



# CHAPTER 3

## Development of the firm's competitive advantage

### LEARNING OBJECTIVES

After studying this chapter you should be able to:

- define the concept 'international competitiveness' in a broader perspective from a macro level to a micro level
- discuss the basic sources of competitive advantages
- explain how 'economies of speed' can be used as a competitive advantage
- explain how Porter's traditional competitive-based five forces can be extended to a relationship (five sources) model
- define the steps in competitive benchmarking and explain how these steps are related to the outsourcing decision process
- explain the purposes and motives for outsourcing activities
- discuss the advantages and disadvantages of outsourcing

### 3.1 INTRODUCTION

Competitiveness is how effective and efficient a firm is, relative to its rivals, at serving customers and resellers. Effectiveness has to do with the quality of products, market share and profitability; efficiency has to do with response speed and low costs. Both effectiveness and efficiency ultimately depend on competitive rationality – the strength of the firm's competitive drives and its decision-making skills.

The topic of this chapter is how a firm creates and develops competitive advantage in the international market. The development of a firm's international competitiveness takes place interactively with the business environment. The firm must be able to adjust to customers, competitors and public authorities. To be able to participate in the international arena, the firm must have established a competitive basis consisting of resources, competences and relations to others in the international arena.

## 3.2 GENERAL SOURCES OF COMPETITIVE ADVANTAGE

Depending on the degree of internationalisation of its business, a company has access to different general sources of competitive advantage. A globally operating company may derive competitive advantage from qualities that are perhaps not available to firms with a regional or domestic focus, such as:

- economies of scale;
- economies of scope;
- strategic thinking as a core competence;
- exploitation of local advantages;
- ability to provide global services;
- company-specific competitive advantages;
- the ability to use human resources in developing competitive advantage.

Each factor will now be discussed in detail.

### Economies of scale (efficiencies of global scale and volume)

Economies of scale are often the main feature of a market. The theory is that the greater the economies of scale, the greater the benefits accruing to those with a high sales volume. As a result, the competition to achieve larger market share is intense. Economies of scale can come about because larger plants are more efficient to run, and their cost per unit of output may be relatively less. There may be overhead costs that cannot be avoided – even by the smaller organisations – but can be spread over larger volumes by the bigger firms. Economies of scale may also be the result of learning. With increasing cumulative production the manufacturer learns more and finds more efficient methods of production. All of these effects tend to increase competition by offering incentives to buy market share in order to become the lowest-cost producer. By the same token economies of scale also produce significant barriers against new entrants to the market. The higher the initial investment, the more difficult it is to justify the investment for a new entry. But such economies of scale do not always last forever.

Hence, where economies through large-scale operations are substantial, a firm will do all it can to achieve scale economies. Attempts to capture scale economies may lead a firm to compete for market share aggressively, escalating pressures on other firms. A similar situation occurs when a business's fixed costs are high and the firm must spread them over a large volume. If capacity can only be added in large increments, the resulting excess capacity will also intensify competition.

Experience effects are based on size over time, rather than size at a particular point in time. The experience effect reflects the improvements (usually resulting in lower costs) that result from economies of scale, learning and improved productivity over time.

For example, capital costs do not increase in direct proportion to capacity. Higher capacity results in lower depreciation charges per unit of output, lower operating cost in the form of the number of operatives, lower marketing, sales, administration, and research and development

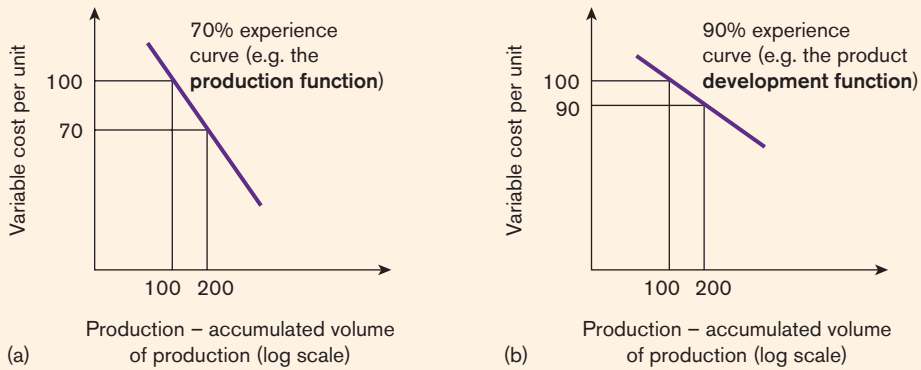


Figure 3.1

## Experience curves in different functions

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### Experience curve (learning curve)

The drop in the average per-unit production cost that comes with accumulated production experience.

### Variable cost

A cost that varies directly with an organisation's production or sales. Variable costs are a function of volume.

costs, and lower raw materials and shipping costs. It is generally recognised, however, that cost reductions apply more to the value-added elements than to bought-in supplies. In fact, the Boston Consulting Group discovered that costs decrease by up to 30 per cent for every cumulative doubling of output. This phenomenon (a so-called 70 per cent **experience curve**: every time production output doubles, the unit cost falls to 70 per cent of the former cost) is shown in Figure 3.1(a). This experience curve would be typical for the production function, whereas the experience curve is less sensitive for value functions like marketing and product development (Figure 3.1(b)). The reason is that these functions are more innovative in nature. While there are many implications for marketing strategy, particularly in relation to pricing policy, discussion will be confined to the product/market implications.

Large economies of scale exist when there are high fixed versus **variable costs** in the predominant business model. Large organisations can amortise the fixed costs over greater volumes, which gives them a big advantage over small competitors.

However, Toyota taught the Western world that many fixed costs can be reduced. By reducing in-process inventories, set-up times for machinery, and the overhead costs inherent in an inventory-intensive batch-manufacturing process, Toyota flattened the scale economics of assembling a car. CAD (computer-aided-design) systems had a similar effect on reducing the fixed cost of designing a new model. As a result, there is no relationship between a car producer's market share and its profitability. Analogous innovations have flattened scale economics in steel, electric-power generation and computers – and rendered transitory what were once thought to be sustainable advantages (Kalpič, 2008).

Strategists in industries that today see leading companies enjoying scale-based competitive advantage ought to ask themselves if the fundamental trade-offs that create today's high fixed costs might change. Consider Intel. A barrier to potential competitors is the US\$700 million cost to design a new family of microprocessors and the US\$3 billion needed to build a new fabrication facility. However, disruptive technologies such as Tensilica's modular microprocessor architecture are flattening the scale economics of design. And small fabrication facilities, or mini-fabs, could reduce the fixed costs of production. Such technologies take root at the bottom end of the market first, but their capabilities are improving all the time (Christensen, 2001).

## Economies of scope (transfer of resources, experience, ideas and successful concepts across products and markets)

A second source of competitive advantage, intertwined with scale economics, has been breadth of product range. For example, through the 1970s, Caterpillar's scope gave the company an unassailable advantage in construction equipment against smaller competitors such as Komatsu. Only Caterpillar was large enough to absorb the complexity-driven overhead

costs of developing, manufacturing and distributing a full product range. Caterpillar's dealers did not need to carry equipment from other manufacturers in order to offer customers what they needed. Caterpillar's huge installed base of equipment in the field meant its dealers, who were the largest dealers in each market, could afford to stock the part necessary to offer 24-hour delivery of any spare part to any Caterpillar owner. No competitor could match this at that time.

Scope economies are also derived from activities in interrelated geographical markets. If they are strong, a sustainable advantage in one market can be used to build sustainability in another. The term scope economy is not just a new name for synergy; it actually defines the conditions under which synergy works. To achieve economies of scope, a company must be able to share resources across markets, while making sure that the cost of those resources remains largely fixed. Only then can economies be effected by spreading assets over a greater number of markets.

Global companies can transfer resources between business units in different parts of the world. These resources may include personnel (such as experienced production managers), funds (global organisations usually have a lower capital cost than domestic firms), and superior market information. Firms such as Kraft-Jacobs-Suchard, the Swiss chocolate and coffee manufacturer owned by Philip Morris, transfer their managers to operations where they need their specific know-how, for example in the growing markets of Eastern Europe, and profit from the capital transfer capacity of their company to respond quickly to market opportunities wherever they occur.

A global company is also able to transfer experience, ideas and successful concepts from one country to another. McDonald's country managers in Europe, for example, meet regularly to compare notes on products and promotional ideas, but also how to avoid waste, and to discuss whether such ideas might be appropriate in other markets. Faster knowledge transfer and learning result in superior customer benefits through lower prices and improved product and service features.

Finally, global companies often have a stronger brand reputation than can be achieved by domestic companies. As travel and communication across national boundaries increase, this potential for transfer of brand reputation is likely to grow.

## Time-based competition (TBC)

Competitive advantage is a constantly moving target. The most successful firms know how to keep moving, always staying alert and pro-active. Today, time represents a powerful source of competitive advantage and includes managing time in production and service delivery, in new product development and introduction, and in sales distribution.

Time can be expressed in a variety of ways: cycle time, **time to market**, new product development time, time elapsed between order placement and payment, and real-time customer responsiveness. Time-based competitors focus on both activity and system delivery times as measures in all phases of their operations.

All **time-based competition** (TBC) uses process strategies to reduce one or more of the various types of **lead times** faced by the company. They are implemented using such tactics as team building, organisational flattening, flexible manufacturing systems and simultaneous engineering. The key challenge facing any company attempting to implement TBC is to ensure that there is a proper fit between how the company competes in the marketplace, the specific TBC process strategies selected, and the specific implementation tactics used.

By competing on time, a company enjoys first-entrant advantages that include higher pricing, higher market share, improved customer service, and productivity improvement. The goal of TBC, like just-in-time, is to eliminate all wasted time from activities in the value chain. Such time-reduction methods can be seen in overlapping product development activities through simultaneous engineering, improving communication channels between

### Time to market

The time it takes for a company to develop a new product and turn it into a product which people can buy.

### Time-based competition

Competition based on providing time utility by delivering a product when the consumer wants it.

### Lead time

The time from the moment the customer places an order to the moment it is received by the customer.

various functions (including customers and suppliers), through set-up times, and smoothing production flow. The underlying premise of TBC is that the company fastest at responding to market needs will lead the rest.

The time-based competitor is able to use customer feedback to offer new products in less time, quickly discontinuing products that do not sell well. In an early example of TBC, Yamaha was overwhelmed when Honda responded to its challenge in motorcycles. Honda launched many of new motorcycle models in just a few months. Yamaha was forced to admit defeat and retreat from its position as market leader. Honda's gain of market share and its market dominance were a direct result of time-based strategies.

A strategy built on leadership alone or flexible manufacturing alone would not have been sufficient for Honda because Yamaha could have matched it on each score. Honda's competitive advantage came from optimising synergies between time-based characteristics of lower prices, flexible processes, top quality and heightened awareness of consumers via consumer service programmes.

However, that TBC is not everything is shown by the VCR industry where success in controlling the industry standard perhaps can indicate all competitive advantages in other areas.

Sony, as the first-to-market initially had many competitive advantages over JVC, e.g. innovation and differentiation. Yet losing in the industry standard war to JVC's VHS format, due to a lack of network building, diminished Sony's many competitive advantages in the VCR business. Sony had to abide by the standard set by JVC and reduce its own Betamax system to a niche product, hurting its performance in the business (Ma, 2000a).

The first-generation approach to speed has been radical in many ways. Managers in North America and Europe changed forever how they thought about manufacturing, for example. Borrowing from the Japanese, they introduced methodologies that helped to boost production speed and to match supply and demand more accurately. As the speed of manufacturing and service delivery increased, attention shifted upstream toward the much longer, less tangible product-development process. By breaking down functional barriers and introducing concurrent design processes, companies cut product development time by 30 per cent or more.

Today the focus is also on strategy. The companies that can make decisions fast, change direction nimbly, and figure out when to enter and exit markets will enjoy competitive advantage.

Speed plays an increasingly important role in more traditional strategic moves, such as mergers and acquisitions. Traditionally, acquisitions were used to buy earnings and remove competitors in mature markets. Now, innovation and access to capabilities drive many mergers and acquisitions. In those cases, senior managers must identify, execute and assimilate acquisitions very quickly or they will lose the deal. Partnerships can substantially enhance a company's ability to move swiftly by enabling it to focus on what it does best and fastest.

### 3.3 INTRODUCTION OF A HOLISTIC MODEL OF COMPETITIVENESS: FROM MACRO TO MICRO LEVEL

The theory of firm competitiveness implicitly assumes that the 'competitiveness of nations' is not simply based on country-specific factors but heavily influenced by firm-specific factors, as the latter is deeply ingrained in and shapes the former.

On the other hand, the competitive advantage developed by a firm in its home market is determined to a significant extent by the national business environment, with benefits being derived from access to resources and skills and competitive pressures derived from other national firms creating the need to invest and innovate.

The need to understand the advantages gained by firms in industries in these countries is valuable for the individual firm in seeing what it is about its own location that can determine its ability to gain competitive advantage.



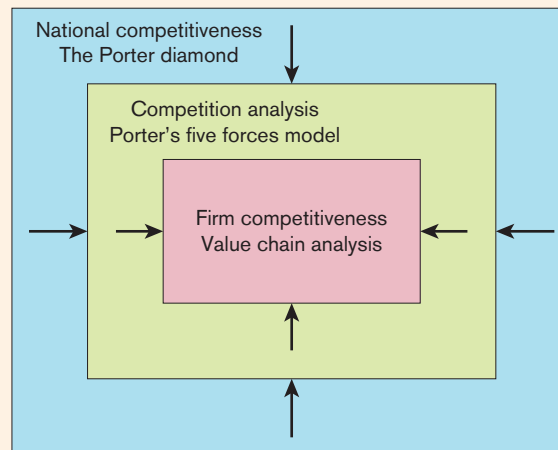


Figure 3.2

Three levels of international competitiveness

It is relevant to look at why a nation becomes the base for successful international competition in an industry or how it is that firms in an industry from a particular country can create competitive advantage, and then sustain it over time.

