Chapter 5

THE CUSTOMER AND MARKET AUDIT PART 3: THE PRODUCT AUDIT

SUMMARY

- What we sell to the segments identified in Chapter 3
- What a 'product' is – throughout the chapter the word 'product' is used, but the guidelines provided apply equally to services
- What a brand is
- What the difference is between a successful and an unsuccessful brand
- Key diagnostic tools, specifically
  - lifecycle analysis
  - the Boston Matrix
  - the directional policy matrix
- The growing importance of category management
- Examples of all these tools in practice are provided in the form of mini case histories
- Exercises to turn the theory into actionable propositions

INTRODUCTION

It will be recalled that, at the beginning of Chapter 3, the diagram of the marketing process – repeated here as Figure 5.1 – indicated that Chapters 3, 4 and 5 would be concerned with Box 1, for clearly a marketing audit is concerned not just with whom we sell to but also with what we sell to them. Consequently, this chapter is concerned with this aspect of the audit.

Marketing Plans: How to Prepare Them, How to Profit From Them, Eighth Edition
By Malcolm McDonald and Hugh Wilson

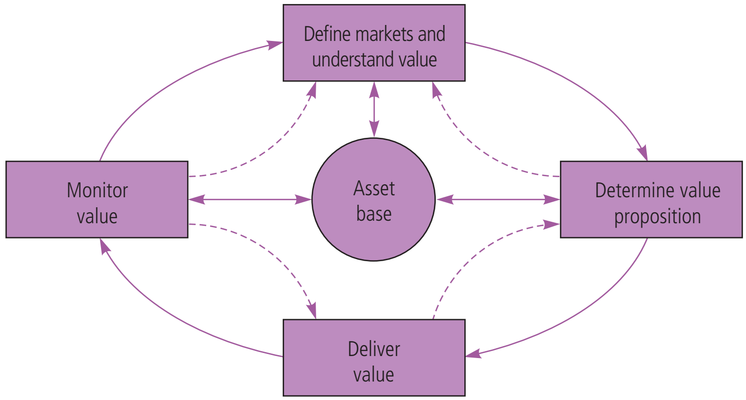

Figure 5.1: Overview of marketing map.

The contents of a strategic marketing plan (T+3) (less than 20 pages)

- The purpose statement
- Financial summary
- Market overview
  - how the market works
  - key segments and their needs
- SWOT analyses
- Portfolio summary
  - of SWOTs
- Assumptions
- Objectives and strategies
- Budget for three years

Figure 5.2: The contents of a strategy marketing plan.

Referring again to the *output* of the marketing planning process, shown in Figure 5.2, let us remind ourselves that we are still carrying out an audit in order to complete the following sections of the strategic marketing plan:

Market overview

- How the market works
- Key segments and their needs (these sections were dealt with in Chapters 3 and 4)
- SWOT analyses
- Portfolio summary of the SWOTs

This chapter is principally concerned with what is sold to the customers – the 'product'– and it will quickly be made clear that it is impossible to separate the product itself from the way it is delivered. This is why scholars have to date concluded that brand equity and customer equity (explained in Chapter 13) are two sides of the same coin. Hence, this chapter is included in Part 3 as 'The Customer and Market Audit'.

What is a Product?

Throughout this chapter we refer to the term ‘product’. However, everything we say is equally applicable to a service.

The central role that the ▶ product plays in marketing management makes it such an important subject that mismanagement in this area is unlikely to be compensated for by good management in other areas.

The vital aspects of product management we shall discuss in this chapter are concerned with the nature of products, product lifecycles, how products make profits, the concept of the product portfolio and new product development. The purpose of this discussion is to help us to carry out a product audit in order that we can set meaningful marketing objectives. But before we can begin a proper discussion about product management, it is necessary first to understand what a product is, since this is the root of whatever misunderstanding there is about product management.

We have already looked at customers; now we begin to look at what we sell to them. Let us start by explaining that a product is a problem-solver, in the sense that it solves the customer’s problems, and is also the means by which the company achieves its objectives. And, since it is what the customer actually gets for what they pay, it is clearly a subject of great importance.

The clue to what constitutes a product can be found in an examination of what it is that customers appear to buy. Customers have needs and they buy products to satisfy them. This was made clear in the last chapter on market segmentation. At its simplest level, someone who needs a hole may buy a drill. But if a better way of making a hole is invented – say a pocket laser – demand for drills may fall.

A product (or service) is the total experience of the customer or consumer when dealing with an organization.

MARKETING INSIGHT

Some years ago, Gestetner got into serious difficulties because they thought they were in the duplicator market, when it was clear that other solutions to the duplication problem had become available.

The important point about this is that a company which fails to think of its business in terms of customer benefits rather than in terms of physical products or services is in danger of losing its competitive position in the market.

But while this is important at the highest level of a company, it is also extremely relevant even at the level of the salesperson. A salesperson announcing that the quench tank on their furnace is three times bigger than a competitor’s quench tank must not be surprised if this news is met with complete indifference, especially if this feature requires a hole to be dug in the ground three times bigger than the one the customer currently has! Much more relevant would be the fact that this larger quench tank would enable the customer to save a large amount of money each year on operating costs, which is a benefit and is the main aspect the customer is interested in. This is what we reference in Chapter 4 as a value proposition.

So far, we have not said much about service products, such as consulting, banking, insurance, and so on. The reason for this is simply that, as we said in Chapter 1, the marketing of services is not very different from the marketing of goods. The greatest difference is that a service product has benefits that cannot be stored. Thus, an airline seat, for example, if not utilized at the time of the flight, is gone forever, whereas a physical product may be stored and used at a later date.

In practice, this disadvantage makes very little difference in marketing terms. The major problem seems to lie in the difficulty many service product companies have in actually perceiving and presenting their offerings as 'products'. Consider the example of the consultant. This country is full of a constantly changing army of people who set themselves up as consultants, and it is not unusual to see people presenting themselves, for example, as marketing consultants. It would be difficult for any prospective client to glean from such a description exactly what benefits this person is offering. Yet the market for consulting is no different from any other market, and it is a simple matter to segment the market and develop 'products' that will deliver the particular package of benefits desired.

We can now begin to see that, when a customer buys a product, even as an industrial buyer purchasing a piece of equipment for a company, he or she is still buying a particular bundle of benefits perceived as satisfying their own particular needs and wants.

We can now appreciate the danger of leaving product decisions entirely to technical experts. If we do, they will often assume that the only point in product management is the actual technical performance, or the functional features of the product itself.

These ideas are incorporated in Figure 5.3.

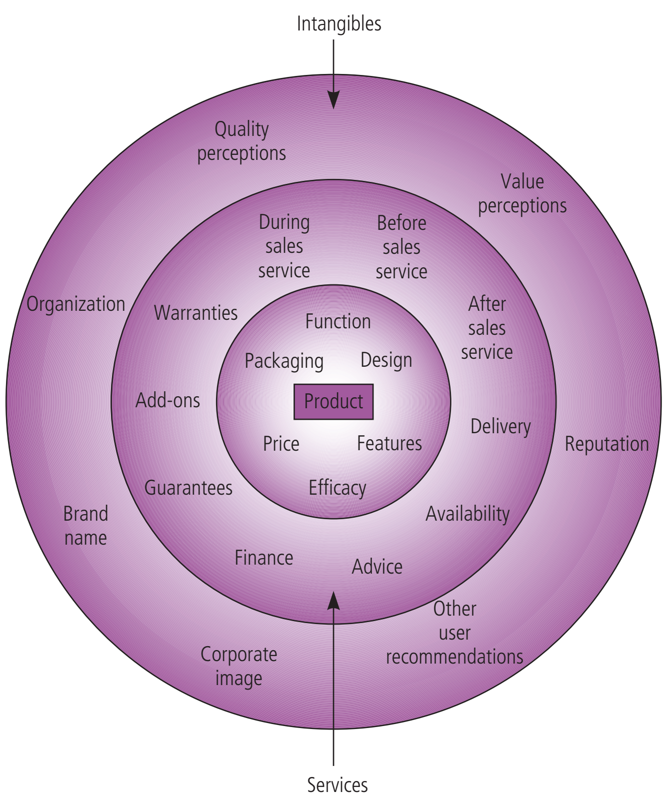

Figure 5.3: What is a product?

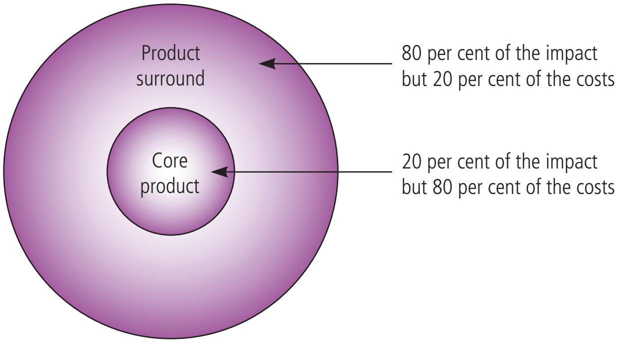

Figure 5.4: Product costs.

The two outer circles are depicted as 'product surround'. This product surround can account for as much as 80 per cent of the added values and impact of a product. Often, these only account for about 20 per cent of costs, whereas the reverse is often true of the core product. This is shown in Figure 5.4.

THE IMPORTANCE OF THE BRAND

It will be clear that here we are talking about not just a physical product, but a relationship with the customer, a relationship that is personified either by the company's name or by the ▶ brand name on the product itself. IBM, BMW and Shell are excellent examples of company brand names. Persil, Coca-Cola, Foster's Lager, Dulux Paint and Castrol GTX are excellent examples of product brand names.

A brand is a name or symbol which identifies a product. A successful brand identifies a product as having sustainable, competitive advantage.

Most people are aware of the Coca-Cola/Pepsi-Cola blind taste tests, referred to in Chapter 4, in which little difference was perceived when the colas were drunk 'blind'. On revealing the labels, however, 65 per cent of consumers claimed to prefer Coca-Cola. This is one of the best indications of the value of what we have referred to as the 'product surround'. That it is a major determinant of commercial success there can be little doubt. When one company buys another, as in the case of Nestlé and Rowntree, it is abundantly clear that the purpose of the acquisition is not to buy the tangible assets which appear on the balance sheet, such as factories, plant, vehicles, and so on, but the brand names owned by the company to be acquired.

In 2006, P&G paid £31 billion for Gillette yet, as can be seen from Table 5.1, they acquired only £4 billion of tangible assets.

In 2010, Kraft bought Cadbury for over £10 billion, most of which was for the brand names rather than the tangible assets.

This is because it is not factories that make profits, but relationships with customers, and it is company and brand names that secure these relationships.

Gillette brand	**£4.0 billion**
Duracell brand	£2.5 billion
Oral B	£2.0 billion
Braun	£1.5 billion
Retail and supplier network	£10.0 billion
Gillette innovative capability	£7.0 billion
TOTAL	£27.0 billion

Table 5.1: P&G have paid £31 billion for Gillette, but have bought only £4 billion of tangible assets.

Source: David Haigh, Brand finance, *Marketing Magazine*, 1 April 2005.

It is also a fact that, whenever brand names are neglected, what is known as 'the commodity slide' begins. This is because the physical characteristics of products are becoming increasingly difficult to differentiate and easy to emulate. In situations like these, one finds that purchasing decisions tend to be made on the basis of price or availability in the absence of strong brands.

Business history is replete with examples of strong brand names which have been allowed to decay through lack of attention, often because of a lack of both promotion and continuous product improvement programmes.

MARKETING INSIGHT

The fruit squash drink market is typical of this. The reverse can be seen in the case of Intel, which is a fantastic branding success story in a highly competitive global market.

Figure 5.5 depicts the process of decay from brand to commodity as the distinctive values of the brand are eroded over time, with a consequent reduction in the ability to command a premium price.

The difference between a brand and a commodity can be summed up in the term 'added values', which are the additional attributes, or intangibles, that the consumer perceives as being

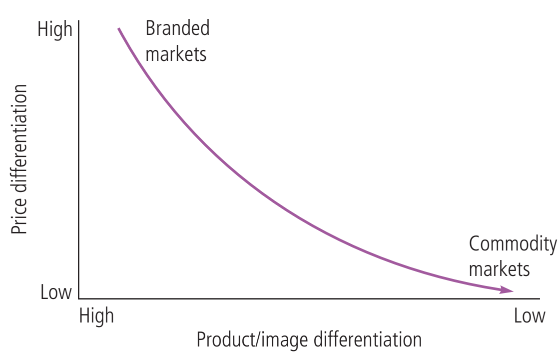

Figure 5.5: The commodity slide.

embodied in the product. Thus, a product with a strong brand name is more than just the sum of its component parts. The Coca-Cola example is only one of thousands of examples of the phenomenon.

MARKETING INSIGHT

In the same way, the Apple brand enables it to maintain its prominence in spite of the technological capabilities of its competitors such as Samsung.

Research has shown that perceived product quality, as explained above, is a major determinant of profitability. This issue is further discussed in Chapter 6 under the heading 'Competitive strategies'.

The Difference Between Successful and Unsuccessful Brands

Successful brand building helps profitability by adding values that entice customers to buy. They also provide a firm base for expansion into product improvements, variants, added services, new countries, and so on. They also protect companies against the growing power of intermediaries. And last, but not least, they help transform organizations from being faceless bureaucracies to ones that are attractive to work for and deal with.

We must not, however, make the mistake of confusing successful and unsuccessful 'brands'. The world is full of products and services that have brand names, but which are not successful brands. They fall down on other important criteria.

A successful brand has a name, symbol or design (or some combination) that identifies the 'product' of an organization as having a sustainable competitive advantage – for example, Coca-Cola, IBM, Tesco. A successful brand invariably results in superior profit and market performance. An IPA report in March 2008[1] stated: 'The average proportion of consumers across all categories who were motivated by price was 10 per cent. There was, therefore, good reason in continuing to build brand preference during a downturn.' ROCE and market share were considerably enhanced by increased brand expenditure during a downturn. Brands are only assets if they have sustainable competitive advantage. Like other assets, brands depreciate without further investment – for example, Hoover, Singer, MG, Marks & Spencer, and so on.

MARKETING INSIGHT

There are many 'products' that pretend to be brands, but are not the genuine article. As the Director of Marketing at Tesco said, 'Pseudo brands are not brands. They are manufacturer's labels. They are "me-toos" and have poor positioning, poor quality and poor support. Such manufacturers no longer understand the consumer and see retailers solely as a channel for distribution' (Marketing Director, Tesco, reported in *Marketing Globe*, Vol. 2, No. 10, 1992).

In the majority of buying decisions, brands simply provide a short cut, because whether we buy Brand A or Brand B isn't a matter of life or death so we buy on a whim or habitual choice.[2]

Seen in this light, pseudo brands can never be mistaken for the real thing, because the genuine brand provides added brand values. Customers believe that the product:

- will be reliable
- is the best
- is something that will suit them better than product X
- is designed with them in mind.

These beliefs are based not only on perceptions of the brand itself relative to others, but also on customers' perceptions of the supplying company and beliefs about its reputation and integrity.

As Mark Ritson said: 'Great stars shine brightest when the sky is darkest. In austere times, great brands bestow pleasure, maintain their premium and take a long view.'[3]

> The title 'successful brand' has to be earned. The company has to invest in everything it does so that the product meets the physical needs of customers, as well as having an image to match their emotional needs. Thus it must provide concrete and rational benefits that are sustained by a marketing mix that is compatible, believable and relevant.

IBM, despite all its trials and tribulations in the 1990s, still has a substantial world market share and that three-lettered logo is still very powerful.

The Components of a Brand

There are three principal components: brand strategy; brand positioning; and brand personality.

The first of these, brand strategy, stems from the position of the brand in the portfolio of the organization that owns the brand. Later in this chapter we will see that some poor brands are competing in high-growth markets, while others are competing in mature or declining markets. Thus the objectives for the brand could well call for different levels and types of investment (invest or harvest), innovation (relaunch, augment, cut costs), sales and distribution patterns (extension, reduction, broad, narrow), market share, usage aims (new, existing behaviour), and so on.

> The first point to be made, then, is that an organization must be clear what the appropriate objectives are for a brand.

The second component, brand positioning, is concerned with what the brand actually does and with what it competes. In other words, brand positioning starts with the physical or functional aspects of the brand (the centre circle in Figure 5.3). For instance, Canada Dry is positioned in the UK as a mixer for brandies and whiskies, rather than as a soft drink competing with Coca-Cola, Pepsi-Cola and 7-Up. Tide is a tough, general-purpose detergent, rather than a powder for woollens. Waitrose is a high-quality grocer rather than a low-price supermarket. SAS is positioned as the business person's airline.

