

The Formulation of Strategy 1: Analysing the Product Portfolio

10.1 LEARNING OBJECTIVES

When you have read this chapter you should be able to understand:

- (a) how strategic perspectives have developed over the past 30 years;
- (b) how the responsibilities for planning vary throughout the organization;
- (c) how portfolio analysis has developed, and how it can be used in the development of strategy;
- (d) the limitations and current status of portfolio analysis.

10.2 INTRODUCTION

Against the background of the material covered so far we are now in a position to turn our attention to the ways in which organizations approach the development of a marketing strategy. In this, the first of three chapters on strategy, we begin by examining how strategic perspectives have developed over the past 30 or more years. We then turn our attention to a variety of models of portfolio analysis. In Chapter 11 we concentrate upon the issues surrounding growth, the approaches that are most typically used to achieve it, methods of developing a sustainable competitive advantage, and the ways in which market position influences strategy.

10.3 THE DEVELOPMENT OF STRATEGIC PERSPECTIVES

Although a considerable amount has been written about strategic planning, it should be recognized that, as a discipline, strategic planning and the

associated concepts and techniques did not emerge fully until the early 1970s. There are several reasons for this, perhaps the most significant of which stems from the way in which many companies throughout the 1950s and 1960s prospered largely as the result of the growing and continuously buoyant markets that characterized Western economies at the time. In these circumstances, short-term operational planning was often seemingly all that was required. The turbulence of the early 1970s, which followed a series of crises – including oil supply restrictions, energy and material shortages, high inflation, economic stagnation, labour unrest, increased unemployment and then recession – caused many managers to search for a radically different approach to the running of their businesses. At the same time, an influx of low-price but relatively high-quality products from countries such as Japan began to flood Western markets, changing drastically the economics of manufacturing. The revised approach to management planning that emerged was designed to provide organizations with a far stronger and more resilient framework that would enable managers to both recognize opportunities more readily and overcome threats more easily. This new planning process was based on three central premises:

1. The company's business should be viewed and managed in a similar way to an investment portfolio, with each aspect of the business being closely monitored and decisions subsequently made on which products or specific parts of the business should be developed, maintained, phased out, or deleted.
2. Emphasis should be placed upon identifying in detail the future profit potential of each aspect of the business.
3. A strategic perspective to the management of each major element of the business should be adopted. This notion of what has sometimes been referred to as a 'game plan' for achieving long-term objectives required the strategist to plan on the basis of industry position, objectives, opportunities and resources.

It needs to be recognized, however, that for the strategist to be able to adopt this approach to management, there is a need to understand in detail the complexities of the interrelationships that exist between different parts of the organizational structure. In the majority of businesses, three different organizational levels can be identified: the corporate level, the business unit level and the product level.

At the corporate level, the decisions made are concerned principally with the corporate strategic plan and how best to develop the long-term profile of the business. This in turn involves a series of decisions on the levels of resource allocation to individual business units, be it a division, subsidiary or brand, and on which new potential business should be supported. Following this, each business unit should, within the resources allocated by

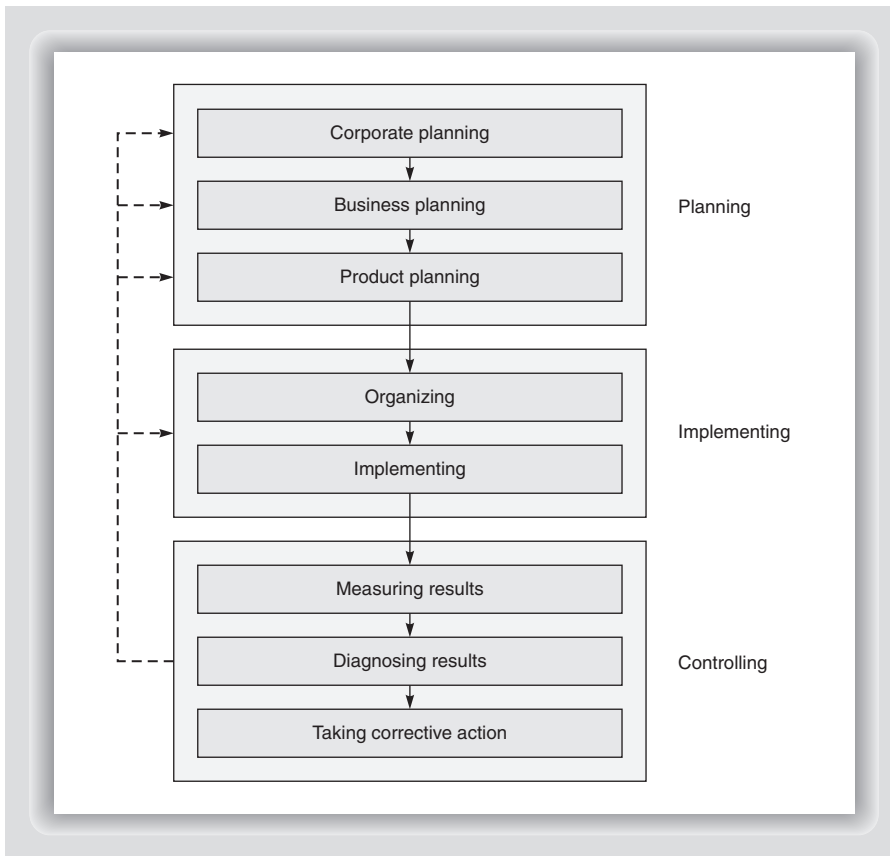


FIGURE 10.1 *The strategic planning, implementation and control cycle*

corporate headquarters, then develop its own strategic plan. Finally, marketing plans need to be developed at the product level. Plans at all three levels need then to be implemented, the results monitored and evaluated, and, where necessary, corrective action taken; this cycle of planning, implementation and control, which underpins the structure of this book, is illustrated in Figure 10.1.

Strategic planning and issues of responsibility

It should be apparent from what has been said so far that the ultimate responsibility for the planning process rests firmly with corporate management. This process, which involves statements of vision, mission, policy and strategy, establishes the broad framework within which plans at the business unit level are then developed. In practice, of course, organizations differ greatly both in how they go about this and in the degree of freedom given to the managers of individual business units. Some organizations, for

example, allow the managers of business units considerable scope in developing their own objectives and strategies, requiring only that the promised levels of performance are then obtained: this is typically referred to as *bottom-up planning*. Others, by contrast, adopt an approach that is diametrically opposed to this in that they not only establish the objectives, but also subsequently insist on being involved in the development and implementation of strategy (*top-down planning*). Still others are content to establish the goals and then leave the business unit to develop the strategies for their achievement (*goals down/plans up*). However, irrespective of which approach is adopted, corporate management has the ultimate responsibility for the four major dimensions of planning:

1. The definition of the vision and business mission
2. Establishing the company's strategic business units (SBUs)
3. Evaluating the existing business portfolio
4. Identifying new areas for the business to enter.

