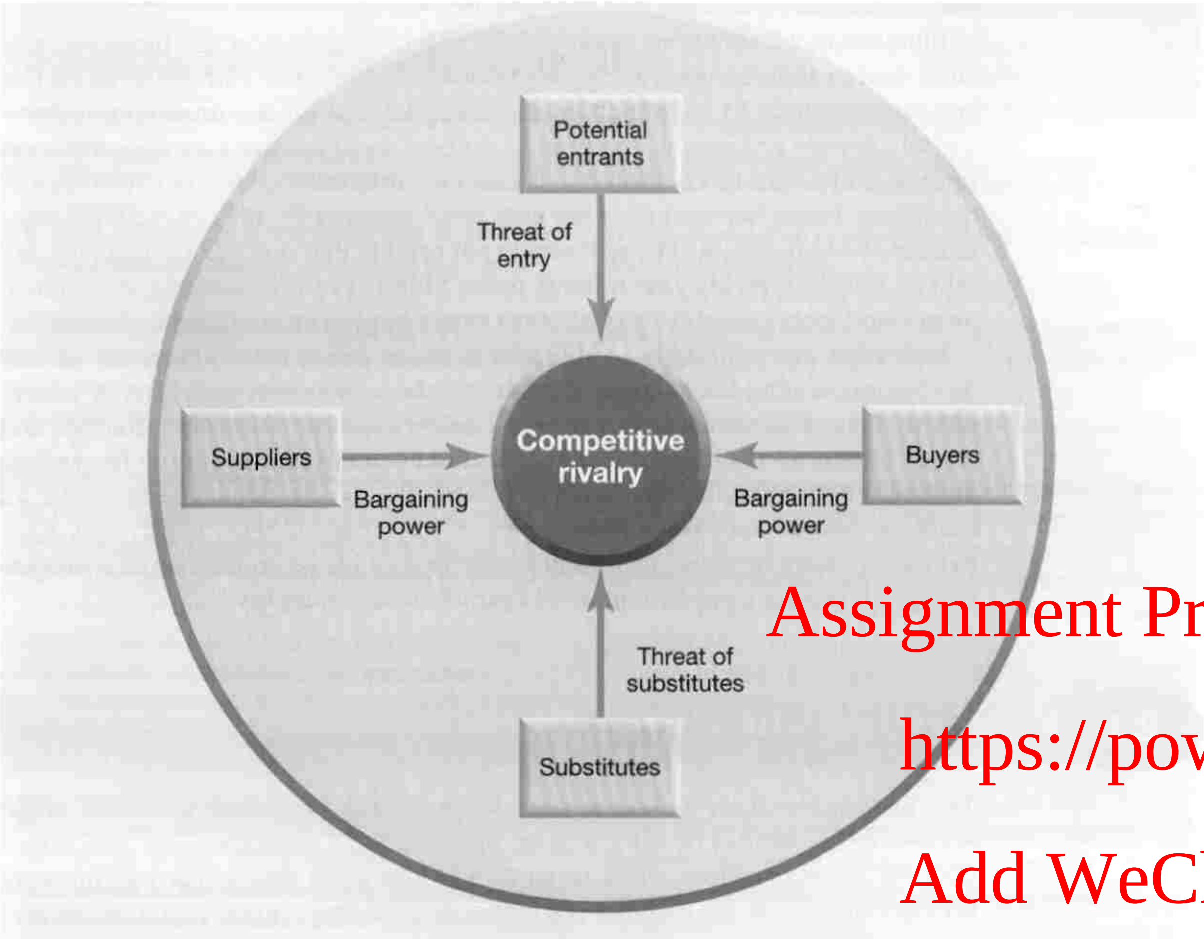
This section looks first at Michael Porter's *five forces framework* for industry analysis and then introduces techniques for analysing the *dynamics* of industries or sectors.

The five forces framework helps identify the attractiveness of an industry or sector in terms of competitive forces

2.3.1 Competitive forces – the five forces framework

Porter's **five forces framework**[6] was originally developed as a way of assessing the attractiveness (profit potential) of different industries. The five forces constitute

Exhibit 2.2 The five forces framework



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KEY CONCEPT
Porter's five forces

an industry's 'structure' (see Exhibit 2.2). Although initially developed with businesses in mind, industry structure analysis with the five forces framework is of value to most organisations. It can provide a useful starting point for strategic analysis even where profit criteria may not apply: in most parts of the public sector, each of the five forces has its equivalents. As well as assessing the attractiveness of an industry or sector, the five forces can help set an agenda for action on the various 'pinch-points' that they identify.

The five forces are: the *threat of entry* into an industry; the *threat of substitutes* to the industry's products or services; the *power of buyers* of the industry's products or services; the *power of suppliers* into the industry; and *the extent of rivalry* between competitors in the industry. Porter's essential message is that where these five forces are high, then industries are not attractive to compete in. There will be too much competition, and too much pressure, to allow reasonable profits. The rest of this section will introduce each of the five forces in more detail.

The threat of entry

Barriers to entry are factors that need to be overcome by new entrants if they are to compete successfully

How easy it is to enter the industry obviously influences the degree of competition. Threat of entry depends on the extent and height of **barriers to entry**. Barriers are the factors that need to be overcome by new entrants if they are to compete successfully. High barriers to entry are good for incumbents (existing competitors), because they protect them from new competitors coming in. Typical barriers are as follows:

- *Scale and experience*. In some industries, *economies of scale* are extremely important: for example, in the production of automobiles or the advertising of fast-moving consumer goods. Once incumbents have reached large-scale production, it will be very expensive for new entrants to match them and until they reach a similar volume they will have higher unit costs. This scale effect is accentuated where there are high *investment requirements* for entry, for example research costs in pharmaceuticals or capital equipment costs in automobiles. Barriers to entry also come from *experience curve* effects that give incumbents a cost advantage because they have learnt how to do things more efficiently than an inexperienced new entrant could possibly do (see Chapter 3). Until the new entrant has built up equivalent experience over time, it will tend to produce at higher cost. Of course, changing 'business models' can alter scale effects or make certain kinds of experience redundant. For example, Internet banking requires only 10,000 customers to be viable (particularly if they are from a profitable niche) and makes experience in running branches much less important.
- *Access to supply or distribution channels*. In many industries manufacturers have had control over supply and/or distribution channels. Sometimes this has been through direct ownership (vertical integration), sometimes just through customer or supplier loyalty. In some industries this barrier has been overcome by new entrants who have bypassed retail distributors and sold directly to consumers through e-commerce (for example, Dell Computers and Amazon).
- *Expected retaliation*. If an organisation considering entering an industry believes that the retaliation of an existing firm will be so great as to prevent entry, or mean that entry would be too costly, this is also a barrier. Retaliation could take the form of a price war or a marketing blitz. Just the knowledge that incumbents are prepared to retaliate is often sufficiently discouraging to act as a barrier. This dynamic interaction between incumbents and potential new entrants will be discussed more fully in section 2.3.2 In global markets this retaliation can take place at many different 'points' or locations (see Chapter 8).
- *Legislation or government action*. Legal restraints on new entry vary from patent protection (for example, pharmaceuticals), to regulation of markets (for example, pension selling), through to direct government action (for example, tariffs). Of course, organisations are vulnerable to new entrants if governments remove such protection, as has happened with deregulation of the airline industry.
- *Differentiation*. Differentiation means providing a product or service with higher perceived value than the competition; its importance will be discussed

more fully in Chapter 6. Cars are differentiated, for example, by quality and branding. Steel, by contrast, is by and large a commodity, undifferentiated and therefore sold by the tonne. Steel buyers will simply buy the cheapest. Differentiation reduces the threat of entry because it increases customer loyalty.

The threat of substitutes

Substitutes can reduce demand for a particular 'class' of products as customers switch to the alternatives

Substitutes are products or services that offer a similar benefit to an industry's products or services, but by a different process. For example, aluminium is a substitute for steel in automobiles; trains are a substitute for cars; films and theatre are substitutes for each other. Managers often focus on their competitors in their own industry, and neglect the threat posed by substitutes. Substitutes can reduce demand for a particular 'class' of products as customers switch to alternatives – even to the extent that this class of products or services becomes obsolete. However, there does not have to be much actual switching for the substitute threat to have an effect. The simple risk of substitution puts a cap on the prices that can be charged in an industry. Thus, although Eurostar has no direct competitors in terms of train services from Paris to London, the prices it can charge are ultimately limited by the cost of flights between the two cities.