This section focuses on the three levels of analysis – nation, industry and firm (see Figure 3.2).

To enable an understanding of the development of a firm's international competitiveness in a broader perspective, a model in three stages (see Figure 3.3) will be presented:

- 1 analysis of national competitiveness (the Porter diamond) – macro level;
- 2 competition analysis in an industry (Porter's five forces) – meso level;
- 3 value chain analysis – micro level:
  - (a) competitive triangle;
  - (b) **benchmarking**.

The analysis starts at the macro level and then moves into the firm's competitive arena through **Porter's five forces model**. Based on the firm's value chain, the analysis is concluded with a discussion of which activities/functions in the value chain are the firm's core competences (and must be developed internally in the firm) and which competences must be placed with others through alliances and market relations.

The graphical system used in Figure 3.3 (which will be referred to throughout this chapter) places the models after each other in a hierarchical windows logic, where you get from stage 1 to stage 2 by clicking on the icon box: 'Firm strategy, structure and rivalry'. Here Porter's five forces model appears. From stage 2 to 3 we click the middle box labelled 'Market competitors/Intensity of rivalry' and the model for a value chain analysis/competitive triangle appears.

### Individual competitiveness and time-based competition

In this chapter the analysis ends at the firm level but it is possible to go a step further by analysing individual competitiveness (Veliyath and Zahra, 2000). The factors influencing the capacity of an individual to become competitive would include intrinsic abilities, skills, motivation levels and the amount of effort involved. Traditional decision-making perspectives maintain that uncertainty leads executives to search for more additional information with which to increase certainty. However, Kedia *et al.* (2002) showed that some executives increase competitiveness by using tactics to accelerate analysis of information and alternatives

#### Benchmarking

The process of comparing the company's products and processes to those of competitors or leading firms in other industries to find ways to improve quality and performance.

#### Porter's five forces model

The state of competition and profit potential in an industry depends on five basic competitive forces: new entrants, suppliers, buyers, substitutes and market competitors.

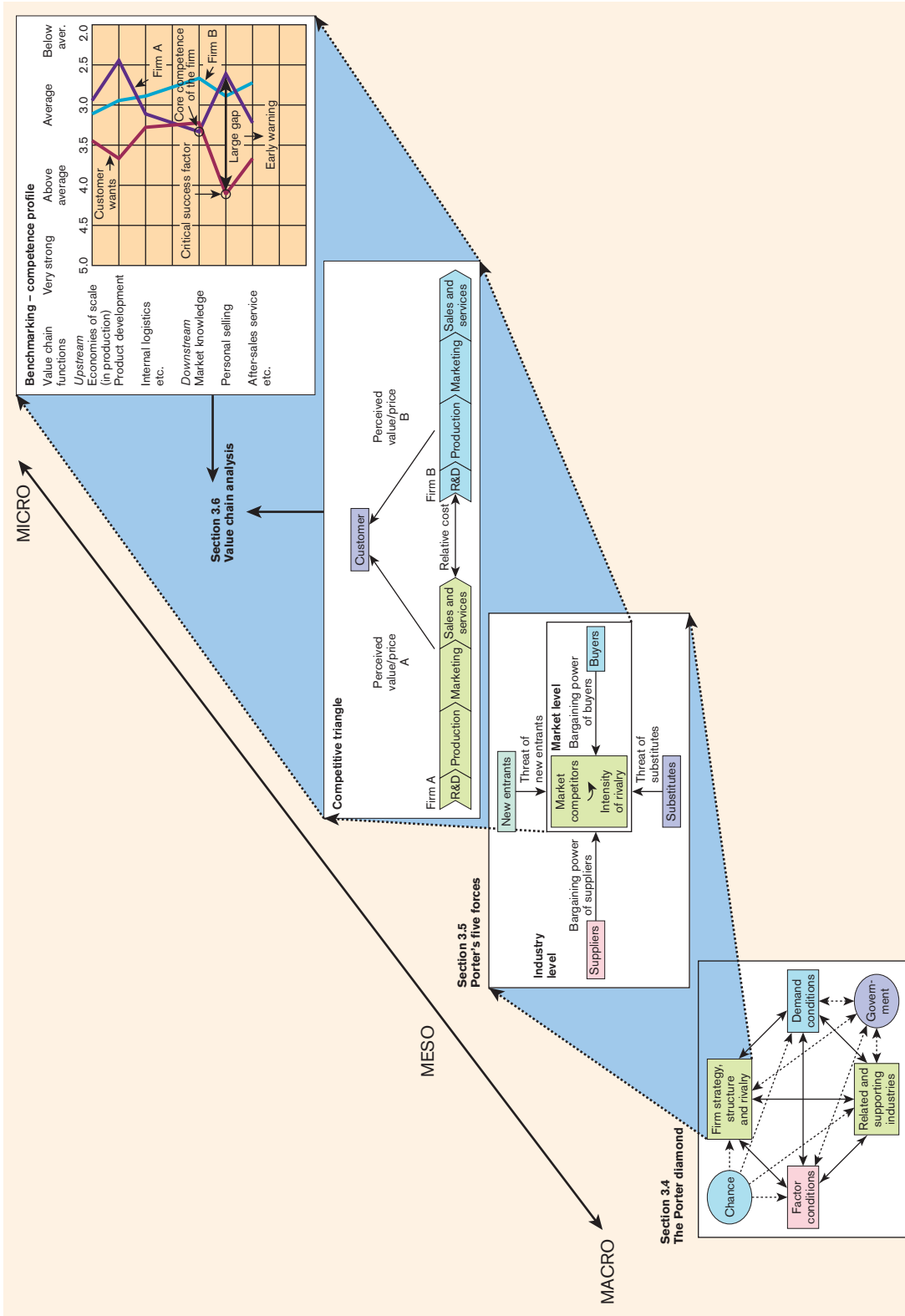


Figure 3.3 Development of a firm's international competitiveness

during the decision-making process. For example, these executives examine several alternatives simultaneously. The comparison process speeds their analysis of the strengths and weaknesses of options.

### 3.4 ANALYSIS OF NATIONAL COMPETITIVENESS (THE PORTER DIAMOND)

Analysis of national competitiveness represents the highest level in the entire model (Figure 3.3). Michael E. Porter called his work *The Competitive Advantage of Nations* (1990), but as a starting point it is important to say that it is firms which are competing in the international arena, not nations. Yet the characteristics of the home nation play a central role in a firm's international success. The home base shapes a company's capacity to innovate rapidly in technology and methods, and to do so in the proper directions. It is the place from which competitive advantage ultimately emanates and from which it must be sustained. Competitive advantage ultimately results from an effective combination of national circumstances and company strategy. Conditions in a nation may create an environment in which firms can attain international competitive advantage, but it is up to a company to seize the opportunity. The national diamond becomes central to choosing the industries to compete with, as well as the appropriate strategy. The home base is an important determinant of a firm's strengths and weaknesses relative to foreign rivals.

Understanding the home base of foreign competitors is essential in analysing them. Their home nation yields them advantages and disadvantages. It also shapes their likely future strategies.

Porter (1990) describes a concentration of firms within a certain industry as industrial clusters. Within such industrial clusters firms have a network of relations to other firms in the industry: customers (including firms that work on semi-manufactured goods), suppliers and competitors. These industrial clusters may go worldwide, but they will usually have their starting point and location in a certain country or region of a country.

A firm gains important competitive advantages from the presence in its home nation of world-class buyers, suppliers and related industries. They provide insight into future market needs and technological developments. They contribute to a climate for change and improvement, and become partners and allies in the innovation process. Having a strong cluster at home unblocks the flow of information and allows deeper and more open contact than is possible when dealing with foreign firms. Being part of a cluster localised in a small geographic area can be even more valuable, so the central question we can ask is: what accounts for the national location of a particular global industry? The answer begins, as does all classical trade theory, with the match between the factor endowments of the country and the needs of the industry.

Let us now take a closer look at the different elements in **Porter's diamond**. Throughout the analysis the Indian IT/software industry (especially illustrated by the Bangalore area) will be used as an example (Nair *et al.*, 2007).

#### Factor conditions

We can make a distinction between 'basic and advanced' factors. Basic factors include natural resources (climate, minerals, oil), where the mobility of the factors is low. These factors can also create the ground for international competitiveness, but they can never turn into real value creation without the advanced factors, like sophisticated human resources (skills) and research capabilities. Such advanced factors also tend to be specific to the industry.

#### Porter's diamond

The characteristics of the 'home base' play a central role in explaining the international competitiveness of the firm – the explaining elements consist of factor conditions, demand conditions, related and supporting industries, firm strategy, structure and rivalry, chance and government.



In the Indian software industry, Bangalore has several engineering- and science-oriented educational institutions. Also the Indian Institute of Science (a research-oriented graduate school) can be identified as essential in the development of the software industry in the region. The presence of the public sector engineering firms and the private engineering colleges has attracted young people from the country to Bangalore and it has created a diverse, multilingual, tolerant and cosmopolitan culture. One of the most critical success factors of the industry was the availability of advanced and highly educated human resources, but with generalised skills. These generalists (not specialists in software or programming) could be trained into problem solvers in specific areas based on industry needs.

## Demand conditions

These factors are represented in the right-hand box of Porter's diamond (Figure 3.3). The characteristics of this element that drive industry success include the presence of early home demand, market size, its rate of growth, and sophistication.

There exists an interaction between scale economies, transportation costs and the size of the home market. Given sufficiently strong economies of scale, each producer wants to serve a geographically extensive market from a single location. To minimise transportation costs the producer chooses a location with large local demand. When scale economies limit the number of production locations the size of a market will be an important determinant of its attractiveness. Large home markets will also ensure that firms located at that site develop a cost advantage based on scale and often on experience as well.

An interesting pattern is that an early large home market that has become saturated forces efficient firms to look abroad for new business. For example, the Japanese motorcycle industry with its large home market used its scale advantages in the global marketplace after an early start in Japan. The composition of demand also plays an important role.

A product's fundamental or core design nearly always reflects home market needs. In electrical transmission equipment, for example, Sweden dominates the world in the high-voltage distribution market. In Sweden there is a relatively large demand for transporting high voltage over long distances, as a consequence of the location of population and industry clusters. Here the needs of the home market shaped the industry that was later able to respond to global markets (with ABB as one of the leading producers in the world market).

The sophistication of the buyer is also important. The US government was the first buyer of chips and remained the only customer for many years. The price inelasticity of government encouraged firms to develop technically advanced products without worrying too much about costs. Under these conditions the technological frontier was clearly pushed much further and much faster than it would have been had the buyer been either less sophisticated or more price sensitive.

The Indian software industry was kick-started in connection with the Y2K problem (a problem caused due to a coding convention in older systems that assigned only two digits for the year count, thereby creating a potential disruption as the calendar year turned 2000), where US firms contracted with Indian software firms that had employees who were skilled in older programming languages such as Cobol and Fortran. As their experience with US firms increased and the Y2K problems were solved, India-based software firms began diversifying and offering more value-added products and services. Serving demanding US customers forced the Indian software firms to develop high-quality products and services. Later on this experience helped to address the needs of IT customers in Germany, Japan and other markets.

## Related and supporting industries

The success of an industry is associated with the presence of suppliers and related industries within a region (Chen and Hsieh, 2008).

In many cases competitive advantages come from being able to use labour that is attracted to an area to serve the core industry, but which is available and skilled for supporting this industry. Coordination of technology is also eased by geographic proximity. Porter argues that Italian world leadership in gold and silver jewellery has been sustained in part by the local presence of manufacturers of jewellery-making machinery. Here the advantage of clustering is not so much transportation cost reductions but technical and marketing cooperation. In the semiconductor industry, the strength of the electronics industry in Japan (which buys the semiconductors) is a strong incentive to the location of semiconductors in the same area. It should be noted that clustering is not independent of scale economies. If there were no scale economies in the production of intermediate inputs, then the small-scale centres of production could rival the large-scale centres. It is the fact that there are scale economies in both semiconductors and electronics, coupled with the technological and marketing connections between the two, that give rise to clustering advantages.

In the beginning, Bangalore's lack of reliable supporting industries, such as telecommunication and power supply, was a problem, but many software firms installed their own generators and satellite communication equipment. Recently, firms that provide venture capital, recruitment assistance, network, hardware maintenance and marketing/accounting support have emerged in the Bangalore area to support the software firms. Also, the presence of consulting firms such as KPMG, PriceWaterhouseCoopers and Ernst & Young can assist incoming multinational companies with entering the Indian market by solving, for example, their currency and location problems. Consequently, a whole system of support has now evolved around the software industry.

### Firm strategy, structure and rivalry

This fairly broad element includes how companies are organised and managed, their objectives, and the nature of domestic rivalry.

One of the most compelling results of Porter's study of successful industries in ten different nations is the powerful and positive effect that domestic competition has on the ability to compete in the global marketplace. In Germany, the fierce domestic rivalry among BASF, Hoechst and Bayer in the pharmaceutical industry is well known. Furthermore, the process of competition weeds out inferior technologies, products and management practices, and leaves as survivors only the most efficient firms. When domestic competition is vigorous firms are forced to become more efficient, adopt new cost-saving technologies, reduce product development time, and learn to motivate and control workers more effectively. Domestic rivalry is especially important in stimulating technological developments among **global firms**.

The small country of Denmark has three producers of hearing-aids (William Demant, Widex and GN Resound/Danavox), which are all among the top ten of the world's largest producers of hearing-aids. In 1996 Oticon (the earlier William Demant) and Widex fought a violent technological battle to be the first in the world to launch a 100 per cent digitalised hearing-aid. Widex (the smaller of the two producers) won, but forced Oticon at the same time to keep a leading edge in technological development.