The first of these – the definition of the vision and business mission – provided the focus for Chapter 8, and, as we emphasized at that stage, is designed to provide the organization with an overall sense of purpose. Once this has been done, the strategist is then in a position to move on and identify the organization's SBUs.

Planning with SBUs

The idea of SBUs as the basis for planning first emerged in the 1960s, and gave recognition to the fact that the majority of companies operate a number of businesses, not all of which will necessarily be immediately apparent or identifiable. It does not follow, for example, that a company with four operating divisions will have four businesses and hence four SBUs, since one division may in practice contain several quite separate businesses. This typically comes about when the division produces different products for very different customer groups. Equally, two or three divisions may overlap or be interrelated in such a way that in effect they form a single business. It is therefore important that the planner understands in detail the nature and extent of these interrelationships so that the organization's strategy can be developed in the most logical way.

In commenting on this, Levitt (1960, pp. 45–56), along with a number of other writers, has warned against the dangers of simply defining businesses in terms of the products being made. Doing this, he argues, is myopic, since the demand for a particular product is likely to be transient. By contrast, basic needs and customer groups are far more likely to endure. In arguing this, Levitt is reminding us that a business needs to be seen as a *customer-satisfying process* rather than as a *goods-producing process*.

Numerous examples exist of industries that have failed to recognize this, including the American railway companies in the 1950s, the British motorcycle industry in the 1960s, the European cutlery industry in the 1980s and 1990s, and the Swiss watch industry in the 1970s (for a more detailed discussion of the problems experienced by the Swiss watch industry, refer to Illustration 8.1). The net effect of this has been either that opportunities have been missed, or that the business – and on some occasions the entire industry – has gone into decline. It was in an attempt to force managers to recognize the transient nature of demand that Drucker (1973) recommended that periodically they should pose the questions ‘What business are we in?’ and ‘What business should we be in?’

This general theme has also been pursued by Abell (1980), who suggests that businesses should be defined in terms of three elements:

1. The customer groups that will be served
2. The customer needs that will be satisfied
3. The technology that will be used to meet these needs.

Having done this, the planner can then move on to consider how best to manage each business strategically. A variety of frameworks to help with this have emerged over the past 25 years, although at the heart of virtually all of them is the concept of the *strategic business unit* or *strategy centre*. The term ‘strategy centre’ was first used by the American management consultants Arthur D. Little (1974), who defined it as:

A business area with an external market place for goods or services, for which management can determine objectives and execute strategies independently of other business areas. It is a business that could probably stand alone if divested. Strategic Business Units are the ‘natural’ or homogeneous business of a corporation.

It follows from this definition that SBUs exhibit a number of characteristics, the three most important of which are that an SBU:

1. Is a single business or collection of related businesses that offers scope for independent planning and that might feasibly stand alone from the rest of the organization
2. Has its own set of competitors
3. Has a manager who has responsibility for strategic planning and profit performance, and control of profit-influencing factors.

The idea of planning based on SBUs developed throughout the 1970s, and has subsequently proved to be useful – not least because for many managers it has to a very large extent clarified what is meant by strategic marketing planning. The identification of SBUs is therefore a convenient starting

point for planning, since, once the company's strategic business units have been identified, the *responsibilities* for strategic planning can be more clearly assigned. In practice, the majority of companies work on the basis that strategic planning at SBU level has to be agreed by corporate management. Thus plans are typically submitted on an annual basis, with corporate management then either agreeing them or sending them back for revision.

In going through this process of review, corporate management attempts to identify future potential and hence where investment can most profitably be made. This has in turn led to the development of a variety of frameworks in which products are categorized on the basis of their potential. One of the best known of these was put forward by Drucker (1963), who labelled products as:

1. Tomorrow's breadwinners
2. Today's breadwinners
3. Products that are capable of making a contribution, assuming drastic remedial action is taken
4. Yesterday's breadwinners
5. The also-rans
6. The failures.

By categorizing products or SBUs in this way, corporate management is moving towards a position where decisions regarding patterns of investment in the overall portfolio can be made with a far higher degree of objectivity than is typically the case when each SBU is viewed in partial or total isolation. To help with this, and in order to ensure that the process is analytical rather than impressionistic, a number of models of portfolio evaluation have been developed. Among the best known of these are the Boston Consulting Group's growth–share and growth–gain matrices.

10.4 MODELS OF PORTFOLIO ANALYSIS

The Boston Consulting Group's growth–share and growth–gain matrices

Undoubtedly the best-known approach to portfolio analysis, the Boston Consulting Group's (BCG) growth–share model, involves SBUs being plotted on a matrix according to the *rate of market growth* and their *market share relative to that of the largest competitor*. This is illustrated in Figure 10.2.

In using these dimensions as the basis for evaluating the product portfolio, the Boston Consulting Group forces management to give explicit consideration

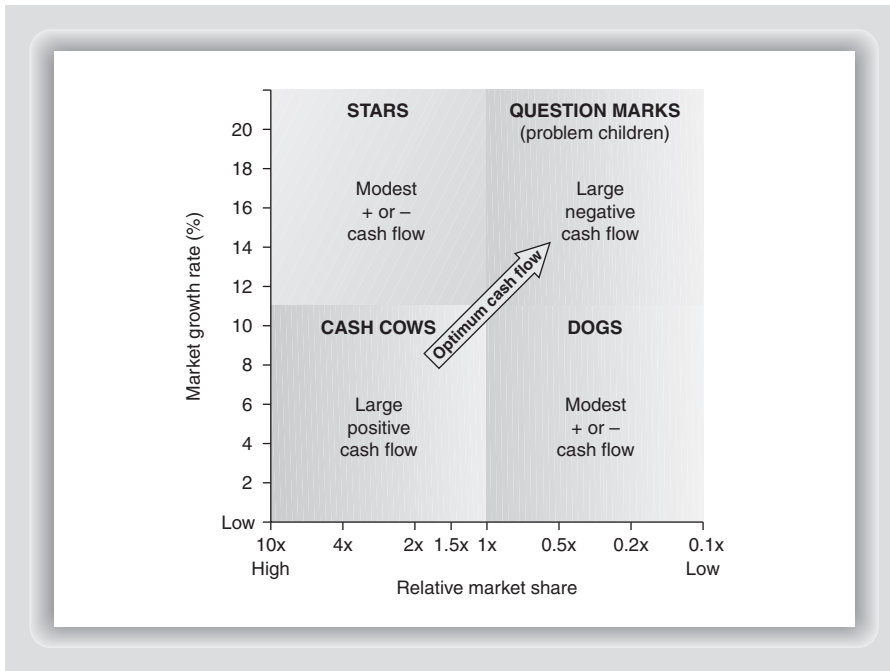


FIGURE 10.2 The Boston Consulting Group's growth–share matrix (adapted from Hedley, 1977)

both to the *future potential of the market* (i.e. the annual growth rate) and to the *SBU's competitive position*. Within the model, competitive position is measured on a logarithmic scale against the share of the firm's largest competitor; thus a relative market share of 0.3 in Figure 10.2 signifies that the SBU's sales volume is 30 per cent of the leader's sales volume, while 4.0 would mean that the company's SBU is the market leader and has four times the market share of the next largest company in the market. A ratio of 1.0 signifies joint leadership. The vertical axis is then used to illustrate the largely uncontrollable annual rate of market growth in which the business operates. In Figure 10.2 this ranges from 0 to 20 per cent, with a growth rate in excess of 10 per cent being seen as high.

