of course strategy is hard – it’s about making tough choices.

Professor Michael E. Porter, 2001, Harvard Business School

Organizations need to understand their operational world. In the classic definition, the two concerns of strategy are the ‘external environment’ and the ‘future’. Mintzberg (1994) states that ‘an organization needs a sense of where it is going and what forces in its environment are going to help or hinder it in achieving its goal’. Porter (1985) suggests that it helps the organization to explore a limited number of possible directions and create a model of how their actions are going to affect that environment.

**LEARNING OUTCOMES**

When you have completed this chapter you should be able to:

- Discuss the nature of competitive advantage.
- Identify the components of a business strategy.

**The history of strategy**

It has been written that strategy comes from the military writings of Sun Tzu, who wrote, in 360 BC in *The Art of War*, that ‘strategy is the great work of the organization’ (Grant 1995; Mintzberg 1998). Other authors have described the origin of the word strategy as being derived from the Greek *strategos*, itself derived from the words for ‘army’ and ‘lead’ (Grant 1995; Kare-Silver 1997; Trott 1998; Whittington 1993). Lynch (1997) states that ‘strategy is likely to concern itself with the survival of the business as the minimum objective and the creation of value-added as a maximum objective. Porter’s definition, quoted in Kare-Silver (1997), is ‘a combination of the ends for which the firm is striving and the means by which it is seeking to get there’. Bennett (1996) has a similar definition, ‘the totality of management decisions that determine the purpose and direction of the enterprise and hence its fundamental goals, activities and the policies it selects in order to attain its objectives’. All of these certainly point to the
future and how to get there, but do not define the type of products and services that are needed in this future. Much strategic management is still locked into the Porteresque eighties. A SWOT and PEST analysis (see below) is still a good start, but it works much better if linked to a specific product/market.

So, if strategy is a statement of how an organization expects to achieve its missions and goals, it can be seen very much as a road map outlining how the organization is going to reach these goals, the steps that need to be taken.

Any organization is concerned not only with survival in the short term but also with how to stay in business in the long term. Planning for this often involves a statement of the organization’s mission, which should set out the purpose or rationale for the organization’s existence. Mission statements are often so overblown as to be viewed with ridicule or so banal as to be meaningless. However, it is easier to develop a good strategy if the mission or the intent of the strategy has been well expressed. They do give an organization an opportunity to set out its vision of the desirable future for the organization. An example from Tesco states: ‘Our core purpose is to create value for customers to earn their lifetime loyalty’. Its plan for long-term growth is based around: growth in the core UK market, growth internationally, developing the non-food market as the food one and following customers into new retailing services.

Objectives or statements of what we want to do are drawn up after an analysis of the environment and an appraisal of where competitive advantage could be derived. Environmental scanning using tools such as identifying Strengths, Weaknesses, Opportunities and Threats (SWOT analysis) or identifying Political, Economic, Social and Technological factors (PEST analysis) is a fundamental feature of strategy development (see Tables 2.1 and 2.2).

The PEST model assesses a market while the SWOT analysis is commonly used to appraise a business unit, a proposition or idea. These are the two basic building blocks in any assessment of the internal and external environment. Some writers have extended the PEST model to seven factors, named PESTELI, by adding Environmental, Legislative and Industry factors to the original. Of course you might expect these issues to be covered in the PEST analysis since Industry should surely be considered under the Economic heading, Legislative factors should arise under the Political heading and Environmental factors could well be discussed under all four PEST headings.

Such analyses help identify customers’ needs, current and future, which should then help the organization plan how to meet those. Of course, such plans have to take account of the existing competition and the likelihood of new entrants affecting the competitive position of the organization. An assessment of the role of suppliers and their bargaining power impacts on the cost analysis undertaken by an organization to underpin its planned strategy.

Competitive advantage

So what do we mean by competitive advantage? Where an organization has a unique advantage over its competitors it can be deemed to have a competitive advantage.
Such advantage usually manifests itself by the achievement of profits higher than the average for their sector. Michael Porter (1980) identified two basic ways of achieving competitive advantage. The first occurs when an organization is able to deliver the same benefits as its competitors but at a lower cost, thereby gaining a cost advantage for itself. The second is when the organization differentiates itself by offering superior benefits to its competitors. Such improved benefits and services usually command a higher price. Such a position is only sustainable of course if consumers believe they are getting added value for those higher prices.

A third type of strategy has been described as a focus strategy, whereby a company applies a cost leadership or differentiation strategy within a particular target market in some specialized way that delivers an advantage over those firms applying their generic strategy in a wider market.