There are usually several main motivators in any market, only one or two of which are of real importance. These dimensions are best seen as bipolar scales along which brands can be positioned – for example:

1. expensive/inexpensive
2. strong/mild

3. big/small
4. hot/cold
5. fast/slow
6. male/female
7. etc.

Because they are so obvious, they are easy to research in order to establish which are those that people regard as the most fundamental basis for buying. It will be obvious that not all consumers look for the same functional performance, so market segmentation becomes important at this stage. A useful starting point in this kind of primary market interpretation is to draw a bipolar map, as shown in Figure 5.6. Figure 5.7 shows an actual bipolar map for detergents.

Clearly the physical dimensions of any market will change over time, so this kind of basic research should be conducted on a regular basis to establish, first, what the main dimensions are and, second, whether the position of any competing product has changed.

In highly mature markets, brands are likely to be positioned close to one another, thus indicating that the basic functional or physical characteristics are less likely to be the sole basis on which a product or service is selected.

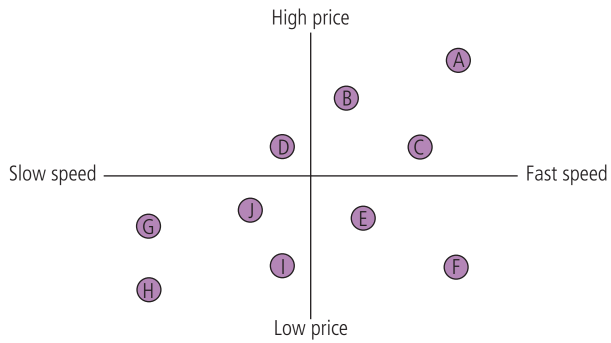

Figure 5.6: A brand position map.

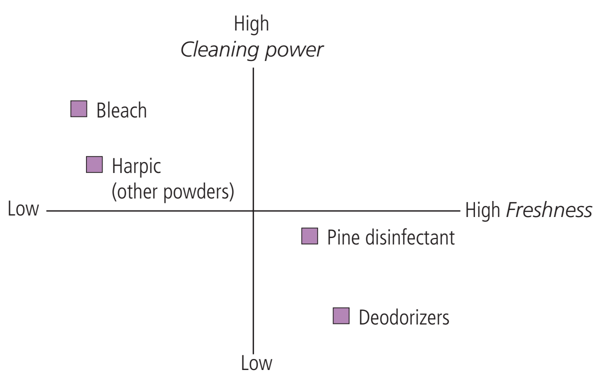

Figure 5.7: Bipolar map for detergents.

MARKETING INSIGHT

This brings us to the final component, brand personality. The late Stephen King said that a product is something that is made in a factory; a brand is something that is bought by a consumer. A product can be copied, but a successful brand is unique and, particularly in mature markets, is a key discriminator in the marketplace.

Brand personality is a useful descriptor for the total impression that consumers have of brands, and in many ways brands are like people, with their own physical, emotional and personality characteristics. Brands are very similar, in that they are a complex blend of physical, emotional and personality characteristics. Thus two brands can be very similar in terms of their functions, but have very different personalities.

MARKETING INSIGHT

For example, small Fords, Peugeots, VWs and Fiats all perform about the same along the functional dimensions of size, speed and price. Yet each one has a totally different personality, which is the result of a blend of three sorts of appeal: sensual, rational and emotional.

Sensual appeal, that is, how the product or service looks, feels, sounds, and so on, can have an important influence on buying behaviour. It is easy to imagine how this appeal can differ in the case of, say, cigarettes or cars.

Rational appeal, that is, how the product or service performs, what they contain, and so on, can also have an important influence on buying behaviour.

Emotional appeal, however, is perhaps the most important and has a lot to do with the psychological rewards the products or services offer, the moods they conjure up, the associations they evoke, and so on. It is easy to imagine the overt appeal of certain products as being particularly masculine, or feminine, or chic, or workmanlike, or flashy.

BMW cars are noted for their hard, sporty personalities, while Mercedes is noted for its solid, reliable engineering prowess.

The point is that, for any brand to be successful, all these elements have to be consistent, as they will all affect the brand's personality and it is this personality, above all else, that represents the brand's totality and makes one brand more desirable, or appealing, than another.

Put at its simplest, it is a brand's personality that converts a commodity into something unique and enables a higher price to be charged for it.

Figure 5.8 combines brand functionality and personality in a matrix. The vertical axis refers to a brand's ability to satisfy utilitarian needs, such as quality, reliability, effectiveness, and so on, where the consumer's need for such benefits is high. The horizontal axis represents the brand's ability to help consumers express something about themselves, be it, for example, their mood, their membership of a particular social group, their status, and so on. Brands are chosen on

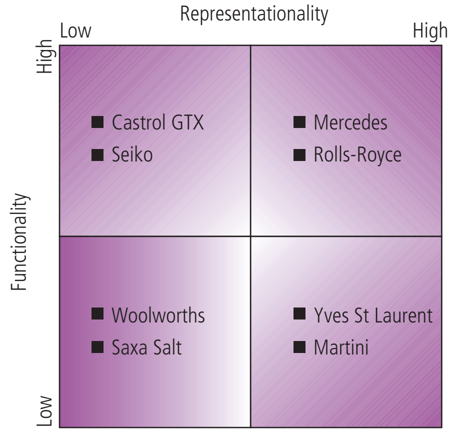

Figure 5.8: Brand functionality and personality.[4]

this dimension because they have values that exist over and above their physical values. We call this dimension representationality. For example, products such as Yves St Laurent neckties are effective brands for expressing particular personality types and roles, with functional attributes being secondary.

It is possible, by means of ▶ market research, to identify the degree to which consumers perceive a brand as reflecting functionality and representationality. Having done this, it is then possible for the marketer to consider how best to use the available resources to support the brand.

For products and services in the top right hand box (i.e. ones that both provide functional excellence and are good vehicles for non-verbal communication about themselves), a creative strategy that reinforces consumers' lifestyle requirements should be adopted and communicated through appropriate media channels. Additionally, the quality of the brand needs to be maintained through high standards of quality control and continuous product development. Also, strict control over channels of distribution should be exercised.

> Market research is the collection, organization, analysis and dissemination of facts and opinions from existing or potential customers and consumers about an organization or its products.

For products and services in the top left hand box (i.e. ones bought by consumers because of a high utilitarian need rather than because of a need to say something about themselves), product superiority needs to be continuously maintained, as 'me-tooism' is a continuous threat to such brands. Also, heavy promotional support is important in communicating the functional benefits of the brand.

For products and services in the bottom right hand box (i.e. ones that are less important for their functional attributes, but which are high as symbolic devices), it is clearly important to reinforce continuously the cultural and lifestyle aspects of the brand and a heavy promotional presence is almost certainly more important than product-development issues.

For products and services in the bottom left hand box (i.e. those that are bought by consumers who are not particularly concerned about either functional differences or self-image), successful branding is more difficult, because it is likely that they must have wide distribution and be very price competitive. Cost leadership, then, becomes important to the brand owner, which entails being an efficient producer. Brands in this sector are obviously vulnerable and, to succeed, an attractive price proposition is usually necessary.

The Company as a Brand

It will, by now, be obvious that it is frequently the case that a company's name is the brand used on different products or services, as opposed to an individual brand name for each product, as in the case of, say, Persil.

To present themselves in the most favourable way, firms develop a corporate identity programme, ensuring that all forms of external communication are coordinated and presented in the same way. Corporate identity can be a valuable asset, which if effectively managed, can make a major contribution to brand success.

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In this respect it is easy to see why Ford has been unable to compete effectively in the high-class car market. Ford wasn't even effective in managing the Jaguar brand, which it bought to enter the up-market segment. Equally, it can be seen why Mars was able to enter the ice-cream market using the Mars corporate brand name, but why it uses a totally different brand name, Pedigree, in the animal foodstuffs market.

Classic examples of this include IBM, Shell, Mercedes, Sony, Yamaha, JCB, Virgin and countless others. It works well as a policy, given the prohibitive costs of building individual brands ab initio, providing the product or service in question is consistent with the corporate image.

While there is a 'halo' effect of using a famous corporate name on a new product or service, there are also risks to the total portfolio, should any one new product prove to be disastrous.

For a quantitative financial technique for calculating what is known as the capital at risk concept, see McDonald.[5]

For products with high representationality, a strong creative strategy needs to be pursued. For products with high functionality, product performance strategy is very important. For example, Levi Strauss was known and respected for jeans. Their extension into Levi tailored classic suits failed because of wrong association. Adding the name Pierre Cardin to bathroom tiles in Spain did little for the value of this core brand!

The late Peter Doyle developed a useful matrix for considering what an appropriate strategy might be towards corporate, as opposed to individual, product branding. This is given in Figure 5.9.

Global Versus Local Brands

So, if we can now distinguish between a brand and a pseudo brand, what is a ▶ global brand? Here is a definition: *a global brand is a product that bears the same name and logo and presents the same or similar message all over the world.* Usually the product is aimed at the same target market and is promoted and presented in much the same way.

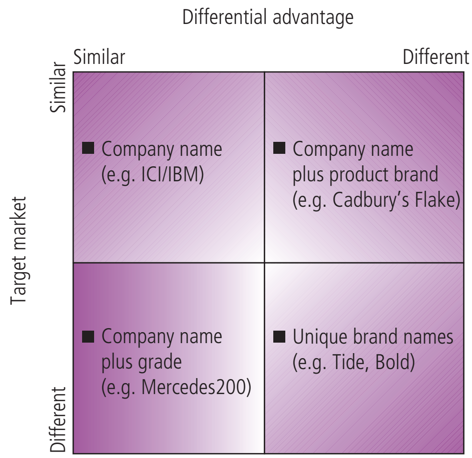

Figure 5.9: Corporate brand positioning.
Source: Professor Peter Doyle, reproduced with his kind permission.

Most of the brand valuation companies such as Brand Finance concur on which are the world's most popular and valuable brands and the top ten usually include names like Google, Wal-Mart and Microsoft, but Coca-Cola, Sony, Mercedes, Disney, McDonald's, Toyota, IBM and Pepsi are always in such lists. Probably there are few surprises here, but what are the alternative options to having a mass global brand?

There are only two broad options:

1. develop a global brand, such as American Express or Coca-Cola, or
2. have a local or regional brand in each country or region of operation.

What fuels the decision making regarding which choice? Clearly, it depends mainly upon the types of customer. However, there are some other practical considerations to take into account, such as the cost of production, the distribution costs, promotion, competitive market structure, channels, legal constraints and operational structures.

A global brand is a product that bears the same name and logo and presents the same or similar message all over the world.

Procter & Gamble experienced major problems trying to get washing powders and liquids established under one brand name across Europe. For one thing, they had to try to accommodate different types of washing machines, different types of water, different washing habits and different cultures. Then there was the business of getting to grips with market structures and competition, and, last but not least (because it can be the greatest barrier of all), getting its own operating structure right.

Clearly, then, the benefits to be derived from economies of scale have to be weighed very carefully against the difficulty of setting up a global brand, as the matrix in Figure 5.10 shows.

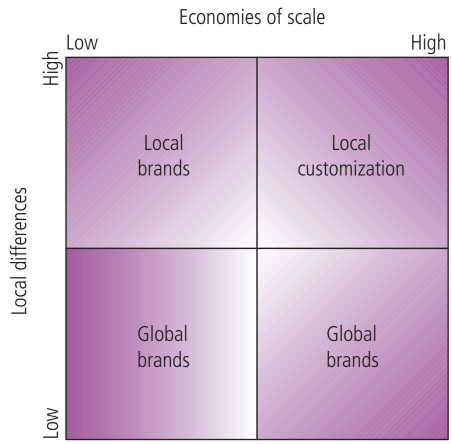

Figure 5.10: Global versus local brands.

Although three of the boxes reduce to fairly obvious choices, the top right hand box is still something of a poser. Our own inclination is that, when faced with high difficulty, but high economies of scale, we would endeavour to establish global brands.

Of course, while the matrix only represents a concept, it is possible to develop concrete data for it in much the same way as the directional policy matrix (DPM), which is described later in this chapter. For example, all the savings attributable to economies of scale could be calculated, such as manufacturing, R&D, purchasing, logistics, better management control, and so on. Equally, local differences could be assessed taking into account the infrastructure of markets, demand homogeneity, culture, political/legal framework, market structure, competition, and the like.

By looking at international markets in this way, the odds come out very much higher in favour of global brands as against local ones. Predictions about future trends only serve to reinforce this hypothesis. For example, in the European single market it has been predicted that:

1. Prices will tend to harmonize towards the lowest levels across Europe.
2. Purchasers will tend to buy on a pan-European basis to gain maximum price advantage.
3. Major distributors (especially importers) will operate transnationally and take advantage of remaining price differentials and low-cost suppliers.

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Donald Casey of Lauder Associates asserts, ‘The growth in global branding is a direct result of the explosion of media consumption amongst the young. In every country the data show that the younger consumers are significantly more aware of international brands, particularly in fields like TV, music, video and sports.’ Further support is provided by Alan Woofe who says, ‘The most fundamental point of all this is that one day there will eventually be a Euro-market, and there may one day be Euro-consumers in the foreseeable future.’

There is much evidence to confirm that these trends are already happening. The portents are clear. Already, large pan-European retailing groups are appearing and if an organization does not have a European brand, especially if it is in fast-moving consumer goods, it does not appear to have very good prospects. It is brand names that win customers, make a profit and create customer loyalty. As stated earlier, Nestlé wanted to buy Rowntree purely for its brands, not for its factories. A good brand, at the end of the day, is the company's best marketing asset. For that reason it is short-sighted not to invest in the brand. To allow it to slip and become a 'me-too' commodity is tantamount to commercial vandalism.

To summarize, a successful brand is an identifiable product, service, person or place augmented in such a way that the buyer or user perceives relevant, unique added values which match their needs most closely. Its success results from being able to sustain these added values against competitors. Being able to do this on a global basis will bring great rewards, but it will not be easy.

CATEGORY MANAGEMENT

Next a few words about category management are necessary.

Category management (CM) is a concept that has developed as a radical alternative to brand management in retail marketing since the mid-1990s. The process of CM can be summarized as:

> The strategic management of a group of products clustered around a specific customer need. This group, or category, is managed as a strategic business unit with clearly defined profitability goals.

The impact of CM is that it shifts attention from individual brands to the management of overall categories as defined by local customer needs.

CM emerged from the development of ideas within the concept of Efficient Customer Response (ECR) that was initiated industry-wide in the USA from the mid-1980s onwards. The emphasis of ECR is on sales profitability rather than sales volume and spans the entire business process from the purchase of raw materials to manufacturing, distribution and sale. It is founded on the recent improvements in technology that have allowed suppliers and buyers to reduce waste and stockholding as well as reduced discounts as a means of generating sales. The focus of the concept is the business processes to be found in retail organizations.

Growth of Category Management

Brand management focuses on individual brands from the manufacturer's perspective, grouping all functions that affect a brand's profitability under one manager. Retailers, however, will often group brands together by product (e.g. soap powder) because that is more convenient for their customers and reflects the way in which customers shop.

The resultant categories are, therefore, defined by customers, but this can lead to problems of definition. For instance, when a customer wants a cleaner for the bathroom, does he or she categorize it as a bathroom product, a cleaner or a home safety product? In addition, categories tend to vary regionally and according to customer types, rather than on a broader cross-cultural basis. In response some manufacturers have had to recast their brands for categories, but this in turn raises the question of whether some products should appear in more than one category – for instance, should herbs be categorized with fresh produce, baking goods or both?

In the final analysis, what is important to retailers is that their shelf space sells more than it would if managed another way. Retailers' expertise lies in providing space to sell products and services to facilitate this. Sometimes, an external supplier is appointed as category manager, who is then made responsible for optimizing sales from that space. By doing so, retailers are exploiting manufacturer skills in such areas as display, sales promotion and merchandising.

The retailer will normally set minimum standards for the category such as demanding that there must be at least one major brand name and one 'own label' product displayed. After that, the category managers make their own stocking and communications decisions on behalf of their assigned category. For example, if SmithKline Beecham were to identify opportunities for increased toothbrush sales within the oral hygiene category for which they acted as category manager, they could spend their own budget on promoting them.

CM reflects the shift of power from manufacturer to retailer.

Contrary to traditional practices, CM obliges manufacturers to consider the profitability of an entire product segment rather than that of just their own brands. The fact that retailers have forced this change is another example of the evolution of retailers from passive distributors to proactive marketers and the shift of power from manufacturer to retailer.