The 2×2 matrix that emerges from this is based on four assumptions:

1. Margins and the funds generated increase with market share largely as the result of experience and scale effects
2. Sales growth demands cash to finance working capital and increases in capacity
3. Increases in market share generally need cash to support share-gaining tactics

4. Growth slows as the product reaches life cycle maturity, and at this stage a surplus of cash can often be generated without the organization experiencing any loss of market share; this can then be used to support products still in the growth stages of their life cycles.

The matrix itself is divided into four cells, each of which indicates a different type of business with different cash-using and cash-generating characteristics; the characteristics of each of these cells are discussed in Figure 10.3.

Having plotted the position of the organization's SBUs, the balance and health of the portfolio can be seen fairly readily. A balanced portfolio typically exhibits certain characteristics, including a mixture of cash cows and stars. By contrast, an unbalanced and potentially dangerous portfolio would have too many dogs or question marks, and too few stars and cash cows. The likely consequence of this is that insufficient cash will be generated on a day-to-day basis to fund or support the development of other SBUs.

Dogs (low share, low growth)

Dogs are those businesses that have a weak market share in a low-growth market. Typically they generate either a low profit or return a loss. The decision faced by the company is whether to hold on to the dog for strategic reasons (e.g. in the expectation that the market will grow, or because the product provides an obstacle, albeit a minor one, to a competitor). Dog businesses frequently take up more management time than they justify and there is often a case for phasing out (shooting) the product.

Question marks (low share, high growth)

Question marks are businesses operating in high-growth markets but with a low relative market share. They generally require considerable sums of cash since the firm needs to invest in plant, equipment and manpower to keep up with market developments. These cash requirements are, in turn, increased significantly if the company wants to improve its competitive position. The title of **question mark** comes about because management has to decide whether to continue investing in the SBU or withdrawing from the market.

Stars (high share, high growth)

Stars are those products which have moved to the position of leadership in a high growth market. Their cash needs are often high with the cash being spent in order to maintain market growth and keep competitors at bay. As stars also generate large amounts of cash, on balance there is unlikely to be any positive or negative cash flow until such time as the state of market growth declines. At this stage, provided the share has been maintained, the product should become a cash cow.

Cash cows (high share, low growth)

When the rate of market growth begins to fall, stars typically become the company's cash cows. The term cash cow is derived from the fact that it is these products which generate considerable sums of cash for the organization but which, because of the lower rate of growth, use relatively little. Because of the SBU's position in the market, economies of scale are often considerable and profit margins high.

Two further groups of SBU's have been identified by Barksdale and Harris (1982). These are **war horses** (high market share and negative growth) and **dodos** (low share, negative growth).

FIGURE 10.3 *The Boston Consulting Group's SBU classification*

Having identified the shape of the portfolio, the planner needs then to consider the objectives, strategy and budget for each SBU. In essence, four major strategies can be pursued:

1. *Build*. In following a building strategy, the primary objective is to increase the SBU's market share in order to strengthen its position. In doing this, short-term earnings and profits are quite deliberately forsaken in the expectation that long-term returns will be far greater. It is a strategy that is best suited to question marks, so that they become stars.
2. *Hold*. The primary objective in this case is to maintain the current share. It is the strategy that typically is used for cash cows to ensure they continue to generate the maximum amounts of cash.
3. *Harvest*. By following a harvesting strategy management tries to increase short-term cash flows as far as possible, even at the expense of the SBUs's longer-term future. It is a strategy best suited to cash cows that are weak or are in a market with seemingly only a limited future life. It is also used on occasions when the organization is in need of cash and is willing to mortgage the future of the product in the interests of short-term needs. Harvesting is also used for question marks when there appear to be few real opportunities to turn them into stars, and for dogs.
4. *Divest or terminate*. The essential objective here is to rid the organization of SBUs that act as a drain on profits, or to realize resources that can be used to greater effect elsewhere in the business. It is a strategy that again is often used for question marks and dogs.

Having decided which of these four broad approaches to follow, the strategist needs to consider the way in which each SBU is likely to change its position within the matrix over time. SBUs typically have a life cycle that begins with their appearance as question marks and then progresses through the stages of star, cash cow and, finally, dog. It is essential therefore that the BCG matrix is used not simply to obtain a snapshot of the portfolio as it stands currently, but rather to see how SBUs have developed so far and how they are likely to develop in the future. In doing this it is possible to gain an impression of the probable shape and health of the portfolio in several years' time, any gaps that are likely to exist, and hence the sort of strategic action that is needed in the form of decisions on new products, marketing support, and indeed product deletion. This process can then be taken a step further if similar charts are developed for each major competitor, since by doing this the strategist gains an insight to each competitor's portfolio strengths, weaknesses and potential gaps. The implications can then be fed back into the organization's own strategy.

The pitfalls of portfolio analysis

Although portfolio analysis is capable of providing a picture of the organization's current position, strategists need to adopt a degree of care in their interpretation and when developing future policy. A common mistake in portfolio analysis is to require each SBU to achieve an unrealistic growth rate or level of return: the essence of portfolio analysis involves recognizing that each SBU offers a different potential, and as such requires individual management. Other typical mistakes include:

- Investing too heavily in dogs, hoping that their position will improve, but failing
- Maintaining too many question marks and investing too little in each one, with the result that their position either fails to change or deteriorates. Question marks should either be dropped or receive the level of support needed to improve their segment position dramatically
- Draining the cash cows of funds and weakening them prematurely and unnecessarily. Alternatively, investing too much in cash cows, with the result that the funding available for question marks, stars and dogs is insufficient
- Seeing models of portfolio analysis as anything more than a *contributor* to decision-making. When the planner begins to use models such as the BCG growth–share matrix to replace evaluation and judgement by relying upon the essentially prescriptive ideas associated with each cell (e.g. *always* milk cash cows, *always* shoot dogs, and so on) as the basis for action, there is the potential for disaster. Given this, a summary of the pros and cons of the Boston matrix – and, by extension, a number of the other models of portfolio analysis examined later in this chapter – appears in Figure 10.4.