Differentiation will come from anything and everything that influences the value that customers derive from the product or service. So the operations manager has a role to play in defining everything about a product that will influence its potential value to customers. This can be tweaking the design of the product features, influencing its convenience for customers through decisions on the location of distribution centres or retail outlets, or affecting how delivery, installation or repair and maintenance services are implemented.

The differentiation may come from achieving a quality advantage or through timely, reliable delivery or from offering a flexible performance that is extremely responsive to customer needs. In the airline industry Singapore Airlines aims to create competitive advantage for themselves by focusing on maximizing the value created for the customer, which then commands a price premium. Policies such as offering branded goods, extending the product range, making use of economies of scale, offering highly personalized procedures are commonly found in a differentiation strategy.

<table>
<thead>
<tr>
<th>TABLE 2.1 BUSINESS ANALYSIS TOOL (SWOT)</th>
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<tr>
<td><strong>Strengths</strong></td>
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<td>e.g. innovative product design</td>
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<tr>
<td><strong>Weaknesses</strong></td>
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<tr>
<td>e.g. inflexible supply chain</td>
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<tr>
<td><strong>Opportunities</strong></td>
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<tr>
<td>e.g. changes in delivery technology</td>
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<tr>
<td><strong>Threats</strong></td>
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<td>e.g. new entrants to market</td>
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<th>TABLE 2.2 ENVIRONMENTAL SCANNING (PESTELI)</th>
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<tr>
<td><strong>Political factors</strong></td>
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<td><strong>Economic factors</strong></td>
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<td><strong>Technological factors</strong></td>
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<td><strong>Environmental factors</strong></td>
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<td><strong>Legislative factors</strong></td>
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<td><strong>Industry factors</strong></td>
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Competing on cost is the strategy adopted by budget airlines Ryanair and easyJet. Ryanair proudly declares itself to be Europe’s original low fare airline (founded in 1985) and is still Europe’s largest low fare carrier in 2005. Ryanair commits itself to offer the lowest available prices to passengers on all routes on which they operate. In doing so they are following the same strategy pioneered by Southwest Airlines in the United States since their launch in 1971. This is founded on the use of secondary airports and terminals, first-come first-served seating, no-meal flights, smaller crews flying more hours and the use of Internet booking.

The low cost airlines make effective use of their capacity. Both Southwest Airlines and Ryanair use Boeing 737s. Ryanair has just replaced its current fleet of Boeing 737-200s with 737-800s which are designed to have less of an adverse impact on the environment with less emissions, lower fuel burn, greater seat density and quieter engines. Standardizing the fleet in this way has the advantage of making spares and maintenance easier to organize and less costly.

Costs are taken out of the value chain by minimizing the amount of time their planes actually spend on the ground. Faster turnarounds can be achieved by speeding up the cleaning process, hence no peanuts or meals. Drinks and snacks are of course available for purchase, not distributed for free as the full cost airlines do. Ryanair is quite obvious about its aim, which is to continue to offer low fares that will encourage growth in passenger traffic. Its ability to offer these low fares is founded on its policy of focusing on containing its costs through delivering operating efficiencies.

A low cost strategy should not be confused with low value or low quality. Retailers like Wal-Mart that pursue a low cost strategy focus on reducing distribution costs, shrinkage in the stores, reduced warehousing costs and through keen management of their supply chain achieve a high inventory turnover. Discount retailers like Aldi and Lidl have also successfully pursued a cost leadership strategy through limiting the product range offered in their stores, simplifying business processes, standardizing, making use of automation and offering non-branded goods.

Levels of strategy

If one accepts a top-down hierarchical approach to strategy there are three main levels of strategy: corporate, business and functional. Under this model the corporate goals are handed down to the business and then to functional areas (see Figure 2.1). Strategy at the corporate level sets out the direction of the whole organization, acknowledging the key stakeholders the organization is seeking to satisfy. These stakeholders will be both internal and external. Such a strategy is a statement of how the organization wants to position itself in its economic, political, social environment. It details the types of business the corporation wants to be in and what parts of the world it wants to operate in. In large diversified companies the second level of strategy, business level strategy, is at the Strategic Business Unit (SBU) level. This strategy sets out the plan for how the business unit will deal with its customers, markets and competitors and also how this will contribute to the overall corporate strategy. Growth and profitability targets and return on investment are considered at
this level. The third level of strategy is where the business functions, operations or finance or marketing, formulate their long-term plans which support the aims being pursued by the business strategy. Different business objectives would probably require different operations strategies in that they would demand a different set of priorities. Under the top-down model the role of the operations function is to implement business strategy formulated elsewhere.