In relation to the Indian software industry, most firms in the Bangalore area experience fierce competition. The competition about future customers is not just with local firms, but also with firms outside Bangalore and multinational companies such as IBM and Accenture. It has resulted in a pressure on firms not only to deliver quality products and services, but also to be cost-effective. This competition has encouraged firms to seek international certifications, with a rating in software development. Today the Bangalore area has the world's highest concentration of companies with the so-called CMM-SEI (Carnegie Mellon University's Software Engineering Institute) Level 5 certification (the highest quality rating).

#### Global firm

A firm that by operating in more than one country gains marketing, production, R&D and financial advantages in its costs and reputation that are not available to purely domestic competitors.

## Government

According to Porter's diamond model, government can influence and be influenced by each of the four main factors.

Governments can play a powerful role in encouraging the development of industries within their own borders that will assume global positions. Governments finance and construct infrastructure, providing roads, airports, education and healthcare, and can support use of alternative energy (e.g. wind turbines) or other environmental systems that affect factors of production.

In relation to the Indian software industry, the federal government in Delhi had already targeted software as a growth area in the 1970s, because of its high skill requirements and labour intensity. Though the 1970s and 1980s the industry was mainly dominated by public sector companies, such as CMC. In 1984 the government started liberalising industrial and investment policies, which gave access to IT companies from abroad, e.g. Texas Instruments. One of the new initiatives was also setting up 'Technology Parks', e.g. the Software Technology Parks (STP) in Bangalore. The liberation policy continued throughout the 1980s and 1990s. In 1988 NASSCOM (National Association of Software and Service Companies) was formed. NASSCOM is an association of IT firms that acts as a catalyst for the industry growth by supporting IT research and education in India. In 1999 the Ministry of Information Technology was set up to coordinate the IT initiatives at government, academic and business levels.

Thus Bangalore's success in becoming a software hub can be attributed to the state government's active role in the early and later stages of the industry's evolution.

## Chance

According to Porter's diamond, national/regional competitiveness may also be triggered by random events.

When we look at the history of most industries we also see the role played by chance. Perhaps the most important instance of chance involves the question of who comes up with a major new idea first. For reasons having little to do with economics, entrepreneurs will typically start their new operations in their home countries. Once the industry begins in a given country, scale and clustering effects can cement the industry's position in that country.

In relation to the development of competitiveness of the Indian software industry (especially in Bangalore), two essential events can be identified:

- 1 The Y2K problems (described earlier), which created the increased demand for services of Indian software firms.
- 2 The collapse of the dot-com boom in 2001 in the USA and Europe, which created the search for ways to cut costs by outsourcing software functions to India.

From the firm's point of view the last two variables, chance and government, can be regarded as exogenous variables which the firm must adjust to. Alternatively, the government may be considered susceptible through lobbying, interest organisations and mass media.

In summary, we have identified six factors that influence the location of global industries: factors of production, home demand, the location of supporting industries, the internal structure of the domestic industry, government and chance. We have also suggested that these factors are interconnected. As industries evolve their dependence on particular locations may also change. For example, the shift in users of semiconductors from the military to the electronics industry has had a profound effect on the shape of the national diamond in that industry. To the extent that governments and firms recognise the source of any locational advantages that they have, they will be better able to both exploit those differences and anticipate their shifts.

In relation to the software industry in India (Bangalore), which was used throughout the diamond model, the following conclusions may be given (Nair *et al.*, 2007).

The software industry in Bangalore started off by serving not its domestic customers but the demanding North American customers. Also, the rivals for the software firms tend not to be so much local but more global.

The support needed for software services is much less sophisticated than for manufacturing. For the manufacturing sector it is also important to have access to a well-functioning physical infrastructure (transport, logistics, etc.), which is not necessary for the software industry, where most of the logistics can be done over the Internet. That is one of the reasons why Bangalore's software industry created international competitiveness but the manufacturing sector did not.

The software industry is very much dependent on advanced and well-educated human resources as the key factor input.

While the Bangalore-based firms started off at the low end of the value chain (performing coding work for the Y2K problem) they have continuously moved in the direction of delivering more value-added service in emerging areas.

### 3.5 COMPETITION ANALYSIS IN AN INDUSTRY

The next step in understanding the firm's competitiveness is to look at the competitive arena in an industry, which is the top box in the diamond model (see Figure 3.3).

One of the most useful frameworks for analysing the competitive structure has been developed by Porter. Porter (1980) suggests that competition in an industry is rooted in its underlying economic structure and goes beyond the behaviour of current competitors. The state of competition depends upon five basic competitive forces, as shown in Figure 3.3. Together these factors determine the ultimate profit potential in an industry, where profit is measured in terms of long-run return on invested capital. The profit potential will differ from industry to industry (Brookfield *et al.*, 2008).

To make things clearer we need to define a number of key terms. An *industry* is a group of firms that offer a product or class of products which are close substitutes for each other. Examples are the car industry and the pharmaceutical industry (Kotler, 1997, p. 230). A *market* is a set of actual and potential buyers of a product and sellers. A distinction will be made between industry and market level, as we assume that the industry may contain several different markets. This is why the outer box in Figure 3.3 is designated 'industry level' and the inner box 'market level'.

Thus the *industry level* (Porter's five forces model) consists of all types of actors (new entrants, suppliers, substitutes, buyers and market competitors) that have a potential or current interest in the industry.

The *market level* consists of actors with a current interest in the market; that is, buyers and sellers (market competitors). In section 3.6 (value chain analysis) this market level will be further elaborated on as the buyers' perceived value of different competitor offerings will be discussed.

Although division into the above-mentioned two levels is appropriate for this approach, Levitt (1960) pointed out the danger of '**marketing myopia**', where the seller defines the competition field (i.e. the market) too narrowly (Brookfield *et al.*, 2008). For example, European luxury car manufacturers showed this myopia with their focus on each other rather than on the Japanese mass manufacturers, who were new entrants into the luxury car market.

The goal of competition analysis is to find a position in industry where the company can best defend itself against the five forces, or can influence them in its favour. Knowledge of these underlying pressures highlights the critical strengths and weaknesses of the company,

#### Marketing myopia

The failure of a company to define its organisational purpose from a broad consumer orientation.

shows its position in the industry, and clarifies areas where strategy changes yield the greatest pay-off. Structure analysis is fundamental for formulating competitive strategy.

Each of the five forces in the Porter model in turn comprises a number of elements that combine to determine the strength of each force, and its effect on the degree of competition. Each force is now discussed.

## Market competitors

The intensity of rivalry between existing competitors in the market depends on a number of factors:

- *Concentration of the industry*: numerous competitors of equal size will lead to more intense rivalry. There will be less rivalry when a clear leader (at least 50 per cent larger than the second) exists with a large cost advantage.
- *Rate of market growth*: slow growth will tend towards greater rivalry.
- *Structure of costs*: high fixed costs encourage price cutting to fill capacity.
- *Degree of differentiation*: commodity products encourage rivalry, while highly differentiated products, which are hard to copy, are associated with less intense rivalry.
- *Switching costs*: when switching costs are high, because the product is specialised, the customer has invested a lot of resources in learning how to use the product or has made tailor-made investments that are worthless with other products and suppliers (high asset specificity), rivalry is reduced.
- **Exit barriers**: when barriers to leaving a market are high, due to such factors as lack of opportunities elsewhere, high vertical integration, emotional barriers or the high cost of closing down plant, rivalry will be more intense than when exit barriers are low.

### Exit barrier

The barriers to leaving an industry, e.g. cost of closing down plant.

Firms need to be careful not to spoil a situation of competitive stability. They need to balance their own position against the well-being of the industry as a whole. For example, an intense price or promotional war may gain a few percentage points in market share but lead to an overall fall in long-run industry profitability as competitors respond to these moves. It is sometimes better to protect industry structure than to follow short-term self-interest.

## Suppliers

The cost of raw materials and components can have a major bearing on a firm's profitability. The higher the bargaining power of suppliers, the higher the costs. The bargaining power of suppliers will be higher in the following circumstances:

- Supply is dominated by few companies and they are more concentrated than the industry they sell to.
- Their products are unique or differentiated, or they have built up switching costs.
- They are not obliged to contend with other products for sale to the industry.
- They pose a credible threat of integrating forwards into the industry's business.
- Buyers do not threaten to integrate backwards into supply.
- The market is not an important customer to the supplier group.

A firm can reduce the bargaining power of suppliers by seeking new sources of supply, threatening to integrate backwards into supply, and designing standardised components so that many suppliers are capable of producing them.



## Buyers

The bargaining power of buyers is higher in the following circumstances:

- Buyers are concentrated and/or purchase in large volumes.
- Buyers pose a credible threat of integrating backwards to manufacture the industry's product.
- Products they purchase are standard or undifferentiated.
- There are many suppliers (sellers) of the product.
- Buyers earn low profits, which create a great incentive to lower purchasing costs.
- The industry's product is unimportant to the quality of the buyer's products, but price is very important.

Firms in the industry can attempt to lower buyer power by increasing the number of buyers they sell to, threatening to integrate forward into the buyer's industry, and producing highly valued, differentiated products. In supermarket retailing, the brand leader normally achieves the highest profitability, partially because being number one means that supermarkets need to stock the brand, thereby reducing buyer power in price negotiations.

Customers who purchase the product but are not the end user (such as OEMs or distributors) can be analysed in the same way as other buyers. Non-end customers can gain significant bargaining power when they can influence the purchase decision of customers downstream (Porter, 2008). Over the years ingredient supplier DuPont has created enormous clout by advertising its 'Teflon' brand not only to the manufacturers of cooking equipment, but also to downstream end-customers (households). See also the section on ingredient branding in Chapter 11.

## Substitutes

The presence of substitute products can reduce industry attractiveness and profitability because they put a constraint on price levels.

If the industry is successful and earning high profits it is more likely that competitors will enter the market via substitute products in order to obtain a share of the potential profits available. The threat of substitute products depends on the following factors:

- the buyer's willingness to substitute;
- the relative price and performance of substitutes;
- the costs of switching to substitutes.

The threat of substitute products can be lowered by building up switching costs. These costs may be psychological. Examples are the creation of strong, distinctive brand personalities, and maintaining a price differential commensurate with perceived customer values.

## New entrants

New entrants can serve to increase the degree of competition in an industry. In turn, the threat of new entrants is largely a function of the extent to which barriers to entry exist in the market. Some key factors affecting these entry barriers include the following:

- economies of scale;
- product differentiation and brand identity, which give existing firms customer loyalty;
- capital requirements in production;
- switching costs – the cost of switching from one supplier to another;
- access to distribution channels.

Because high barriers to entry can make even a potentially lucrative market unattractive (or even impossible) to enter for new competitors, the marketing planner should not take a passive approach but should actively pursue ways of raising barriers to new competitors.

High promotional and R&D expenditures and clearly communicated retaliatory actions to entry are some methods of raising barriers. Some managerial actions can unwittingly lower barriers. For example, new product designs that dramatically lower manufacturing costs can make entry by newcomers easier.

## The collaborative 'five sources' model

Porter's original model is based on the hypothesis that the competitive advantage of the firm is best developed in a very competitive market with intense rivalry relations.

The five forces framework thus provides an analysis for considering how to squeeze the maximum competitive gain out of the context in which the business is located – or how to minimise the prospect of being squeezed by it – on the five competitive dimensions that it confronts.

Over the past two decades, however, an alternative school (e.g. Reve, 1990; Kanter, 1994; Burton, 1995) has emerged which emphasises the positive role of cooperative (rather than competitive) arrangements between industry participants, and the consequent importance of what Kanter (1994) has termed 'collaborative advantage' as a foundation of superior business performance.

An all-or-nothing choice between a single-minded striving for either competitive or collaborative advantage would, however, be a false one. The real strategic choice problem that all businesses face is where (and how much) to collaborate, and where (and how intensely) to act competitively.

Put another way, the basic questions that firms must deal with in respect of these matters are as follows:

- choosing the combination of competitive and collaborative strategies that are appropriate in the various dimensions of the industry environment of the firm;
- blending the two elements together so that they interact in a mutually consistent and reinforcing, and not counterproductive, manner;
- in this way, optimising the firm's overall position, drawing upon the foundation and utilisation of both collaborative and competitive advantage.

This points to the imperative in the contemporary context of complementing the competitive strategy model with a sister framework that focuses on the assessment of collaborative advantage and strategy. Such a complementary analysis, which is called the *five sources framework* (Burton, 1995), is outlined below.

Corresponding to the array of five competitive forces that surround a company – as elaborated in Porter's treatment – there are also five potential sources for the building of collaborative advantage in the industrial environments of the firm (the **five sources model**). These sources are listed in Table 3.1.

In order to forge an effective and coherent business strategy, a firm must evaluate and formulate its collaborative and competitive policies side by side. It should do this for two purposes:

- to achieve the appropriate balance between collaboration and competition in each dimension of its industry environment (e.g. relations with suppliers, policies towards customers/channels);
- to integrate them in a way that avoids potential clashes and possibly destructive inconsistencies between them.

This is the terrain of composite strategy, which concerns the bringing together of competitive and collaborative endeavours.

### Five sources model

Corresponding to Porter's five competitive forces there are also five potential sources for building collaborative advantages together with the firm's surrounding actors.

Table 3.1

The five sources model and the corresponding five forces in the Porter model

Porter's five forces model	The five sources model
<b>Market competitors</b>	Horizontal collaborations with other enterprises operating at the same stage of the production process/producing the same group of closely related products (e.g. contemporary global partnering arrangements among car manufacturers).
<b>Suppliers</b>	Vertical collaborations with suppliers of components or services to the firm – sometimes termed vertical quasi-integration arrangements (e.g. the <i>keiretsu</i> formations between suppliers and assemblers that typify the car, electronics and other industries in Japan).
<b>Buyers</b>	Selective partnering arrangements with specific channels or customers (e.g. lead users) that involve collaboration (value co-creation) extending beyond standard, purely transactional relationships (Vargo <i>et al.</i> , 2008).
<b>Substitutes</b>	Related diversification alliances with producers of both complements and substitutes. Producers of substitutes are not natural allies but such alliances are not inconceivable (e.g. collaborations between fixed-wire and mobile telephone firms in order to grow their joint network size).
<b>New entrants</b>	Diversification alliances with firms based in previously unrelated sectors, but between which a blurring of industry borders is potentially occurring, or a process (commonly due to new technological possibilities) that opens up the prospect of cross-industry fertilisation of technologies/business that did not exist before (e.g. the collaborations in the emerging multimedia field).