There are two important points to bear in mind about substitutes:

- *The price/performance ratio* is critical to substitution threats. A substitute is still an effective threat even if more expensive, so long as it offers performance advantages that customers value. Thus aluminium is more expensive than steel, but its relative lightness and its resistance to corrosion give it an advantage in some automobile manufacturing applications. It is the ratio of price to performance that matters, rather than simple price.
- *Extra-industry effects* are the core of the substitution concept. Substitutes come from outside the incumbents' industry and should not be confused with competitors' threats from within the industry. The value of the substitution concept is to force managers to look outside their own industry to consider more distant threats and constraints. The more threats of substitution there are, the less attractive the industry is likely to be.

The power of buyers

Buyers are the organisation's immediate customers, not necessarily the ultimate consumers

Customers, of course, are essential for the survival of any business. But sometimes customers – here **buyers** – can have such high bargaining power that their suppliers are hard pressed to make any profits at all.

Buyer power is likely to be high when some of the following conditions prevail:

- *Concentrated buyers*. Where a few large customers account for the majority of sales, buyer power is increased. This is the case on items such as milk in the grocery sector in many European countries, where just a few retailers dominate the market. If a product or service accounts for a high percentage of the buyers' total purchases their power is also likely to increase as they are more likely to 'shop around' to get the best price and therefore 'squeeze' suppliers than they would for more trivial purchases.

- *Low switching costs*. Where buyers can easily switch between one supplier or another, they have a strong negotiating position and can squeeze suppliers who are desperate for their business. Switching costs are typically low for weakly differentiated commodities such as steel.
- *Buyer competition threat*. If the buyer has some facilities to supply itself, or if it has the possibility of acquiring such facilities, it tends to be powerful. In negotiation with its suppliers, it can raise the threat of doing the suppliers' job themselves. This is called *backward vertical integration*, moving back to sources of supply, and might occur if satisfactory prices or quality from suppliers cannot be obtained. For example, glass manufacturers have lost power against their buyers as some large window manufacturers have decided to produce some of their own glass.

It is very important that *buyers* are distinguished from *ultimate consumers*. Thus for companies like Nestlé or Unilever, their buyers are retailers such as Carrefour or Tesco, not ordinary consumers (see discussion of the 'strategic customer' in section 2.4.3). Carrefour and Tesco have much more negotiating power than an ordinary consumer would have. The high buying power of such supermarkets has become a major source of pressure for the companies supplying them.

The power of suppliers

Suppliers supply the organisation with what is required to produce the product or service, and include labour and sources of finance

Suppliers are those who supply the organisation with what it needs to produce the product or service. As well as fuel, raw materials and equipment, this can include labour and sources of finance. The factors increasing supplier power are the converse to those for buyer power. Thus *supplier power* is likely to be high where there are:

- *Concentrated suppliers*. Where just a few producers dominate supply, suppliers have more power over buyers. The iron ore industry is now concentrated in the hands of three main producers, leaving the steel companies, relatively fragmented, in a very weak negotiating position for this essential raw material.
- *High switching cost*. If it is expensive or disruptive to move from one supplier to another, then the buyer becomes relatively dependent and correspondingly weak. Microsoft is a powerful supplier because of the high switching costs of moving from one operating system to another. Buyers are prepared to pay a premium to avoid the trouble, and Microsoft knows it.
- *Supplier competition threat*. Suppliers have increased power where they are able to cut out buyers who are acting as intermediaries. Thus airlines have been able to negotiate tough contracts with travel agencies as the rise of online booking has allowed them to create a direct route to customers. This is called *forward vertical integration*, moving up closer to the ultimate customer.

Most organisations have many suppliers, so it is necessary to concentrate the analysis on the most important ones or types. If their power is high, suppliers can capture all their buyers' own potential profits simply by raising their prices. Star football players have succeeded in raising their rewards to astronomical levels, while even the leading football clubs – their 'buyers' – struggle to make money.

Competitive rivalry

These wider competitive forces (the four arrows in the model) all impinge on the direct competitive rivalry between an organisation and its most immediate rivals. Thus low barriers to entry increase the number of rivals; powerful buyers with low switching costs force their suppliers to high rivalry in order to offer the best deals. The more competitive rivalry there is, the worse it is for incumbents within the industry.

Competitive rivals are organisations with similar products and services aimed at the same customer group

Competitive rivals are organisations with similar products and services aimed at the same customer group (that is, not substitutes). In the European transport industry, Air France and British Airways are rivals; trains are a substitute. As well as the influence of the four previous forces, there are a number of additional factors directly affecting the degree of competitive rivalry in an industry or sector:

- *Competitor balance*. Where competitors are of roughly equal size there is the danger of intense competition as one competitor attempts to gain dominance over others. Conversely, less rivalrous industries tend to have one or two dominant organisations, with the smaller players reluctant to challenge the larger ones directly (for example, by focusing on niches to avoid the 'attention' of the dominant companies).
- *Industry growth rate*. In situations of strong growth, an organisation can grow with the market, but in situations of low growth or decline any growth is likely to be at the expense of a rival, and meet with fierce resistance. Low-growth markets are therefore often associated with price competition and low profitability. The *industry life cycle* influences growth rates, and hence competitive conditions: see section 2.3.2.
- *High fixed costs*. Industries with high fixed costs, perhaps because they require high investments in capital equipment or initial research, tend to be highly rivalrous. Companies will seek to reduce unit costs by increasing their volumes: to do so, they typically cut their prices, prompting competitors to do the same and thereby triggering price wars in which everyone in the industry suffers. Similarly, if extra capacity can only be added in large increments (as in many manufacturing sectors, for example a chemical or glass factory), the competitor making such an addition is likely to create short-term overcapacity in the industry, leading to increased competition to use capacity.
- *High exit barriers*. The existence of high barriers to exit – in other words, closure or disinvestment – tends to increase rivalry, especially in declining industries. Excess capacity persists and consequently incumbents fight to maintain market share. Exit barriers might be high for a variety of reasons: for example, high redundancy costs or high investment in specific assets such as plant and equipment that others would not buy.
- *Low differentiation*. In a commodity market, where products or services are poorly differentiated, rivalry is increased because there is little to stop customers switching between competitors and the only way to compete is on price.

Implications of five forces analysis

The five forces framework provides useful insights into the forces at work in the industry or sector environment of an organisation. Illustration 2.3 describes the

Illustration 2.3

The consolidating steel industry

Five forces analysis helps understand the changing attractiveness of an industry.

For a long time, the steel industry was seen as a static and unprofitable one. Producers were nationally based, often state owned and frequently unprofitable – between the late 1990s and 2003, more than 50 independent steel producers went into bankruptcy in the USA. The twenty-first century has seen a revolution. For example, during 2006, Mittal Steel paid $35bn (£19.6bn; €28bn) to buy European steel giant Arcelor, creating the world's largest steel company. The following year, Indian conglomerate Tata bought Anglo-Dutch steel company Corus for $13bn. These high prices indicated considerable confidence in being able to turn the industry round.

New entrants

In the last 10 years, two powerful groups have entered world steel markets. First, after a period of privatisation and reorganisation, large Russian producers such as Severstal and Evraz entered export markets, exporting 30 million tonnes of steel by 2005. At the same time, Chinese producers have been investing in new production facilities, in the period 2003–2005 increasing capacity at a rate of 30 per cent a year. Since the 1990s, Chinese share of world capacity has increased more than two times, to 25 per cent in 2006, and Chinese producers have become the world's third largest exporter just behind Japan and Russia.

Substitutes

Steel is a nineteenth-century technology, increasingly substituted for by other materials such as aluminium in cars, plastics and aluminium in packaging and ceramics and composites in many high-tech applications. Steel's own technological advances sometimes work to reduce need: thus steel cans have become about one-third thinner over the last few decades.

Buyer power

Key buyers for steel include the global car manufacturers, such as Ford, Toyota and Volkswagen, and leading can producers such as Crown Holdings, which makes one-third of all food cans produced in North America and Europe. Such companies buy in volume, coordinating purchases around the world. Car manufacturers are sophisticated users, often leading in the technological development of their materials.

Supplier power

The key raw material for steel producers is iron ore. The big three ore producers – CVRD, Rio Tinto and BHP Billiton – control 70 per cent of the international market. In 2005, iron ore producers exploited surging demand by increasing prices by 72 per cent; in 2006 they increased prices by 19 per cent.