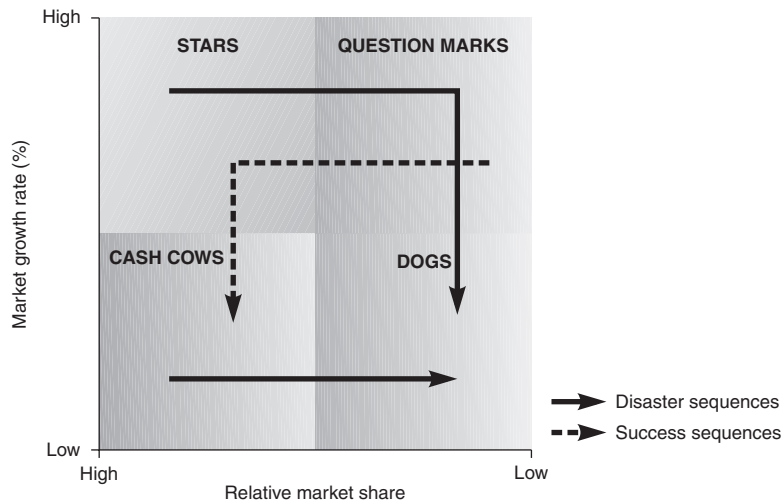
It should be apparent from the discussion so far that cash cows are essential to the health and long-term profitability of the organization, since they provide the funds needed if it is to develop and realize its full potential. The reality in many companies, however, is that cash cows are often in short supply and may already have been too vigorously milked. In 1988, for example, Booz Allen Hamilton estimated that, in traditional portfolio analysis terms, 72 per cent of business units in the USA were dogs, 15 per cent were cash cows, 10 per cent were question marks and only 3 per cent were stars. There is little evidence to suggest that the proportions in the UK at the time were radically different – or indeed that they have changed a great deal since then. Recognizing this, the strategist needs to focus upon the long term and consider how best to manage the portfolio and ensure that the organization benefits from a *succession* of cash cows. Any failure to do this is likely to lead to suboptimal management and the sorts of disaster sequences illustrated in Figure 10.5.

Pros

- It is an easy-to-use guide that helps managers to think about the investment needs of a portfolio of businesses
- It provides a useful basis for thinking about priorities across a spread of activities

Cons

- It is a guide to investment rather than strategy
- It rests on the implicit assumption that business planning is driven by just two factors, growth rate and market share, and in doing this ignores the spectrum of factors that influence profitability, such as competitive intensity, competitive advantage and customer needs
- Cash flow is seen to be dependent upon market growth and market share. In practice, this is not necessarily the case
- Market share is rarely as easily defined as the model suggests. With the erosion of geographic boundaries and the emergence of a radically different competitive environment, share is often far more fluid and difficult to measure
- The model fails to come to terms with the nature of the strategy and form of competitive advantage that will lead to success

FIGURE 10.4 *The pros and cons of the Boston matrix***FIGURE 10.5** *Success and disaster sequences in the product portfolio (adapted from The Boston Consulting Group, 1970)*

A second model developed by the Boston Consulting Group – the growth–gain matrix – can go some way towards helping the strategist avoid problems such as those shown in Figure 10.5. The alternative matrix, which is often used in conjunction with growth–share analysis, illustrates the extent to which the growth of each product or SBU is keeping pace with market growth. The matrix, which is illustrated in Figure 10.6(a), features

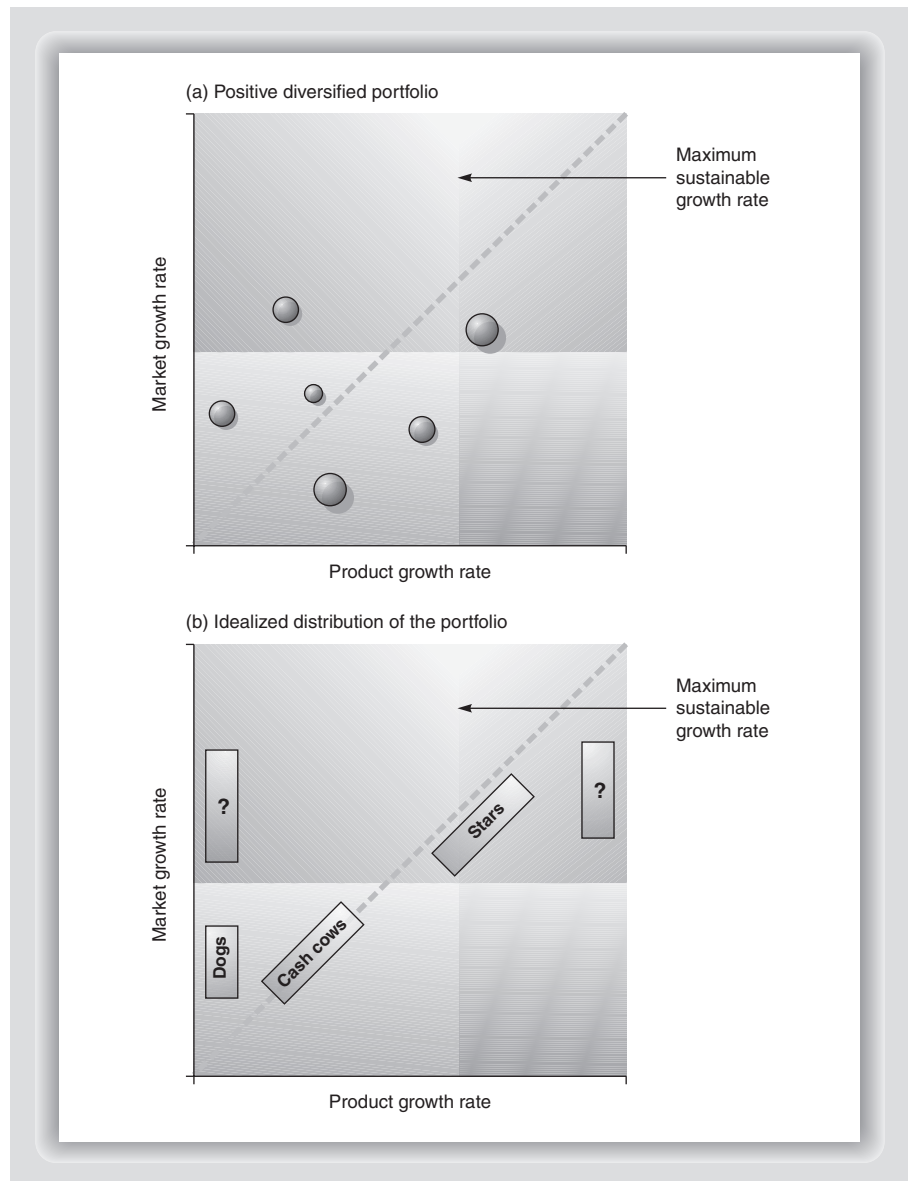


FIGURE 10.6 The product portfolio and maximum sustainable growth (adapted from *The Boston Consulting Group, 1970*)

the growth rate of the product (or of its capacity) on the horizontal axis, and the growth rate of the market on the vertical axis. Products with a growth rate just equal to the market growth rate are located on the diagonal. Share losers therefore appear above the diagonal, while share gainers are below.