Source: Burton, J. (1995) Composite strategy: the combination of collaboration and competition, *Journal of General Management*, 21(1): 1–23. Reproduced with permission from The Baybrooke Press Ltd.

## 3.6 VALUE CHAIN ANALYSIS

Until now we have discussed the firm's international competitiveness from a strategic point of view. To get closer to the firm's core competences we will now look at the market-level box in Porter's five-forces model, which treats buyers and sellers (market competitors). Here we will look more closely at what creates a competitive advantage among market competitors towards customers at the same competitive level.

### The competitive triangle

Success in the marketplace is dependent not only upon identifying and responding to customer needs, but also upon our ability to ensure that our response is judged by customers to be superior to that of competitors (i.e. high perceived value). Several writers (e.g. Porter, 1980; Day and Wensley, 1988) have argued that causes of difference in performance within a market can be analysed at various levels. The immediate causes of differences in the performance of different firms, these writers argue, can be reduced to two basic factors (D'Aveni, 2007):

- 1 The *perceived value* of the product/services offered, compared to the perceived sacrifice. The *perceived sacrifice* includes all the 'costs' the buyer faces when making a purchase, primarily the *purchase price*, but also acquisition costs, transportation, installation, handling, repairs and maintenance (Ravald and Grönroos, 1996). In the models presented the (purchase) price will be used as a representative of the perceived sacrifice. D'Aveni (2007) presents a strategic tool for evaluating how much a customer is willing to pay for a perceived benefit of a product/service.
- 2 The firm-related *costs* incurred in creating this perceived value.

		Perceived value (compared to the purchase price)	
		Higher for A	Higher for B
Relative costs	Lower for A	I	II
	Lower for B	III	IV

Figure 3.4

Perceived value, relative costs and competitive advantage

These two basic factors will be further discussed later in this section.

The more value customers perceive in a market offering relative to competing offerings, and the lower the costs in producing the value relative to competing producers, the higher the performance of the business. Hence firms producing offerings with a higher perceived value and/or lower relative costs than competing firms are said to have a competitive advantage in that market.

#### Competitive triangle

Consists of a customer, the firm and a competitor (the 'triangle'). The firm or competitor 'winning' the competition depends on perceived value offered to the customer compared to the relative costs between the firm and the competitor.

This can be illustrated by the 'competitive triangle' (see Figure 3.3). There is no one-dimensional measure of competitive advantage, and **perceived value** (compared to the price) and relative costs have to be assessed simultaneously. Given this two-dimensional nature of competitive advantage it will not always be clear which of the two businesses will have a competitive advantage over the other.

Looking at Figure 3.4, firm A will clearly have an advantage over firm B in case I, and clearly have a disadvantage in case IV, while cases II and III do not immediately allow such a conclusion. Firm B may have an advantage in case II, if customers in the market are highly quality conscious and have differentiated needs and low price elasticity, while firm A may have a similar advantage in case II when customers have homogeneous needs and high price elasticity. The opposite will take place in case III.

#### Perceived value

The customer's overall evaluation of the product/service offered by a firm, compared to a price paid.

Even if firm A has a clear competitive advantage over firm B, this may not necessarily result in a higher return on investment for A, if A has a growth and B a hold policy. Thus performance would have to be measured by a combination of return on investment and capacity expansion, which can be regarded as postponed return on investment.

While the relationship between perceived value, relative costs and performance is rather intricate, we can retain the basic statement that these two variables are the cornerstone of competitive advantage. Let us take a closer look at these two fundamental sources of competitive advantage.

### Perceived value advantage

We have already observed that customers do not buy products; they buy benefits. Put another way, the product is purchased not for itself but for the promise of what it will 'deliver'. These benefits may be intangible; that is, they may relate not to specific product features but rather to such things as image or reputation. Alternatively, the delivered offering may be seen to outperform its rivals in some functional aspect.

Perceived value is the customer's overall evaluation of the product/service offered. So, establishing what value the customer is actually seeking from the firm's offering (value chain) is the starting point for being able to deliver the correct mix of value-providing activities. It may be some combination of physical attributes, service attributes and technical support available in relation to the particular use of the product. This also requires an understanding of the activities that constitute the customer's value chain.

Unless the product or service we offer can be distinguished in some way from its competitors there is a strong likelihood that the marketplace will view it as a 'commodity', and so the

sale will tend to go to the cheapest supplier. Hence the importance of seeking to attach additional values to our offering to mark it out from the competition.

What are the means by which such value differentiation may be gained? If we start in the value chain perspective (see section 2.5), we can say that each activity in the business system adds perceived value to the product or service. Value, for the customer, is the perceived stream of benefits that accrue from obtaining the product or service. Price is what the customer is willing to pay for that stream of benefits. If the price of a good or service is high, it must provide high value, otherwise it is driven out of the market. If the value of a good or service is low, its price must be low, otherwise it is also driven out of the market. Hence, in a competitive situation, and over a period of time, the price that customers are willing to pay for a good or service is a good proxy measure of its value.

If we look especially at the downstream functions of the value chain, a differential advantage can be created with any aspect of the traditional 4P marketing mix: product, distribution, promotion and price are all capable of creating added customer perceived value. The key to whether improving an aspect of marketing is worthwhile is to know if the potential benefit provides value to the customer.

If we extend this model, particular emphasis must be placed upon the following (see Booms and Bitner, 1981; Magrath, 1986; Rafiq and Ahmed, 1995):

- *People*: these include both consumers, who must be educated to participate in the service, and employees (personnel), who must be motivated and well trained in order to ensure that high standards of service are maintained. Customers identify and associate the traits of service personnel with the firms they work for.
- *Physical aspects*: these include the appearance of the delivery location and the elements provided to make the service more tangible. For example, visitors experience Disneyland by what they see, but the hidden, below-ground support machinery is essential for the park's fantasy fulfilment.
- *Process*: the service is dependent on a well-designed method of delivery. Process management assures service availability and consistent quality in the face of simultaneous consumption and production of the service offered. Without sound process management balancing service demand with service supply is extremely difficult.

Of these three additional Ps, the firm's *personnel* occupy a key position in influencing customer perception of product quality. As a consequence the *image* of the firm is very much influenced by the personnel. It is therefore important to pay particular attention to the quality of employees and to monitor their performance. Marketing managers need to manage not only the service provider – customer interface – but also the actions of other customers; for example, the number, type and behaviour of other people will influence a meal at a restaurant.

### Relative cost advantage

Each activity in the value chain is performed at a cost. Getting the stream of benefits that accrue from the good or service to the customer is thus done at a certain 'delivered cost', which sets a lower limit to the price of the good or service if the business system is to remain profitable. Decreasing the price will thus imply that the delivered cost be first decreased by adjusting the business system. As mentioned earlier, the rules of the game may be described as *providing the highest possible perceived value to the final customer, at the lowest possible delivered cost*.

A firm's cost position depends on the configuration of the activities in its value chain versus that of competitors and its relative location on the cost drivers of each activity. A cost advantage is gained when the cumulative cost of performing all the activities is lower than competitors' costs. This evaluation of the **relative cost position** requires an identification of each important competitor's value chain. In practice, this step is extremely difficult

#### Relative cost advantage

A firm's cost position depends on the configuration of the activities in its value chain versus that of the competitors.



because the firm does not have direct information on the costs of competitors' value activities. However, some costs can be estimated from public data or interviews with suppliers and distributors.

### Relative cost advantage

A firm's cost position depends on the configuration of the activities in its value chain versus that of the competitors.

Creating a **relative cost advantage** requires an understanding of the factors that affect costs. It is often said that 'big is beautiful'. This is partly due to economies of scale, which enable fixed costs to be spread over a greater output, but more particularly it is due to the impact of the *experience curve*.

The experience curve is a phenomenon that has its roots in the earlier notion of the learning curve. The effects of learning on costs were seen in the manufacture of fighter planes for the Second World War. The time taken to produce each plane gradually fell as learning took place. The combined effect of economies of scale and learning on cumulative output has been termed the experience curve. The Boston Consulting Group estimated that costs reduced on average by approximately 15–20 per cent each time cumulative output doubled.

Subsequent work by Bruce Henderson, founder of the Boston Consulting Group, extended this concept by demonstrating that all costs, not just production costs, would decline at a given rate as volume increased. In fact, to be precise, the relationship that the experience curve describes is between real unit costs and cumulative volume.

This suggests that firms with greater market share will have a cost advantage through the experience curve effect, assuming that all companies are operating on the same curve. However, a move towards a new manufacturing technology can lower the experience curve for adopting companies, allowing them to leapfrog over more traditional firms and thereby gain a cost advantage even though cumulative output may be lower.

The general form of the experience curve and the above-mentioned leapfrogging to another curve are shown in Figure 3.5.

Leapfrogging the experience curve by investing in new technology is a special opportunity for SMEs and newcomers to a market, since they will (as a starting point) have only a small market share and thereby a small cumulative output.

The implications of the experience curve for the pricing strategy will be discussed further in Chapter 12. According to Porter (1980) there are other cost drivers that determine the costs in value chains:

- *Capacity utilisation*: underutilisation incurs costs.
- *Linkages*: costs of activities are affected by how other activities are performed. For example, improving quality assurance can reduce after-sales service costs.
- *Interrelationships*: for example, different SBUs sharing R&D, purchasing and marketing will lower costs.

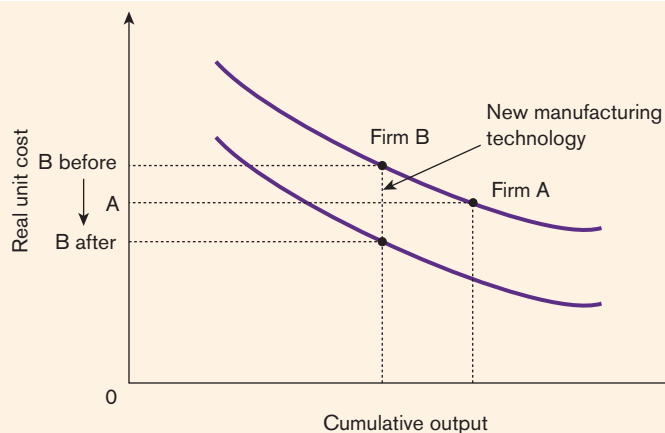


Figure 3.5

Leapfrogging the experience curve

- *Integration*: for example, deintegration (outsourcing) of activities to subsuppliers can lower costs and raise flexibility.
- *Timing*: for example, first movers in a market can gain cost advantage. It is cheaper to establish a brand name in the minds of the customers if there are no competitors.
- *Policy decisions*: product width, level of service and channel decisions are examples of policy decisions that affect costs.
- *Location*: locating near suppliers reduces in-bound distribution costs. Locating near customers can lower out-bound distribution costs. Some producers locate their production activities in Eastern Europe or the Far East to take advantage of low wage costs.
- *Institutional factors*: government regulations, tariffs, local content rules, etc., will affect costs.

## Competitive benchmarking

The ultimate test of the efficiency of any marketing strategy has to be in terms of profit. Those companies that strive for market share, but measure market share in terms of volume sales, may be deluding themselves to the extent that volume is bought at the expense of profit.

Because market share is an 'after the event' measure, we need to utilise continuing indicators of competitive performance. This will highlight areas where improvements in the marketing mix can be made.

In recent years a number of companies have developed a technique for assessing relative marketplace performance, which has come to be known as **competitive benchmarking**. Originally the idea of competitive benchmarking was literally to take apart a competitor's product, component by component, and compare its performance in a value engineering sense with your own product (Kolar and Toporisc, 2007). This approach has often been attributed to the Japanese, but many Western companies have also found the value of such detailed comparisons.

The concept of competitive benchmarking is similar to what Porter (1996) calls operational effectiveness (OE), meaning performing similar activities better than competitors perform them. However, Porter (1996) also thinks that OE is a necessary but not a sufficient condition for outperforming rivals. Firms also have to consider strategic (or market) positioning, meaning the performance of *different* activities from rivals or performing similar activities in different ways. Only a few firms have competed successfully on the basis of OE over a long period. The main reason is the rapid diffusion of best practices. Competitors can rapidly imitate management techniques and new technologies with support from consultants.

However, the idea of benchmarking is capable of extension beyond this simple comparison of technology and cost effectiveness. Because the battle in the marketplace is for 'share of mind', it is customers' perceptions that we must measure.

The measures that can be used in this type of benchmarking programme include delivery reliability, ease of ordering, after-sales service, the quality of sales representation and the accuracy of invoices and other documentation. These measures are not chosen at random, but are selected because of their importance to the customer. Market research, often based on in-depth interviews, would typically be employed to identify what these 'key success factors' are. The elements that customers identify as being the most important (see Figure 3.6) then form the basis for the benchmark questionnaire. This questionnaire is administered to a sample of customers on a regular basis: for example, German Telecom carries out a daily telephone survey of a random sample of its domestic and business customers to measure customers' perceptions of service. For most companies an annual survey might suffice; in other cases, perhaps a quarterly survey, particularly if market conditions are dynamic. The output of these surveys might typically be presented in the form of a competitive profile, as in the example in Figure 3.6.

Most of the criteria mentioned above relate to downstream functions in the value chain. Concurrently with closer relations between buyers and suppliers, especially in the industrial market, there will be more focus on the supplier's competences in the upstream functions.

### Competitive benchmarking

A technique for assessing relative marketplace performance compared with main competitors.