Competitive rivalry

The industry has traditionally been very fragmented: in 2000, the world's top five producers accounted for only 14 per cent of production. Most steel is sold on a commodity basis, by the tonne. Prices are highly cyclical, as stocks do not deteriorate and tend to flood the market when demand slows. In the late twentieth century demand growth averaged a moderate 2 per cent per annum. The start of the twenty-first century saw a boom in demand, driven particularly by Chinese growth. Between 2003 and 2005, prices of sheet steel for cars and fridges trebled to $600 (£336; €480) a tonne. Companies such as Nucor in the USA, Thyssen-Krupp in Germany as well as Mittal and Tata responded by buying up weaker players internationally. New steel giant Mittal accounted for about 10 per cent of world production in 2007. Mittal actually reduced capacity in some of its Western production centres.

Questions

1. In recent years, which of the five forces has become more positive for steel producers, which less so?
2. Explain the acquisition strategies of players such as Mittal, Tata and Nucor.
3. In the future, what might change to make the steel industry less attractive or more attractive?

five forces in the changing steel industry. It is important, however, to use the framework for more than simply listing the forces. The bottom line is an assessment of the attractiveness of the industry. The analysis should conclude with a judgement about whether the industry is a good one to compete in or not.

The analysis should next prompt investigation of the *implications* of these forces. For example:

- *Which industries to enter (or leave)?* The fundamental purpose of the five forces model is to identify the relative attractiveness of different industries: industries are attractive when the forces are weak. Managers should invest in industries where the five forces work in their favour and avoid or disinvest from markets where they are strongly against.
- *What influence can be exerted?* Industry structures are not necessarily fixed, but can be influenced by deliberate managerial strategies. For example, organisations can build barriers to entry by increasing advertising spend to improve customer loyalty. They can buy up competitors to reduce rivalry and increase power over suppliers or buyers. Influencing industry structure involves many issues relating to *competitive strategy* and will be a major concern of Chapter 6.
- *How are competitors differently affected?* Not all competitors will be affected equally by changes in industry structure, deliberate or spontaneous. If barriers are rising because of increased R&D or advertising spending, smaller players in the industry may not be able to keep up with the larger players, and be squeezed out. Similarly, growing buyer power is likely to hurt small competitors most. Strategic group analysis is helpful here (see section 2.4.1).

Although originating in the private sector, five forces analysis can have important implications for organisations in the public sector too. For example, the forces can be used to adjust the service offer or focus on key issues. Thus it might be worth switching managerial initiative from an arena with many crowded and overlapping services (for example, social work, probation services and education) to one that is less rivalrous and where the organisation can do something more distinctive. Similarly, strategies could be launched to reduce dependence on particularly powerful and expensive suppliers, for example energy sources or high-shortage skills.

Key issues in using the five forces framework

The five forces framework has to be used carefully and is not necessarily complete, even at the industry level. When using this framework, it is important to bear the following three issues in mind:

- *Defining the 'right' industry*. Most industries can be analysed at different levels. For example, the airline industry has several different segments such as domestic and long haul and different customer groups such as leisure, business and freight (see section 2.4.2 below). The competitive forces are likely to be different for each of these segments and can be analysed separately. It is often useful to conduct industry analysis at a disaggregated level, for each distinct segment. The overall picture for the industry as a whole can then be assembled.

Convergence is where previously separate industries begin to overlap in terms of activities, technologies, products and customers

- *Converging industries*. Industry definition is often difficult too because industry boundaries are continuously changing. For example, many industries, especially in high-tech arenas, are undergoing **convergence**, where previously separate industries begin to overlap or merge in terms of activities, technologies, products and customers.[7] Technological change has brought convergence between the telephone and photographic industries, for example, as mobile phones increasingly include camera and video functions. For a camera company like Kodak, phones are increasingly a substitute and the prospect of facing Nokia or Samsung as direct competitors is not remote.

Complementors are products or services for which customers are prepared to pay more if together than if they stand alone

- *Complementary products*. Some analysts argue for a 'sixth force', organisations supplying complementary products or services. These **complementors** are players from whom customers buy complementary products that are worth more together than separately. Thus Dell and Microsoft are complementors insofar as computers and software are complementary products for buyers. Microsoft needs Dell to produce powerful machines to run its latest-generation software. Dell needs Microsoft to work its machines. Likewise, television programme makers and television guide producers are complements. Complementors raise two issues. The first is that complementors have opportunities for *cooperation*. It makes sense for Dell and Microsoft to keep each other in touch with their technological developments, for example. This implies a significant shift in perspective. While Porter's five forces sees organisations as battling against each other for share of industry value, complementors may cooperate to increase the value of the whole cake.[8] The second issue, however, is the potential for some complementors to demand a high share of the available value for themselves. Microsoft has been much more profitable than the manufacturers of complementary computer products and its high margins may have depressed the sales and margins available to companies like Dell. The potential for cooperation or antagonism with such a complementary 'sixth force' needs to be included in industry analyses.[9]

2.3.2 The dynamics of industry structure

Industry structure analysis can easily become too static: after all, structure implies stability.[10] However, the previous sections have raised the issue of how competitive forces change *over time*. The key drivers for change are likely to alter industry structures and scenario analyses can be used to understand possible impacts. This section examines three additional approaches to understanding change in industry structure: the *industry life-cycle* concept; the notion of *hyper-competitive cycles of competition*; and *comparative five forces analyses*.

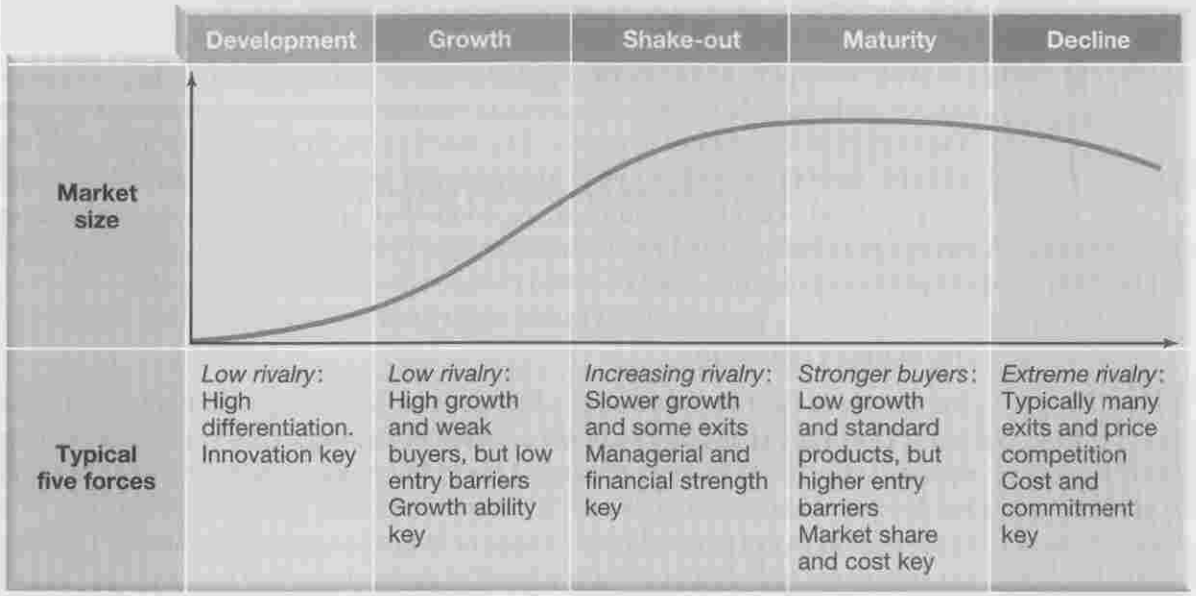
The industry life cycle

The power of the five forces typically varies with the stages of the industry life cycle. The industry life-cycle concept proposes that industries start small in their development stage, then go through a period of rapid growth (the equivalent to 'adolescence' in the human life cycle), culminating in a period of 'shake-out'. The final two stages are first a period of slow or even zero growth ('maturity'), before the final stage of decline ('old age'). Each of these stages has implications for the five forces.[11]

The *development stage* is an experimental one, typically with few players exercising little direct rivalry and highly differentiated products. The five forces are likely to be weak, therefore, though profits may actually be scarce because of high investment requirements. The next stage is one of high growth, with rivalry low as there is plenty of market opportunity for everybody. Buyers may be keen to secure supplies and lack sophistication about what they are buying, so diminishing their power. One downside of the growth stage is that barriers to entry may be low, as existing competitors have not built up much scale, experience or customer loyalty. Another potential downside is the power of suppliers if there is a shortage of components or materials that fast-growing businesses need for expansion. The *shake-out stage* begins as the growth rate starts to decline, so that increased rivalry forces the weakest of the new entrants out of the business. In the *maturity stage*, barriers to entry tend to increase, as control over distribution is established and economies of scale and experience curve benefits come into play. Products or service tend to standardise. Buyers may become more powerful as they become less avid for the industry's products or services and more confident in switching between suppliers. For major players, market share is typically key to survival, providing leverage against buyers and competitive advantage in terms of cost. Finally, the *decline stage* can be a period of extreme rivalry, especially where there are high exit barriers, as falling sales force remaining competitors into dog-eat-dog competition. Exhibit 2.3 summarises some of the conditions that can be expected at different stages in the life cycle.