Hayes and Wheelwright (1984) claimed that overall operations capability drives the success of organizations and developed a model to help identify the strategic role of the operations function. The four-stage model (see Figure 2.2) progresses from a passive, largely reactive approach to a proactive approach in Stage 4. The stages can be described as follows.

**Stage 1: Internal neutrality** At this stage the operations function is attempting to reach a certain minimum standard. It is seen as a hindrance in the delivery of competitive advantage by the other business functions. Its focus is on avoiding mistakes so it tends to be inward-looking and is reactive. The bad publicity that comes from organizations being let down by their operations can be damaging.
Stage 2: External neutrality

Here the operations function compares its performance with competitor organizations. Benchmarking its performance against its competitors enables it to identify the best ideas to copy. In trying to match the benchmarks it has identified, the operations function is attempting to be externally neutral.

Stage 3: Internally supportive

At Stage 3 operations are broadly up there with the best but have aspirations to continue to improve and be the very best in the market. The operations function has developed appropriate operations processes and resources to excel in those areas in which the company needs to compete effectively. The internally supportive element comes from the development of a credible operations strategy which supports the corporate strategy.

Stage 4: Externally supportive

At this level the operations function is playing a lead role in strategy-making and is forming the foundation for future competitive success. It might be doing so by organizing resources in innovative ways or in designing in flexibility so it is capable of adapting as markets change. At stage 4 a long-term perspective is taken and capabilities developed that will enable the organization to compete in future market conditions. It is about redefining the market and its expectations.

Operations performance objectives

Slack, Chambers and Johnston (2004) identified five performance objectives that apply to all types of operation. Focusing on one or more of these can provide a source of competitive advantage to the organization.

Quality, whether you are running a hospital or a retail superstore, is about doing things right so that error-free goods and services are delivered that are fit for their purpose. We talk further in the quality chapter (Chapter 9) about the various definitions of quality which can be adopted. Quality encompasses both the quality of the design of the product in terms of aesthetics, reliability and performance and the quality of the process that delivers the product or service. Quality of delivery process impacts on costs and dependability. Quality is a major source of customer satisfaction or dissatisfaction. Poor quality products or poor quality of service are likely to put the customer off returning, leading to future lost sales.

Flexibility is about the operation being able to change what it does quickly. How quickly can the organization change the mix of products and services it is offering to the customer? Changing consumer tastes affects demand levels and the product range desired and for an organization to stay competitive it needs to be able to respond to these changes with flexibility. Can the organization react to demand changes and increase or decrease the volume of output in response? Is a wide range of products or services on offer? Can the organization bring new product/service designs to market quickly so it is in a position to meet changing customer needs?
Providing flexibility in delivery options, both the manner and the timing give an opportunity for differentiation.

**Speed** is all about how long customers wait before receiving their service. Addressing the speed objective requires the organization to pay attention to the cycle time involved in their new product development. How long does it take to bring new products to market? As we shall discuss later, adopting a multidisciplinary team approach to design, seeing it as an iterative process with activities being undertaken in parallel, reduces the design cycle time. An organization also has to pay attention to its scheduling and capacity planning as well as inventory management to be able to deliver on the speed objective. Reducing inventory will also impact on obtaining a cost advantage.

**Dependability** is, of course, about consistency. An organization’s processes have to be geared up to consistently meeting a promised delivery time for a product or service. Customers are unlikely to be satisfied by an increase in delivery speed if it is not matched by consistent performance. This will require that an organization has systems in place to identify problems early and be flexible enough in its planning to be able to move to a plan B as necessary.

**Cost** is the last objective to be discussed but clearly not the least. For organizations that have adopted a low cost strategy it is the most important objective. The lower the cost of producing the goods the lower price that can be offered to customers, which in turn will boost sales and profits. Even organizations that seek to gain their competitive advantage through differentiation are keen to lower their cost basis because that will lead to improvements in profit levels. To be able to deliver a cost advantage an organization has to analyse where operation costs are incurred. The major cost categories are staffing, facilities that include technology and equipment costs, and materials. The proportions vary between these categories but broadly an organization spends around 55% of its costs on materials, 30% on facilities and 15% on staffing (Greasley 2006). So focusing on reducing the cost of materials will have the biggest impact on reducing costs. It is not surprising then to see the current emphasis on supply chain management and procurement. These sorts of cost breakdown hold good for the manufacturing sector such as automobile plants or for supermarket retailers. In contrast, when considering a hospital the biggest cost element will be staff costs, then facility and technology costs followed by bought-in materials and services. Many costs in a hospital operation are fixed and will not vary according to the number of patients treated. That is to say that facilities like beds, operating theatres or laboratories are as expensive as are the highly specialized staff. These are all needed to be available if not all of the time, then most of it. That obviously has cost implications.