Figure 10.6(b) shows the ideal location of products within a portfolio. Here the dogs are clustered along or near the market growth axis, a position that reflects zero capacity growth. Cash cows are concentrated along the diagonal, showing that market share is being maintained. Stars should appear in the high-growth sector since they should be gaining (or at the very least holding) market share. Question marks then appear in two clusters, with one group receiving little support while the other is receiving the considerable support needed to maximize its chances of producing stars.

In discussing how best to use and interpret the growth–gain matrix, Alan Zakon (1971) of the Boston Consulting Group highlights the significance of the firm's *maximum sustainable growth*; this is plotted as a solid vertical line on the matrix. 'The weighted average growth rate of the products within the portfolio cannot', he emphasizes, 'exceed this maximum sustainable rate.' Where, however, the 'centre of gravity' (i.e. the weighted average growth rate) is to the left of this line, scope exists for further growth. This would typically be achieved by a series of strategy changes to reposition products. As an example of this, extra funds might be shifted to one of the stars in order to achieve even higher rates of growth.

Used in this way, the growth–gain matrix provides a basis for moving the portfolio closer to the 'ideal' position of maximum sustainable growth. Equally, by plotting growth–gain matrices for each major competitor, the strategist can, as with growth–share analysis, gain an insight into the areas of competitive emphasis and react accordingly.

Portfolio analysis: an initial assessment

Although the BCG matrices have a number of obvious attractions a word of caution is necessary, since they do not represent the ultimate management panacea that many of their advocates in the early days argued. It should be recognized that the practical value of portfolio analysis is influenced significantly both by the quality of the basic data inputs, many of which are difficult to define and measure, and the broader political and social environments within which decisions are made. It was therefore in an attempt to give greater specific recognition to a broader spectrum of factors that other approaches to portfolio analysis, including the General Electric multifactor matrix, the Shell directional policy matrix, the Arthur D. Little strategic condition matrix and Abell and Hammond's 3×3 relative investment opportunity chart, have been developed. It is to these models, which are concerned with market attractiveness and business position, that we now turn our attention.

10.5 MARKET ATTRACTIVENESS AND BUSINESS POSITION ASSESSMENT

The two BCG matrices discussed so far are capable of providing the strategist with an understanding of several important strategic relationships, including internal cash flows, and market share and growth trajectories. However, it is generally acknowledged that while the insights provided by these models are undoubtedly of significant value, they are in the majority of cases insufficient if worthwhile investment decisions affecting the future of the business are to be made. More specifically, critics such as Abell and Hammond (1979, pp. 211–12) have highlighted the three major shortcomings of relying simply on growth–share analysis:

1. Often, factors other than relative market share and industry growth play a significant role in influencing cash flow
2. Cash flow may well be viewed as being of less significance than rate of return on investment (ROI) as a means of comparing the attractiveness of investing in one business rather than another
3. Portfolio charts provide little real insight into how one business unit compares with another in terms of investment opportunity. Is it the case, for example, that a star is always a better target for investment than a cash cow? Equally, problems are often encountered in comparing question marks when trying to decide which should receive funds to make it a star, and which should be allowed to decline.

Recognition of these sorts of problems has led to the development of an approach that is labelled '*market attractiveness–business position assessment*', the best known of which is the General Electric model.

The General Electric multifactor portfolio model

The thinking behind General Electric's multifactor model is straightforward and is based on the argument that it is not always possible or appropriate to develop objectives or to make investment decisions for an SBU solely on the basis of its position in the growth–share matrix. The General Electric model therefore takes the general approach a step further by introducing a greater number of variables against which the position of SBUs might be plotted. This model, which appears in Figure 10.7, involves SBUs being rated against two principal dimensions:

1. Industry attractiveness
2. Business strengths.

The circles then represent not the size of the SBU but rather the size of the market in question, with the shaded part of the circle representing the

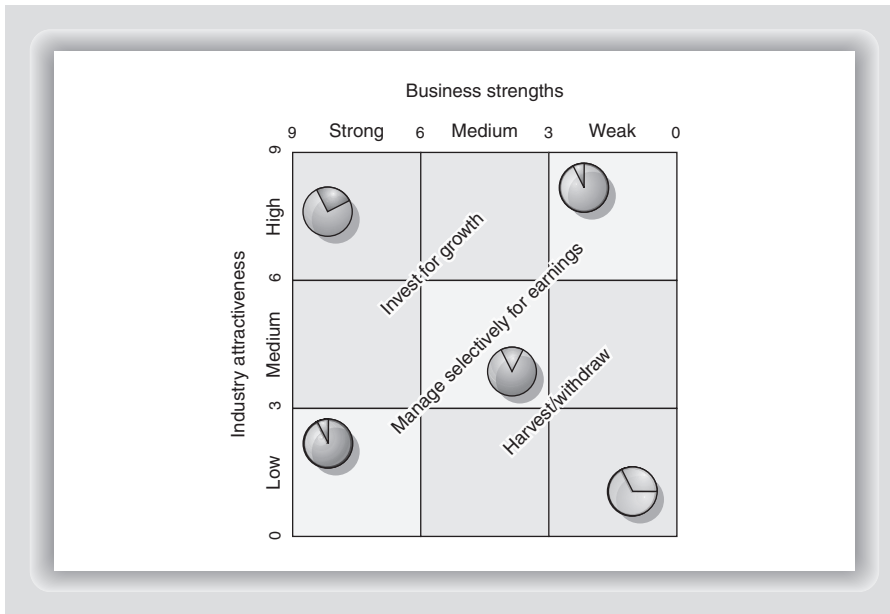


FIGURE 10.7 The General Electric multifactor portfolio model

SBU's market share. The thinking behind the choice of the two axes is based on the notion that the success of a company is determined, first, by the extent to which it operates in attractive markets, and secondly, by the extent to which it possesses the sorts of competitive business strengths needed to succeed in each of these markets. The failure on the part of the planning team to acknowledge this is likely to lead to long-term problems, since strong companies that operate in an unattractive market and weak companies operating in an attractive market will almost invariably underperform.