Examples of value chain functions (mainly downstream functions)	Customer Importance to customer (key success factors)					Own firm (Firm A) How do customers rate performance of our firm?					Key competitor (Firm B) How do customers rate performance of key competitor?				
	High importance		Low importance			Good		Bad			Good		Bad		
	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
Uses new technology															
High technical quality and competence															
Uses proven technology															
Easy to buy from															
Understands what customers want															
Low price															
Delivery on schedule															
Accessible for enquiries															
Takes full responsibility															
Flexible and quick															
Known contact person															
Provides customer training															
Take account of future requirements															
Courteous and helpful															
Specified invoices															
Gives guarantees															
ISO 9000 certified															
Right first time															
Can give references															
Environment conscious															

Figure 3.6

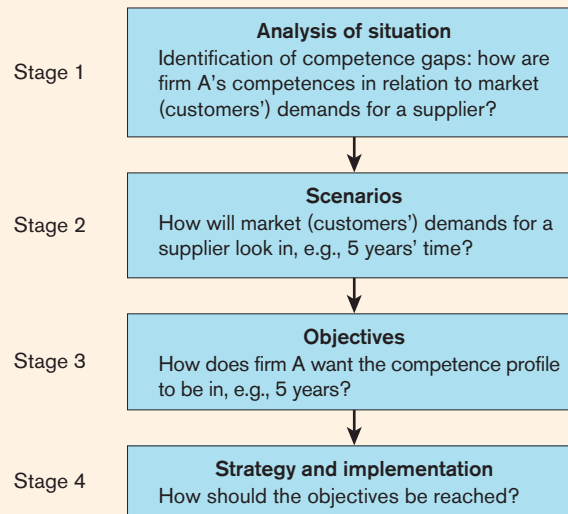
Competitive benchmarking (example with only a few criteria)

### Development of a dynamic benchmarking model

On the basis of the value chain's functions, we will suggest a model for the development of a firm's competitiveness in a defined market (Collis and Rukstad, 2008). The model will be based on a specific market as the market demands are assumed to differ from market to market, and from country to country.

Before presenting the basic model for development of international competitiveness we will first define two key terms:

- 1 *Critical success factors*: those value chain functions where the customer demands/expects the supplier (firm X) to have a strong competence.
- 2 *Core competences*: those value chain functions where firm X has a strong competitive position.

**Figure 3.7**

Model for development of core competences

Source: Hollensen, S. (2001) *Global Marketing: A Market Responsive Approach*, 2nd ed., Financial Times-Prentice Hall, Harlow, p. 95. Reproduced with permission.

### The strategy process

The model for the strategy process is shown in Figure 3.7.

#### **Stage 1: Analysis of situation (identification of competence gaps)**

We will not go into detail here about the problems there have been in measuring the value chain functions. The measurements cannot be objective in the traditional way of thinking, but must rely on internal assessments from firm representatives (interviews with relevant managers) supplemented by external experts ('key informants') who are able to judge the market's (customers') demand now and in the future.

The competence profile for firm A in Figure 3.3 (top-right diagram) is an example of how a firm is not in accordance with the market (= customer) demand. The company has its core competences in parts of the value chain's functions where customers place little importance (market knowledge in Figure 3.3).

If there is a generally good match between the critical success factors and firm A's initial position, it is important to concentrate resources and improve this core competence to create sustainable competitive advantages.

If, on the other hand, there is a large gap between customers' demands and the firm's initial position in critical success factors in Figure 3.3 (as with the personal selling functions), it may give rise to the following alternatives:

- improve the position of the critical success factor(s);
- find business areas where firm A's competence profile better suits the market demand and expectations.

As a new business area involves risk, it is often important to identify an eventual gap in a critical success factor as early as possible (Allen *et al.*, 2005). In other words, an 'early warning' system must be established that continuously monitors the critical competitive factors so that it is possible to start initiatives that limit an eventual gap as early as possible.

In Figure 3.3 the competence profile of firm B is also shown.

#### **Stages 2 and 3: Scenarios and objectives**

To be able to estimate future market demand different scenarios are made of the possible future development. These trends are first described generally, then the effect of the market's future demand/expectations on a supplier's value chain function is concretised.

By this procedure the described ‘gap’ between market expectations and firm A’s initial position becomes more clear. At the same time the biggest gap for firm A may have moved from personal sales to, for example, product development. From knowledge of the market leader’s strategy it is possible to complete scenarios of the market leader’s future competence profile.

These scenarios may be the foundation for a discussion of objectives and of which competence profile the company wants in, say, five years’ time. Objectives must be set realistically and with due consideration of the organisation’s resources (the scenarios are not shown in Figure 3.3).

#### **Stage 4: Strategy and implementation**

Depending on which of firm A’s value chain functions are to be developed, a strategy is prepared. This results in implementation plans that include the adjustment of the organisation’s current competence level.

## 3.7 BLUE OCEAN STRATEGY AND VALUE INNOVATION

### **Red oceans**

Tough head-to-head competition in mature industries often results in nothing but a bloody red ocean of rivals fighting over a shrinking profit pool.

### **Blue oceans**

The unserved market, where competitors are not yet structured and the market is relatively unknown. Here it is about avoiding head-to-head competition.

Kim and Mauborgne (2005a, b, c) use the ocean as a metaphor to describe the competitive space in which an organisation chooses to swim. **Red oceans** refer to the frequently accessed marketspaces where the products are well-defined, competitors are known and competition is based on price, product quality and service. In other words, red oceans are an old paradigm that represents all the industries in existence today.

In contrast, the **blue oceans** denote an environment where products are not yet well defined, competitors are not structured and the market is relatively unknown. Companies that sail in the blue oceans are those beating the competition by focusing on developing compelling value innovations that create uncontested market space. Adopters of blue ocean strategy believe that it is no longer valid for companies to engage in head-to-head competition in search of sustained, profitable growth.

In Michael Porter’s models (1980, 1985), companies are fighting for competitive advantage, battling for market share and struggling for differentiation; blue ocean strategists argue that cut-throat competition results in nothing but a bloody red ocean of rivals fighting over a shrinking profit pool.

A blue ocean is a market space that is created by identifying an unserved set of customers, then delivering to them a compelling new value proposition. This is done by reconfiguring what is on offer to better balance customer needs with the economic costs of doing so. This is as opposed to a red ocean, where the market is well defined and heavily populated by the competition.

Blue ocean strategy should not be a static process but a dynamic one. Consider The Body Shop. In the 1980s, The Body Shop was highly successful, and rather than compete head on with large cosmetics companies, it invented a whole new market space for natural beauty products. During the 1990s The Body Shop also struggled, but that does not diminish the excellence of its original strategic move. Its genius lay in creating a new market space in an intensely competitive industry that historically competed on glamour (Kim and Mauborgne, 2005b).

Kim and Mauborgne (2005a) is based on a study of 150 strategic moves that spanned more than 100 years (1880–2000) and 30 industries. Kim and Mauborgne’s first point in distinguishing this strategy from the traditional strategic frameworks is that in the traditional business literature the company forms the basic unit of analysis, and the industry analysis is the means of positioning the company. Their hypothesis is that since markets are constantly changing in their levels of attractiveness, and companies over time vary in their level of performance, it is the particular *strategic move of the company*, and not the company itself or the industry, which is the correct criterion for evaluating the difference between red and blue ocean strategies.



## Value innovation

### Value innovation

A strategic approach to business growth, involving a shift away from a focus on the existing competition to one of trying to create entirely new markets. Value innovation can be achieved by implementing a focus on innovation and creation of new marketspace.

Kim and Mauborgne (2005a) argue that tomorrow's leading companies will succeed not by battling competitors but by making strategic moves, which they call **value innovation**.

The combination of value with innovation is not just marketing and taxonomic positioning. It has consequences. Value without innovation tends to focus on value creation on an incremental scale, and innovation without value tends to be technology driven, market pioneering or futuristic, often overshooting what buyers are ready to accept and pay for. Conventional Porter logic (1980, 1985) leads companies only to compete at the margin for incremental share. The logic of value innovation starts with an ambition to dominate the market by offering a tremendous leap in value. Many companies seek growth by retaining and expanding their customer base. This often leads to finer segmentation and greater customisation of offerings to meet specialised needs. Instead of focusing on the differences between customers, value innovators build on the powerful commonalities in the features that customers value (Kim and Mauborgne, 1997).

Value innovation is intensely customer focused, but not exclusively so (Abraham, 2007). Like value chain analysis it balances costs of delivering the value proposition with what the buyer values are, and then resolves the trade-off dilemma between the value delivered and the costs involved. Instead of compromising the value wanted by the customer because of the high costs associated with delivering it, costs are eliminated or reduced if there is no or less value placed on the offering by the customer. This is a real win-win resolution that creates the compelling proposition. Customers get what they really want for less, and sellers get a higher rate of return on invested capital by reducing start-up and/or operational delivery costs. The combination of these two is the catalyst of blue ocean market creation (Sheehan and Vaidyanathan, 2009). Exhibit 3.1 illustrates this by using the case of Formule 1.

The output of the value innovation analysis is the value curves of the different marketers in the industry (also called 'strategy canvas' in Kim and Mauborgne, 2005 – see Exhibit 3.1). These different value curves raise four basic questions for the focal firm:

- 1 Which factors should be reduced well below the industry standard?
- 2 Which of the factors that the industry takes for granted should be eliminated?
- 3 Which factors should be raised well above the industry standard?
- 4 Which factors should be created that the industry has never offered?

The resulting new value curve should then determine if the firm is on its way into the 'blue ocean'.

### EXHIBIT 3.1

#### Value innovation at hotel chain Formule 1



When Accor launched Formule 1 (a line of French budget hotels) in 1985, the budget hotel industry was suffering from stagnation and overcapacity. The top management urged the managers to forget everything they knew of the existing rules, practices and traditions of the industry. There were two distinct market segments in the industry. One segment consisted of no-star and one-star hotels (very cheap, around €20 per room per night) and the other segment comprised two-star hotels, with an average price €40 per room. These more expensive two-star hotels attracted customers by offering better sleeping facilities than the cheap segment. Accor's management undertook market research and found out what most customers of all budget hotels wanted: a good night's sleep at a low price. Then they asked themselves (and answered) the four fundamental questions:

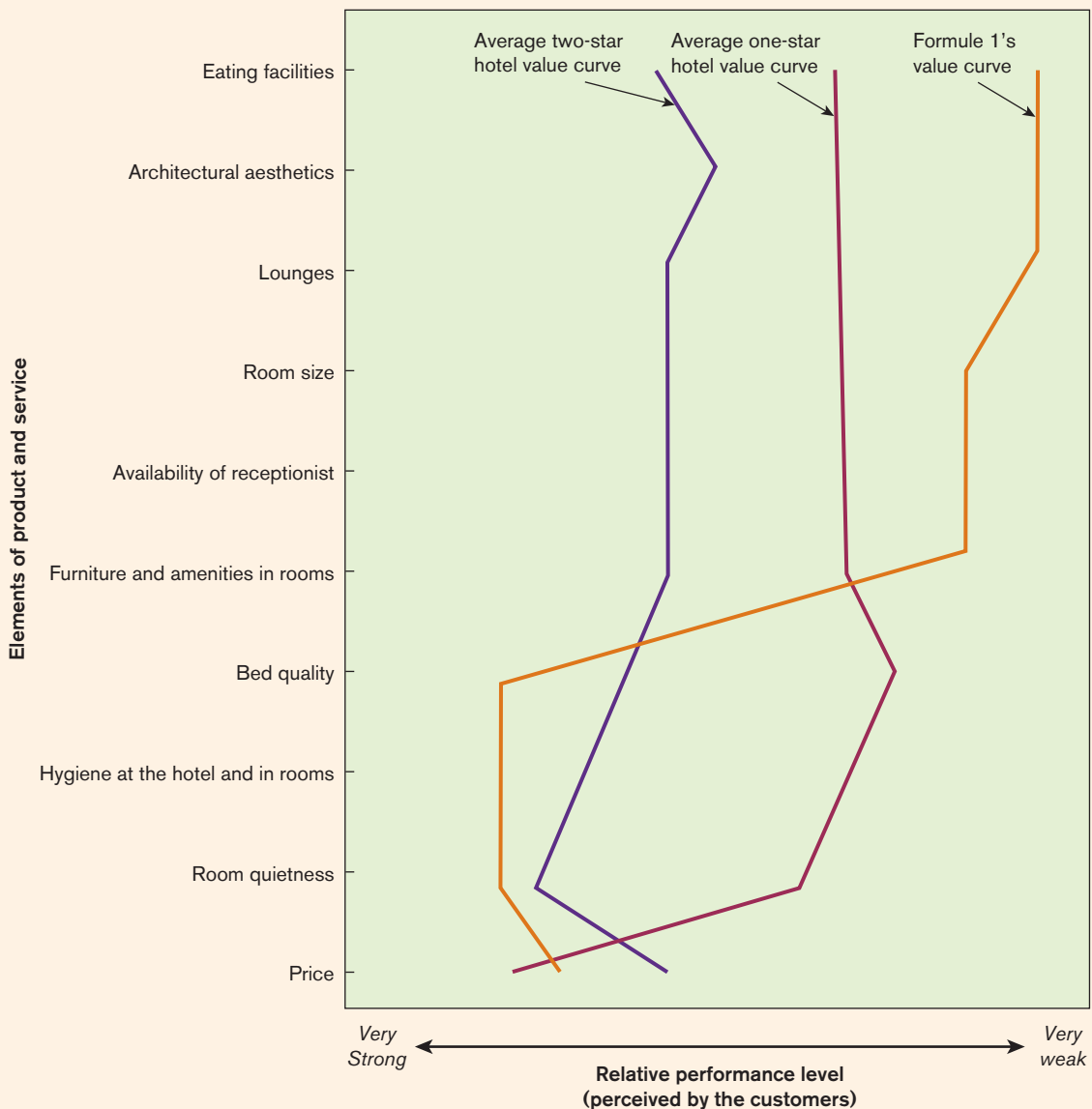


**EXHIBIT 3.1**

## Value innovation at hotel chain Formule 1 (continued)

**1 Which of the factors that the budget hotel industry took for granted should be eliminated?**

The Accor management eliminated such standard hotel features as costly restaurants and appealing lounges. Accor reckoned that they might lose some customers by this, but they also knew that most customers could live without these features.