It is important to avoid putting too much faith in the inevitability of life-cycle stages. One stage does not follow predictably after another: industries vary widely in the length of their growth stages, and others can rapidly 'de-mature' through radical innovation. The telephony industry, based for nearly a century on fixed-line telephones, de-matured rapidly with the introduction of mobile and

Exhibit 2.3 The industry life cycle

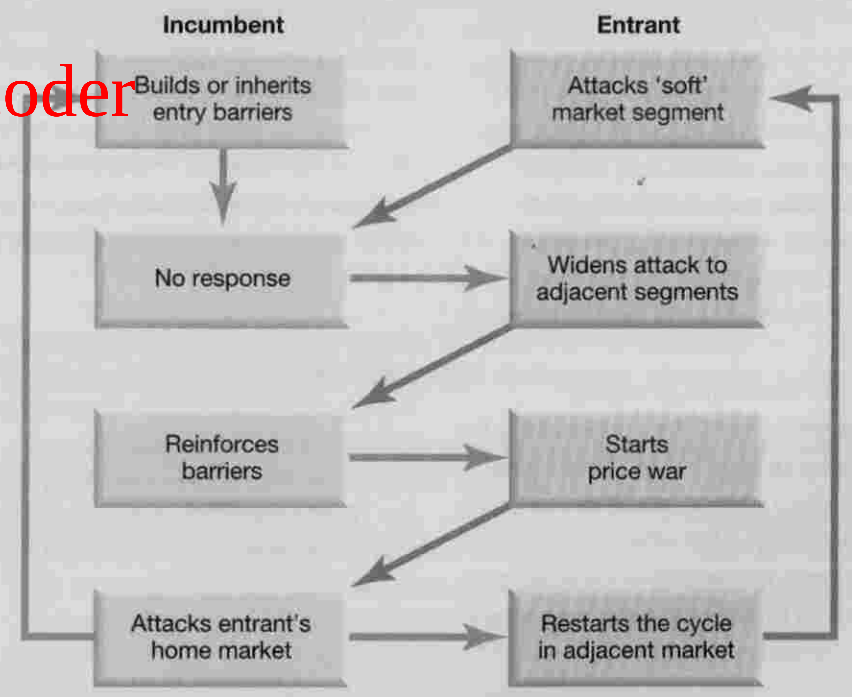


Internet telephony. Anita McGahan warns of the 'maturity mindset', which can leave many managers complacent and slow to respond to new competition.[12] Managing in mature industries is not necessarily just about waiting for decline. Although steady progress through the stages is not inevitable, the life-cycle concept does none the less remind managers that conditions will change over time. Especially in fast-moving industries, five forces analyses need to be reviewed quite regularly.

Hypercompetition and competitive cycles[13]

Competitors constantly interact in terms of competitive moves: price cuts are matched and innovations imitated. These sequences of move and counter-move are called *cycles of competition*. In some industries, these interactions become so intense and fast that industry structures are constantly undermined. Such industries are *hypercompetitive* (intensely competitive), trapped by the aggressive interactions of competitors into negative downward cycles for all concerned. Competitors attack and counter-attack each other in a way that precludes stability and makes sustainable profits impossible. The cycle of competition concept underlines the fact that industry structures are not 'natural', but are often created and reshaped by the deliberate strategies of competitors. Exhibit 2.4 shows a theoretical cycle of competition, and an empirical example is given in Illustration 2.4.

Exhibit 2.4 Cycles of competition



Source: Adapted with the permission of The Free Press, a Division of Simon & Schuster Adult. Publishing Group, from *Hypercompetitive Rivalries: Competing in Highly Dynamic Environments* by Richard A. D'Aveni with Robert Gunther. Copyright © 1994, 1995 by Richard A. D'Aveni. All rights reserved.

Illustration 2.4

Cycles of competition

Changes in the business environment and moves by competitors erode the competitive position of organisations which, in turn, respond by counter-moves. Competition moves through cycles and any competitive advantage is temporary.

Consider the interactions between Francotop, the highly profitable dominant player in a French consumer goods niche, and Deutschespitze, a German company with a similar product that was wishing to become a significant European-wide player.

Deutschespitze's first competitive move was to target a consumer age group where consumption and brand awareness in France were both low. Francotop had limited its marketing efforts to the over-25 age groups – the Germans saw a possibility of extending the market into the 18–25 group and aimed their promotional efforts at the group with some success. This first move was ignored by Francotop as it did not impact on its current business. However, from this bridgehead Deutschespitze's second move was to attack Francotop's key older market. This triggered Francotop to launch an advertising campaign reinforcing brand awareness in its traditional segments, hoping to confine the German company to its initial niche.

Deutschespitze responded by counter-advertising and price reductions – undermining the margins earned by its French rival. Competition then escalated with a counter-attack by Francotop into the German market. This wider competitive activity played itself out resulting in the erosion of both of the original strongholds and a progressive merger of the French and German markets.

It is possible at this stage that this whole cycle of competition could have repeated itself in an adjacent market, such as the UK. However, what happened was that Deutschespitze saw an opportunity to move away from this *cost/quality* basis of competition by adapting the product for use by businesses. Its core competences in R&D allowed it to get the adapted product to market faster than its French rival. It then consolidated these first-mover advantages by building and defending barriers. For example, it appointed key account salespeople and gave special offers for early adoption and three-year contracts.

Nevertheless, this stronghold came under attack by the French firm and a cycle of competition similar to the consumer market described above was triggered. However, the German firm had built up enough financial reserves to survive a price war, which it then initiated. It was willing and able to fund losses longer than the French competitor – which was forced to exit the business user market.

Questions

1. Could the French firm have slowed down the cycle of competition?
2. How could the French firm have prevented the German firm escalating competition, to its advantage, in the business user market?

Exhibit 2.4 shows a cycle of competition involving various moves and counter-moves between competitors over time. The starting point is a new entrant attacking an incumbent's established market, apparently protected by inherited entry barriers. The new entrant sensibly attacks a particularly 'soft' (unprotected) segment of the overall market. If receiving no strong competitive response from the incumbent (that is, no retaliation), the new entrant widens its attack to adjacent segments of the incumbent's market. There is a danger of increased industry rivalry and rapidly falling industry profits. In Exhibit 2.4, the incumbent finally responds by increasing entry barriers, perhaps by reinforcing customers' loyalty through increased differentiation. The new entrant counters with a price war. The final resort of the incumbent is to attack the new entrant's home market, hoping to do enough damage there to persuade the new entrant to back off. Thus rivalry increases in that home industry as well. The incumbent meanwhile does its best to raise its barriers to entry.

Illustration 2.4 demonstrates a similar cycle of competition in an international context. Here moves and counter-moves by organisations and their competitors take place simultaneously in several locations. So a competitive move in one arena, the German company's aggressive move into France, did not trigger off a counter-move in that arena (France), but in its competitor's home territory (Germany).

The competitive dynamics between organisations competing in different product or geographical markets (as in Illustration 2.4) is known as *multi-point competition*, in other words competition at multiple points in a business's portfolio of businesses. The possibility of multi-point competition does not necessarily increase competitive rivalry. Indeed, it can reduce competitive rivalry by raising the costs and risks of aggressive moves and counter-moves.[14] For an incumbent, having a small presence in the main market of a potential competitor can discourage any aggressive move by the competitor, because the competitor knows it risks prompt retaliation in its own most valuable market, where it will hurt most.

