

business strategy and performance models

relevant to ACCA Qualification Papers P3 and P5

model accountants

FIGURE 1: PORTER'S FIVE FORCES MODEL

Adapted from M E Porter, *Competitive Strategy*, Free Press, 1980



■ This article provides a brief overview of three models which can assist accountants, not only in the determination of business strategy, but also in the appraisal of business performance.

PORTER'S FIVE FORCES MODEL

The use of Porter's five forces model (see **Figure 1**) will help identify the sources of competition in an industry or sector.

The model has similarities with other tools for environmental audit, such as political, economic, social, and technological (PEST) analysis, but should be used at the level of the strategic business unit, rather than the organisation as a whole. A strategic business unit (SBU) is a part of an organisation for which there is a distinct external market for goods or services. SBUs are diverse in their operations and markets so the impact of competitive forces may be different for each one.

Five forces analysis focuses on five key areas: the threat of entry, the power of buyers, the power of suppliers, the threat of substitutes, and competitive rivalry.

THE THREAT OF ENTRY

This depends on the extent to which there are barriers to entry. These barriers must be overcome by new entrants if they are to compete successfully. Johnson et al (2005), suggest that the existence of such barriers should be viewed as delaying entry and not permanently stopping potential entrants. Typical barriers are detailed below.

Economies of scale

For example, the benefits associated with volume manufacturing by organisations operating in the automobile and chemical industries. Lower unit costs result from increased output, thereby placing potential entrants at a considerable cost disadvantage unless they can immediately establish operations on a scale that will enable them to derive similar economies.

The capital requirement of entry

These vary according to technology and scale. Certain industries, especially those which are capital intensive and/or require very large amounts of research and development expenditure, will deter all but the largest of new companies from entering the market.

Access to supply or distribution channels

In many industries, manufacturers enjoy control over supply and/or distribution channels via direct ownership (vertical integration) or, quite simply, supplier or customer loyalty. Potential market entrants may be frustrated by not being able to get their products accepted by those individuals who decide which products gain shelf or floor space in retailing outlets. Retail space is always at a premium and untried products from a new supplier constitute an additional risk for the retailer.

Supplier and customer loyalty

A potential entrant will find it difficult to gain entry to an industry where there are one or more established operators with a comprehensive knowledge of the industry, and with close links with key suppliers and customers.

Cost disadvantages independent of scale

Well-established companies may possess cost advantages which are not available to potential entrants irrespective of their size and cost structure. Critical factors include proprietary product technology, personal contacts, favourable business locations, learning curve effects, favourable access to sources of raw materials, and government subsidies.

Expected retaliation

In some circumstances, a potential entrant may expect a high level of retaliation from an existing firm, designed to prevent entry – or make the costs of entry prohibitive.

Government regulation

This may prevent companies from entering into direct competition with nationalised industries. In other scenarios, the existence of patents and copyrights afford some degree of protection against new entrants.

Differentiation

Differentiated products and services have a higher perceived value than those offered by competitors. Products may be differentiated in terms of price, quality, brand image, functionality, exclusivity, and so on. However, differentiation may be eroded if competitors can imitate the product or service being offered and/or reduce customer loyalty.

THE POWER OF BUYERS

The power of the buyer will be high where:

- there are a few, large players in a market. For example, large supermarket chains can apply a great deal of price pressure on their potential suppliers. This is especially the case where there are a large number of undifferentiated, small suppliers, such as small farming businesses supplying fresh produce to large supermarket chains
- the cost of switching between suppliers is low, for example from one haulage contractor to another
- the buyer's product is not significantly affected by the quality of the supplier's product. For example, a manufacturer of foil and cling film will not be affected too greatly by the quality of the spiral-wound paper tubes on which their products are wrapped
- buyers earn low profits
- buyers have the potential for backward integration, for example where the buyer might purchase the supplier and/or set up in business and compete with the supplier. This is a strategic option which might be selected by a buyer in circumstances where favourable prices and quality levels cannot be obtained
- buyers are well informed. For example, having full information regarding availability of supplies.

THE POWER OF SUPPLIERS

The power of the seller will be high where (and this tends to be a reversal of the power of buyers):

- there are a large number of customers, reducing their reliance upon any single customer
- the switching costs are high. For example, switching from one software supplier to another could prove extremely costly
- the brand is powerful (BMW, McDonalds, Microsoft). Where the supplier's brand is powerful then a retailer might not be able to operate a particular brand in its range of products
- there is a possibility of the supplier integrating forward, such as a brewery buying restaurants
- customers are fragmented so that they have little bargaining power, such as the customers of a petrol station situated in a remote location.