**Figure 3.8****Formule 1's value curve**

Source: Kim, W. C. and Mauborgne, R. (2005) *Blue Ocean Strategy: How to Create Uncontested Market Space and Make the Competition Irrelevant*, Harvard Business School Publishing, Boston, MA. Copyright © 2005 by the Harvard Business School Publishing Corporation. All rights reserved. Reproduced with permission.



## 2 Which factors should be reduced well below the industry standard?

Accor also believed that budget hotels were overperforming along other dimensions. For example, at Formule 1 receptionists are on hand only during peak check-in and check-out hours. At all other times, customers use an automated teller. The rooms at Formule 1 are small and equipped only with a bed and bare necessities – no desks or decorations. Instead of closets there are a few shelves for clothing.

## 3 Which factors should be raised well above the industry standard?

As seen in Formule 1's value curve (Figure 3.8), the following factors:

- the bed quality
- hygiene
- room quietness

were raised above the relative level of the low-budget hotels (the one-star and two-star hotels). The price-performance was perceived as being at the same level as the average one-star hotels.

## 4 Which new factors (that the industry had never offered) should be developed?

These covered cost-minimising factors such as the availability of room keys via an automated teller. The rooms themselves are modular blocks manufactured in a factory. That is a method which may not result in the nicest architectural aesthetics but gives economies of scale in production and considerable cost advantages. Formule 1 has cut in half the average cost of building a room and its staff costs (in relation to total sales) dropped below the industry average (approximately 30 per cent) to between 20 per cent and 23 per cent. These cost savings have allowed Accor to improve the features that customers value most ('a good night's sleep at a low price').

Note that in Figure 3.8 if the price is perceived as relatively low, it is regarded as a strong performance.

## WHAT HAS HAPPENED WITH ACCOR AND FORMULE 1?

Today Accor is owner of several hotel chains (besides Formule 1), for example Mercure, Sofitel, Novotel, Ibis and Motel 6. In 2005 the sales of Accor Group were €7.6 billion. As of 1 January 2006 Formule 1 has the following number of hotels in the following regions of the world (Table 3.2).

**Table 3.2** Number of Formule 1 hotels worldwide

Region	Number
France	284
Rest of Europe	44
North America	–
South America	5
Africa (South Africa)	24
Asia-Pacific	20
Total	377

Formule 1 is represented in 12 countries: France, Germany, Sweden, the UK, the Netherlands, Switzerland, Spain, Belgium, South Africa, Japan, Australia and Brazil. In France, Formule 1's market share in the budget hotel segment is approximately 50 per cent.

### 3.8 OUTSOURCING – A STRATEGIC DECISION FRAMEWORK BASED ON CUSTOMERS' EVALUATION

After the dynamic benchmarking process the firm might have an idea about whether it should perform a certain value chain activity itself or if it should consider letting somebody else do it, e.g. outsource the activity.

It is important for a firm to decide which competences to keep in-house and which to outsource. The underlying assumption is that a firm should outsource non-core activities to be able to focus more on the core competence.

#### Outsourcing

Using another firm for the manufacture of needed components or products or delivery of a service.

Over the last number of years, **outsourcing** has become an important issue for many organisations. The potential for outsourcing has moved from peripheral activities such as cleaning and catering to critical activities such as design, product development, IT, manufacturing, logistics and marketing/advertising.

What is outsourcing? The word outsourcing defines the process of transferring the responsibility for a specific business function from an internal employee group to an external partner. An example of outsourcing (and how the boundary of the firm is 'reduced') is shown in Figure 3.9.

Though there might be differences, in- or outsourcing and make or buy analysis will be regarded as synonyms in this book.

Outsourcing is a contractual agreement between the firm and one or more suppliers to provide services or processes that the firm is currently providing internally. The fundamental difference between outsourcing and any other purchasing agreement is that the firm contracts-out part of its existing internal activity. There are many reasons why a company may choose to outsource and it will rarely be for one single reason.

The three most obvious reasons are listed in Table 3.3.

The hybrid situations enable the two organisations supporting the same market to share resources and increase revenue through synergistic relationships.

As indicated, one of the reasons why firms have outsourced a number of their primary supply chain activities is that the costs of remaining up to date in a multitude of value chain activities has become financially onerous. Where technology moves the fastest, the problem is the most serious. It would not be a surprise to learn, therefore, that a number of the pioneering outsourcers have been in the IT sector.

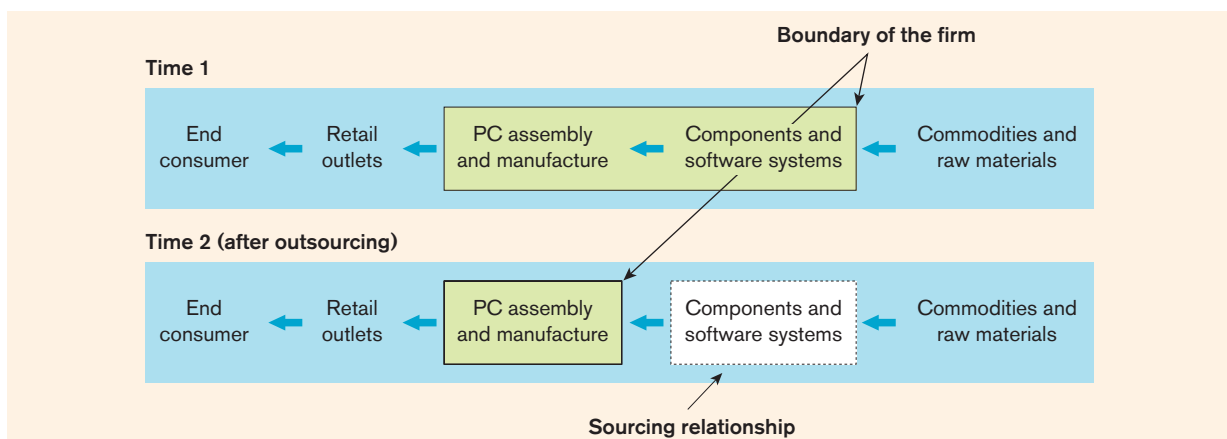


Figure 3.9

Example of primary supply chain outsourcing in an IT firm

**Table 3.3** Reasons why companies outsource

Rationale	Description	Benefits
<b>Cost reduction</b>	Outsourcing to another party to reduce cost of operations.	<ul style="list-style-type: none"> <li>● Improve efficiency</li> <li>● Increase return on assets</li> <li>● Improve profitability</li> </ul>
<b>Revenue generation</b>	Contracting with another party to provide products or services which the outsourcing firm cannot offer on its own.	<ul style="list-style-type: none"> <li>● Increase revenue (new products to existing and/or new customers)</li> <li>● Reduce risk</li> <li>● Improve efficiency</li> </ul>
<b>Hybrid situations</b>	Collaborations, alliances, partnerships, etc. with two or more like parties in the same business line to offer complementary products or services.	<ul style="list-style-type: none"> <li>● Improve return on investment</li> <li>● Increase capability utilisation</li> <li>● Create economies of scope by offering a broader product concept to customers</li> </ul>

Source: Adapted from Blumberg, D. F. (1998) Strategic assessment of outsourcing and downsizing in the service market, *Managing Service Quality*, 8(1): 7. Copyright © 1998 Emerald Group Publishing Limited. All rights reserved. Reproduced with permission.

## An outsourcing/insourcing framework

The stages involved in the outsourcing framework are illustrated in Figure 3.10. The stages will now be described.

### Stage 1: Analysis

#### *Stage 1a: Evaluating customer value (KSF)*

Activities with high customer value are often **key success factors (KSF)**, which are central to the firm successfully serving the need of potential customers in each market. To point out KSFs, customers are asked if the firm's value chain activities are adding value for them. This is done by asking about the importance of activities (see also the questionnaire in Figure 3.6).

#### *Stage 1b: Evaluating the firm's relative competence strengths*

Focusing attention on customer needs and competitive advantage will involve applying the firm's distinctive capabilities to meet these needs. Here, each selected activity must be benchmarked against the capabilities of all potential external providers of that activity. This will enable the company to identify its *relative* performance for each activity (also illustrated in Figure 3.6 questionnaire).

The depth of evaluation of the organisation's value chain can take place at the activity (such as logistics) or sub-activity (materials handling) level depending on the particular circumstances of the organisation.

### Stage 2: Decision about in/outsourcing

Stages 1a and 1b identify the disparity between the sourcing company and potential external providers of the core activities. It allows companies to focus on whether it will be detrimental to their competitive position to outsource activities such as research and development, design, engineering, manufacturing, marketing and service, both in the short and long term.

#### **Key success factors (KSF)**

Those factors in a market which determine competitive success or failure in that market.



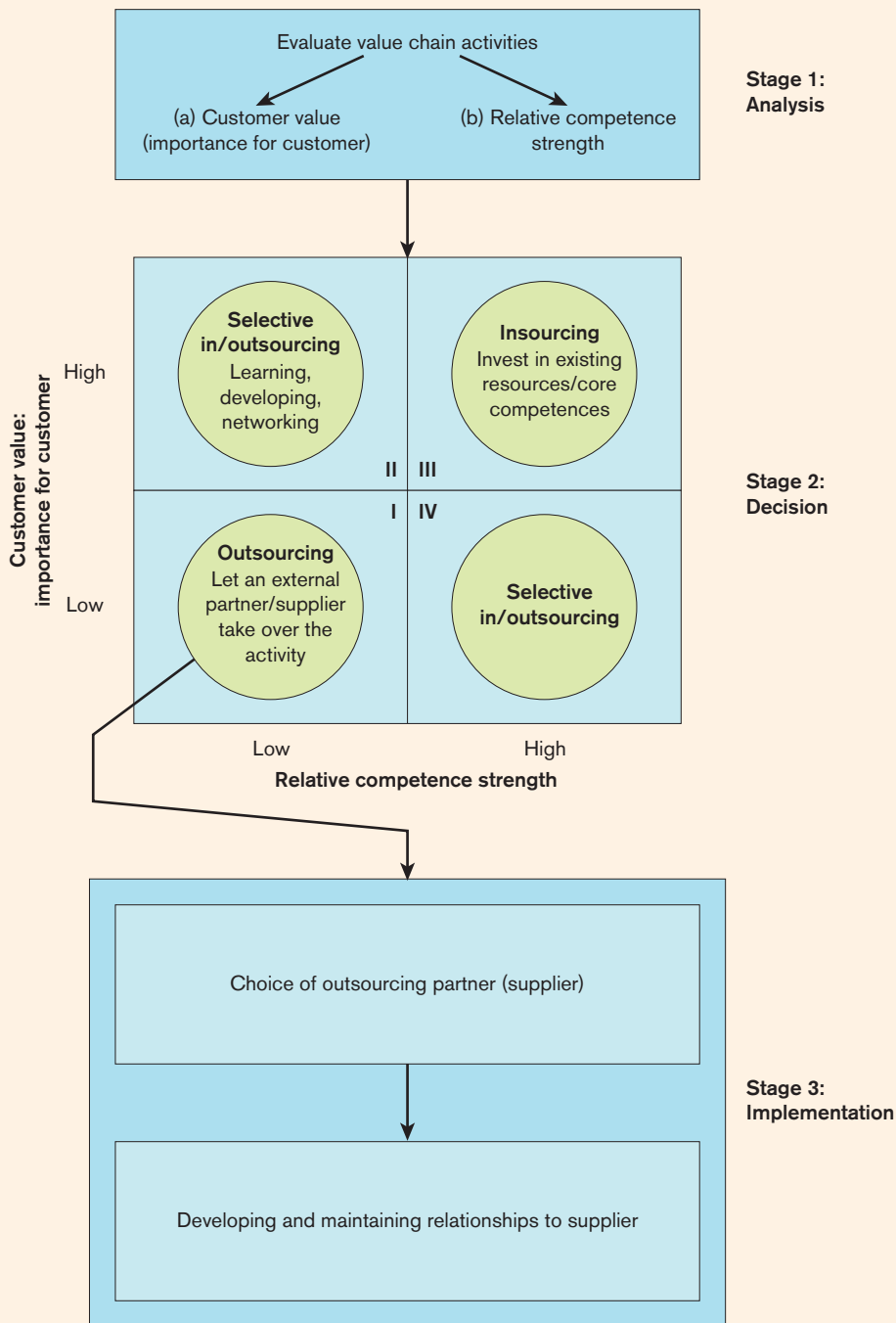


Figure 3.10

Outsourcing – a decision framework

Before the final decision the firm must identify and measure the costs associated with either retaining the activity in-house or outsourcing the activity.

In Box I in Figure 3.10 the firm faces one of its value chain activities, which only delivers low customer value, and the firm is also relatively poor in performing the activity (low relative competence strength). In this situation it is more appropriate for the company to outsource the activity to external suppliers that are more competent and have a lower cost base.

Unlike Box I, Box III is a situation where the company can focus resources on the activities where it can achieve pre-eminence and provide high customer perceived value. For example, if a company has leadership in a core activity then this activity should be held and further developed within the company in order to maintain and build this core competence.

In Boxes II and IV the outcome can be either keeping the activity in-house or outsourcing depending on the specific situation. The situation in Box II is very similar to the evaluation of the activity of 'personal selling' in Figure 3.3. In this situation the firm could outsource the activity (because it is not good at performing the activity) or it could try to develop its competence level and move it from Box II to Box III, because the activity is very important for the customer.

The outcome of Box IV could also be a selective in/outsourcing depending on the situation. Perhaps this firm is able to transfer its high relative strength in these activities to another industry or a new customer group who would value it more. This would be a reverse situation where the firm itself would function as a sub-supplier to another outsourcing company.

#### Personal selling

Person-to-person interaction between a buyer and a seller wherein the seller's purpose is to persuade the buyer to accept a point of view, to convince the buyer to take a course of action, or to develop a customer relationship.