Where category managers are appointed internally, they usually have a similar role – that is, the management of a partnership between a supplier or a number of suppliers with the objective of sales and profit enhancement.

The trend towards CM has also required a shift from the traditionally narrow focus of brand management. Looked at from a category perspective, it is possible to see that the consumer choice is not just about selecting from competing brands such as Coca-Cola or Pepsi, but involves an entire drinks portfolio of soft drinks, juices, beverages and alcohol. Heinz began realigning its business along category management principles in 1997 and now has eight global categories: ketchups, condiments and sauces, infant feeding, seafood (tuna), organic and nutritional food, pet food, frozen food and convenience food (H.J. Heinz Company Corporate Profile, 2000).

Rather than relying on the power of their brand names, organizations need to ensure that all of their support systems demonstrate to retailers that they are capable of managing categories to advantage. This might mean a review of all of the organization's systems for retail supply such as the logistics of keeping the shelves fully supplied or maintaining efficient electronic data interchange systems for stocks.

Limitations of Category Management

Viewed purely as a strategy to reduce waste, and therefore costs, CM loses its focus on the end customer as the absolute priority. Concentrating on the maximization of shelf space profitability may not improve customer satisfaction levels and this, in the long run, may reduce profits.

One recent report concluded that the availability of a wide selection of goods is a major determinant in customers' decisions about where to shop. CM limits the choice of products to those which are most profitable for the retailer and this can have a negative impact on the customers' shopping experience. If customers feel hindered in their purchase decisions by the inability to compare prices of different brands, the CM process will ultimately rebound.

Further difficulties arise from the issue of positioning different product categories. Should paper tissues, for instance, be categorized with bathroom products or health and beauty? And, should the two categories be set next to each other or apart? In addition, different retailers and manufacturers could well work to different category definitions

CM's emphasis on the manufacturer/retailer relationship can demote a customer focus.

These limitations reflect the fact that much of the emphasis of CM has been on the manufacturer/retailer relationship. As far back as 1994, a *Financial Times* survey found that consumers have effectively been demoted as the focus of marketing strategy as retailers have grown in importance, with consumers attracting 30 per cent of marketing expenditure against retailers at 54 per cent.

Challenges for the Future

One of the most difficult challenges facing CM is reducing the number of superfluous items on the shelves. This is in opposition to traditional brand marketing which aims to prolong the life of the brand by extending the product range. Possible ways of evolution are demonstrated by Figure 5.11.

Mass customization has been made possible by the increased sophistication in consumer information, which has allowed marketers to provide variations on the central product to suit each customer. The growth of retailers' own label products (e.g. Tesco's 'finest' and 'value') reflects this, but further limits the available shelf space for branded supplies. The difficulty for retailers is ensuring that limiting consumers' brand choice is not perceived as limiting their category choice just because they cannot find their favourite products.

The future of CM must necessarily take account of the distribution systems for an increasingly 'global village' market. Many mass retailers are unable to market so many products properly, even when redefined as categories. Providing marketing expertise is, therefore, one way in which manufacturers can hope to retain some kind of balance in the relationship with such international retailers.

In order to sustain a customer focus, manufacturers need free access to customer information. This can be obtained through large panel companies such as Nielsen or Taylor Nelson Sofres (TNS), or through the development of a manufacturer's own database, such as Heinz. Manufacturers can also try to establish a reputation for themselves as leaders in ECR.

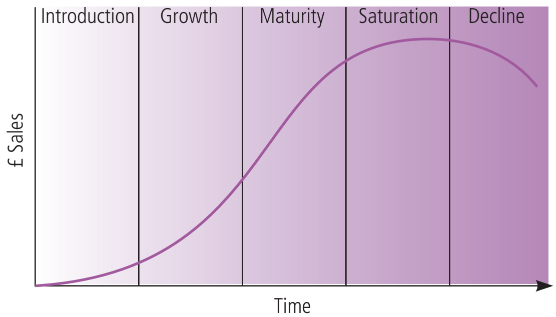


Figure 5.11: Category management evolution.

CM can help deliver customer satisfaction by focusing retailers on customer preferences.

Future emphasis will probably be on targeting customer satisfaction more effectively in order to maximize long-term profit.

CM can help by focusing on the retail audience and the way in which category sales are driven. This is turn helps retailers build an effective vehicle for appealing to the variety of customers' product decisions and needs. The challenge is to make this happen on a store-by-store basis, at an affordable cost.

PRODUCT LIFECYCLE

Having discussed the vital factor of benefits as a part of product management, we must now ask ourselves whether one product is enough.

There are many examples of entrepreneurs who set themselves up in business to manufacture, say, toys such as clackers, who make their fortune and who then just as quickly lose it when this fashion-conscious market changes to its latest fad. Such examples are merely the extreme manifestation of what is known as the ▶ product lifecycle. This, too, is such a vital and fundamental concept that it is worth devoting some time to a discussion of the subject.

Historians of technology have observed that all technical functions grow exponentially until they come up against some natural limiting factor which causes growth to slow down and, eventually, to decline as one technology is replaced by another. There is universal agreement that the same phenomenon applies to products, so giving rise to the concept of the product lifecycle, much written about in marketing literature during the past seven decades.

The product lifecycle postulates that if a new product is successful at the introductory stage (and many fail at this point), then gradually repeat purchase grows and spreads and the rate of sales growth increases. At this stage, competitors often enter the market and their additional promotional expenditures further expand the market. But no market is infinitely expandable, and eventually the rate of growth slows as the product moves into its maturity stage. Eventually, a point is reached where there are too many firms in the market, price wars break out, and some firms drop out of the market, until finally the market itself falls into decline. Figure 5.11 illustrates these apparently universal phenomena.

Nevertheless, while the product lifecycle may well be a useful practical generalization, it can also be argued that particular product lifecycles are determined more by the activities of the company than by any underlying 'law'.

MARKETING INSIGHT

For example, Bailey's liqueur, while exhibiting all the characteristics of the classic product lifecycle, went on to new record sales heights following the appointment of a new brand manager.

Nevertheless, while this example illustrates the dangers inherent in incorrect interpretation of lifecycle analysis, even in this case, sales will eventually mature.

From a management point of view, the product lifecycle concept is useful in that it focuses our attention on the likely future sales pattern if we take no corrective action. There are several courses of action open to us in our attempts to maintain the profitable sales of a product over its lifecycle.

A product lifecycle plots the volume or value of sales of a product from its launch to its decline and withdrawal.

Figure 5.12 illustrates the actual courses taken by an American company in the management of one of its leading industrial market products. As sales growth began to slow down, the company initiated a programme of product range extensions and market development which successfully took the brand into additional stages of growth. At the same time the company was aggressively seeking new products and even considering potential areas for diversification.

Even more important are the implications of the product lifecycle concept on every element of the marketing mix. Figure 5.13 gives some guide as to how the product has to change over its lifecycle. In addition to this, however, every other element also has to change. For example, if a company rigidly adhered to a premium pricing policy at the mature stage of the product lifecycle, when markets are often overcrowded and price wars begin, it could well lose market share. It could be regretted later on when the market has settled down, for it is often at this stage that products provide extremely profitable revenue for the company. It will become clearer later in this chapter why market share is important.

The same applies to promotion. During the early phase of product introduction, the task for advertising is often one of creating awareness, whereas during the growth phase the task may need to change to one of creating a favourable attitude towards the product. Neither should

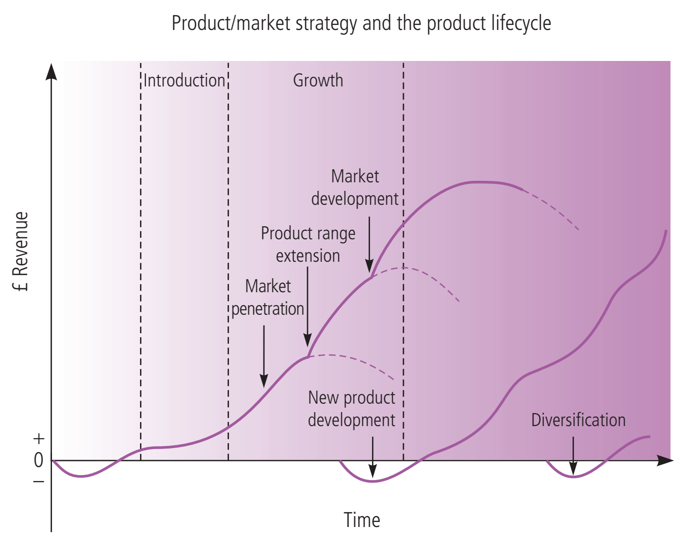


Figure 5.12: Extending the product lifecycle.

The product/market lifecycle and market characteristics

Key characteristics	Unique	Product differentiation	Service differentiation	'Commodity'
Marketing message	Explain	Competitive	Brand values	Corporate
Sales	Pioneering	Relative benefits Distribution support	Relationship based	Availability based
Distribution	Direct selling	Exclusive distribution	Mass distribution	80/20
Price	Very high	High	Medium	Low (consumer controlled)
Competitive intensity	None	Few	Many	Fewer, bigger, international
Costs	Very high	Medium	Medium/low	Very low
Profit	Medium/high	High	Medium/high	Medium/low
Management style	Visionary	Strategic	Operational	Cost management

Figure 5.13: Strategy changes over the product lifecycle.

the policy towards channels be fixed. At first we are concerned with getting distribution for the product in the most important channels, whereas during the growth phase we have to consider ways of reaching the new channels that want our product. All of these points will become clearer in those chapters specifically concerned with the management of price, place and promotion.

MARKETING INSIGHT

The famous 3M Post-it notes are representative of the changes which have to take place over the life of a product. At first, prices and margins were high, there were no competitors and the route to market was via direct selling. Sooner or later, new competitors entered the market. When the market reached maturity, 3M added clearer branding to the product and the route to market changed. Today, consumers have a choice of own label, coloured, lined and small or large versions of the Post-it note. Faced with such a change in market circumstances, it is obvious that the key characteristics of management also had to change to ensure continued success.

MARKETING INSIGHT

Another example is an American multinational that, in 1972, had an 80 per cent share of the photocopier market and gross margins of 40 per cent. Five years later, they had a 10 per cent share and a 10 per cent margin. This was because they failed to recognize that markets tend to segment as they enter the growth phase. In this case, the Japanese entered with small photocopiers.

Drawing a product lifecycle, however, can be extremely difficult, even given the availability of some form of time series analysis. This is connected with the complex question of market share measurement.

First, let us remind ourselves that a firm needs to be concerned with its share (or its proportion of volume or value) of an actual market, rather than with a potential market. The example of the carpet manufacturer given in Chapter 3 emphasized the importance of measuring the right things when determining what a company's market is.

For the purpose of helping us to draw lifecycles, it is worth repeating the definitions given in Chapter 3:

- product class, e.g. carpets
- product subclass, e.g. nylon rolls
- product brand, e.g. 'X'.

'X' as a brand, for the purpose of measuring market share, is concerned only with the aggregate of all other brands that satisfy the same group of customer wants.

Nevertheless, the manufacturer of 'X' also needs to be aware of the sales trends of other kinds of carpets and floor covering in the institutional market, as well as of carpet sales overall.

One of the most frequent mistakes made by companies that do not understand what market share really means is to assume that their company has only a small share of some market, whereas if the company is commercially successful, it probably has a much larger share of a smaller market segment.

It is interesting to see how many commercial failures can be traced back to a naive assumption on the part of managements that what was successful as a policy at one time will continue to be successful in the future.

MARKETING INSIGHT

A reference back to Figure 5.13 will immediately explain the demise of many companies, particularly in the information technology industry, who continued to pursue policies more appropriate to the second column, when, in reality, the markets for some of their products had moved to the fourth column.

The important point to remember at this stage is that the concept of the product lifecycle is not an academic figment of the imagination, but a hard reality which is ignored at great risk.

Table 5.2 shows a checklist used by one major company to help it determine where its markets are on the lifecycle.

Diffusion is the adoption of new products or services over time by consumers within social systems, as encouraged by marketing. Diffusion refers to the cumulative percentage of potential adopters of a new product or service over time.

Maturity stage factor	Embryonic	Growth	Mature	Declining
1. Growth rate	Normally much greater than GNP (on small base).	Sustained growth above GNP. New customers. New suppliers. Rate decelerates toward end of stage.	Approximately equals GNP.	Declining demand. Market shrinks as users' needs change.
2. Predictability of growth potential	Hard to define accurately. Small portion of demand being satisfied. Market forecasts differ widely.	Greater percentage of demand is met and upper limits of demand becoming clearer. Discontinuities, such as price reductions based on economies of scale, may occur.	Potential well defined. Competition specialized to satisfy needs of specific segments.	Known and limited.
3. Product line proliferation	Specialized lines to meet needs of early customers.	Rapid expansion.	Proliferation slows or ceases.	Lines narrow as unprofitable products dropped.
4. Number of competitors	Unpredictable.	Reaches maximum. New entrants attracted by growth and high margins. Some consolidation begins toward end of stage.	Entrenched positions established. Further shakeout of marginal competitors.	New entrants unlikely. Competitors continue to decline.
5. Market share distribution	Unstable. Shares react unpredictably to entrepreneurial insights and timing.	Increasing stability. Typically, a few competitors emerging as strong.	Stable with a few companies often controlling much of industry.	Highly concentrated or fragmented as industry segments and/or is localized.
6. Customer stability	Trial usage with little customer loyalty.	Some loyalty. Repeat usage with many seeking alternative suppliers.	Well-developed buying patterns with customer loyalty. Competitors understand purchase dynamics and it is difficult for a new supplier to win over accounts.	Extremely stable. Suppliers dwindle and customers less motivated to seek alternatives.
7. Ease of entry	Normally easy. No one dominates. Customers' expectations uncertain. If barriers exist, they are usually technology, capital or fear of the unknown.	More difficult. Market franchises and/or economies of scale may exist, yet new business is still available without directly confronting competition.	Difficult. Market leaders established. New business must be 'won' from others.	Little or no incentive to enter.
8. Technology	Plays an important role in matching product characteristics to market needs. Frequent product changes.	Product technology vital early, while process technology more important later in this stage.	Process and material substitution focus. Product requirements well known and relatively undemanding. May be a thrust to renew the industry via new technology.	Technological content is known, stable and accessible.

Table 5.2: Guide to market maturity.

DIFFUSION OF INNOVATION

In Chapter 3 we briefly referred to Everett Rogers' Diffusion of Innovation curve to explain why markets eventually fragment into market segments.

We make no apologies for reintroducing this important concept once again in the context of product management, as it is fundamental to commercial success.

A useful explanation and extension of the product lifecycle is what is known as the 'diffusion of innovation'. ▶ Diffusion is the adoption of new products or services over time by consumers within social systems, as encouraged by marketing. Diffusion refers to the cumulative percentage of potential adopters of a new product or service over time.

Everett Rogers[6] examined some of the social forces that explain the product lifecycle. The body of knowledge often referred to as 'reference theory' (which incorporates work on group norms, group pressures, etc.) helps explain the snowball effect of diffusion. Rogers found that the actual rate of diffusion is a function of a product's:

- relative advantage (over existing products)
- compatibility (with lifestyles, values, etc.)
- communicability (is it easy to communicate?)
- complexity (is it complicated?)
- divisibility (can it be tried out on a small scale before commitment?).

Diffusion is also a function of the newness of the product itself, which can be classified broadly under three headings:

1. Continuous innovation (e.g. the new miracle ingredient).
2. Dynamically continuous innovation (e.g. disposable lighter).
3. Discontinuous (e.g. microwave oven).

However, Rogers found that, for all new products, not everyone adopts new products at the same time, and that a universal pattern emerges as shown in Figure 5.14.

In general, the innovators think for themselves and try new things (where relevant); the early adopters, who have status in society, are opinion leaders and they adopt successful products, making them acceptable and respectable; the early majority, who are more conservative and who have slightly above-average status, are more deliberate and only adopt products that have

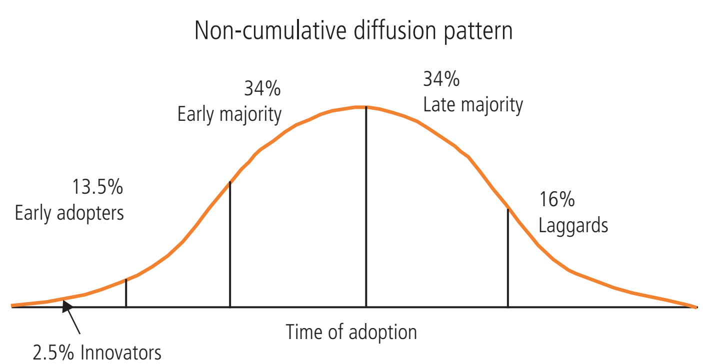


Figure 5.14: Non-cumulative diffusion pattern.[6]

social approbation; the late majority, who are below average status and sceptical, adopt products much later; the laggards, with low status, income, and so on, view life 'through the rear mirror' and are the last to adopt products.