Recognizing this requires the planner to measure each of the two dimensions. In order to do this, the factors underlying each dimension must be identified, measured, and then combined to form an index. Although within each dimension the list of factors that combine to form a measure of attractiveness will be specific to each company, it is possible to identify the sorts of factor that will in nearly every instance be of relevance. *Industry attractiveness*, for example, is determined to a very large extent by the market's size, its rate of growth, the nature, degree and bases of competition, the pace of technological change, the extent to which it is constrained by government or legislative regulations, the opportunities for profit that exist, and so on. Equally, *business strengths* is influenced by such factors as market share, product quality, brand image and reputation, levels of management and operational capability, production capabilities, cost factors, the organization's distribution reach and strength, and the nature of the customer base and levels of loyalty.

It can be seen from Figure 10.7 that the nine cells of the General Electric matrix fall into three distinct areas, each of which requires a different approach to management and investment. The three cells at the top left of the matrix are the most attractive in which to operate, and require a policy of investment for growth. The three cells that run diagonally from the top right to the bottom left have a medium attractiveness rating: the management of the SBUs within this category should therefore be rather more cautious, with a greater emphasis being placed upon selective investment and earnings retention. The three cells at the bottom right of the matrix are the least attractive in which to operate, and management should therefore pursue a policy of harvesting and/or divestment.

As with the BCG matrix, it needs to be recognized that the General Electric approach to portfolio analysis also needs to take account of the probable future of each SBU. The planner should therefore attempt to look ahead by considering life cycles, new forms of technology and their probable impact, likely competitive strategies, and so on. Probable future changes can then be reflected in the matrix by adding a series of arrows showing how each SBU is likely to move over the next few years.

Other portfolio models

Although the BCG and GE models are undoubtedly the best-known approaches to portfolio analysis, a variety of other models have appeared over the years, including the Shell directional policy matrix (Shell Chemical Co., 1975), Abell and Hammond's 3×3 matrix (1979), and the Arthur D. Little strategic condition model (1974).

Shell's directional policy matrix (DPM), which is illustrated in Figure 10.8, again has two key dimensions: the company's *competitive capabilities* and the *prospects for sector profitability*. As with the General Electric matrix, each dimension is then subdivided into three categories. SBUs are located within the matrix, and the strategic options open to the company are then identified.

The directional policy matrix has in turn provided the basis for Abell and Hammond's 3×3 chart (see Figure 10.9), which is designed to depict relative investment opportunities. Although the terminology used by Abell and Hammond differs slightly from that of Shell's DPM – company competitive capability, for example, is referred to as business position, while prospects for sector profitability is termed market attractiveness – the thinking behind the model is similar, and indeed can be seen to link back to the General Electric approach.

The Arthur D. Little (ADL) model, which is illustrated in Figure 10.10, is again similar in concept, although here the two dimensions used are the firm's *competitive position* and the *stage of industry maturity*.

Competitive position, it is suggested, is influenced by the geographical scope of the industry and the specific product–market sectors in which the

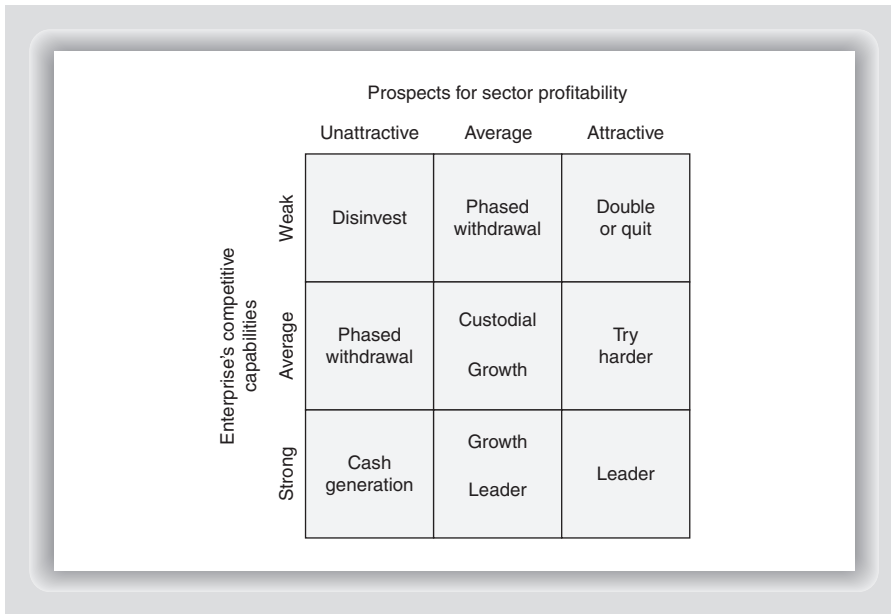


FIGURE 10.8 The Shell directional policy matrix (adapted from Shell Chemical Co., 1975)

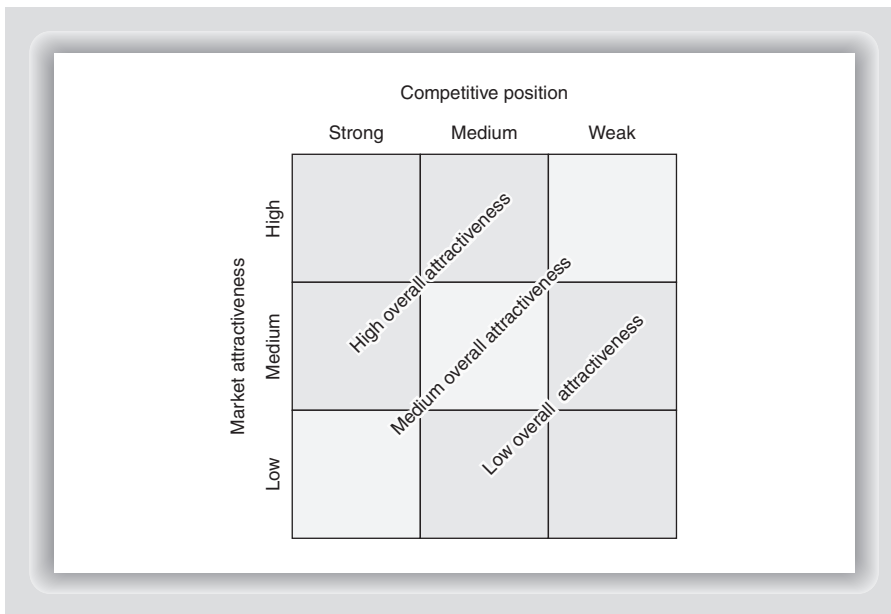


FIGURE 10.9 Abell and Hammond's 3 × 3 investment opportunity matrix (adapted from Abell and Hammond, 1979)