THE THREAT OF SUBSTITUTES

The threat of substitutes is higher where:

- there is product-for-product substitution, eg for fax and postal services
- there is substitution of need. For example, better quality domestic appliances reduce the need for maintenance and repair services. The information technology revolution has made a significant impact in this particular area as it has greatly diminished the need for providers of printing and secretarial services
- there is generic substitution competing for disposable income, such as the competition between carpet and flooring manufacturers.

COMPETITIVE RIVALRY

Competitive rivalry is likely to be high where:

- there are a number of equally balanced competitors of a similar size. Competition is likely to intensify as one competitor strives to attain dominance over another
- the rate of market growth is slow. The concept of the life cycle suggests that in mature markets, market share has to be achieved at the expense of competitors
- there is a lack of differentiation between competitor offerings because, in such situations, there is little disincentive to switch from one supplier to another
- the industry has high fixed costs, perhaps as a result of capital intensity, which may precipitate price wars and hence low margins. Where capacity can only be increased in large increments, requiring substantial investment, then the competitor who takes up this option is likely to create short-term excess capacity and increased competition
- there are high exit barriers. This can lead to excess capacity and, consequently, increased competition from those firms effectively 'locked in' to a particular marketplace.

In summary, the application of Porter's five forces model will increase management understanding of an industrial environment which they may want to enter.

EXAMPLE 1

Kleen-up plc, which provides factory cleaning services, is considering a strategic decision to set up industrial launderettes in order to enter the market for cleaning industrial work-wear in the country of Eajland. Map the following eight points onto the five forces model:

- 1 A government grant, equal to 95% of the start-up costs, will be paid to any organisation setting up an industrial launderette.
- 2 Disposable work-wear is available on a nationwide basis from a distributor of imported products.
- 3 A large number of businesses spend large amounts of money on cleaning employees' work-wear each week.
- 4 There are very few high quality launderettes capable of cleaning industrial work-wear to a satisfactory standard.
- 5 Health and Safety legislation in Eajland encourages the use of launderettes by businesses.

- 6 Other launderettes within the community regularly offer free cleaning, or high discounts on the cleaning of clothing items.
- 7 The number of industrial firms setting up in Eajland is increasing by 10% per annum.
- 8 The market in the cleaning of industrial work-wear in Eajland is relatively new, and is projected to grow rapidly.

Answer

- 1 A government grant, equal to 95% of the start-up costs, will be paid to any organisation setting up an industrial launderette.
threat of entry – low barriers to entry
- 2 Disposable work-wear is available on a nationwide basis from a distributor of imported products.
product-for-product substitution
- 3 A large number of businesses spend large amounts of money on cleaning employees' work-wear each week.
high bargaining power of buyers
- 4 There are very few high quality industrial launderettes capable of cleaning industrial work-wear to a satisfactory standard.
high bargaining power of suppliers
- 5 Health and Safety legislation in Eajland encourages the use of industrial launderettes by businesses.
threat of entry reduced by legislation
- 6 Other launderettes within the community regularly offer free cleaning, or high discounts on the cleaning of clothing items.
threat of entry – differentiation
- 7 The number of industrial firms setting up in Eajland is increasing by 10% per annum.
bargaining power of buyers
- 8 The market in the cleaning of industrial work-wear is relatively new, and is projected to grow rapidly.
competitive rivalry

THE BOSTON CONSULTING GROUP MATRIX

There is a fundamental need for management to evaluate existing products and services in terms of their market development potential, and their potential to generate profit. The Boston Consulting Group matrix (on page 45), which incorporates the concept of the product life cycle (PLC), is a useful tool which helps management teams to assess existing and developing products and services in terms of their market potential. More importantly, the model can also be used to assess the strategic position of SBUs, and in this respect it is particularly useful to those organisations which operate in a number of different markets.

The matrix offers an approach to product portfolio planning. It has two controlling aspects, namely relative market share (meaning relative to the competition) and market growth. Management must consider each product or service marketed, and then position it on the matrix. This should be done for every product manufactured or service provided, and management should then plot the position of competitors' products and services on the matrix in order to determine relative market share.

	High market share	Low market share
Growing market	Star	Problem Child
Mature market	Cash cow	Dog

Stars

Stars are products which have a good market share in a strong and growing market. As a product moves into this category it is commonly known as a 'rising star'. While a market is strong and still growing, competition is not yet fully established. Since demand is strong, and market saturation and over-supply is not an issue, the pricing of such products is relatively unhindered, and therefore these products generate very good margins. At the same time, manufacturing overheads are minimised due to high volumes and good economies of scale. These are great products, and worthy of continuing investment for as long as they have the potential to achieve good rates of growth. In circumstances where this potential no longer exists, these products are likely to fall vertically in the matrix into the 'cash cow' quadrant ('fallen stars'), and their cash characteristics will change. It is therefore vital that a company has 'rising stars' developing from its 'problem children' in order to fill the void left by the fallen stars.