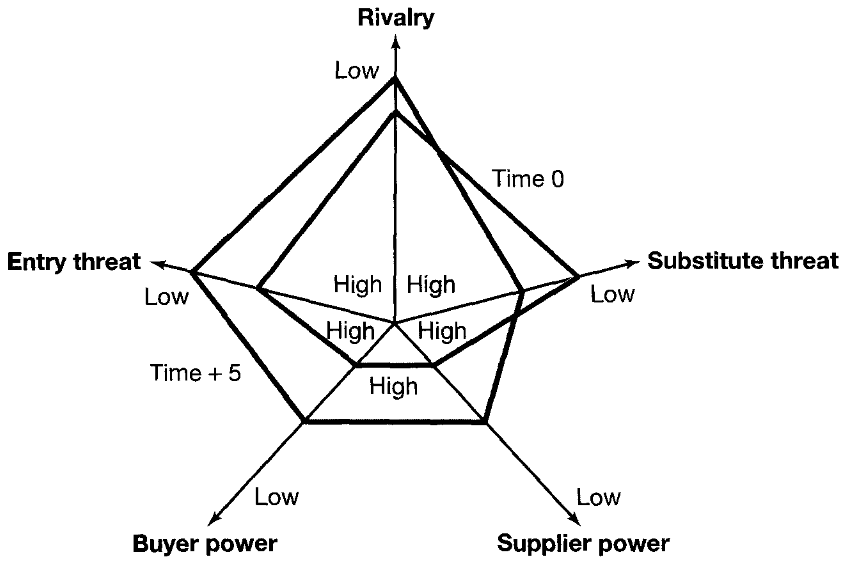
Hypercompetition occurs where the frequency, boldness and aggressiveness of dynamic movements by competitors accelerate to create a condition of constant disequilibrium and change

Hypercompetition occurs where the frequency, boldness and aggressiveness of competitor interactions accelerate to create a condition of constant disequilibrium and change.[15] Industry structures are permanently unstable and no industry can be judged securely attractive for any substantial period of time. In hypercompetitive conditions, it may not be worth investing heavily in building up barriers to entry or trying to reduce rivalry, perhaps by acquisition of competitor companies. Competitor moves will inevitably undermine attractive industry structures. The sustainability of competitive advantage is discussed further in Chapter 3, with competitive moves under conditions of hypercompetition returned to in Chapter 6. Some analysts claim that industries in general are becoming more hypercompetitive, because of international competition or technological change. However, the research evidence is divided on the trend to hypercompetition and it is wise not to be panicked into unduly hypercompetitive behaviour.[16] Aggressive cycles have a reinforcing character that are hard to stop once begun.

Comparative industry structure analyses

The industry life cycle and cycles of competition notions underline the need to make industry structure analysis dynamic. One effective means of doing this is to compare the five forces over time in a simple 'radar plot'.

Exhibit 2.5 Comparative industry structure analysis



Source: Adapted from V. Lerville-Anger, F. Fréry, A. Gazengel and A. Ollivier, *Conduire le diagnostic global d'une unité industrielle*, Editions d'Organisation, Paris, 2001.

Exhibit 2.5 provides a framework for summarising the power of each of the five forces on five axes. Power diminishes as the axes go outwards. Where the forces are low, the total area enclosed by the lines between the axes is large; where the forces are high, the total area enclosed by the lines is small. The larger the enclosed area, therefore, the greater is the profit potential. In Exhibit 2.5, the industry at Time 0 (represented by the bright blue lines) has relatively low rivalry (just a few competitors) and faces low substitution threats. The threat of entry is moderate, but both buyer power and supplier power are relatively high. Overall, this looks like only a moderately attractive industry to invest in.

However, given the dynamic nature of industries, managers need to look forward: here five years represented by the dark blue lines in Exhibit 2.5. Managers are predicting in this case some rise in the threat of substitutes (perhaps new technologies will be developed). On the other hand, they predict a falling entry threat, while both buyer power and supplier power will be easing. Rivalry will reduce still further. This looks like a classic case of an industry in which a few players emerge with overall dominance. The area enclosed by the dark blue lines is large, suggesting a relatively attractive industry. For a firm confident of becoming one of the dominant players, this might be an industry well worth investing in.

Comparing the five forces over time on a radar plot thus helps to give industry structure analysis a dynamic aspect. Similar plots can be made to aid diversification decisions (see Chapter 7), where possible new industries to enter can be compared in terms of attractiveness. The lines are only approximate, of course, because they aggregate the many individual elements that make up each of the forces into a simple composite measure. Notice too that if one of the forces is very adverse, then this might nullify positive assessments on the other four axes: for example, an industry with low rivalry, low substitution, low entry barriers and low supplier power might still be unattractive if powerful buyers

were able to demand highly discounted prices. With these warnings in mind, such radar plots can none the less be both a useful device for initial analysis and an effective summary of a final, more refined analysis.

2.3 COMPETITORS AND MARKETS

An industry or sector may be too high a level to provide for a detailed understanding of competition. The five forces can impact differently on different kinds of players. For example, Ford and Porsche may be in the same broad industry (automobiles), but they are positioned differently: they face different kinds of buyer power and supplier power at the very least. It is often useful to disaggregate. Many industries contain a range of companies, each of which has different capabilities and competes on different bases. These competitor differences are captured by the concept of *strategic groups*. Customers too can differ significantly. Such customer differences can be captured by distinguishing between *strategic customers* and ultimate consumers and between different *market segments*. Underpinning strategic groups and market segments is recognition of what *customers value* and *critical success factors*. These various concepts will now be discussed.

2.4.1 Strategic groups[17]

Strategic groups are organisations within an industry with similar strategic characteristics, following similar strategies or competing on similar bases

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KEY CONCEPT
Strategic groups

Strategic groups are organisations within an industry or sector with similar strategic characteristics, following similar strategies or competing on similar bases. These characteristics are different from those in other strategic groups in the same industry or sector. For example, in the grocery retailing industry, supermarkets, convenience stores and corner shops each form different strategic groups. There are many different characteristics that distinguish between strategic groups but these can be grouped into two major categories (see Exhibit 2.6):[18] first, the *scope* of an organisation's activities (such as product range, geographical coverage and range of distribution channels used); second, the *resource commitment* (such as brands, marketing spend and extent of vertical integration). Which of these characteristics are especially relevant in terms of a given industry needs to be understood in terms of the history and development of that industry and the forces at work in the environment.

Strategic groups can be mapped onto two-dimensional charts – for example, one axis might be the extent of product range and the other axis the size of marketing spend. One method for establishing key dimensions by which to map strategic groups is to identify top performers (by growth or profitability) in an industry and to compare them with low performers. Characteristics that are shared by top performers, but not by low performers, are likely to be particularly relevant for mapping strategic groups. For example, the most profitable firms in an industry might all be narrow in terms of product range and lavish in terms of marketing spend, while the less profitable firms might be more widely spread in terms of products and restrained in their marketing. Here the two dimensions for mapping would be product range and marketing spend. A potential recommendation for the less profitable firms would be to cut back their product range and boost their marketing. In Illustration 2.5, Figure 1 shows a strategic group map of the major providers of MBAs in The Netherlands in 2007.

Illustration 2.5

Strategic groups in Dutch MBA education

Mapping of strategic groups can provide insights into the competitive structures of industries or sectors and the opportunities and constraints for development.

In the mid-2000s there were three kinds of institutions offering MBA courses in The Netherlands: traditional universities, for-profit business schools (FPBSs) and polytechnics:

- Traditional universities offered a wide range of subjects, carried out research, and attracted students both nationally and internationally. Their programmes were more academic than vocational. A university degree was generally valued more highly than that of a polytechnic.
- FPBSs were relatively new, and provided MBA degrees only. Some of the FPBS now offer a DBA course as well. Usually they were located close to the centre or capital of the country. MBA education at FPBSs was generally more of the action learning type, which made it attractive for practising managers. Many students already had diplomas from a university or polytechnic. Several of these schools received accreditation from the Dutch Validation Council. In 2005 the Dutch minister of education and culture recognised NIMBAS, an FPBS, as an official 'universiteit'. NIMBAS later merged with TIAS, the business school of Universiteit Tilburg.
- Polytechnics (in The Netherlands named HogeScholen) often attracted students from the region and provided education aimed more at application of theory than at developing conceptual thinking. Some of the polytechnics provided MBA degrees, in some cases in cooperation with universities in the UK.