		Stage of industry maturity			
		Embryonic	Growth	Mature	Ageing
Competitive position	Dominant	<ul style="list-style-type: none"> • Grow fast • Build barriers • Act offensively 	<ul style="list-style-type: none"> • Grow fast • Aim for cost leadership • Defend position • Act offensively 	<ul style="list-style-type: none"> • Defend position • Increase the importance of cost • Act offensively 	<ul style="list-style-type: none"> • Defend position • Focus • Consider withdrawal
	Strong	<ul style="list-style-type: none"> • Grow fast • Differentiate 	<ul style="list-style-type: none"> • Lower cost • Differentiate • Attack small firms 	<ul style="list-style-type: none"> • Lower cost • Differentiate • Focus 	<ul style="list-style-type: none"> • Harvest
	Favourable	<ul style="list-style-type: none"> • Grow fast • Differentiate 	<ul style="list-style-type: none"> • Lower cost • Differentiate • Attack small firms 	<ul style="list-style-type: none"> • Focus • Differentiate • Hit smaller firms 	<ul style="list-style-type: none"> • Harvest
	Tenable	<ul style="list-style-type: none"> • Grow the industry • Focus 	<ul style="list-style-type: none"> • Hold-on or withdraw • Niche • Aim for growth 	<ul style="list-style-type: none"> • Hold-on or withdraw • Niche 	<ul style="list-style-type: none"> • Withdraw
	Weak	<ul style="list-style-type: none"> • Search for a niche • Attempt to catch others 	<ul style="list-style-type: none"> • Niche or withdraw 	<ul style="list-style-type: none"> • Withdraw 	<ul style="list-style-type: none"> • Withdraw

FIGURE 10.10 *The Arthur D. Little strategic condition matrix (adapted from Arthur D. Little, 1974)*

SBU operates. It is not therefore simply market share that influences competitive position, but also competitive economics and a series of other factors, including technology. This led Arthur D. Little to the recognition of five main categories of competitive position:

1. *Dominant*. This is a comparatively rare position, and in many cases is attributable either to a monopoly or to a strong and protected technological leadership. The implications are that the firm is able to exert considerable influence over the behaviour of others in the industry, and has a wide variety of strategic options open to it.
2. *Strong*. By virtue of this position the firm has a considerable degree of freedom over its choice of strategy, and is often able to act without its market position being unduly threatened by competitors.

3. *Favourable*. This position, which generally comes about when the industry is fragmented and no one competitor stands out clearly, results in the market leaders having a reasonable degree of freedom. Companies with a favourable market position often have strengths that can be exploited by particular strategies, and hence a greater than average opportunity to increase market share.
4. *Tenable*. Although firms within this category are able to perform satisfactorily and can justify staying in the industry, they are generally vulnerable in the face of increased competition from stronger and more proactive companies in the market. The opportunities for an organization to strengthen its position tend to be lower than average. The profitability of the tenable firm is best achieved and sustained through a degree of specialization.
5. *Weak*. The performance of firms in this category is generally unsatisfactory, although opportunities for improvement do exist. Often, however, the firm is either too big and inefficient to compete with any real degree of effectiveness, or too small to cope with competitive pressures. Unless the firm changes, it is ultimately likely to be forced out of the market or to exit of its own accord.

A sixth position, that of *non-viability*, can be added to this list, and applies when the firm's performance is unsatisfactory and there are few (if any) opportunities for improvement. In these circumstances it is essentially a case of the strategist recognizing the reality of the situation and withdrawing from the market in the least costly way.

The second dimension of the model – the *stage of industry maturity*, ranging from embryonic to ageing – has, Arthur D. Little argues, significant implications for the strategies open to the organization. Thus once a basic strategy has been identified, there are certain things the strategist must do, might do, and should not do if consistency is to be maintained.

This combination of competitive position and industry maturity provides the basis for determining the SBU's strategic condition and, subsequently, the identification and evaluation of the strategic options open to the company. This typically is a choice between investing in order to strengthen or maintain position, spending in order to maintain the *status quo*, harvesting, or exiting from the industry. In commenting on this, Arthur D. Little states that 'there is a finite set of available strategies for each Business Unit' and that these can be seen in terms of six generic strategic groups:

1. Market strategies (domestic and international)
2. Product strategies
3. Technology strategies

4. Operations strategies
5. Management and systems strategies
6. Retrenchment strategies.

In choosing among these, Arthur D. Little identifies several guiding principles, the most important of which is that 'strategy selection [should] be driven by the condition of the business, not the condition of its managers'. In making this comment, Arthur D. Little is arguing for realism in strategic planning and that it is this that should prevail if the organization is not to overreach itself.

10.6 CRITICISMS OF PORTFOLIO ANALYSIS

Despite the rapid growth, adoption and indeed the apparent attractions of the underlying logic of portfolio analysis, it has been subject to a considerable and growing volume of criticism over the past 15 years. Although it is acknowledged by its critics that the sort of models referred to here have encouraged managers to think strategically, consider the economics of their businesses in greater detail, examine the nature of interrelationships and adopt a more proactive approach to management, many writers have argued that the models are generally too simplistic in their structure. In commenting on this, Kotler (1987, p. 77) suggests that:

Portfolio analysis models must be used cautiously. They may lead the company to place too much emphasis on market-share growth and entry into high growth businesses, or to neglect its current businesses. The model's results are sensitive to the ratings and weights and can be manipulated to produce a desired location in the matrix. Furthermore, since these models use an averaging process, two or more businesses may end up in the same cell position but differ greatly in the underlying ratings and weights. Many businesses will end up in the middle of the matrix as the result of compromises in ratings, and this makes it hard to know what the appropriate strategy should be. Finally, the models fail to delineate the synergies between two or more businesses, which means that making decisions for one business at a time may be risky.

These sorts of criticisms have been echoed by others, including Baker (1985, p. 75), who has pointed to the way in which many firms managed to cope with the recession of the 1970s and early 1980s not because of a portfolio of products or even a high market share, but rather as the result of a strategy of concentrating upon a single product and market. Equally, many other firms, and especially those in mature markets, he suggests, have not only survived but have also prospered despite having products that, in portfolio analysis terms, would be universally classified as dogs. Brownlie (1983)

also discusses these criticisms in some detail, and is worth quoting at length. He suggests that:

Additional criticism of the BP [business portfolio] approach tends to focus on its over-simplified, and somewhat misleading, representation of possible strategy positions; and its use of the dimensions growth rate and market share, which are themselves considered to be inadequate measures of, respectively, industry attractiveness and competitive position. As Wensley concludes, this approach to strategy development ‘encourages the use of general rather than specific criteria as well as implying assumptions about mechanisms of corporate financing and market behaviour which are rather unnecessary or false’. Indeed, it has been observed that market leadership does not always offer the benefits of lower costs, more positive cash flow and higher profits. On the contrary: the number of highly viable companies occupying market ‘niches’ is legion, and growing by the day. Recent trends that have favoured the development of greater specialization in some markets include the growth of private label consumer products and the emergence of differential preferences in some industrial markets, for example computers, as customers become familiar with product, or develop relevant in-house expertise.