This particular piece of research can be very useful, particularly for advertising and personal selling. For example, if we can develop a typology for opinion leaders, we can target our early advertising and sales effort specifically at them. Once the first 7–8 per cent of opinion leaders have adopted our product, there is a good chance that the early majority will try it. Hence, once the 10–12 per cent point is reached, the champagne can be opened, because there is a good chance that the rest will adopt our product.

We know, for example, that the general characteristics of opinion leaders are that they are: venturesome; socially integrated; cosmopolitan; socially mobile; and privileged. So we need to ask ourselves what the specific characteristics of these customers are in our particular industry. We can then tailor our advertising and selling message specifically for them.

It can, however, also be both a practical diagnostic and a forecasting tool. There follows a worked example of how forecasts, and eventually strategic marketing plans, were developed from the intelligent use of the diffusion of innovation curve in respect of computerized business systems for the construction industry in the UK.

1ST ESTIMATE OF MARKET SIZE

1. Number of contracting firms (Department of Environment, Housing and Construction)	160,596
2. Number of firms employing 4–79 direct employees	43,400
3. Exclude painters, plasterers, etc.	6,100
4. Conservative estimate of main target area or 23 per cent of total	37,300 (1)

2ND ESTIMATE OF MARKET SIZE

5. Using the Pareto (80/20 rule) likelihood that 20 per cent will be main target area, i.e. 160,596 20%	160,596

3RD ESTIMATE OF MARKET SIZE

6. Total number of firms in construction industry (Business Statistics Office)	217,785
7. Number of firms classified by turnover from £100,000 to £1,000,000	
(£K) 100–249	26,698
(£K) 250–499	10,651
(£K) 500–999	5,872
(£K) 43,221 (3)	

8. Company's best estimate of size of target market	37,300	
9. Company's estimate of the number of micro installations in this segment	3,500	(9.4%)

Plotting this on the diffusion of innovation curve shows:

- Penetration of innovators and early adopters has taken four years. Adoption rate will now accelerate. It will probably be complete within one year.
- One-year balance of early adopters = 6.6 per cent = 2,462 firms = installed base of 5,968. Sales objective = 360 installations plus present base of 400 = 760 = 12.7 per cent market share.

It will be seen from this that three independent estimates were made of the market size in order to establish the current position on the diffusion of innovation curve.

In contrast, a Dutch computer supplier attempted to launch hardware and software into the motor trade using an undifferentiated product at a high sales price. An elementary study would have indicated that this market is already well into the late majority phase, when price and product features become more important. Not surprisingly, the product launch failed.

The diffusion of innovation curve, when seen in conjunction with the product lifecycle, helps to explain the dynamics of markets. Figure 5.15 illustrates this relationship. It shows that, when all potential users of a product are using it, the market is a replacement market.

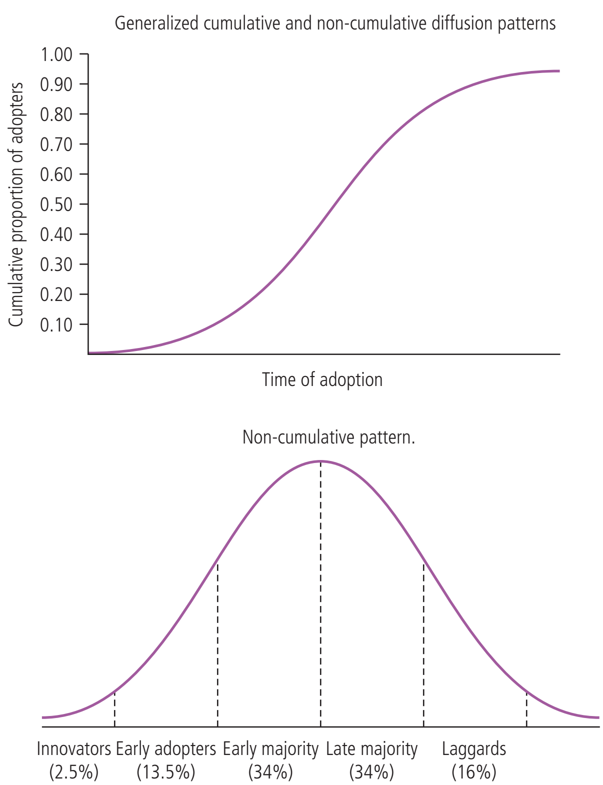


Figure 5.15: Cumulative pattern.

MARKETING INSIGHT

For example, virtually everyone in Western Europe has fridges, washing machines, dishwashers, televisions and cars. The market is dependent on population growth or decline, so most of these are replacement markets and most competitors wishing to grow their sales would probably have to take it from competitors.

PRODUCT PORTFOLIO

We might well imagine that, at any point in time, a review of a company's different products would reveal different stages of growth, maturity and decline.

In Figure 5.16, the dotted line represents the time of our analysis, and this shows one product in severe decline, one product in its introductory stage, and one in the saturation stage.

If our objective is to grow in profitability over a long period of time, our analysis of our product portfolio should reveal a situation like the one in Figure 5.17, in which new product introductions are timed so as to ensure continuous sales growth.

The idea of a ▶ portfolio is for a company to meet its objectives by balancing sales growth, cash flow and risk. As individual products progress or decline and as markets grow or shrink, then the overall nature of the company's product portfolio will change. It is, therefore, essential that the whole portfolio is reviewed regularly and that an active policy towards new product

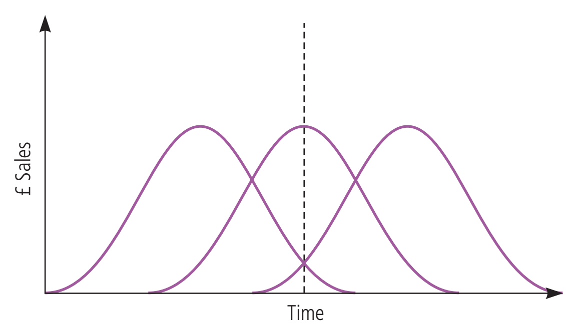


Figure 5.16: Product lifecycle for three products.

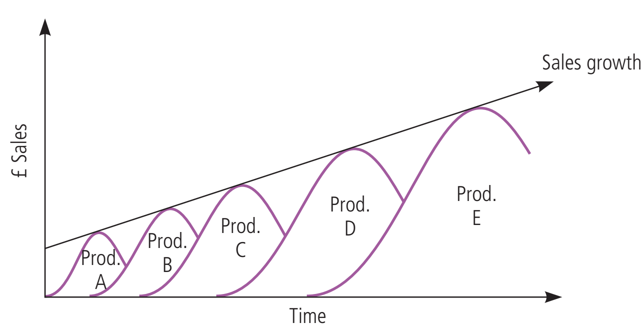


Figure 5.17: New product introductions over time.

development and divestment of old products is pursued. In this respect, the work of the Boston Consulting Group, begun in the early 1960s, had a profound effect on the way managements think about this subject and about their product/market strategy.

UNIT COSTS AND MARKET SHARE

A portfolio plots either products or markets using at least a two-dimensional matrix in order to balance growth, cash flow and risk.

There are basically two parts to the thinking behind the work of the Boston Consulting Group. One is concerned with market share; the other with market growth.

It is a well-known fact that we become better at doing things the more we do them. This phenomenon is known as the learning curve. It manifests itself especially with items such as labour efficiency, work specialization and methods improvement.

The experience effect reflects the improvements (usually resulting in lower costs) that result from economies of scale, learning and improved productivity over time

Such benefits are themselves a part of what we can call the ▸ experience effect, which includes such items as process innovations, better productivity from plant and equipment, product design improvements, and so on. In addition to the experience effect, and not necessarily mutually exclusive, are economies of scale that come with growth. For example, capital costs do not increase in direct proportion to capacity, which results in lower depreciation charges per unit of output, lower operating costs in the form of the number of operatives, lower marketing, sales, administration and R&D costs, and lower raw materials and shipping costs. It is generally recognized, however, that cost decline applies more to the value-added elements of cost than to bought-in supplies.

Cost decline applies more to the value-added elements of cost than to bought-in supplies.

In fact, the Boston Consulting Group discovered that costs decline by up to 30 per cent for every cumulative doubling of output. This phenomenon is shown in Figure 5.18. Imagine a factory producing 100 units a year for eight years. It will be seen from the following simple calculation that it becomes more difficult each year cumulatively to double output.

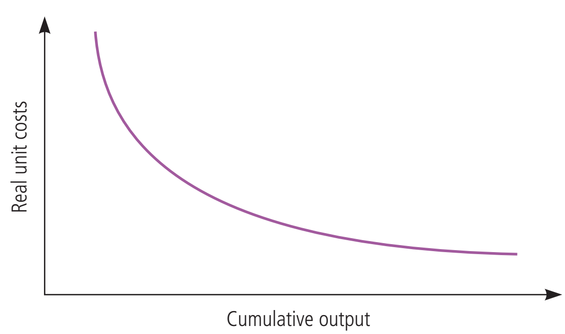


Figure 5.18: Unit cost decline over cumulative output.

Year	Cumulative	Total
1	100	100
2	100	200 D
3	100	300
4	100	400 D
5	100	500
6	100	600
7	100	700
8	100	800 D

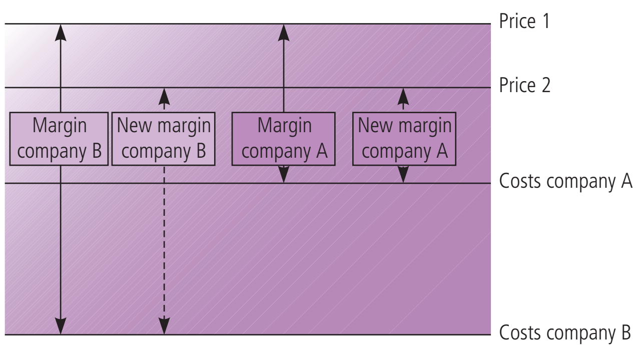


Figure 5.19: The relationship between costs and margin.

It is this phenomenon which explains the shape of the curve in Figure 5.18. The Boston Consulting Group used logarithmic scales on the data to enable them to make predictions about future costs at forecast output levels, a method favoured for many years by the Japanese as a way of capturing markets in America and Western Europe.

While there are many implications from this for marketing strategy, particularly in relation to pricing policy, we will confine ourselves here to a discussion of the product/market implications.

There is sufficient evidence to show that this real cost reduction actually occurs, in which case it follows that the greater your volume, the lower your unit costs should be. Thus, irrespective of what happens to the price of your product, providing you have the highest market share (hence the biggest volume), you should always be relatively more profitable than your competitors. This is illustrated in Figure 5.19.

Thus, as a general rule, it can be said that market share per se is a desirable goal.

Indeed, the Strategic Planning Institute's Profit Impact of Market Strategies research has confirmed that market share and profitability are linearly related. However, as we made clear in Chapter 3, we have to be certain that we have carefully defined our market, or segment.

This explains why it is apparently possible for many small firms to be profitable in large markets. The reason is, of course, that, in reality, they have a large share of a smaller market segment. This is another reason why understanding market segmentation is the key to successful marketing.

It would be unusual if there were not many caveats to the above 'law', and, although what these might be are fairly obvious, nevertheless it should be noted that the evidence provided by the Boston Consulting Group shows overwhelmingly that, in general, these 'laws' apply universally, whether for consumer, industrial or service markets.

Turning now to market growth, we observe that, in markets which are growing at a very low rate per annum, it is extremely difficult and also very costly to increase your market share. This is usually because the market is in the steady state (possibly in the saturation phase of the product lifecycle) and is dominated by a few major firms who have probably reached a stage of equilibrium, which it is very difficult to upset.

In markets which are going through a period of high growth, it is fairly obvious that the most sensible policy would be to gain market share by taking a bigger proportion of the market growth than your competitors. However, such a policy is very costly in promotional terms. So, many companies prefer to sit tight and enjoy rates of growth lower than the market rate. The major problem with this approach is that they are, in fact, losing market share, which gives cost advantages (hence margin advantages) to competitors.

Since we know from previous experience of product lifecycles that the market growth rate will fall, when this stage is reached and the market inevitably becomes price sensitive, the product will begin to lose money and we will probably be forced out of the market. Indeed, seen in this light, it becomes easier to understand the reasons for the demise of many industries in those countries of the world where the Japanese entered the market.

It is interesting to note, however, that even the Japanese have suffered in recent years from lower cost suppliers entering the markets using lower prices than they can offer. These suppliers include the Koreans, the Chinese and, more recently, the Indians and South Americans. It is unlikely that high-cost 'Western' companies can compete on price alone in most of these markets, which is why segmentation is so important in strategy development today.

MARKETING INSIGHT

Typical of this is the motorcycle industry in the UK in which the output of the Japanese increased from thousands of units to millions of units during a period of market growth, while the output of the British remained steady during the same period. When the market growth rate started to decline, the inevitable happened. Even worse, it is virtually impossible to recover from such a situation, while the Japanese, with their advantageous cost position, have now dominated practically every market segment, including big bikes.

THE BOSTON MATRIX

The Boston Consulting Group combined these ideas in the form of a simple matrix, which has profound implications for the firm, especially in respect of cash flow. Profits are not always an appropriate indicator of portfolio performance, as they will often reflect changes in the liquid assets of the company, such as inventories, capital equipment, or receivables, and thus do not indicate the true scope for future development. Cash flow, on the other hand, is a key determinant of a company's ability to develop its product portfolio.

The Boston Matrix classifies a firm's products according to their cash usage and their cash generation using market growth and relative market share to categorize them in the form of a box matrix.

The ▶ Boston Matrix classifies a firm's products according to their cash usage and their cash generation along the two dimensions described above, that is, relative market share and market growth rate. Market share is used because it is an indicator of the product's ability to generate cash; market growth is used because it is an indicator of the product's cash requirements. The measure of market share used is the product's share relative to the firm's largest competitor. This is important because it reflects the degree of dominance enjoyed by the product in the market. For example, if company A has 20 per cent market share and its biggest competitor also has 20 per cent market share, this position is usually less favourable than if company A had 20 per cent market share and its biggest competitor had only 10 per cent market share. The relative ratios would be 1:1 compared with 2:1. It is this ratio, or measure of market dominance, that the horizontal axis measures. This is summarized in Figure 5.20.

The definition of high relative market share is taken to be a ratio of one or greater than one. The cut-off point for high, as opposed to low, market growth should be defined according to the prevailing circumstances in the industry, but this is often taken as 10 per cent. There is, however, no reason why the dividing line on the vertical axis cannot be zero, or even a minus figure. It depends entirely on the industry, or segment, growth or decline. Sometimes, in very general markets, gross domestic product (GDP) can be used.

The somewhat picturesque labels attached to each of the four categories of products give some indication of the prospects for products in each quadrant. Thus, the 'question mark' is a product

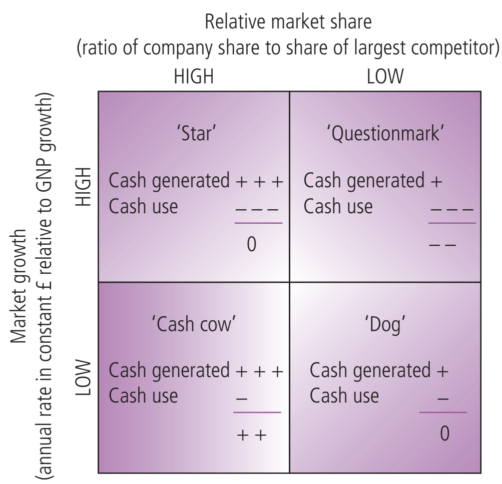


Figure 5.20: Boston Consulting Group and cash flows implications.

which has not yet achieved a dominant market position and thus a high cash flow, or perhaps it once had such a position but has slipped back. It will be a high user of cash because it is in a growth market. This is also sometimes referred to as a 'wildcat'.

The picturesque labels given to the four categories in the Boston Matrix give some indication of the prospects for products in each quadrant.

The 'star' is probably a newish product that has achieved a high market share and which is probably more or less self-financing in cash terms.

The 'cash cows' are leaders in markets where there is little additional growth, but a lot of stability. These are excellent generators of cash and tend to use little because of the state of the market.