Figure 1 gives an indication of how these three types of institution were positioned in terms of geographical coverage and 'orientation'. Figure 2 shows the barriers confronting organisations who wished to move from one group to another (they show the barriers *into* a group). For example, if the FPBSs tried to 'enter' the strategic group of traditional universities they would need to build up a reputation in research or innovation. They may not be interested in doing research, since there would be high costs and little pay-off for their effort. In reverse, for traditional universities to move in the direction of the FPBSs may be difficult since the faculty may not have skills in action learning and may be inexperienced at working with older students.

Figure 3 shows where 'strategic space' might exist. These spaces are created by changes in the macro-

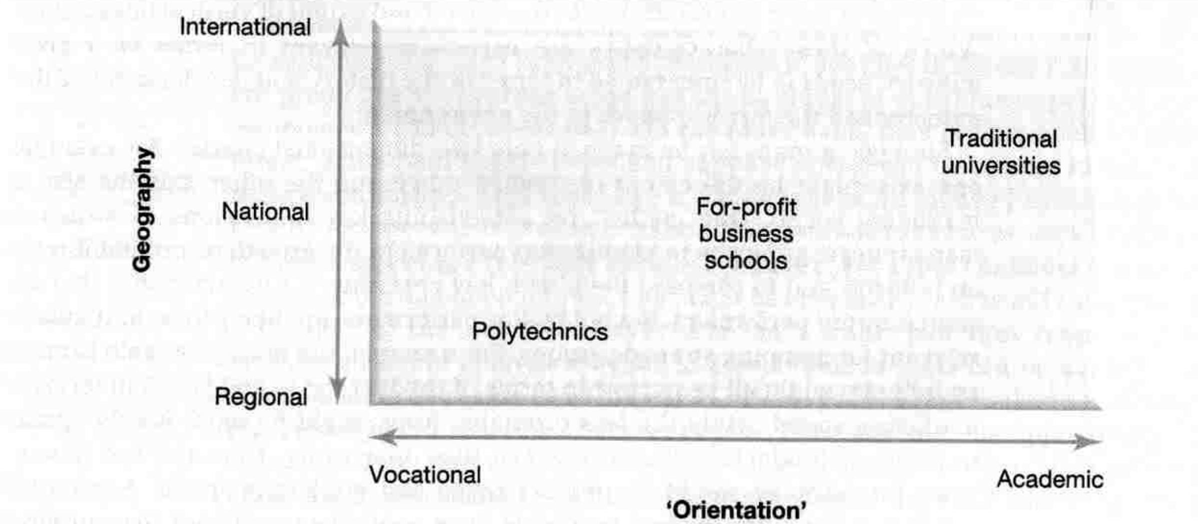


Figure 1 Strategic groups in MBA education in The Netherlands

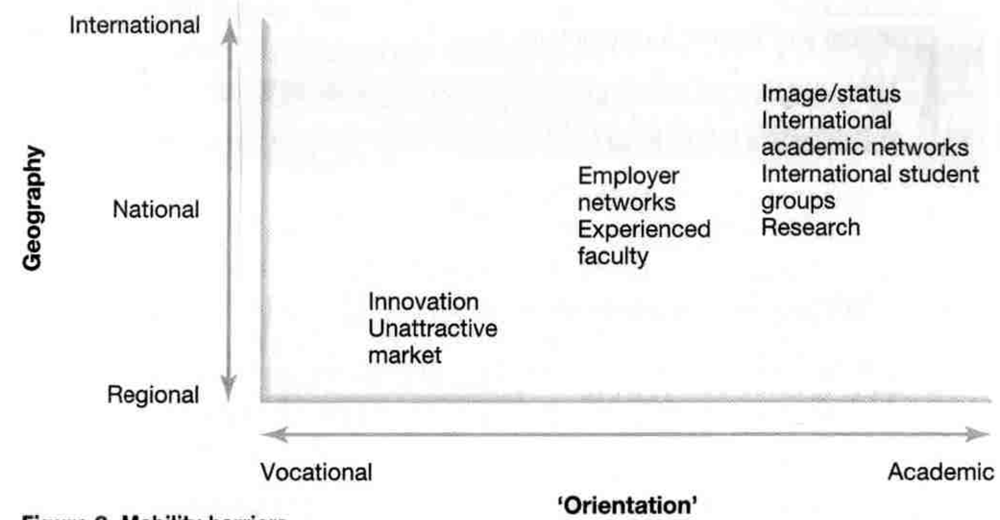


Figure 2 Mobility barriers

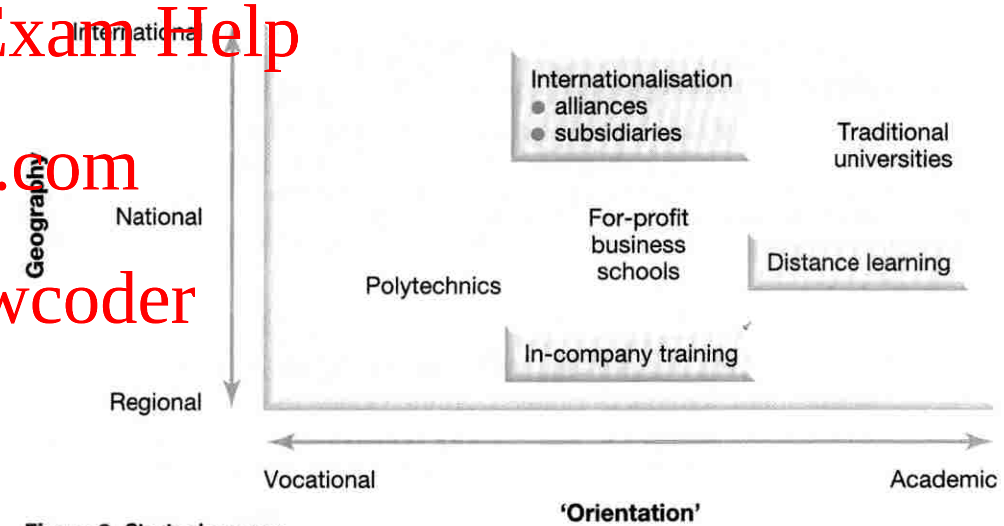


Figure 3 Strategic space

environment – particularly globalisation and information technology. This could provide opportunities for Dutch business schools to seek more international business. However, the reverse threat of international competitors entering the Dutch market was a major concern. Information and communication technology helps students study at their own place of work or at home, and also enables them to tap into an international network. So an American or British school could provide content over the Internet and local student support through partnerships with Dutch institutions. Indeed the University of Phoenix had already made efforts to do just this.

Source: This is an updated version of D.J. Eppink and S. de Waal, 'Global influences on the public sector', in G. Johnson and K. Scholes (eds), *Exploring Public Sector Strategy*, FT/Prentice Hall, 2001, chapter 3.

Question

How might this analysis influence the next strategic moves by each of the three types of institution?

Exhibit 2.6 Some characteristics for identifying strategic groups

It is useful to consider the extent to which organisations *differ* in terms of **characteristics** such as:

Scope of activities

- Extent of product (or service) diversity
- Extent of geographical coverage
- Number of market segments served
- Distribution channels used

Resource commitment

- Extent (number) of **branding**
- **Marketing effort** (e.g. advertising spread, size of salesforce)
- Extent of **vertical integration**
- Product or service **quality**
- **Technological leadership** (a leader or follower)
- **Size** of organisation

Sources: Based on M.E. Porter, *Competitive Strategy*, Free Press, 1980; and J. McGee and H. Thomas, 'Strategic groups: theory, research and taxonomy', *Strategic Management Journal*, vol. 7, no. 2 (1986), pp. 141–160.

This strategic group concept is useful in at least three ways.

- *Understanding competition*. Managers can focus on their direct competitors within their particular strategic group, rather than the whole industry. They can also establish the dimensions that distinguish them most from other groups, and which might be the basis for relative success or failure. These dimensions can then become the focus of their action.
- *Analysis of strategic opportunities*. Strategic group maps can identify the most attractive 'strategic spaces' within an industry. Some spaces on the map may be 'white spaces', relatively under-occupied. In the Dutch MBA market, for instance, examples are vocational degrees for the international market and semi-academic education for the regional in-company training market. Such white spaces might be unexploited opportunities. On the other hand, they could turn out to be 'black holes', impossible to exploit and likely to damage any entrant. A strategic group map is only the first stage of the analysis. Strategic spaces need to tested carefully.
- *Analysis of mobility barriers*. Of course, moving across the map to take advantage of opportunities is not costless. Often it will require difficult decisions and rare resources. Strategic groups are therefore characterised by 'mobility barriers', obstacles to movement from one strategic group to another. These are similar to barriers to entry in five forces analysis. In Illustration 2.5, Figure 2 shows examples of mobility barriers for the groupings identified in the industry. These may be substantial: to enter the international academic strategic group, a regional, vocational competitor would have to establish the appropriate image, mobilise networks, change its teaching methods and improve its remuneration levels. As with barriers to entry, it is good to be in a successful strategic group for which there are strong mobility barriers, to impede imitation.