Generally the level of costs depends on the volume and variety of output and how variable is demand. Variety of outputs leads to greater levels of complexity and therefore increased costs.

Cost is dependent on the other performance objectives. Improvements in each of the other four will lead to cost reductions. The relative priority of the performance objectives is determined by the demands of customers and the actions of competitors. Making these decisions on priorities links back to the statement in the strategy of what business the organization is in and who are its customers. Selling to customers who insist on error-free products requires the organization to concentrate...
on its quality performance. Consumer segments that are looking for low-priced products or services will lead the organization to emphasize its cost performance.

Effective market research will help the organization to identify different competitive factors such as innovative products and services, a wide range of products and services, low price, reliable delivery, fast delivery, high quality and the ability to be flexible and change the timing or quantity of output. In terms of being able to make appropriate business decisions an operations manager needs to be able to judge the relative importance of such competitive factors.

**Order winning and qualifying factors**

Such factors can be distinguished between those that are ‘order winning’ and those that are ‘qualifying factors’. As the name suggests, order winning factors contribute directly and in a significant manner to the winning of business. They will be the factors identified by customers as the reason they made a purchase. So improving performance around the order winning factors is likely to result in improving the organization’s opportunity of winning more business. Qualifying factors perform an important function, like the hygiene factors in Herzberg’s motivation model. They may not be the crucial determinants of success but they have to be there just for the organization to be considered by the customer. Performance below such a qualifying level could disqualify the company from being considered. This has to be weighed up with the realization that further improvements in performance around those factors are unlikely to result in improved business. To put it another way, the organization is unlikely to gain a return on its investment in the further development of qualifying factors.

These factors have to be considered by each of the customer segments an organization is selling into. For example, the judgements of personal banking customers will be quite different from those of corporate banking services. The weighting given to various factors differs in importance according to the product life cycle stage reached (see Figure 2.3).

**The Platts–Gregory procedure**

Platts and Gregory (1990) developed a procedure to help formulate an operations strategy which starts at Stage 1 with an analysis of the market position of the organization. Given its external focus at this stage, it looks at opportunities and threats in the competitive marketplace. In particular it identifies the factors that are required by the market and then compares those with the achieved performance so it enables an organization to chart how the operation performs with what the market is looking for. Profiling in this way shows where the gaps are, which should then be addressed by the operations strategy.

The capabilities of the operation are then assessed in Stage 2 of the procedure. What are the current operations practices and how far do these achieve the performance levels identified in Stage 1 as being important?
Reviewing the options open to the organization takes place at Stage 3 and results in the selection of options that best satisfy the criteria identified in the earlier stages. While this procedure explicitly identifies the gaps between operations performance and the market requirements, this model is regarded as being over-simplistic by those authorities in the strategy area. It does provide a framework for asking some important questions though. Whatever model is chosen it is important to identify what will be the critical success factors for an organization to sustain its long-term well-being.

A crucial part of the formulation of operations strategy is to prioritize competitive factors such as quality, cost, flexibility, dependability and speed. A simple 2×2 matrix of importance/performance is rather crude. Slack (1994) derived a 9-point importance scale (Table 2.3) which takes account of some of these issues just discussed. An assessment of importance and performance leads to decision-making that identifies where urgent action is needed, where the areas for improvement are, at what level performance is appropriate and where it is excessive in terms of what is appropriate as far as customers are concerned.

Although a lot has been written on company strategy, little of this has focused on the actual products (and services) that organizations will need to provide to ensure their survival in that future. How far ahead is this future? Johnson and Scholes (1984) do imply a longer view in their definitions, 'strategy is the direction and scope of an organization over the long term'. Other writers who have said that strategy requires a long-term perspective are Grant (1995) and Schwartz (1998). Although all of these certainly point to the future and how to get there, they do not define the type of products and services that are needed in this future.