'Dogs' often have little future and can be a cash drain on the company. While it is possible that such products are necessary to support more successful products, they are probably candidates for divestment, although often such products fall into a category aptly described by Peter Drucker as 'investments in managerial ego'.

The art of product portfolio management now becomes a lot clearer. What we should be seeking to do is to use the surplus cash generated by the 'cash cows' to invest in our 'stars' and to invest in a selected number of 'question marks'. This is indicated in Figure 5.21.

The Boston Matrix can be used to forecast the market position of our products, say three years from now, if we continue to pursue our current policies.

Figure 5.22 illustrates this process for a manufacturer of plastic valves. The area of each circle is proportional to each product's contribution to total company sales volume. In the case of this particular company, it can be seen that they are following what could well prove to be disastrous policies in respect of their principal products. Product A, although growing, is losing market share in a high-growth market. Product D is also losing market share in a high-growth market. Products E and C are gaining market share in declining markets.

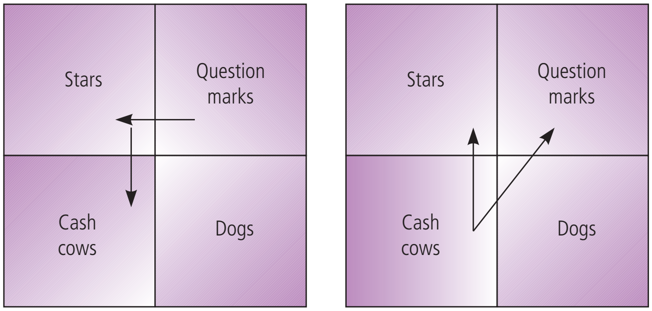


Figure 5.21: Using cash from 'cash cows' to invest in 'stars' and 'question marks'.

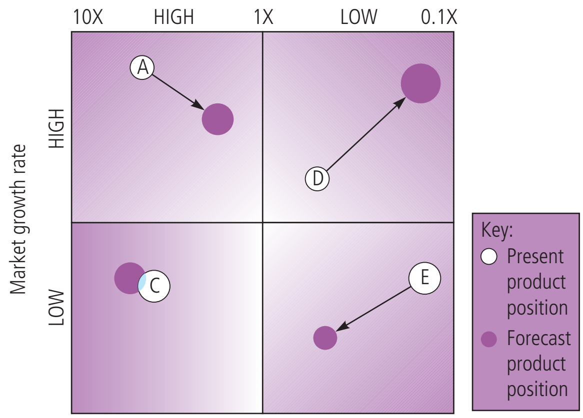


Figure 5.22: An unbalanced portfolio forecast.

Such a framework also easily helps to explain the impracticability of marketing objectives such as 'to achieve a 10 per cent growth and a 20 per cent return on investment'. Such an objective, while fine as an overall policy, if applied to individual products in the portfolio, clearly becomes a nonsense and totally self-defeating. For example, to accept a 10 per cent growth rate in a market which is growing at, say, 15 per cent per annum, is likely to prove disastrous in the long run. Likewise, to go for a much higher than market growth rate in a low-growth market is certain to lead to unnecessary price wars and market disruption.

This type of framework is particularly useful to demonstrate to senior management the implications of different product/market strategies. It is also useful in formulating policies towards new product development.

Weaknesses in the Boston Matrix Approach

Unfortunately, many companies started using the Boston Matrix indiscriminately during the 1970s and, as a result, it gradually lost its universal appeal. The reason, however, had more to do with lack of real understanding on the part of management than with any major defects in the methodology.

Nonetheless, there are circumstances where great caution is required in its use. Imagine for a moment a company with 80 per cent of its products in low-growth markets, and only 20 per cent of its products as market leaders. Their matrix would look as depicted in Figure 5.23. As can be seen, almost 65 per cent of the company's products are 'dogs'. To divest these may well be tantamount to throwing the baby out with the bath water!

Consider, also, those industries in which market share for any single product in the range has little to do with its 'profitability'. Often a low market share product enjoys the same production, distribution and marketing economies of scale as other products in the portfolio, as, for example, in the case of beers and chemical products.

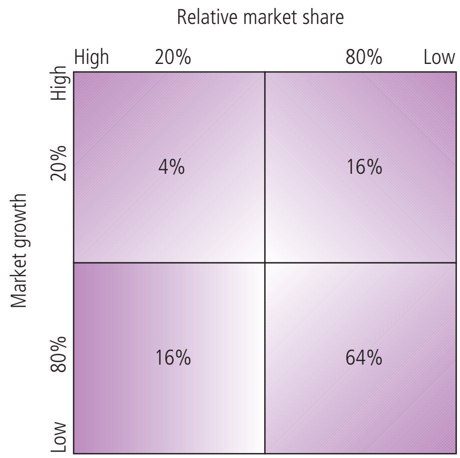


Figure 5.23: Avoid rituals such as 'divest the dogs'.

MARKETING INSIGHT

Let us take the case of a product which is manufactured using basically the same components as other large market share products, is manufactured in the same plant as part of a similar process, and is distributed on the same vehicles and via the same outlets. In such a case it is easy to see how this low market share product can indeed be extremely profitable.

None of this, however, invalidates the work of the Boston Consulting Group, the principles of which can be applied to companies, divisions, subsidiaries, strategic business units, product groups, products, and so on. Providing great care is taken over the 'market share' axis, it is an extremely valuable planning tool. It is certainly a very useful analysis to complete on major products as part of the customer and market audit.

Further Developments of the Boston Matrix

It is complications such as those outlined above that make the Boston Matrix less relevant to certain situations. While it is impossible to give absolute rules on what these situations are, suffice it to say that great caution is necessary when dealing with such matters. In any case, two principles should always be adhered to.

First, a business should define its markets in such a way that it can ensure that its costs for key activities will be competitive. Second, it should define the markets it serves in such a way that it can develop specialized skills in servicing those markets and hence overcome a relative cost disadvantage. Both, of course, have to be related to a company's distinctive competence.

However, the approach of the Boston Consulting Group is fairly criticized in such circumstances as those described above as relying on two single factors, that is, relative market share and market growth. Many readers will be aware of companies with high market share in a growing market that are not profitable.

To overcome this difficulty, and to provide a more flexible approach, General Electric and McKinsey jointly developed a multi-factor approach using the same fundamental ideas as the Boston Consulting Group. They used industry attractiveness and business strengths as the two main axes and built up these dimensions from a number of variables. Using these variables, and some scheme for weighting them according to their importance, products (or businesses) are classified into one of nine cells in a 3 × 3 matrix. Thus, the same purpose is served as in the Boston Matrix (i.e. comparing investment opportunities among products or businesses) but with the difference that multiple criteria are used. These criteria vary according to circumstances, but often include at least some of those shown in Figure 5.24. We will expand on this below.

It is not necessary, however, to use a nine-box matrix, and many managers prefer to use a four-box matrix similar to the Boston box. Indeed this is the authors' preferred methodology, as it seems to be more easily understood by, and useful to, practising managers.

The four-box DPM is shown in Figure 5.25. Here, the circles represent sales into an industry, market or segment and, in the same way as in the Boston Matrix, each is proportional to that segment's contribution to turnover.

The difference in this case is that, rather than using only two variables, the criteria which are used for each axis are totally relevant and specific to each company using the matrix. It shows:

- markets categorized on a scale of attractiveness to the firm
- the firm's relative strengths in each of these markets
- the relative importance of each market.

> It is advisable to use no more than five or six factors for the vertical axis of the DPM, otherwise the calculations become too complex and lose focus.

The specific criteria to be used should be decided by key executives using the device, but a generalized list for the vertical axis is given in Table 5.3. It is advisable to use no more than five or six factors, otherwise the exercise becomes too complex and loses its focus. Read on, however, before selecting these factors, as essential methodological instructions on the construction of a portfolio matrix follow.

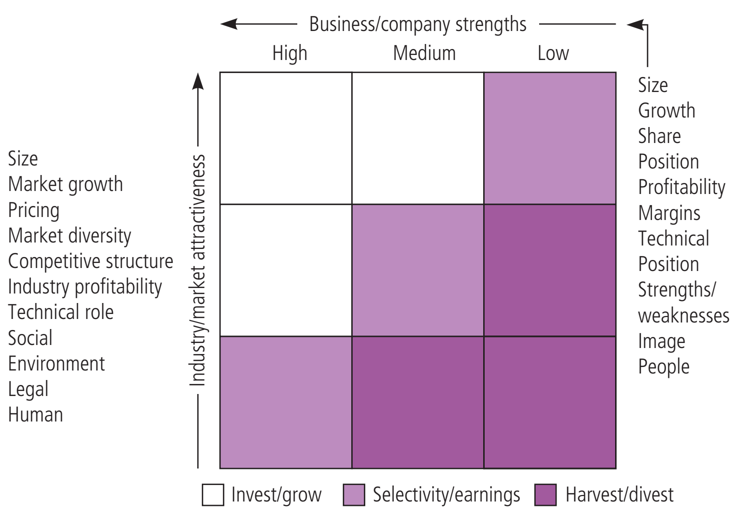


Figure 5.24: The nine-box DPM.

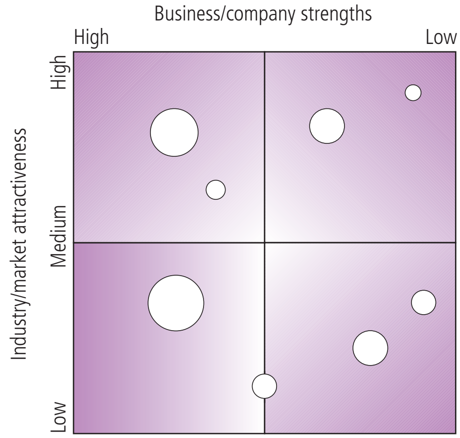


Figure 5.25: The McDonald-Wilson four-box DPM.

Market factors Size (money, units, or both) Size of key segments Growth rate per year: total segments Diversity of market Sensitivity to price, service features and external factors Cyclicality Seasonality Bargaining power of upstream suppliers Bargaining power of downstream suppliers	*Financial and economic factors* Contribution margins Leveraging factors, such as economies of scale and experience Barriers to entry or exit (both financial and non-financial) Capacity utilization *Technological factors* Maturity and volatility Complexity Differentiation Patents and copyrights Manufacturing process technology required
Competition Types of competitors Degree of concentration Changes in type and mix Entries and exits Changes in share Substitution by new technology Degrees and types of integration	*Socio-political factors in your environment* Social attitudes and trends Laws and government agency regulations Influence with pressure groups and government representatives Human factors, such as unionization and community acceptance

Table 5.3: Factors contributing to market attractiveness.

A DETAILED, STEP-BY-STEP APPROACH TO CREATING A PORTFOLIO

The Strategic Business Unit (SBU)

Although the DPM, like other models of ‘portfolio analysis’, attempts to define a firm’s strategic position and strategy alternatives, this objective cannot be met without considering what is meant by the term ‘firm’. The accepted level at which a firm can be analysed using the DPM is that of the ‘strategic business unit’.

The most common definition of an SBU is as follows:

1. It will have common segments and competitors for most of the products.
2. It will be a competitor in an external market.
3. It is a discrete, separate and identifiable 'unit'.
4. Its manager will have control over most of the areas critical to success.

The process of defining an SBU can be applied all the way down to product or department level.

It is possible, however, to use the DPM for any unit that has in it a number of different variables that could be usefully plotted using a two-dimensional matrix.

What Should be Plotted on the Matrix?

This is also comparatively simple to deal with, but confusion can arise because the options are rarely spelled out.

The DPM can be used on:

- countries (not all countries are equally attractive)
- sectors (such as agriculture, steel, etc.)
- markets
- regions
- distributors
- segments
- major customers.

Here we will use the 'market' level to explain the DPM.

The DPM is useful where there is more than one (at least three, and a maximum of ten are suggested) 'markets' or segments between which the planner wishes to distinguish. These can be either existing or potential markets.

In order to implement the DPM, the following simple definition of 'market' and 'market segment' is offered:

> An identifiable group of customers with requirements in common that are, or may become, *significant* in determining a separate strategy.

The results from Exercise 4.1 from the previous chapter should be plotted on the matrix.

The principal unit of analysis for the purpose of entering data will be the user's definition of 'product for market'.

Preparation

Prior to commencing analysis, the following preparation is recommended:

1. Product profiles should be available for all products/services to be scored.
2. The markets in which the products/services compete should be clearly defined.
3. Define the time period being scored. Three years is recommended.
4. Define the competitors against which the products/services will be scored.

5. Ensure sufficient data are available to score the factors (where no data are available, this is no problem as long as a sensible approximation can be made for the factors).
6. Ensure up-to-date sales forecasts are available for all products/services, plus any new products/services.

Analysis Team

In order to improve the quality of scoring, it is recommended that a group of people from a number of different functions take part, as this encourages the challenging of traditional views through discussion. It is recommended that there should be no more than six people involved in the analysis.

Ten Steps to Producing the DPM

Step 1 Define the products/services for markets that are to be used during the analysis.
Step 2 Define the criteria for market attractiveness, set the parameters and define weights for the market attractiveness criteria.
Step 3 Score the relevant products/services for market. Multiply the scores by the weights.
Step 4 Define the organization's relative strengths for each product/service for market.
Step 5 Analyse and draw conclusions from the relative position of each product/service for market.
Step 6 Draw conclusions from the analysis with a view to generating objectives and strategies.
Step 7 (Optional) Position the circles on the box assuming no change to current policies – that is to say, a *forecast* should be made of the future position of the circles.
Step 8 Redraw the portfolio to position the circles where the organization wants them to be – that is to say, the objectives they wish to achieve for each product/service for market.
Step 9 Detail the strategies to be implemented to achieve the objectives.
Step 10 Detail the appropriate financial consequences in terms of growth rate by product/service for market and return on sales.

Two Key Definitions

▶ Market attractiveness is a measure of the *potential* of the marketplace to yield growth in sales and profits. It is important to stress that this should be an objective assessment of market attractiveness using data *external* to the organization. The criteria themselves will, of course, be determined by the organization carrying out the exercise and will be relevant to the objectives the organization is trying to achieve, but it should be independent of the organization's position in its markets.

▶ Business strengths/position is a measure of an organization's *actual* strengths in the marketplace (i.e. the degree to which it can take advantage of a market opportunity). Thus, it is an objective assessment of an organization's ability to satisfy market needs relative to competitors.

> Market attractiveness is a measure of the potential of the marketplace to yield growth in sales and profits.

The Process

There follows a more detailed step-by-step explanation of the process for constructing a DPM.

Step 1 List the population of products/services for markets that you intend to include in the matrix

The list can consist of: countries, companies, subsidiaries, regions, products, markets, segments, customers, distributors, or any other unit of analysis that is important.

> Business strengths/position is a measure of an organization's actual strengths in the marketplace (i.e. the degree to which it can take advantage of a market opportunity).

The DPM can be used at any level in an organization and for any kind of SBU.

Step 2 Define market attractiveness factors (MAFs)

In this step, you should list the factors you wish to consider in comparing the attractiveness of your markets.

It is also important to list the markets that you intend to apply the criteria to before deciding on the criteria themselves, since the purpose of the vertical axis is to discriminate between more and less attractive markets. The criteria themselves must be specific to the population and must not be changed for different markets in the same population.

	Example weight
Growth rate	40
Accessible market size	20
Profit potential	40
Total	**100**

Note: As profit = market size × margin × growth, it would be reasonable to expect a weighting against each of these to be at least as shown, although an even higher weight on growth would be understandable in some circumstances (in which case, the corresponding weight for the others should be reduced).

The above represent a combination of a number of factors. These factors, however, can usually be summarized under three headings.

1. *Growth rate*. Average annual growth rate of revenue spent by that segment (2011 over 2010 plus percentage growth 2012 over 2011, plus percentage growth 2013 over 2012, all divided by 3). If preferred, compound average growth rate could be used.
2. *Accessible market size*. An attractive market is not only large – it can also be accessed. One way of calculating this is to estimate the total revenue of the segment in t + 3, less revenue impossible to access, regardless of investment made. Alternatively, total market size can be used, which is the most frequent method, as it does not involve any managerial judgement to be made that could distort the truth. This latter method is the preferred method. A market size factor score is simply the score multiplied by the weight (20 as in the example above).
3. *Profit potential*. This is much more difficult to deal with and will vary considerably, according to industry. For example, Porter's Five Forces model could be used to estimate the profit potential of a segment, as in the following example:

Subfactors	**10 = Low × 0 = High**	**Weight**	**Weighted factor score**
1. Intensity of competition		50	
2. Threat of substitutes		5	
3. Threat of new entrants		5	
4. Power of suppliers		10	
5. Power of customer		30	
Profit potential factor score			

Alternatively, a combination of these and industry-specific factors could be used. In the case of the pharmaceutical industry, for example, the factors could be:

Subfactors	High	Medium	Low × Weight	Weighted factor score
Unmet medical needs (efficacy)			30	
Unmet medical needs (safety)			25	
Unmet medical needs (convenience)			15	
Price potential			10	
Competitive intensity			10	
Cost of market entry			10	
Profit potential factor score				

These are clearly a proxy for profit potential. Each is weighted according to its importance. The weights add up to 100 in order to give a *profit potential factor score*, as in the Porter's Five Forces example.