### Stage 3: Implementation

If the outcome of stage 2 is outsourcing (Box I), the firm believes it can be more flexible by outsourcing activities than performing activities internally by being in a better position to react rapidly to market changes and be more responsive to customer change. This strategy will result in the company gradually becoming a 'systems integrator' in which it manages and coordinates a network of best production and service providers. Such a strategy is based on the premise that the company should outsource those activities (both production and service) where it can develop no strategic advantage itself.

From this analysis of potential suppliers, the company will filter out any potential suppliers that are unsuitable (see also screening of potential suppliers in Figure 4.11). If it is found that there are no suppliers suitable with which to initiate a relationship, then the company may pursue an 'Invest to perform internally' strategy. However, if the company has found a suitable supplier then it should form a relationship while leveraging its own capabilities by focusing resources on high value-added activities.

A number of issues have to be addressed before the actual outsourcing to the chosen supplier can take place. The company may wish to maintain the knowledge (design skills, management skills, manufacturing, etc.) that enable the technology of the activity to be exploited, even when it is being provided by another partner. Therefore, it is important that the company controls the new product development and design process, as these are the activities that will drive future growth. The company may establish a partnership relationship or strategic alliance with a supplier in order to exploit their capabilities. This involves an intensive collaborative working relationship with the prospective partner.

If the company has succeeded in developing a best-in-world core competence, it would never outsource it. The company may even prefer to build defensive rings of essential competences that customers insist it have or that protect its core competence – as Sony has done (Exhibit 3.2).

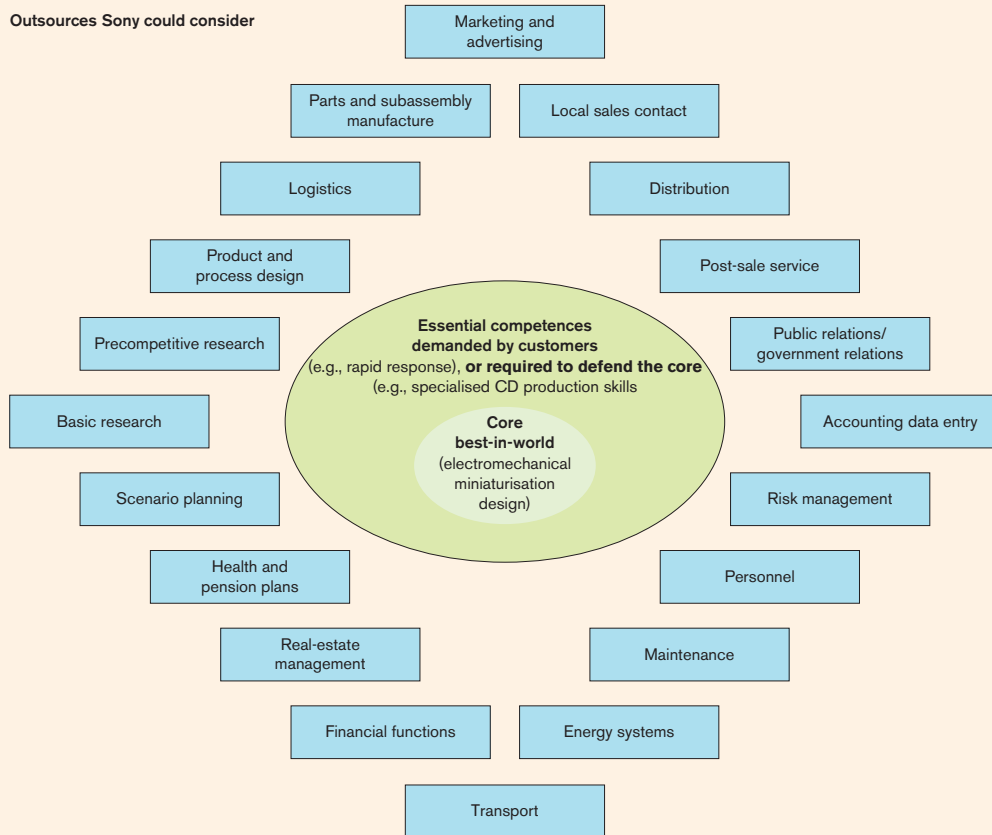
## EXHIBIT 3.2

### Sony, an outsourcing company

Sony, as one of the largest electronics manufacturers in the world, certainly enjoys market power because of its strong market position globally, e.g. its dominant position in the personal stereo segment of the personal electronics market. Its efficient manufacturing capability and outsourcing expertise provide operating advantages. Sony is a firm that is known to be a pioneer, not a follower. Innovation lies at the heart of the whole corporation. It constantly launches new products and models to overwhelm the me-too competitors. And Sony is a company that is willing to make commitments, for good or bad, even when a technology's commercial viability is uncertain. Its commitment to the Betamax format in the VCR industry caused it to lose out in that lucrative



## EXHIBIT 3.2

Sony, an outsourcing company (*continued*)

**Figure 3.11** The structure of Sony, an outsourcing company

Source: Adapted from Quinn, J. B. (2000) Outsourcing innovation: the new engine of growth, *MIT Sloan Management Review*, Summer: 20. Copyright © 2000 by the Massachusetts Institute of Technology. All rights reserved. Distributed by Tribune Media Service. Reproduced with permission.

market because it failed to become the industry standard. Sony failed to establish its leadership position in its business system of fellow VCR producers. The same can be said about its stubbornness in going alone on Mini-Disc and Digital Audio Tape (DAT), and not sharing its format through network alliances.

Nonetheless, one has to appreciate Sony's remarkable consistency and discipline in implementing its strategy: it is both a pioneer and the proprietary beneficiary of its new technology. Sony's miniaturisation skills have often been cited as a classical example of corporate core competence (Figure 3.11) which enables it to enjoy a commanding lead in portable and pocket-size electronics (Prahalad and Hamel, 1990).

Its unique capability lies in quickly adopting new knowledge and technology. In this sense, Sony is definitely a leading company in time-based competition.

Although it favours proprietary technology, Sony is also no stranger to cooperation and learning-inspired collaborative arrangement. To tackle technical challenges and share risks in R&D, in the late 1970s and early 1980s, Sony jointly developed the CD format with Philips. Once it learned enough from its partner and ironed out major technical obstacles, it decided to make a greater commitment to manufacturing facilities faster than Philips did and pre-empt the worldwide market for CD players. Philips saw the CD format as essentially a high-end consumer product, whereas Sony treated it as the future industry standard and a potential blockbuster for the firm, which would succeed its colour TV and Walkman as the next star product and help sustain its growth.

Sources: After Ma (2000b); Quinn (2000).

**Table 3.4** Advantages and disadvantages of outsourcing

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>● Offers significant cost savings across a wide range of low-margin, non-differentiated services as well as additional income opportunities.</li> <li>● Outsourcing non-critical functions permits a company to increase its financial resources.</li> <li>● Eliminates investments in fixed infrastructure.</li> <li>● Allows for greater quality and efficiency.</li> <li>● Permits increased access to functional expertise.</li> <li>● Outsourcing provides a competitive advantage and creates new revenue streams by allowing suppliers to offer services that would otherwise require considerable expense and commitment of personnel.</li> <li>● Using an outside provider allows suppliers to test market demand for a product or service in a less risky, more cost-effective way than creating the service internally with service resources.</li> </ul>	<ul style="list-style-type: none"> <li>● Requires a change in management mind set.</li> <li>● Requires a new and more complicated level of communication.</li> <li>● Introduces a host of new outlooks, personalities and demands that can produce new problems.</li> <li>● Introduces insecurity to the workforce and unions.</li> <li>● Monitoring and evaluating the performance of suppliers is a difficult task.</li> <li>● Outsourcing functions that have customer contact risks alienating customers.</li> <li>● Outsourcing benefits may not be realised in the short term.</li> <li>● Long-term contracts which feature short-term savings may prove expensive later (resulting in high transaction costs).</li> </ul>

Source: Adapted from Blumberg, D. F. (1998) Strategic assessment of outsourcing and downsizing in the service market, *Managing Service Quality*, 8(1): 7. Copyright © 1998 Emerald Group Publishing Limited. All rights reserved. Reproduced with permission.

### Advantages and disadvantages of outsourcing

Outsourcing can create a number of economic advantages. However, there are also a number of risks in outsourcing, which may create perceived disadvantages (see Table 3.4).

These disadvantages are mostly of a psychological nature and if managed effectively do not lead to financial losses. For example, partnering with a third party introduces a host of new outlooks, personalities and demands that can produce new problems. These challenges include a more complicated level of communication, insecurity in the workforce, and the risk of high **transaction costs**.

The biggest barrier to outsourcing is that it requires a change in management mind set. Many managers fear the loss of control or conflict of interest and fail to compare the cost and benefit of using internal support organisations. Managers faced with an outsourcing decision often construe the financial cost and loss of control over individuals as their justification for not outsourcing, but fail to consider the long- and short-term savings to the organisation.

Motivating employees for the change towards outsourcing is not an easy task. However, the risk associated with outsourcing can be offset and controlled if managed properly.

#### Transaction costs

The total of all costs incurred by a buyer and seller as they gather information and negotiate a transaction.

## 3.9 SUMMARY

The main issue of this section is how the firm develops competitive advantage in the international marketplace. The sources of competitive advantage are:

- economies of scale (scale efficiencies);
- economies of scope (transfer of resources across products and markets);
- economies of speed (time-based competition advantages);
- exploitation of local advantages;
- ability to provide global services;
- ability to use 'human resources' (HR) (HR are especially important for RM and internal marketing).

A three-stage model allows us to understand the development of a firm's international competitiveness in a broader perspective.

### Analysis of national/regional competitiveness

The Porter diamond indicates that the home base plays a central role in the firm's international success.

### Competition analysis

Here the firm itself is the unit of analysis. Porter's five forces model suggests that competition in an industry is rooted in its underlying industry structure. The state of competition depends on five basic competitive forces, which determine profit potential in an industry.

### Value chain analysis

According to the competitive triangle it can be concluded that firms have competitive advantage in a market if they offer products or services with the following characteristics:

- a higher perceived value to the customers;
- lower relative costs than the competing firms.

Influenced by core competency thinking, many companies have been attempting to reorganise their value chains and focus on a number of core activities in which they can achieve and maintain a long-term competitive advantage and outsource all other activities where they do not have high relative competence strength.

While the motives for outsourcing are normally specific to the particular situation, some commonly cited reasons are to:

- reduce cost;
- improve quality, service and delivery;
- improve organisational focus;
- increase flexibility;
- facilitate change.

The biggest obstacle to outsourcing is that the management may fear that they would lose control. However, the risks associated with outsourcing can be offset and controlled if managed properly.

## CASE STUDY 3.1

### Nintendo Wii

Taking the leadership in the games console market

A few years ago, very few analysts would have predicted that Nintendo Wii would become market leader in the games console market against the established PlayStation 3 (PS3) and Xbox 360 brands. But analysts can be in error: in the week ending 23 August 2007 data from VGChartz ([www.vgchartz.com](http://www.vgchartz.com)), which is based on

sample data from retailers all over the world, indicated that Nintendo's Wii (which was released in November 2006 – one year after the Xbox 360) passed Xbox 360 lifetime units sales, making Nintendo the new world market leader in both the games console businesses.



This will have a large impact on third party publishers and will undoubtedly influence the decisions that the three major players (Microsoft, Sony and Nintendo) will make in the future.

One factor that has no doubt helped Nintendo's Wii to gain so quickly is the console's broad appeal across all age groups, demographics and countries.

### Nintendo – key facts and financial data

Nintendo Co. was founded in 1889 as the Marufuku Company to make and sell 'hanafuda', Japanese game cards. It became the Nintendo Playing Card Company in 1951 and began making theme cards under a licensing agreement with Disney in 1959.

During the 1980s Nintendo sought new products, releasing Game Boy in 1989 and the Super Family Computer game system (Super NES in the US) in 1991. The company broke with tradition in 1994 by making design alliances with companies such as Silicon Graphics. After creating a 32-bit product in 1995, Nintendo launched the much-touted N64 game system in 1996. It also teamed with Microsoft and Nomura Research Institute on a satellite-delivered Internet system for Japan. Price wars between the top contenders continued in the US and Japan.

In 1998 Nintendo released Pokémon, which involves trading and training virtual monsters (it had been popular in Japan since 1996), in the US. The company also launched the video game 'The Legend of Zelda: Ocarina of Time', which sold 2.5 million units in about six weeks. Nintendo issued 50 new games for 1998, compared to Sony's 131.

Nintendo announced in 1999 that its next-generation game system, Dolphin (later renamed GameCube), would use IBM's PowerPC microprocessor and Matsushita's DVD players.

In September 2001 Nintendo launched its long-awaited GameCube console system (which retailed at \$100 less than its console rivals, Sony's PlayStation 2 and Microsoft's Xbox); the system debuted in North America in November. In addition, the company came out with Game Boy Advance, its newest handheld model with a bigger screen and faster chip.

In 2003 Nintendo bought a stake (about 3 per cent) in game developer and toy-maker Bandai, a move expected to solidify cooperation between the two companies in marketing game software.

Today Nintendo ([www.nintendo.co.jp](http://www.nintendo.co.jp)) is engaged in the creation of interactive entertainment products. It manufactures and markets hardware and software for its home video game systems. The company primarily operates in Japan, Europe and America. It is headquartered in Kyoto, Japan, and employs about 3,400 people.

In the fiscal year 2007 Nintendo's recorded revenue was \$8,189.4 million, an increase of 90 per cent over 2006. The operating profit of the company was \$1,916.2 million during fiscal year 2007, compared to \$773.7 million in 2006. Approximately 67 per cent of the company's revenue is generated from regions outside Japan. The net profit was \$1,478.2 million in fiscal year 2007, an increase of 77.2 per cent over 2006. Nintendo has managed to achieve higher returns on its investments, assets and equity as compared to the industry average.