Strategy is still considered the important topic to be studied and acted upon by those right at the top of the organization, but recently doubts have crept in (Kare-Silver 1997; Mintzberg 1994). It could be suggested that the belief by some that strategic management is falling from grace is because it does not actively consider the product element. The strategy depends very much on what products and services an organization can and wants to produce.
Product strategy

The organization must have a strategic plan and this must be described to all managers in the organization. This is not a mission statement as most mission statements are too bland to be of any practical use and too vague to be implemented. Steer clear of mission statements at this stage (and probably every stage). Sociologist and broadcaster Laurie Taylor recounted the following experience quoted in *People Management* (19 April 2001, vol. 7, no. 8): ‘I would speak to managers and they would say “It is going marvellously – we’ve got this great new mission statement.” Then I would go down the hall and the staff would be rolling around laughing at the new mission statement. Management theory is often a subject of derision down the corridor.’

**TABLE 2.3  A 9-POINT IMPORTANCE/PERFORMANCE SCALE**

*For this product or service does each performance objective meet the following?*

**Orderwinning objectives:**
1. Provide a crucial advantage with customers
2. Provide an important advantage with most customers
3. Provide a useful advantage with most customers

**Qualifying objectives:**
4. Need to be at least up to good industry standard;
5. Need to be around the median industry standard;
6. Need to be within close range of the rest of the industry;

**Less important objectives:**
7. Do not usually come into customers’ consideration,
8. Very rarely come into customers’ considerations;
9. Never come into consideration by customers and are never likely to do so.

*In this market sector, or for this product group, is our achieved performance in each of the performance objectives:*

**Better than competitors:**
1. Consistently considerably better than our nearest competitor;
2. Consistently clearly better than our nearest competitor;
3. Marginally better than our nearest competitor;

**The same as competitors:**
4. Often marginally better than most competitors;
5. About the same as most competitors;
6. Often within striking distance of the main competitors;

**Worse than competitors:**
7. Usually marginally worse than most competitors;
8. Usually worse than most competitors;
9. Consistently worse than most competitors?
A strategic plan should be a detailed description of where the company intends to go over the next few years. It is surprising how many strategic plans (and strategy books) only consider their actions over just the next year. Such a plan simply demonstrates that senior managers are not in control of their business, nor do they give due consideration to the abilities and capabilities of their employees. As many product and service developments can take several years to fully implement, sometimes, development programmes in organizations stretch beyond the written strategic plan. Often these are government or local authority funded organizations. The reverse should be the reality: company strategy should lead the product development otherwise who is running the company? Not the top managers.

As G. Peters (1996) has written: ‘We are invariably caught unaware of the trends affecting our business because we don’t spend enough time looking to the future. Our day-to-day lives are spent managing one crisis or another.’

People managing new products and services can do their bit to revitalize strategy. In fact, with the latest work on design and innovation management and the resulting standard BS 7000-1 Guide to Managing Innovation (1999), these managers are taking their work a lot further than many strategic thinkers and planners.

With experience and a new service programme linked in to a well-written strategic plan, a more effective delivery of profitable new products and services will be the result. This will not happen overnight but the logic is clearly there to be seen, so persuading people for its implementation will not be a serious design management problem.

But … the environment?

Perhaps oddly, despite what people say when asked, very few will go out of their way to buy something that is more environmentally friendly, especially if they have to pay more for it. It was reckoned, at an environmental workshop in Croatia (McAloon and Andreasen 2004), that in Europe there are about 5% of people who will buy environmentally friendly products. A market does exist and may be enough to support niche players but it does not win over big markets. On the other hand, being environmentally friendly coupled with other advantages can be a successful product strategy.

With the enormous success of the ISO 9000 series the standards bodies thought they might achieve similar success with the Environment Management Audit Schemes, such as BS 7750, EMAS and EN 14000. These have not been anywhere near as successful and the reason seems to be fairly obvious. With schemes to improve quality it could be shown that there was a definite marketing edge that would result, as said, in customers demanding it and only purchasing from companies that had acquired it. Although companies often give lip service to their support for environmental policies, they are often not prepared to put their money forward to support companies that are kinder to the environment when their products may cost more. In short, being better to the environment does not always give the marketing edge that providing better quality does.
SUMMARY OF KEY POINTS

- Even in a dynamic, competitive global economy productivity gains are possible and they are likely to be driven by the operations manager.
- Organizations identify their strengths and weaknesses and then develop strategies that take account of those strengths and weaknesses and place the organization in a position to meet the opportunities and threats identified through environmental scanning.
- Organizations can achieve competitive advantage through low cost or product differentiation or a focus strategy.

STUDENT ACTIVITY 2.1

1. Identify three retail companies that follow one of the three generic strategies (cost leadership, differentiation and focus). How have they implemented these strategic plans?
2. How does an operations management strategy change during a product's life cycle?
3. Thinking of the automobile industry, select a car company of your choice and discuss how you think their operations strategy has changed over the past ten years.