2.4.2 Market segments

A market segment is a group of customers who have similar needs that are different from customer needs in other parts of the market

The concept of strategic groups discussed above helps with understanding the similarities and differences in the characteristics of 'producers' – those organisations that are actual or potential competitors. The concept of market segment focuses attention on differences in customer needs. A **market segment**[19] is a group of customers who have similar needs that are different from customer needs in other parts of the market. It will be seen in Chapter 3 that this understanding of what customers (and other stakeholders) value and how an organisation and its competitors are positioned to meet these needs are critical to understanding strategic capability.

The concept of market segments should remind managers of several important issues:

- *Customer needs* may vary for a whole variety of reasons – some of which are identified in Exhibit 2.7. Theoretically, any of these factors could be used to identify market segments. However, in practical terms it is important to consider which bases of segmentation are most important in any particular

Exhibit 2.7 Some bases of market segmentation

Type of factor	Consumer markets	Industrial/organisational markets
Characteristics of people/organisations	Age, sex, race Income Family size Life-cycle stage Location Lifestyle	Industry Location Size Technology Profitability Management
Purchase/use situation	Size of purchase Brand loyalty Purpose of use Purchasing behaviour Importance of purchase Choice criteria	Application Importance of purchase Volume Frequency of purchase Purchasing procedure Choice criteria Distribution channel
Users' needs and preferences for product characteristics	Product similarity Price preference Brand preferences Desired features Quality	Performance requirements Assistance from suppliers Brand preferences Desired features Quality Service requirements

market. For example, in industrial markets, segmentation is often thought of in terms of industrial classification of buyers – such as 'we sell to the domestic appliance industry'. However, it may be that this is not the most relevant basis of segmentation when thinking about the future. Segmentation by buyer behaviour (for example, direct buying versus those users who buy through third parties such as contractors) or purchase value (for example, high-value bulk purchasers versus frequent low-value purchasers) might be more appropriate in some markets. Indeed, it is often useful to consider different bases of segmentation in the same market to help understand the dynamics of that market and how these are changing.

- *Relative market share* (that is, share in relation to that of competitors) within a market segment is an important consideration. Organisations that have built up most experience in servicing a particular market segment should not only have lower costs in so doing, but also have built relationships which may be difficult for others to break down. What customers value will vary by market segment and therefore 'producers' are likely to achieve advantage in segments that are especially suited to their particular strengths. They may find it very difficult to compete on a broader basis. For example, a small local brewery competing against the big brands on the basis of its low prices underpinned by low costs of distribution and marketing is confined to that segment of the local market that values low price.
- How market segments can be *identified and 'serviced'*[20] is influenced by a number of trends in the business environment already discussed in this chapter. For example, the wide availability of consumer data and the ability to process it electronically combined with increased flexibility of companies' operations allow segmentation to be undertaken at a micro-level – even down to individual consumers (so-called 'markets of one'). So Internet shopping selectively targets consumers with special offers based on their past purchasing patterns. The emergence of more affluent, mobile consumers means that geographical segmentation may be much less effective than lifestyle segmentation (across national boundaries).

2.4.3 Identifying the strategic customer

Bringing goods and services to market usually involves a range of organisations performing different roles. In Chapter 3 this will be discussed in more detail through the concept of the value network. For example, most consumers purchase goods through retail outlets. So the manufacturers must attend to two sorts of customers – the shops, their direct customers, and the shops' customers, the ultimate consumers of the product. Although both customers influence demand, usually one of these will be more influential than the others – this is the strategic customer. The **strategic customer** is the person(s) at whom the strategy is primarily addressed because they have the most influence over which goods or services are purchased. Unless there is clarity on who the strategic customer is, managers can end up analysing and targeting the wrong people. It is the desires of the strategic customer that provide the starting point for strategy. The requirements of the other customers are not unimportant – they have to be met – but the requirements of the strategic customer are paramount. Returning to the

The strategic customer is the person(s) at whom the strategy is primarily addressed because they have the most influence over which goods or services are purchased

example, it should be clear that for many consumer goods the retail outlet is the strategic customer as the way it displays, promotes and supports products in store is hugely influential on the final consumer preferences. In the public sector the strategic customer is very often the 'body' which controls the funds or authorises use rather than the user of the service. So family doctors are the strategic customers of pharmaceutical companies and so on.

2.4.4 Understanding what customers value – critical success factors

Although the concept of market segments is useful, managers may fail to be realistic about how markets are segmented and the strategic implications of that segmentation. It will be seen in the next chapter that an understanding of customer needs and how they differ between segments is crucial to developing the appropriate strategic capability in an organisation. However, customers will value many product/service features to a greater or lesser degree. From the potential providers' viewpoint it is valuable to understand which features are of particular importance to a group of customers (market segment). These are known as the critical success factors. **Critical success factors** (CSFs) are those product features that are particularly valued by a group of customers and, therefore, where the organisation must excel to outperform competition.

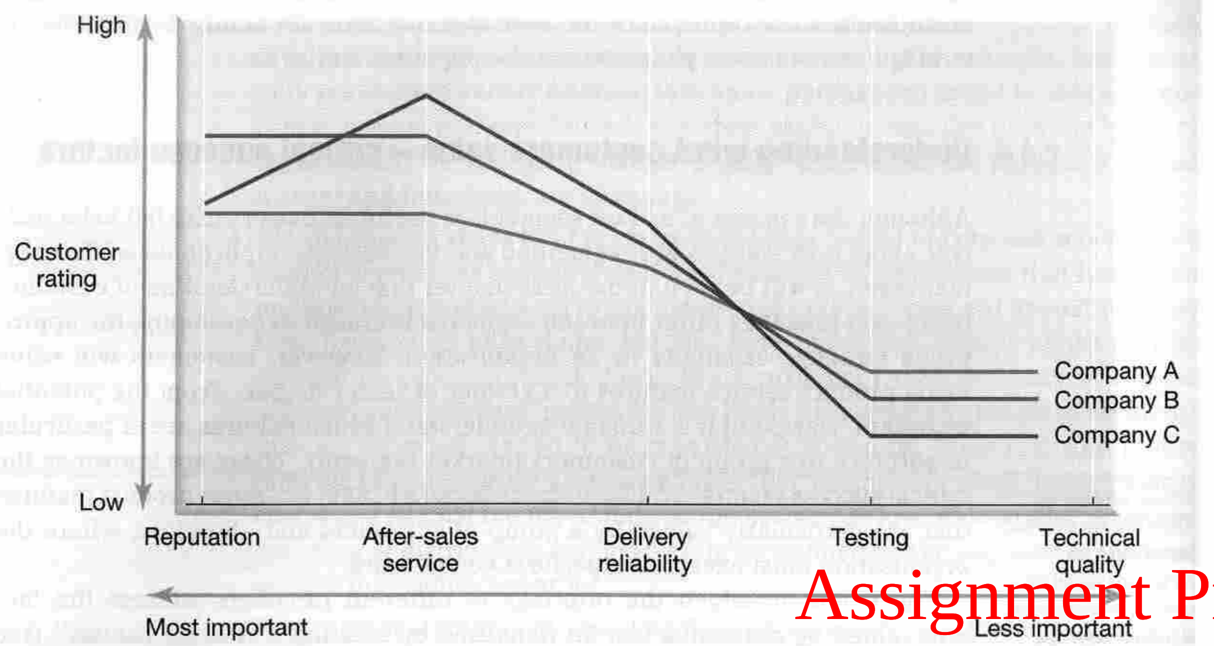
Critical success factors (CSFs) are those product features that are particularly valued by a group of customers and, therefore, where the organisation must excel to outperform competition

The extent to which the offerings of different providers address the factors valued by customers can be visualised by creating a strategy canvas[21] (see Exhibit 2.8). The canvas is a simple but useful way of comparing competitors' positions in a market and potential in different segments. The exhibit relates to one segment of the electrical engineering industry – company-based buyers of electrical engineering equipment – and illustrates the following:

- Five *critical success factors* are identified in Exhibit 2.8 as particularly important to customers on average (in rank order, the producer's reputation, after-sales service, delivery reliability, testing facilities and technical quality). They are the factors which would determine which provider was preferred, given similar prices.
- Three *competitor profiles* are drawn on the canvas against these factors. It is clear that the particular strengths that company A possesses are not the factors *most* valued by the average customer, whereas company B's strengths appear to have a better match. But nobody is doing particularly well with regard to testing and technical quality.
- *Segment choice* is the next issue. Company A could try to improve on the most highly valued factors. But companies B and C are already strong there, and their customers are highly satisfied. An alternative for company A is to focus on a particular market segment, those for whom testing and quality happen to be much more important than for the average customer. There is less competition there and greater room for improvement. This segment might be relatively small, but targeting this specifically could be much more profitable than tackling companies B and C head on in their areas of strength. Company A might focus on raising its profile at the right-hand end of the canvas.