Nintendo has not raised any capital through debt in the past few years. The company's total debt to equity ratio at the beginning of 2007 is zero, compared to the industry average of 12 per cent. Debt-free status indicates the company's ability to finance its operations efficiently. Additionally, no debt obligation provides the company with significant liquidity and financial flexibility.

### The video game console industry

The interactive entertainment software market is characterised by short product life cycles and frequent introductions of new products.

The game consoles are relative expensive in the beginning of the product life cycle. Hard-core game freaks pay dearly to have a console early, but sales really jump in years two and three, as Moore's law and economies of scale drive prices down and third-party developers release must-have games. By year four the buzz has begun about the next generation and, at that time, the game consoles can be found at the local grocery store at discount prices.

Nintendo has been operating in the video game console market since 1977 with colour television games, and is considered the oldest company in this market. It is one of the largest console manufacturers in the world, and a leader in the handheld console market. The company has released four generations of consoles over the past two decades, which include Nintendo Entertainment System; Super Nintendo Entertainment System; Nintendo 64; and GameCube. Nintendo has dominated the handheld games market since its release of the original Game Boy handheld system in 1989. In fiscal year 2007, Nintendo sold 79.5 million units of Game Boy Advance (GBA). Nintendo DS, another handheld console of Nintendo, sold 40.3 million units in fiscal year 2007.

### Nintendo launches Wii

The company's latest console, Wii, was launched in November 2006.

Nintendo's arguments for using this brandname were:





Nintendo Wii console and remote

Source: © Lightly Salted / Alamy

- Wii sounds like 'we', which emphasises this console is for everyone.
- Wii can easily be remembered by people around the world, no matter what language they speak.
- Wii has a distinctive 'ii' spelling that symbolises both the unique controllers and the image of people gathering to play.

The Wii's success has done little to convince Microsoft executives they're on the wrong course. The company is positioning itself for a world where people play multi-player games, download movies and control their TVs through one box. 'Nintendo has created a unique and

innovative experience,' says Peter Moore, who runs Microsoft's Xbox business. 'I love the experience, the price point, and Nintendo content.' But Microsoft, Moore adds, 'provides experiences that Nintendo cannot provide' (O'Brien, 2007).

Of course, Microsoft has little more to lose than money, and there's plenty of that to go around. Sony is another matter. Gaming has been the company's profit centre for years. Suddenly, when everyone thought the PS3 would solidify Sony's dominance, along came the Wii. With an unheard-of price and few quality games to choose from, the PS3 has produced disappointing sales; the father of the PlayStation, Ken Kutaragi, was

recently forced to resign his post as chairman of Sony Computer Entertainment (O'Brian, 2007).

But while he acknowledges a slow start, Jack Tretton, the president and CEO of Sony Computer Entertainment America, thinks it's too early to start talking winners. 'You have to give Nintendo credit for what they've accomplished,' says Tretton, who's quick to point out that Sony has come out with some innovative controllers too. 'But if you look at the industry, any industry, it doesn't typically go backwards technologically. The controller is innovative, but the Wii is basically a repurposed GameCube. If you've built your console on an innovative controller, you have to ask yourself, Is that long term?' (O'Brien, 2007).

### Wii's blue ocean strategy

Nintendo is attempting to create a blue ocean by creating a unique gaming experience and keeping the cost of its system lower than Sony's and Microsoft's.

In a recent Forbes.com interview, Perrin Kaplan, vice president of marketing and corporate affairs for Nintendo of America, discusses its implementation of Blue Ocean:

Inside Nintendo, we call our strategy 'Blue Ocean'. This is in contrast to a 'Red Ocean'. Seeing a Blue Ocean is the notion of creating a market where there initially was none – going out where nobody has yet gone. Red Ocean is what our competitors do – heated competition where sales are finite and the

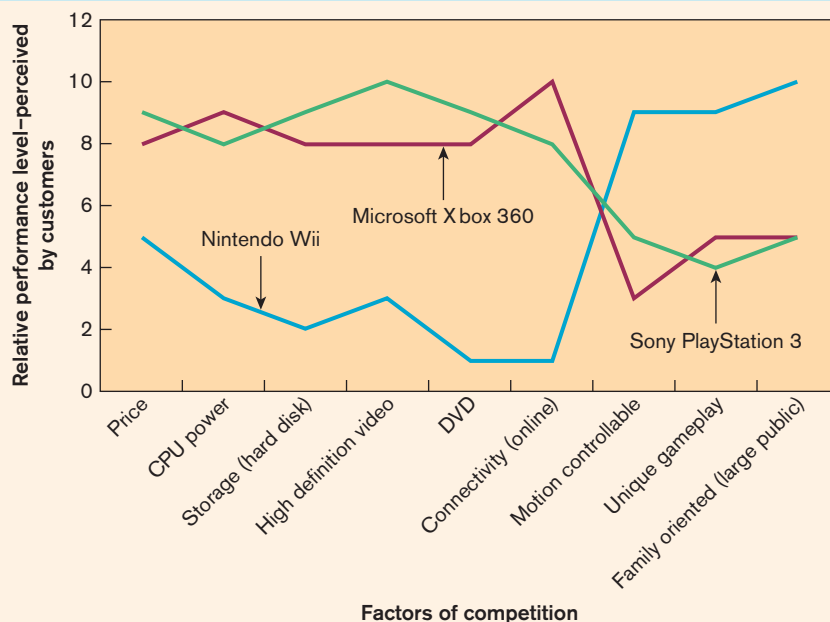
product is fairly predictable. We're making games that are expanding our base of consumers in Japan and America. Yes, those who've always played games are still playing, but we've got people who've never played to start loving it with titles like *Nintendogs*, *Animal Crossing* and *Brain Games*. These games are Blue Ocean in action (Forbes, 2006).

Part of blue ocean strategy involves creating a strategy canvas that depicts the current market space and relative offering level for major attributes that companies compete on. It helps visualise which offerings cost more to compete on. It also helps companies identify which values to eliminate, reduce and/or raise. And, finally, it helps identify new values that aren't currently competed on.

Here's a strategy canvas for the new Nintendo Wii when compared to Microsoft's Xbox 360 and Sony's PlayStation 3 (Figure 3.12). Nintendo's value curve is in blue.

The bottom of the graph lists the primary sources of competitive advantages:

- *Price*: Wii is 30–40 per cent cheaper than Xbox 360 and Sony Playstation 3.
- *CPU power*: Wii has comparatively low processor speed; it has no Dolby 5.1 (sound system). Both PS3 and Xbox 360 have processors that are far more powerful than you'll find in most PCs.
- *Storage (hard disk)*: In the basic model Wii has no hard disk.



**Figure 3.12** Value curves (strategy canvas) – Wii vs. Xbox and PS3

- *High definition video*: Both PS3 and Xbox 360 use high-end graphics chips that support high-definition games and are prepared for HD TV. Wii's graphics are marginally better than the PS2 and the original Xbox, but Wii pale next to the PS3 and Xbox 360.
- *DVD*: Both Sony and Microsoft provide the DVD opportunity. Sony even includes a Blu-Ray DVD drive.
- *Connectivity (online)*: Xbox has especially positioned itself as the online games console with multi-player functions
- *Motion controllable*: With its innovative motion control stick, Wii adds new value to game playing. The stick integrates the movements of a player directly into the video game (tennis, golf, sword fights, etc.)
- *Unique gameplay*: The new Wii gaming console senses depth and motion from players, thus adding a whole new element to the play experience.
- *Family oriented (large public)*: With the motion control stick Nintendo opens up the console world to a completely new public of untapped non-gamers from the age of approximately 30. Parents to teens and even grandparents are getting easily into game fun on the Wii.

### Wii's market shares compared to Microsoft (Xbox) and Sony (PS3)

Table 3.5 shows the worldwide sales of games consoles from 2005 to 2008, together with the corresponding market share.

Current Wii sales are pretty evenly split between the three major markets – 30 per cent have been sold in Japan, the American market (including Canada and South America) accounts for 40 per cent and other markets (including Europe and Australia and a few niche markets) for 30 per cent of units sold. The sales of Sony (PS2 and PS3) and Microsoft (Xbox and Xbox 360) have been more unequally distributed: Microsoft sells most Xbox and Xbox 360 in North America, whereas Sony's biggest markets for PS2 and PS3 are Japan, China and the rest of Asia.

At the retail level, games consoles are sold through a variety of electronic and audio/video retailers, supermarkets, discount stores, department stores and Internet retail stores.

### Nintendo's strategy

Wii has managed to become a market leader by emphasising its simplicity and lower price (than Sony and Microsoft) to break down barriers for new customers.

Nintendo has attracted non-traditional users, such as women and those over 60 years old, with easy-to-play titles such as Brain Training and Wii Fit (launched in April/May 2008). The Brain Training software is sold among middle-aged people who seek to stimulate their memories and learning processes. The £70 Wii Fit game comes with a balance board, which links to the Wii console wirelessly. Players can stand, sit or lie on the board and undertake a range of exercises such as yoga and press-ups, as well as simulate slalom skiing or

**Table 3.5**

World sales of games consoles (units)

	2005		2006		2007		2008	
	Mill. units	%	Mill. units	%	Mill. units	%	Mill. units	%
<b>Sony:</b>								
PS2	16.8		11.7		8.6		7.4	
PS3	–		1.2		7.2		10.3	
Total	16.8	69	12.9	53	15.8	40	17.7	33
<b>Microsoft:</b>								
Xbox	3.6		0.7		–		–	
Xbox 360	1.2		6.8		7.8		11.2	
Total	4.8	20	7.5	31	7.8	20	11.2	21
<b>Nintendo:</b>								
GameCube	2.7		1.0		–		–	
Wii	–		3.0		15.5		24.8	
Total	2.7	11	4.0	16	15.5	40	24.8	46
Total	24.3	100	24.4	100	39.1	100	53.7	100

Source: VGChartz ([www.vgchartz.com](http://www.vgchartz.com) and <http://vgchartz.com/hwcomps.php?weekly=1>).



Nintendo Wii Fit Trainer with balance board

Source: © epf model / Alamy

hula hooping – all with the guidance of an on-screen fitness expert. Experts think that this game can help people lose weight. Playing the Nintendo Wii Fit can also improve balance and help avoid falls among older people. Researchers ultimately hope to determine the effectiveness of computer games in developing muscle strength and coordination and reducing the risk of falls for people with Parkinson's disease.

Nintendo is highly dependent on sub-suppliers, for both hardware and software. The company commissions a number of sub-suppliers and contract manufacturers to produce the key components of game consoles or assemble finished products. The company was not able to meet the growing demand for its new Wii console, which was launched in November 2006, as its suppliers were not able to ramp up their production to meet the demand. A shortage of key components or the finished products had a negative effect on the company's revenues.

Nintendo is also very much dependent on its software suppliers, who are all developing new games based on a licensing agreement with Nintendo.

While the hardware (consoles) market is dominated by three players, the software market is more open and fragmented with several regional players and local developers. However, the games software industry is undergoing a period of consolidation. At the end of 2007, French company Vivendi Games acquired a 52 per cent stake in Activision and created a new entity, Activision Blizzard, which in size is close to that of the market leader, Electronic Arts. For example, Activision Blizzard launched 'Guitar Hero World Tour' for all three platforms in December 2007, at the same time as the announcement of Vivendi Games' acquisition of Activision.

### The competitors' strategy

#### Sony PlayStation

In 2008, cumulative sales of PlayStation 2 (PS2) reached 130 million units, making it the world's best-selling game platform. However, the 2006–07 launch of Sony's new-generation PS3 did not translate into the immediate success that the company had hoped for; PS3 was not as successful as the Nintendo Wii. As a consequence Sony's game segment incurred losses of over US\$1.2 billion in financial year 2007. However, it is possible that, in coming years, the profitability trend could be reversed. Because of the scale economies, the company's production costs have fallen over the years. At the same time, Blu-Ray has become the industry standard for high-definition DVD, as HD DVD development has ceased. The PS3 is one of the cheapest Blu-Ray DVD players on the market, and some consumers are likely to purchase the console to access its DVD player functions.

Sony will continue to promote the PS2 to the emerging markets of Africa, Asia and Latin America.

In 2009/10 the company is set to release PlayStation Portable 3000 which will have a built-in microphone and a new screen with more colours suitable for use outdoors. It also plans to launch a version of its flagship PS3 console with a 160 gigabyte hard drive to store more downloaded content and video.

#### Microsoft Xbox 360

Microsoft continues to target the 'serious' gamer segment with the Xbox 360. The Xbox graphics, games and Xbox live Internet gaming has been popular with the core user segment, primarily young males. The US market remains the most important so far, accounting for nearly 50 per cent of the overall Xbox sales.

Xbox is the console with the highest 'game attach' rate. This is defined as the average number of games

each console owner buys. For the Xbox 360, Microsoft managed in 2008 a 'games per console' average of 8 to 1, the highest in the industry. This was good news for third-party game developers, and it is likely to encourage more games to be developed for this platform.

The strength of Microsoft's software distribution network has also kept the company alive in the business, allowing Microsoft to have a presence in more worldwide markets than Nintendo. Microsoft is strongly positioned in countries such as China, India, Malaysia and South Africa, all of which are growth markets, and this is promising for future sales of Xbox.

## QUESTIONS

- 1 What were Microsoft's motives in entering the games console market with Xbox?
- 2 What are the competitive advantages of Microsoft Xbox and Sony PlayStation 3?
- 3 What are the competitive advantages in the business model of Wii?
- 4 What do you think are Nintendo's chances of creating a long-term blue ocean with Wii?

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## QUESTIONS FOR DISCUSSION

- 1 Which sources of competitive advantage are the most important?
- 2 How can analysis of national competitiveness explain the competitive advantage of a single firm?
- 3 Is it possible to identify not only national competitiveness, but also regional competitiveness? (A region is here defined as more than one country.)
- 4 In which situations should a firm consider outsourcing its activities?
- 5 What are the advantages and disadvantages of outsourcing?

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