The most usual and simplest measure to use, however, is the weighted average percentage return on sales (ROS) that *any* competitor could expect to achieve in this market.

Note that, following this calculation, the *profit potential factor score* is simply multiplied by the weight (40 as in the example above).

Variations Naturally, growth, size and profit will not encapsulate the requirements of all organizations. For example, in the case of an orchestra, artistic satisfaction may be an important consideration. In another case, social considerations could be important. In yet another, cyclicality may be a factor.

> It is possible, then, to add another heading, such as 'Risk' or 'Other' to the three factors listed at the beginning of Step 2. In general, however, it should be possible to reduce it to just the three main ones, with subfactors incorporated into these, as shown.

Now set the parameters for each MAF. For example, a growth rate greater than 10 per cent merits a high score, whereas a growth rate less than 1 per cent merits a low score.

Step 3 Score the relevant products/services for markets

In this step you should score the products/services for markets against the criteria defined in Step 2.

Can market attractiveness factors change while constructing the DPM? The answer to this is no. Once agreed, under no circumstances should market attractiveness factors be changed, otherwise the attractiveness of our markets is not being evaluated against common criteria and the matrix becomes meaningless. Scores, however, will be specific to each market.

Can the circles move vertically? No is the obvious answer, although yes is also possible, providing the matrix shows the current level of attractiveness at the present time. This implies carrying out one set of calculations for the present time according to market attractiveness factors, in order to locate markets on the vertical axis, then carrying out another set of calculations for a future period (say, in three years' time), based on our forecasts according to the same factors. In practice, it is easier to carry out only the latter calculation, in which case the circles can only move horizontally.

Step 4

(i) Define business strengths/position This is a measure of an organization's actual strengths in the marketplace and will differ by market/segment opportunity.

These factors will usually be a combination of an organization's relative strengths versus competitors in connection with *customer-facing* needs, that is, those things that are required by the customer.

These can often be summarized under:

- product requirements
- price requirements
- service requirements
- promotion requirements.

The weightings given to each should be specific to each market/segment. In the same way that 'profit' on the market attractiveness axis can be broken down into subheadings, so can each of the above be broken down further and analysed. Indeed, this is to be strongly recommended. These subfactors should be dealt with in the same way as the subfactors described under 'market attractiveness'.

For example, in the case of pharmaceuticals, product strengths could be represented by:

- relative product strengths
- relative product safety
- relative product convenience
- relative cost-effectiveness.

(ii) Broadening the analysis It will be clear that an organization's relative strengths in meeting customer-facing needs will be a function of its *capabilities* in connection with *industry-wide success factors*. For example, if a depot is necessary in each major town/city for any organization to succeed in an industry and the organization carrying out the analysis doesn't have this, then it is likely that this will account for its poor performance under 'customer service', which is, of course, a customer requirement. Likewise, if it is necessary to have low feedstock costs for any organization to succeed in an industry and the organization carrying out the analysis doesn't have this, then it is likely that this will account for its poor performance under 'price', which is, of course, a customer requirement.

Thus, in the same way that subfactors should be estimated in order to arrive at 'market attractiveness' factors, so an assessment of an organization's capabilities in respect of industry-wide success factors could be made in order to understand what needs to be done in the organization in order to satisfy customer needs better. This assessment, however, is quite separate from the quantification of the business strengths/position axis and its purpose is to translate the analysis into actionable propositions for other functions within the organization, such as purchasing, production, distribution, and so on.

In the case of pharmaceuticals, for example, factors such as 'patent life' are simply an indication of an organization's capability to provide product differentiation. They are irrelevant to the doctor, but need to be taken account of by the organization carrying out the analysis.

(iii) How to deal with business strengths/position The first of these concerns the quantification of business strengths within a 'market'.

Many books for the manager are not particularly useful when used to construct a marketing plan.

Few of the factors they mention take account of the need for a company to make an 'offer' to a particular 'market' that has a sustainable competitive advantage over the 'offers' of relevant competitors.

The only way a company can do this is to understand the real needs and wants of the chosen customer group, find out by means of market research how well these needs are being met by the products on offer, and then seek to satisfy these needs better than their competitors.

The worked example given in the table below shows how to assess the strength of a company in a market. The following three questions are used to plot the firm's (SBU's) position on the horizontal axis (competitive position/business strengths):

1. What are the few key things that any competitor has to do right to succeed (i.e. what are the critical success factors, also known as CSFs, in this industry sector)? In this example, we have shown product, price, service and image as CSFs, but it is clear that each of these needs to be decomposed into much greater detail, as explained above.
2. How important is each of these CSFs (measured comparatively using a score out of 100)?
3. How do you and each of your competitors score (out of 10) on each of the CSFs?

These questions yield the information necessary to make an overall assessment of an SBU's competitive strengths (shown in the table below). From this it will be seen that:

- this organization is not market leader
- all competitors score more than 5.0.

CSFs (What are the few key things that any competition has to do right to succeed?)	Weighting (How important is each of these CSFs? Score out of 100)		Strengths/weaknesses analysis (Score yourself and each of your main competitors out of 10 on each of the CSFs, then multiply the score by the weight)			
			You	**Comp A**	**Comp B**	**Comp C**
1. Product	20		9 = 1.8	6 = 1.2	5 = 1.0	4 = 0.8
2. Price	10		8 = 0.8	5 = 0.5	6 = 0.6	10 = 0.1
3. Service	50		5 = 2.5	9 = 4.5	7 = 3.5	6 = 3.0
4. Image	20		8 = 1.6	8 = 1.6	5 = 1.0	3 = 0.6
These should normally be viewed from the customer's point of view	Total 100	Total score × weight	6.7	7.8	6.1	5.5

The problem with this and many similar calculations is that rarely will this method discriminate sufficiently well to indicate the relative strengths of a number of products in a particular company's product/market portfolio, and many of the SBU's products would appear on the left of the matrix if a scale of 1 to 10 is used.

Some method is required to prevent all products appearing on the left of the matrix. This can be achieved by using a ratio, as in the Boston Matrix. This will indicate a company's position relative to the best in the market.

In the example provided, Competitor A has most strengths in the market, so our organization needs to make some improvements. To reflect this, our weighted score should be compared with that of Competitor A (the highest weighted score). Thus 6.7:7.8 = 0.86:1.

If we were to plot this on a logarithmic scale on the horizontal axis, this would place our organization to the right of the dividing line as follows:

3 × 1 0.3

(We should make the left hand extreme point 3 and start the scale on the right at 0.3.*)

Step 5 Produce the DPM

Finally, circles should be drawn on a four-box matrix, using market size (as defined in Step 2 above) to determine the area of the circle. An organization's market share can be put in as a 'cheese' in each circle. Alternatively, an organization's own sales into each market can be used. This will usually produce a smaller circle to superimpose on the larger market size circle.

In practice, however, it is advisable to do both and compare them in order to see how closely actual sales match the opportunities.

*A scale of 3 to 0.3 has been chosen because such a band is likely to encapsulate most extremes of competitive advantage. If it doesn't, just change it to suit your own circumstances.

Step 6 Analysis and generation of marketing objectives and strategies

The objective of producing the DPM is to see the portfolio of products/services for markets relative to each other in the context of the criteria used. This analysis should indicate whether the portfolio is well balanced or not and should give a clear indication of any problems.

Step 7 (Optional) Forecasting

The forecast position of the circles should now be made. This is simply done by re-scoring the products/services for markets in three years' time, assuming the organization doesn't change its strategies (see Step 3). This will indicate whether the position is getting worse or better.

It is not necessary to change the scores on the vertical axis (see Step 3).

Step 8 Setting marketing objectives

This involves changing the volumes/values and/or market share (marketing objectives) and the scores on the horizontal axis (relative strength in market) in order to achieve the desired volumes/values. Conceptually, one is picking up the circle and moving it/revising it without specifying how this is to be achieved. Strategies are then defined, which involve words and changes to individual CSF scores (Step 9).

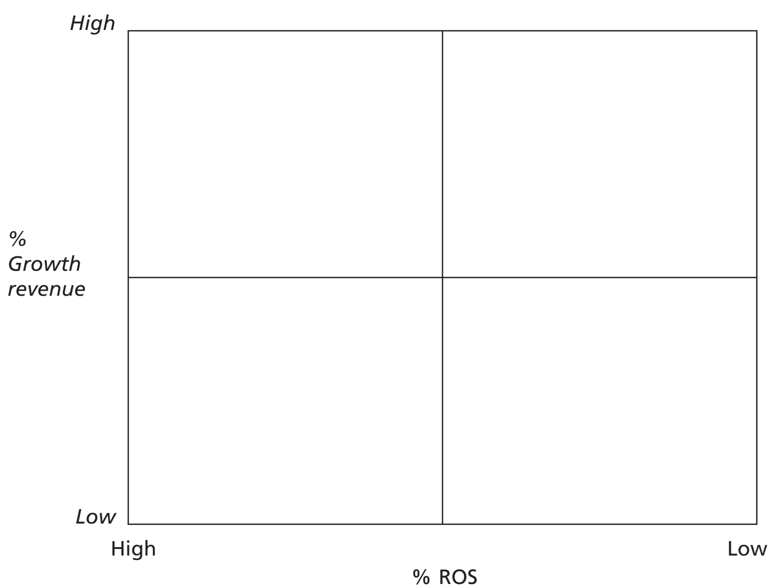
Step 9 Spell out strategies

This involves making specific statements about the marketing strategies to be employed to achieve the desired volumes/values.

Step 10 Sales and profit forecasts

Once this is done, organizations should be asked to do the following:

1. Plot average percentage growth in sales revenue by segment (t – 3 to t0); plot average percentage ROS by segment (t – 3 to t0).
2. Plot forecast average percentage growth in sales revenue by segment (t0 to t + 3); plot forecast average percentage ROS by segment (t0 to t + 3).



This will show clearly whether past performance and, more importantly, forecasts match the market rating exercise above. *This should preferably be done by someone else* (e.g. accountants).

One major chemical company used the DPM to select 50 distributors out of the 450 they were dealing with. They needed to do this because the market was in decline and the distributors began buying for customers rather than selling for the supplier. This led to a dramatic fall in prices. The only way the chemical company could begin to tackle the problem was by appointing a number of exclusive distributorships. The issue of which distributorships to choose was tackled using the DPM, as clearly some were more attractive than others, while the company had varying strengths in their dealings with each distributor.

Portfolio Summary

The resulting portfolio summary pulls together the information from the SWOT analyses, demonstrates the overall competitive position and indicates the relative importance of each product/market segment. The four-box matrix, as in Figure 5.26, illustrates the position most effectively.

Table 5.4 shows how market attractiveness was calculated for three of the segments. Table 5.5 shows how the strengths and weaknesses for one segment were calculated. These were transferred to the DPM, which shows how the circles are positioned.

1. In the top right box, low strengths, combined with an attractive market, indicate a probable policy of selective investment, to improve competitive position.
2. Finally, in the bottom right box, low strengths allied to poor market attractiveness, point to a management for profits strategy, or even withdrawal.

The horizontal axis in Figure 5.26 reflects the scores in the strengths and weaknesses analysis and the vertical axis quantifies the attractiveness, to the organization, of each of the important segments contained in the plan. The circle sizes are relative to the current turnover in each. The darker circles indicate forecast sales in three years' time. From this graphical

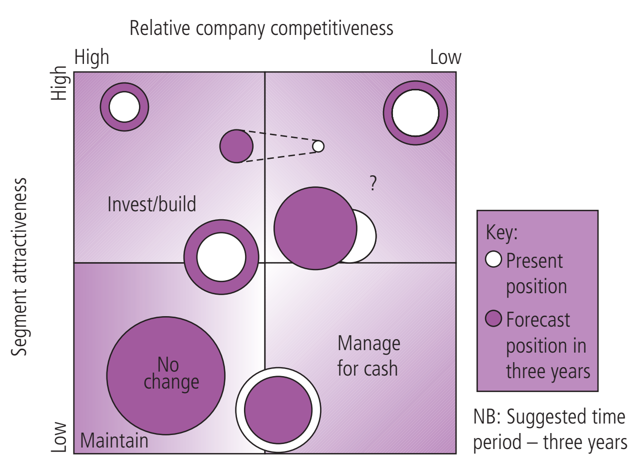


Figure 5.26: A completed DPM.

Attractiveness	Weight	Segment 1		Segment 3		Segment 2	
		score	total	score	total	score	total
Growth	25	6	1.5	5	1.25	10	2.5
Profitability	25	9	2.25	8	2.0	7	1.75
Size	15	6	0.9	5	0.75	8	1.2
Vulnerability	15	5	0.75	6	0.9	6	0.9
Competition	10	8	0.8	8	0.8	4	0.4
Cyclicality	10	2.5	0.25	3	0.3	2.5	0.25
Total	100	6.45	6.0	7.0			

Table 5.4: Establishing how attractive each segment is to your business.

Note: This could be calculated for Year 0 and Year 3, though it is easier and quicker to carry out only the calculations for the final year.

CSFs	Weight	Your company		Competitor A		Competitor B	
		score	total	score	total	score	total
1. Price	50	5	2.5	6	3.0	4	2.0
2. Product	25	6	1.5	8	2.0	10	2.5
3. Service	15	8	1.2	4	0.6	6	0.9
4. Image	10	6	0.6	5	0.5	3	0.3
Total	100	5.8	6.1	5.7			

Table 5.5: Scoring your company and your competitors.

Note: Calculations are first made for Year 0 as this enables you to establish a fixed position on the portfolio matrix for your company in each segment against which the forecast outcome of alternative strategies and assumptions for the planning period can be seen when plotted onto the DPM.

representation of a portfolio of products or range of segments, a number of marketing options present themselves:

1. In the top left box, where strengths are high and markets are attractive, the probable option would be to invest heavily in these markets and increase market share.
2. In the bottom left box, where strengths are high, but markets are less attractive, a likely aim would be to maintain market share and manage for sustained earnings.
3. In the top right box, low strengths, combined with an attractive market, indicate a probable policy of selective investment, to improve competitive position.
4. Finally, in the bottom right box, low strengths allied to poor market attractiveness, point to a management for profits strategy, or even withdrawal.

This matrix gives a clear indication of the marketing objectives for each product for market shown; strategies will be set separately. This is the subject of more detailed treatment in Chapter 6.

COMBINING PRODUCT LIFECYCLES AND PORTFOLIO MANAGEMENT

Figure 5.27 illustrates the consequences of failing to appreciate the implications of both the product lifecycle concept and the dual combination of market share and market growth.

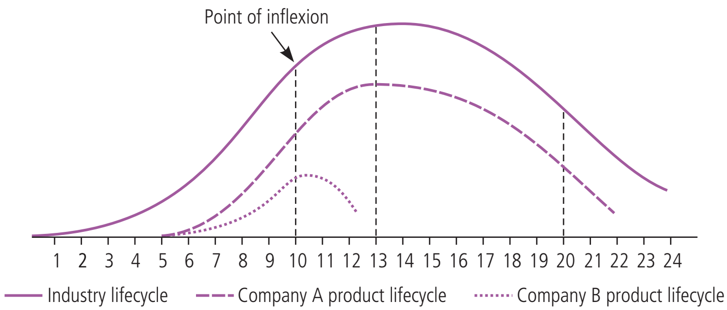


Figure 5.27: Short-term profit maximization versus market share and long-term profit maximization.

Companies A and B both start out with question marks (wildcats) in years five and six in a growing market. Company A invests in building market share and quickly turns into a star. Company B, meanwhile, manages its product for profit over a four-year period so that, while still growing, it steadily loses market share (i.e. it remains a question mark or wildcat). In year ten, when the market becomes saturated (when typically competitive pressures intensify), Company B with its low market share (hence typically higher costs and lower margins) cannot compete and quickly drops out of the market. Company A, on the other hand, aggressively defends its market share and goes on to enjoy a period of approximately ten years with a product which has become a cash cow. Thus, company B, by pursuing a policy of short-term profit maximization, lost at least ten years' profit potential.