The BP approach also tends to overlook other important and strategic factors that are more a function of the external competitive environment – for example, technological change; barriers to entry; social, legal, political and environmental pressures; union and related human factors; elasticity of demand; and cyclicity of sales. The application of the BP to strategic decision-taking is in the manner of a diagnostic rather than a prescriptive aid in instances where observed cash flow patterns do not conform with those on which the four product–market categories are based. This commonly occurs where changes in product–market strategies have short-term transient effects on cash flow.

The limitations and problems of portfolio analysis have also been highlighted by McDonald (1990), albeit from a rather different viewpoint to that of most writers. McDonald suggests that the gap between theory and practice is greater in the case of marketing than in any other discipline. One consequence of this, according to McDonald, is that little evidence exists to show that some of the more substantive techniques such as the Ansoff Matrix, the Boston Matrix, and the Directional Policy Matrix are used in practice. This is supported by research findings not just in the UK but also in Australia and Hong Kong. Reid and Hinckley (1989, p. 9), for example, concluded:

Respondents were asked which techniques they were familiar with. The results were skewed towards ignorance of all the techniques to which they were exposed. The majority were not familiar with any by name.

Similarly, from a study of Australian management practice, McColl-Kennedy *et al.* (1990, p. 28) stated that 'The awareness and usage of planning tools is low'.

McDonald suggests that there are three possible explanations for this:

1. Companies have never heard of them
2. Companies have heard of them but do not understand them
3. Companies have heard of them and tried them, and have found that they are largely irrelevant.

More fundamentally, however, he argues that the gap between theory and practice is due to the failure of most writers' attempts to explain the strategic thinking underpinning such techniques. He illustrates this by discussing the directional policy matrix, which, he suggests, is a well-known but under-utilized and misunderstood planning tool. This misunderstanding is, in one form or another, common to virtually all approaches to portfolio analysis. However, in the case of the DPM, the problems stem from the complexity of the analytical process that is needed if the model is to be used effectively. Thus:

The criteria for the vertical axis (market attractiveness) can only be determined once the population of 'markets' has been specified. Once determined, those criteria cannot be changed during the exercise. Another common mistake is to misunderstand that unless the exercise is carried out twice – once for t_0 and once for $t + 3$ – the circles cannot move vertically. Also, the criteria have to change for every 'market' assessed on the horizontal axis each time a company's strength in that market is assessed. Some way has also to be found of quantifying the horizontal axis to prevent every market appearing in the left-hand box of the matrix. If we add to this just some of the further complexities involved – such as the need to take the square root of the volume or value to determine circle diameter, the need to understand that the term 'attractiveness' has more to do with future potential than with any externally-derived criteria and so on – we begin to understand why practising managers rarely use the device.

Despite criticisms such as these, portfolio analysis has many defenders, including Day (1983), who suggests that:

Current criticisms (of portfolio analysis) are unwarranted because they reflect a serious misunderstanding of the proper role of these analytical methods ... what must be realized is that these methods can facilitate the strategic planning process and serve as a rich source of ideas about possible strategic options. But on their own, these methods cannot present the appropriate strategy or predict the consequences of a specific change in strategy.

In many ways, Day's comments help to put the true role and value of portfolio analysis into perspective. It is not (as some managers appeared to believe in the early days) a set of techniques that guarantees greater success. Rather it is an approach to the formulation of strategy that, if used in the way intended, should force a deeper analysis and give far greater recognition to the interrelationships and implications of these interrelationships to the portfolio of brands or businesses being managed by the company. This in turn should lead to a far firmer base for effective decision-making.

This final point in particular was highlighted in 1979 by the results of a *Harvard Business Review*-sponsored study of strategic portfolio planning practices in *Fortune's* 1000 companies. The study, by Haspelagh (1982), found that portfolio planning helped managers to strengthen their planning processes, particularly in divisionalized and diversified organizations. The secret to success, however, was found to lie not just in the techniques themselves, but also in the challenge of incorporating the theory of the techniques into managerial practice. The findings of the study did highlight several problems of portfolio planning, including the following:

- If done properly the process is time-consuming, and firms often experience difficulties of implementation
- If the techniques are seen simply as analytical tools, the company sees only limited benefits
- All too often the strategist focuses upon factors that are in a sense inappropriate, e.g. levels of cost efficiency rather than organizational responsiveness
- The techniques are of only limited value in addressing the issue of new business generation.

Despite problems such as these, the techniques were found to be popular for a number of reasons:

1. They were felt to lead to improvements in strategies
2. The allocation of resources was improved
3. They provided an improved base for adapting planning to the needs of individual businesses
4. Levels of control improved.

10.7 SUMMARY

In this, the first of three chapters on strategy, we have taken as our primary focus the nature and development of portfolio analysis. As a prelude to this we examined the development of strategic perspectives since the 1970s,

highlighting the way in which the environmental turbulence that characterized the early 1970s led to many managers rethinking their approaches to running their businesses. The new planning perspective that emerged was, we suggested, based on three central premises:

1. A need to view and manage the company's businesses in a similar way to an investment portfolio
2. An emphasis upon each business's future profit potential
3. The adoption of a *strategic* perspective to the management of each business.

The starting point for portfolio analysis involves identifying the organization's *strategic business units*, an SBU being an element of the business as a whole that:

- Offers scope for independent planning
- Has its own set of competitors
- Has a manager with direct profit responsibility who also has control over the profit-influencing factors.

A variety of approaches to portfolio analysis and planning have been developed, the best-known of which are:

- The Boston Consulting Group's growth–share matrix
- The General Electric multifactor matrix
- The Shell directional policy matrix
- The Arthur D. Little strategic condition matrix
- Abell and Hammond's 3×3 investment opportunity chart.

The conceptual underpinnings in each case are broadly similar, with consideration being given in one form or another to the SBU's *competitive position* and *market attractiveness/potential*. Each of the portfolio models also encompasses a series of strategic guidelines, and these were examined.

Against this background, we focused upon the limitations of portfolio analysis. Although it is acknowledged that these models have encouraged managers to think strategically, to consider the economics of their businesses in greater detail and to adopt a generally more proactive approach to management, critics have argued that the models are overly simplistic in their structure and often require data inputs that are complex and difficult to obtain. Because of this, it is suggested, usage levels are generally low.