The key messages from this example are that it is important to see value through the eyes of the customer and to be clear about relative strengths.

Exhibit 2.8 A strategy canvas – perceived value by customers in the electrical engineering industry



Sources: Reprinted by permission of *Harvard Business Review*. Exhibit adapted from 'Charting your company's future' by C. Kim and R. Mauborgne, Vol. 80, no. 6. Copyright © 2002 by the Harvard Business School Publishing Corporation; all rights reserved.

Although this might appear self-evident, a customer viewpoint and clarity about strengths may not be easy to achieve for several reasons:

- *Sense making*. Managers may not be able to *make sense* of the complex and varied behaviours they experience in their markets. Often they will have vast amounts of raw data about customer preferences and competitor moves, but they lack the capability to draw useful conclusions from these data (for example, to spot trends or connections). Market researchers and marketing consultants may be able to supply a clearer view from outside.
- *Distance from the ultimate customer*. Component and raw material suppliers, for example, may be distanced from the final users by several intermediaries – other manufacturers and distributors. Although these direct customers may be the strategic customers there is a danger that what value means to the final consumer is not understood. In other words, companies may be out of touch with what is ultimately driving demand for their product or service.
- *Internal biases*. Managers are prone to assume that their particular strengths are valued by customers, and that somehow their competitors are necessarily inferior. For example, professional groups in many public services have tended to assume that what they think best for the client automatically is the best, while being sceptical of private sector providers' ability to look after the 'true' needs of clients.

- *Changes over time*. Customers' values typically evolve, either because they become more experienced (through repeat purchase) or because competitive offerings become available which offer better value. Managers, however, are often trapped by their historical experience of the market (see Chapter 5).

2.5 OPPORTUNITIES AND THREATS

The concepts and frameworks discussed above should be helpful in understanding the factors in the macro-, industry and competitor/market environments of an organisation (Illustration 2.6 outlines a key debate: just how much do such industry and market factors affect successful strategic outcomes?). However, the critical issue is the *implications* that are drawn from this understanding in guiding strategic decisions and choices. The crucial next stage, therefore, is to draw from the environmental analysis specific strategic opportunities and threats for the organisation. Identifying these opportunities and threats is extremely valuable when thinking about strategic choices for the future (the subject of Chapters 6 to 9). Opportunities and threats forms one half of the strengths, weaknesses, opportunities and threats (SWOT) analyses that shape many companies' strategy formulation (see Chapter 3).[22] In responding strategically to the environment, the goal is to reduce identified threats and take advantage of the best opportunities.

A strategic gap is an opportunity in the competitive environment that is not being fully exploited by competitors

Taking advantage of a **strategic gap** is an effective way of managing threats and opportunities. W. Chan Kim and Renée Mauborgne have argued that if organisations simply concentrate on competing head to head with competitive rivals this will lead to competitive convergence where all 'players' find the environment tough and threatening.[23] They describe this as a 'red ocean' strategy – red because of the bloodiness of the competition and the red ink caused by financial losses. They urge instead that managers attempt 'blue ocean' strategies – searching for, or creating, wide open spaces, free from existing competition. Blue oceans are strategic gaps in the market, opportunities that are not being fully exploited by competitors. One such blue ocean strategy was the creation by Australian wine producers of fun, easy-to-understand and easy-to-drink wines. A red ocean strategy would have been to compete against the established French producers with fancy labels, wine jargon and complex tastes.

Strategic gaps can be identified with the help of the techniques in this chapter. In terms of Porter's five forces, strategic gaps are where rivalry is low. In terms of strategic group maps, gaps typically lie in the under-occupied 'white spaces'. In terms of the strategy canvas, potential strategic gaps are where a big difference can be established with the position of most companies on the various factors valued by customers.

With the concept of strategic gaps, six types of opportunity are particularly important, as follows.

Opportunities in substitute industries

Organisations face competition from industries that are producing substitutes, as discussed in section 2.3.1. But substitution also provides opportunities. In order to identify gaps a *realistic* assessment has to be made of the relative merits of the products/technologies (incumbent and potential substitutes) *in the eyes of the customer*. An example would be software companies substituting electronic versions of reference books and atlases for the traditional paper versions. From the customers' point of view, electronic versions have easier search facilities and are more likely to be up to date.

Opportunities in other strategic groups or strategic spaces

It is also possible to identify opportunities by looking across strategic groups – particularly if changes in the macro-environment make new market spaces economically viable. For example, deregulation of markets (say in electricity generation and distribution) and advances in IT (say with educational study programmes) could both create new market gaps. In the first case, the locally based smaller-scale generation of electricity becomes viable – possibly linked to waste incineration plants. In the latter case, geography can be 'shrunk' and educational programmes delivered across continents through the Internet and teleconferencing (together with local tutorial support). New strategic groups emerge in these industries/sectors.

Opportunities in targeting buyers

Sections 2.4.3 and 2.4.4 emphasised that the nature of the buyers can be complex, with the strategic customer critically important. It was also noted that there may be several people involved in the overall purchase decision. There may be opportunities in targeting neglected strategic customers or neglected influencers of purchasing decisions. It might, for instance, be worth targeting health and safety executives at a customer organisation: they might be willing to pay more for a safe product or service than the usual buyers in the purchasing department, typically more focused on cost.

Opportunities for complementary products and services

This involves a consideration of the potential value of complementary products and services. For example, in book retailing the overall 'book-buying experience' requires much more than just stocking the right books. It also includes providing an ambience conducive to browsing; the provision of a coffee bar might be seen as a complementary service.

Opportunities in new market segments

Looking for new market segments may provide opportunities but product/service features may need to change. If the emphasis is on selling emotional appeal, the alternative may be to provide a no-frills model that costs less and would appeal to another potential market. For example, the Body Shop, operating in the highly emotional cosmetics industry, challenged the accepted viewpoint. This was achieved by the production of purely functional products, noted for their lack of elaborate packaging or heavy advertising. This created new market space by attracting the consumer who wanted quality skin-care products without the added frills.

Opportunities over time

When predicting the impact of changes in the macro- or competitive environments it is important to consider how they are going to affect the consumer. Organisations can gain first-mover advantages that way. Cisco Systems realised that the future was going to create a significant need for high-speed data exchange and was at the forefront of producing equipment to address this future need. It identified new market space because no one else had assessed the likely implications of the Internet boom. This meant that it could offer specially designed products well ahead of its rivals, giving it an important competitive edge.

SUMMARY

- Environmental influences can be thought of as layers around an organisation, with the outer layer making up the *macro-environment*, the middle layer making up the *industry or sector* and the inner layer *strategic groups* and *market segments*.
- The macro-environment can be analysed in terms of the *PESTEL factors*, from which *key drivers of change* can be identified. Alternative *scenarios* about the future can be constructed according to how the key drivers develop.
- Industries and sectors can be analysed in terms of *Porter's Five Forces* – barriers to entry, substitutes, buyer power, supplier power and rivalry. Together, these determine industry or sector attractiveness. Together, these determine industry or sector attractiveness, and can be influential for overall performance (see Key Debate, Illustration 2.6).
- Industries and sectors are dynamic, and their changes can be analysed in terms of the *industry life cycle, hypercompetitive cycles of competition* and *comparative five forces radar plots*.
- In the inner layer of the environment, *strategic group* analysis, *market segment* analysis and the *strategy canvas* can help identify strategic gaps or opportunities.
- *Blue ocean* strategies characterised by low rivalry are likely to be better opportunities than *red ocean* strategies with many rivals.