RELEVANCE OF LIFECYCLE ANALYSIS AND PORTFOLIO MANAGEMENT TO THE MARKETING AUDIT

It will be recalled that this discussion took place against the background of the need to complete a full and detailed marketing audit prior to setting marketing objectives. Such analyses as those described in this chapter should be an integral part of the marketing audit.

The audit should contain a product lifecycle for each major product and an attempt should be made (using other audit information) to predict the future shape of the lifecycle. It should also contain a product portfolio matrix showing the present position of the products.

CASE STUDY

This section concludes with some case histories showing the use and misuse of the DPM.

CASE STUDY 1 – A BLUE-CHIP COMPANY

The first concerns a senior marketing manager of a blue-chip company who dismissed the DPM as irrelevant because he had only four principal products, each one of which was sold to the same customer (or market). Clearly, we are talking about major capital sales in this instance.

The manager had plotted products A, B, C and D on the horizontal axis with only one 'market' on the vertical axis. The resulting matrix obviously had four circles in a straight line. Since the purpose of a matrix is to develop a relationship between two or more variables judged by the planner to be of significance in a given planning context, this matrix was clearly absurd and served no useful purpose whatever.

If this manager really wished to use the DPM, he would have to put products A, B, C and D on the vertical axis and look at their respective size and strengths on the horizontal axis. In such a case, all we have done is to change the nomenclature, making a product equivalent to a market, which is clearly acceptable. The main point is that the purpose of the DPM is to display clearly and visibly the relationship between product/market variables.

CASE STUDY

CASE STUDY 2 – A BUSINESS SCHOOL PORTFOLIO

This is certainly the case for a business school portfolio. Here, the 'product' (e.g. the MBA programme) equals 'market'. This is shown in Figure 5.28. (By astute management, some of these circles have since been moved to the left of the matrix, surely the purpose of using the DPM in the first place!)

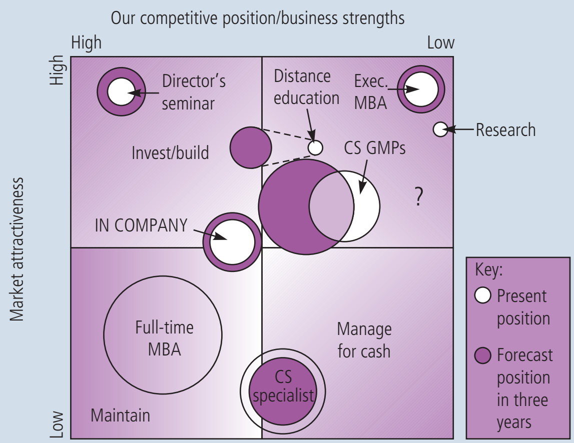


Figure 5.28: A business school portfolio.

Let us now look at two companies whose revenue and profits were static for two consecutive years, and both of which kept their shareholders at bay by selling off part of their assets. The boards of both companies attempted to use the DPM to help clarify the options. In both cases, the resulting matrix was not a reflection of the reality.

CASE STUDY

CASE STUDY 3 – AN INTERNATIONAL ENGINEERING COMPANY

Here, the Shipping, Food, Thermal and Separation Divisions were all operating in no-growth markets; only the Biotechnology Division was in a growth market. Using market growth as a factor obviously caused all divisions to appear in the bottom half of the matrix, except the Biotechnology Division. The other factor used, however, was profitability, which in the case of Shipping and Separation was high. The weighting of 60 per cent on the profit factor pulled both of these divisions into the upper part of the matrix. Strengths in each case were different, and the resulting matrix looked as shown in Figure 5.29.

(*Continued*)

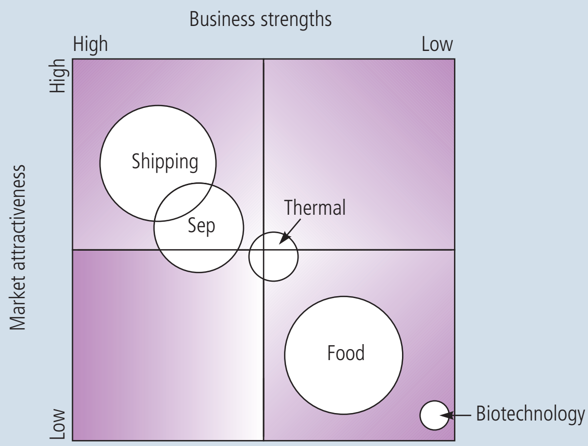


Figure 5.29: Incorrect DPM.

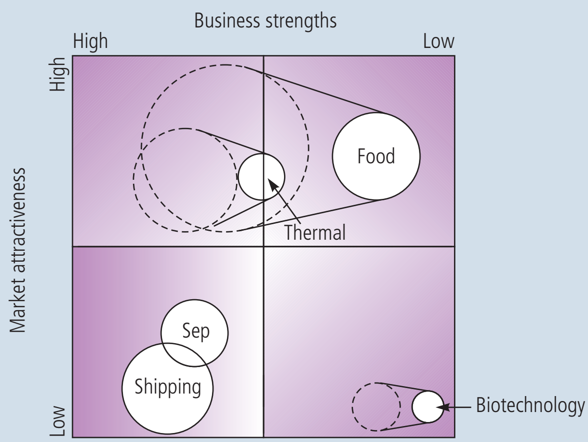


Figure 5.30: Correct DPM.

However, since both the Shipping and Separation Divisions had little (if any) potential to increase their volume and profitability in mature markets, and since the Food and Biotechnology Divisions did, the circles were clearly in the wrong place. The reality facing the company was as shown in Figure 5.30.

The opportunity was clearly there for this company to invest in the Food Division, where it was comparatively weak, and also in the Thermal Division. Both of these markets provided ample opportunity for the company to improve its market share and strengths (especially if it also used productivity measures at the same time), in spite of the fact that both markets were relatively mature.

In other words, all we are really interested in is the potential for us to increase our volume and profits, and, in some instances, externally derived factors of market growth and profitability, however accurate, are not particularly useful.

Having reached the conclusion above, obviously this company then took each division in turn and completed the DPM for each of their component parts in order to decide how best to allocate resources.

CASE STUDY

CASE STUDY 4 – A CONGLOMERATE WITH 12 SEPARATE COMPANIES

This group, although enjoying very high return on capital employed (ROCE), was also under extreme pressure from the financial institutions because its turnover and profits were static. At a directors' meeting, the DPM was used as one of the basic tools of analysis. ROCE of the companies varied between 500 per cent and 5 per cent, with seven about 50 per cent and five below 15 per cent.

Again, using market growth and industry return-on-sales (ROS) as the factors, weighted 30 and 70, not surprisingly all the high-profit companies appeared in the top left of the matrix and all the low-profit companies appeared in the bottom half of the matrix. All this did was to confirm the group's existing position, but was of little value when considering the future.

The directors were advised by the authors of this book to change the factors to encapsulate potential for growth in volume and profits rather than the existing profitability of the markets themselves. The resulting DPM then showed most of the high-profit companies in the lower half of the matrix, since few of them were in growth markets and most already had high market shares.

It also demonstrated clearly another point of policy. One company enjoying a 500 per cent ROCE could grow, providing the chief executive officer was prepared to allow them to redefine their market more broadly and move into lower ROS segments. Such a policy move would have put this particular company back into the top part of the matrix!

But this, of course, is the whole point of using the DPM in the first place. It should raise key issues and force senior executives into thinking about the future in a structured way.

CASE STUDY

CASE STUDY 5 – AN AUSTRALIAN DIVISION OF AN INTERNATIONAL AGROCHEMICAL COMPANY

This Australian division of an international agrochemical company was under extreme pressure to grow the revenue and profits in a declining market. At first glance, the marketing plans looked to be extremely sophisticated. The plans themselves were also well presented.

The problem was that they did not succeed in spelling out a clear strategy to achieve the corporate objectives, the individual product/market objectives appearing to be little more than 'wish lists'. On closer examination, it became clear that the underlying diagnosis was at fault.

The SWOT analysis shown in Table 5.6 is a typical example of the format used. Even a cursory glance at this shows that none of these factors are discriminators in the choice of supply. On discovering, however, that the SWOT had been done on the merchants (or channel) and that merchants were motivated mainly by price, it was easy to conclude that

(*Continued*)

the three main brands were really commodities in the eyes of the merchant, albeit they were major brand names.

CSFs	Success factor scores			
	Weight	Us	Comp A	Comp B
Product efficacy	30	9	8	8
Product price	25	9	9	9
Product image	20	9	8	9
Profitability	20	8	9	6
Formulation	5	8	8	7
		8.8	8.4	8.0

Table 5.6: CSFs scores.

The real bottom line on all of this was that the merchants were calling the shots, a situation that was bound to get worse and that would continue to drive the price down.

The next obvious conclusion was that this company needed to go down the value chain to the farmer and to segment them according to need in order to enable the company to create demand pull, thus reducing the power of the channel. SWOTing at the next link in the chain quickly revealed two things:

1. There was ample opportunity for this company to create value for the farmer.
2. Not enough was known about farmers' needs to enable proper SWOTs to be done on them.

The marketing plan of this company contained what looked to be quite sophisticated DPMs. Again, however, on closer examination of the underlying data, one circle that appeared at the top of the 'market attractiveness' axis was clearly in the wrong place, as the data in Table 5.7 illustrate.

	Product 1	Product 2
Sales in 1996	$10 million	$5 million
Profits in 1996	$1 million	$0.5 million
Projected sales in 1999	$10 million	$7 million
Projected profit in 1999	$1 million	$0.7 million

Table 5.7: Comparison of Product 1 and Product 2's scales.

From this, it can be seen that the product manager doing the analysis believed that Product 1 was more attractive than Product 2 because, even in 1999, the absolute dollar profits were going to be greater. Clearly, however, positioning Product 1 near the top of the vertical axis of the DPM implied an invest strategy, while the implied strategy for Product 2 was a maintain (or manage for sustained earnings) strategy. Both strategies would have been wholly inappropriate, thus reducing the value of the DPM as an analytical tool.

Even worse, since we have already seen that the CSF calculation (to derive the position on the horizontal axis of the DPM) was also wrong, the resulting DPM merely served to confuse, rather than to clarify and to provide valuable insights about competitive strategy.

Since then, having had the DPM properly explained to them, all of these organizations were able to develop objectives and strategies designed to grow the business and all are now thriving and prospering.

Finally, it may be useful to conclude this section with a definition of a portfolio matrix: 'The use of graphic models to develop a relationship between two or more variables judged by the planner to be of significance in the planning context.'

Whichever approach is used, it can be seen that obvious consideration should be given to marketing objectives and strategies which are appropriate to the attractiveness of a market (market growth in Boston Matrix) and the extent to which such opportunities match our capabilities (market share in Boston Matrix). What these objectives should be will be discussed in Chapter 6.

APPLICATION QUESTIONS

1. Select a major product and:
   - draw a lifecycle of the product itself
   - draw a lifecycle of the market (segment) in which it competes
   - explain why it is the shape it is
   - predict the shape and length of the lifecycle in the future
   - say why you are making these predictions.
2. Plot your products on a Boston Matrix and:
   - explain their relative positions
   - forecast where they will be (and why), say, five years from now.
3. List your main markets or segments.
4. List criteria for attractiveness (to you).
5. List criteria for business strengths (you vis-à-vis competitors).
6. Devise a scoring and weighting system for each axis.
7. Put the markets or segments through the criteria.
8. Draw circles around the coordinates. The diameter of each circle should be proportional to that segment's contribution to turnover. Is this where you want the circles to be?

CHAPTER 5 REVIEW

What is a product?

A product (or service) is a problem solver, in the sense that it provides what the customer needs or wants. A product consists of:

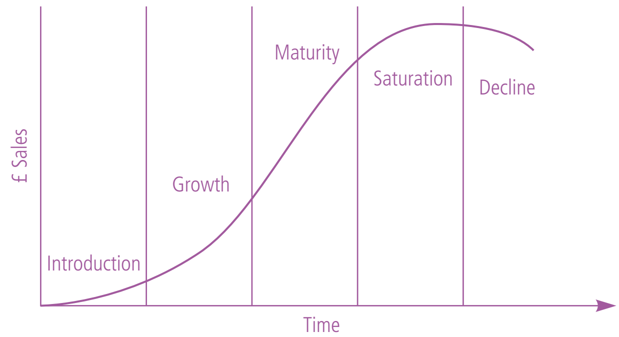
1. A core (functional performance).
2. A surround (a bundle of features and benefits).

Usually the core product has 20 per cent of the impact, yet leads to 80 per cent of the cost. The surround is the reverse of this.

Try Exercise 5.1

The product lifecycle

All products or services have a lifecycle which follows this pattern:



The phases of the lifecycle are:

A Introduction
B Growth
C Maturity
D Saturation
E Decline

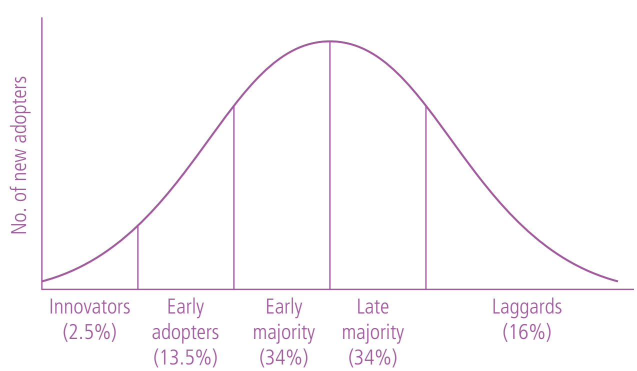
The total lifecycle depends on the type of product or service, for example, fashion products have short lifecycles.

There is a trend for lifecycles of most products to get shorter as changes in technology and customer expectations make greater impact. Each phase of the lifecycle calls for different management responses.

Try Exercise 5.2

Diffusion of innovation

Some people/companies are always prepared to buy new products, while others wait until things are tried and tested. All products and services have customers which fall into these categories.



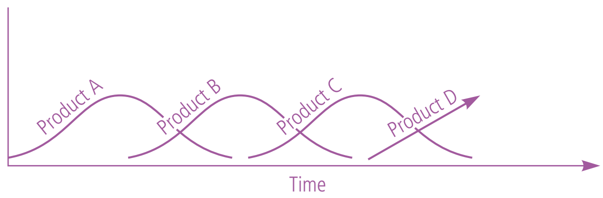
A Innovators (2.5 per cent of total)
B Early adopters (13.5 per cent of total)
C Early majority (34 per cent of total)

D Late majority (34 per cent of total)
E Laggards (16 per cent of total)

Discovering a typology for innovators and early adopters can help in the promotion of new products.

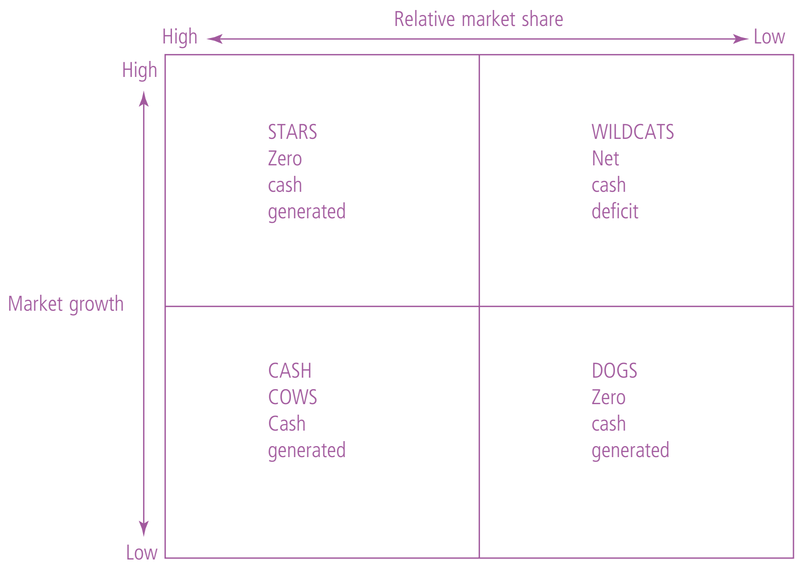
Product portfolio

Ideally, a company should have a portfolio of products whose lifecycles overlap. This guarantees continuity of income and growth potential.



Boston matrix

The product portfolio can be analysed in terms of revenue-producing potential, using this technique.



DPM

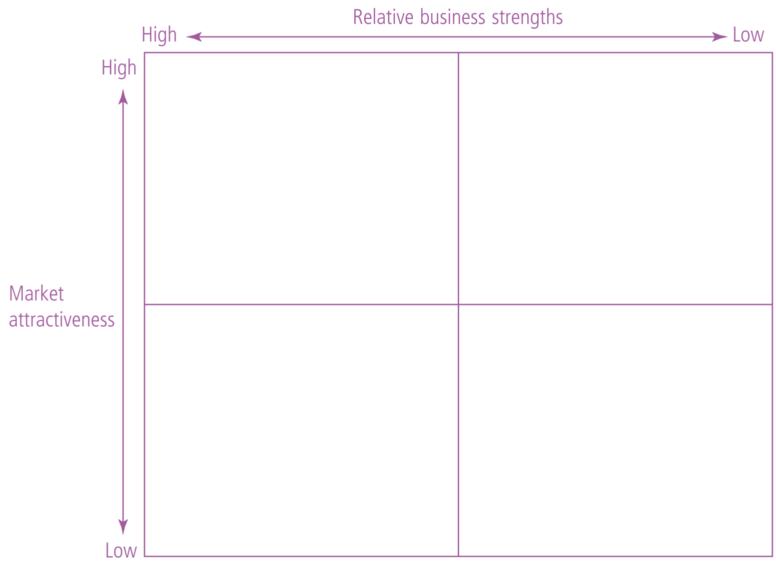
Not all companies possess the data required by the Boston Matrix. Similar results can be obtained using this technique. The axes become as shown on the following figure.

Try Exercises 5.4 and 5.5

Questions raised for the company

1. Q: How useful is a brand name?
   A: Well-known brands have successfully differentiated themselves from competing products by conveying something extra. Such differentiation enables them to command a higher price than unbranded, 'commodity' products.

2. Q: How does market share relate to cash generation, as in the Boston Matrix?
   A: The higher the market share, the higher the output, and the lower the unit costs through economies of scale and the learning curve. Thus a company can command higher margins and generate more revenue.
3. Q: Should 'dogs' always be killed off?
   A: It is a question of timing. It is possible sometimes to squeeze extra earnings from a 'dog'. Sometimes a 'dog' is supportive of another product. Sometimes a 'dog' product can be profitable because it shares in the economies of scale of another product in the range.



EXERCISES

The exercises are designed to help you to look at your product or service range in three different ways:

1. As a 'package' of benefits (Exercise 5.1).
2. From the point of view of their lifecycles (Exercise 5.2).
3. The final exercise in this section invites you to construct and interpret a DPM for your own company (Exercise 5.3).

Exercise 5.1 Benefit package analysis

It has been shown that customers buy products and services for many reasons. Different people look for different types of benefits from the product to satisfy their needs. Here are some typical sources of customer benefits:

1. Good comparative price.
2. Well-known product/service.
3. Good after-sales service.
4. Reputable company image.

5. Low after-sales costs.
6. Prompt delivery.
7. Efficient performance.
8. Well-designed product.
9. Fashionable.
10. Ease of purchase.
11. Good quality.
12. Reliability.
13. Safety factors.

Obviously, the better one's products/services provide benefits to customers and match their needs, the more competitive they are going to be in the marketplace. The following process is designed to help you complete a benefit analysis on your products or services.

By doing this you will discover or confirm which items of your range are the strongest on the market when compared to your competitors'. It should also provide you with insights about where attention might be paid to your products or services, either to improve existing customer benefits or to put emphasis on new ones.

Proceed as follows:

1. Study the customer benefits list above. Are these typical of the reasons why people buy your products or services? If you can think of others that are more pertinent to your particular business, write them down in the spaces provided.
2. Taking into account the market segments with which you do business, look at the customer benefits list and decide which are the three most important benefits demanded by your most important segment(s). Make a note of these.
3. Now identify the next three most important benefits demanded by these customers, and also make a note of these.
4. Finally, tick any other benefits on the list that are relevant to these customers.
5. Repeat this exercise for other important segments.
6. You are now asked to transpose this information on to Worksheet 1 (an example of a completed sheet is provided in Worksheet 2). Proceed as follows:

Step 1 In column 1 list the products or services you supply. No particular order is required.

Step 2 Take the three most important benefits that you selected above and use them as headings for columns 2, 3 and 4 on the worksheet, so that column 2 represents one benefit, column 3 another and column 4 the third.

Step 3 Fill in columns 2, 3 and 4 as follows. Starting with column 2, look at the benefit heading and work down your list of products or services scoring each one on a 1 to 10 point scale: 1 will show that the product barely supplies this particular benefit to the customer and compares badly with competitors' performance, whereas a 10 score would demonstrate very high meeting of customer needs, superior to

(*Continued*)

that provided by competitors. For example, if the benefit heading was 'Delivery' and, working down the list of products, the first product had a good delivery record, as good as any in the trade, then it could be allocated 9 or 10 points. If the next product on the list had a very patchy record on meeting delivery, and we knew several competitors were better, then we might only allocate 4 or 5 points, and so on. Follow the same procedure for columns 3 and 4. Note that the 1–10 scoring scale is only used on columns 2, 3 and 4 because these represent the major benefits to your customers and thus need to be weighted accordingly.

Step 4 Now take the second three most important benefits and use these as headings for columns 5, 6 and 7.

Step 5 As before rate each of your products or services against each heading, in comparison with competitor performance, but this time only use a scoring scale of 1–6, where again 1 point represents low provision of the benefit and 6 high. The 1–6 scoring scale is in recognition of the reduced importance these benefits have for customers.

Step 6 Finally, take any other benefits you ticked above and use these as headings for column 8 and onwards as far as required.

Step 7 Again work through your list of products or services comparing them against how well they meet the benefit heading of each column, but this time only use a 1–3 points scoring scale. The reduced scale reflects the reduced level of importance of the customer benefits in this last group.

Step 8 Aggregate the scores you have allocated to each product or service and enter the result in the Total column.

Step 9 The product or service with the highest points score is clearly that which provides most benefits to your customers and competes favourably with the competition. Therefore, allocate this product with the ranking of 1 in the Ranking column. Find the next highest total score and mark that 2, and so on. You might find some total scores so close to each other that it would be helpful to rank your products or services by groups of similar scores, rather than individually, e.g. have a first 'division', second 'division', etc. of product groupings.

Step 10 On either Worksheet 1 or a separate sheet of paper, make notes about any relevant points. For example, should some scores be qualified because of recent design improvements, are some products under threat from new competition, does the ranking reflect particular strengths or weaknesses, are there any surprises?

What are the main lessons to be learned from this type of benefit analysis for your company's products/services? What steps can you recommend to improve future product development? Use the space in 'Personal notes' to record your thoughts.

Note: This analysis shows that 'containers' provide the best 'benefits package' when compared to the rest of the product range. In contrast, 'water butts' provide least benefits, falling down on price, delivery and design. This analysis enables a company to see where it needs to work at the 'product surround' to become more effective.

Worksheet 1 Benefit package analysis (Exercise 5.1)

	Major benefits			Medium benefits			Lesser benefits														
	Low High score 1		10	*Low High score* 1		6	*Low High score*			1				3							
Col. nos. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18				
Customer benefits / *Prods or services*																		*Total*	*Ranking*	*Notes, observations, qualifying comments, strengths, etc.*

Worksheet 2 Benefit package analysis (Exercise 5.1)

	Major benefits			Medium benefits			Lesser benefits													
	Low High score 1		10	*Low High score* 1		6	*Low High score*			1				3						
Col. nos. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18			
Customer benefits / *Prods or services*	*Price*	*Quality*	*Delivery*	*Design*	*Safety*	*Reliability*	*Our image*	*After-sales service*	*Packaging*	*Comprehensive range*								*Total*	*Ranking*	*Notes, observations, qualifying comments, strengths, etc.*
Water butts	5	8	5	3	6	6	1	1	2	2								39	4	Check costing and deliveries
Containers	8	8	7	5	6	3	3	2	3	2								47	1	Again business difficult to improve except on delivery and reliability
Toy (compts)	3	8	9	5	6	5	1	1	2	2								42	2	Doesn't always mix with other work
Cones for road works, etc.	7	8	6	4	6	5	1	1	3	1								42	2	Work at price and delivery. Also need to improve designs and range

(Continued)

Personal notes

Exercise 5.2 Lifecycle analysis

It is universally accepted that all products or services go through a lifecycle of five stages – introduction, growth, maturity, saturation and, ultimately, decline.

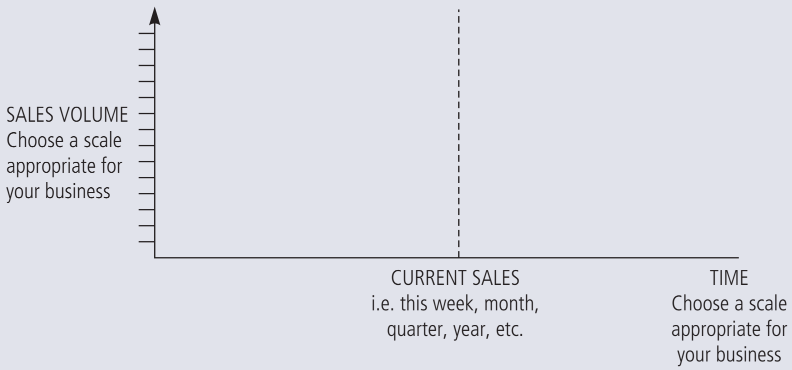
Depending upon the nature of the particular product and its market, the lifecycle can be of short or long duration. Similarly, different products will have different levels of sales. Nevertheless, allowing for these differences in 'width' and 'height', product lifecycle curves all have a remarkably similar and consistent shape. It is because of consistency of the lifecycle curve that this aspect of the product audit becomes such a powerful analytical tool.

The following exercise is designed to help you construct a lifecycle analysis for your company's products or services. By doing this it will help to focus on information that will be used in setting marketing objectives and strategies.

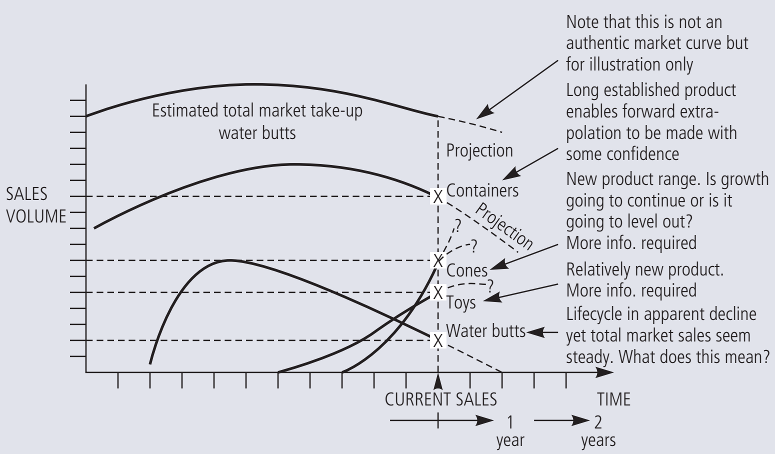
1. Using Worksheet 1, invent a suitable scale for the sales volume axis, i.e. one that will encompass the sales peaks you have had or are likely to experience in your business.
2. At the position marked 'Current sales', record the levels of sales volume for your products or services. You will have to select the timescale you use. If your products are short-lived, perhaps you might have to calculate sales figures in terms of days or weeks. For longer-lived products, perhaps annual sales figures will be more appropriate.
3. Taking each product in turn, plot a lifecycle curve based upon the historical data at your disposal, e.g. if in 2 above you decided that a monthly sales analysis would be necessary to capture the movement on the lifecycle curves, then check back through your sales records and plot the sales volume for each product at monthly intervals.
4. From the lifecycle curves you have drawn, extend those into the future where extrapolation looks feasible, i.e. where a distinct pattern exists. You should finish up with a worksheet looking something like Worksheet 2.
5. Make notes about your key findings from this exercise in the space below.

6. So far you have only looked at your products in isolation. Now on a separate piece of paper (or on the same worksheet if it doesn't cause too much confusion), compare each lifecycle pattern of your major products or services with the total market lifecycle for each one. Do your product patterns mirror the market lifecycle? Are your sales falling, while the total market sales are steady or increasing? Is the reverse happening? Many outcomes will be possible, but whatever they are, you are asked to explain them and to write in the space below what these comparisons between the total market and your sales tell you about your product/service range and its future prospects. If you find it difficult to establish total market lifecycles then refer to the 'Guide to market maturity', later in this exercise.
7. Finally, and to demonstrate that this examination of product lifecycles is not just an intellectual exercise, prepare a short presentation for one of your senior colleagues, or, better still, your boss, following the instructions given on the 'Special project brief', at the end of this exercise.

Worksheet 1 Lifecycle analysis (Exercise 5.2)



Worksheet 2 Lifecycle analysis (Exercise 5.2) – a plastics processing company



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Personal notes

Guide to market maturity

The following checklist is used by one major company to help it determine where its markets are on the lifecycle (repeated earlier from Table 5.2).

Factor	Maturity stage			
	Embryonic	**Growth**	**Mature**	**Declining**
1. Growth rate	Normally much greater than GNP (on small base)	Sustained growth above GNP. New customers. New suppliers. Rate decelerates towards end of stage	Approximately equals GNP	Declining demand. Market shrinks as users' needs change
2. Predictability of growth potential	Hard to define accurately. Small portion of demand being satisfied. Market forecasts differ widely	Greater percentage of demand is met and upper limits of demand becoming clearer. Discontinuties such as price reductions based on economies of scale may occur	Potential well defined. Competition specialized to satisfy needs of specific segments	Known and limited
3. Product line proliferation	Specialized lines to meet needs of early customers	Rapid expansion	Proliferation slows or ceases	Lines narrow as unprofitable products dropped
4. Number of competitors	Unpredictable	Reaches maximum. New entrants attracted by growth and high margins. Some consolidation begins toward end of stage	Entrenched positions established. Further shakeout of marginal competitors	New entrants unlikely. Competitors continue to decline

5. Market share distribution	Unstable. Shares react unpredictably to entrepre-neurial insights and timing	Increasing stability. Typically, a few competitors emerging as strong	Stable, with a few companies often controlling much of the industry	Highly concentrated or fragmented as industry segments and/or is localized
6. Customer stability	Trial usage with little customer loyalty	Some loyalty. Repeat usage with many seeking alterna-tive suppliers	Well-developed buy-ing patterns, with customer loyalty. Competitors understand purchase dynamics and it is difficult for a new supplier to win over accounts	Extremely stable. Suppliers dwindle and customers less motivated to seek alternatives
7. Ease of entry	Normally easy. No one dominates. Customers' expectations uncertain. If barriers exist they are usually technology, capital or fear of the unknown	More difficult. Market franchises and/or economies of scale may exist, yet new business is still available without directly confront-ing competition	Difficult. Market leaders established. New business must be 'won' from others	Little or no incentive to enter
8. Technology	Plays an important role in matching product char-acteristics to market needs. Frequent prod-uct changes	Product technology vital early, while process technology more important later in this stage	Process and mate-rial substitution focus. Product requirements well known and relatively undemanding. May be a thrust to renew the industry via new technology	Technological content is known, stable and accessible

Special project brief

Product lifecycles

Take any product you know well and prepare a short presentation (say ten minutes) which covers the following areas/questions:

1. Brief product description – your definition of the market it serves.
2. Your estimates of the product's current point in the lifecycle curve.
3. Your reasons for believing it is at this point.
4. Your estimate of the length and shape of this lifecycle.
5. Your reasons for this estimate.
6. Your predictions of the prospects for this product over the next three years.
7. Your reasons for these predictions.

(*Continued*)

Exercise 5.3 Applying the DPM to your own organization

Follow these instructions:

1. Choose a product (or group of products) that is bought by many different markets (or segments).
2. List no more than eight of these markets (or segments).
3. Develop a set of criteria for judging:

   Market attractiveness
   Your strength in these markets.
4. Develop a scoring and weighting system for these criteria.
5. Evaluate the markets you have chosen, using these criteria.
6. Locate the point of each of these markets on a four-box DPM.
7. Using an approximate scale of your own choice, make the circle diameter proportional to your current turnover.
8. Comment on the current portfolio.
9. Indicate approximately the size and position of each circle in three years' time.
10. Outline (briefly) the strategies you would pursue to achieve these objectives.

Exercise 5.4 Simulation practice

Use the DPM in your game (which can be found under the Tools button). If you do not have time to score all the segments, choose a few that you think are critical to your success and worthy of extra *investment*. Score those segments first. Then choose a few segments that you think are good candidates for *divestment* and score those. These may be segments where you anticipate low returns for the foreseeable future. Once you have scored them all, you can check that your thinking was right and then change your funding accordingly.

There is further help on using the DPM in the game both in the on-screen help feature and also in the Support Documents.

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