Problem children

'Problem children' have a relatively low market share in a high-growth market, often due to the fact that they are new products, or that they are yet to receive recognition by prospective purchasers. In order to realise the full potential of problem children, management needs to develop new business prudently, and apply sound project management principles if it is to avoid costly disasters. Gross profit margins are likely to be high, but overheads are also high, covering the costs of research, development, advertising, market education, and low economies of scale. As a result, the development of problem children can be loss-making until the product moves into the rising star category, which is by no means assured. This is evidenced by the fact that many problem children products remain as such, while others become tomorrow's 'dogs'.

Cash cows

A cash cow has a relatively high market share in a low growth market, and should generate significant cash flows. This somewhat crude metaphor is based on the idea of 'milking' the returns from a previous investment which established good distribution and market share for the product. Activities to support products in this quadrant should be aimed

at maintaining and protecting their existing position, together with good cost management, rather than aimed at growth. This is because there is little likelihood of additional growth being achieved.

Dogs

A dog has a relatively low market share in a low growth market, might well be loss making, and therefore have negative cash flow. A common belief is that there is no point in developing products or services in this quadrant. Many organisations discontinue 'dogs', but businesses that have been denied adequate funding for development may find themselves with a high proportion of their products or services in this quadrant.

Limitations of the Boston Consulting Group matrix

The popularity of the matrix has diminished as more comprehensive models have been developed. Management should exercise a degree of caution when using the matrix. Some of its limitations are detailed below.

- The rate of market growth is just one factor in an assessment of industry attractiveness, and relative market share is just one factor in the assessment of competitive advantage. The matrix ignores many other factors which contribute towards these two important determinants of profitability.
- There can be practical difficulties in determining what exactly 'high' and 'low' (growth and share) can mean in a particular situation.
- The focus upon high market growth can lead to the profit potential of declining markets being ignored.
- The matrix assumes that each SBU is independent. This is not always the case, as organisations often take advantage of potential synergies.
- The use of the matrix is best suited to SBUs as opposed to products, or to broad markets (which might comprise many market segments).
- The position of dogs is frequently misunderstood, as many dogs play a vital role in helping SBUs achieve competitive advantage. For example, dogs may be required to complete a product range and provide a credible presence in the market. Dogs may also be retained in order to reduce the threat from competitors.

Notwithstanding these limitations, the Boston Consulting Group matrix provides a useful starting point in the assessment of the performance of products and services and, more importantly, of SBUs.

EXAMPLE 2

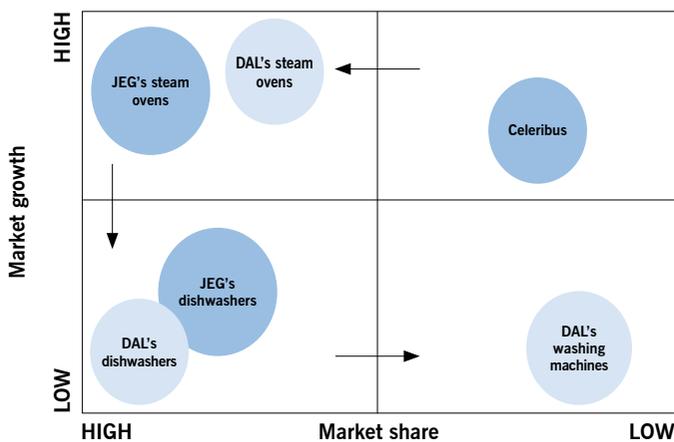
Domestic Appliances Ltd (DAL) commenced trading in 1955, when it started to manufacture semi-automatic washing machines. From 1965, DAL expanded its product portfolio. Core products now include fully automatic washing machines, dishwashers, and cookers. The market in domestic appliances is extremely competitive. DAL's principal competitor is the Jarvis Electrical Group (JEG), which has achieved the position of market leader in many similar areas of the market. Other information is as follows:

- 1 JEG is the market leader in dishwashers, having 48% of the market. DAL has only 30% of the market. Environmentalist pressure groups, concerned about water consumption, have caused a significant diminution in the size of the market for dishwashers. However, the market remains profitable and this is expected to continue.
- 2 DAL continues to manufacture washing machines using a process which uses new materials for each unit. Legislation now requires that 35% of all materials used comprise recycled materials, which means that DAL will no longer be able to sell its washing machines in certain markets.
- 3 Both DAL and JEG have invested very heavily in the manufacture of steam ovens. DAL has 12% of the new market, while JEG has an 18% share of the new market.
- 4 DAL has recently produced a new washing machine, the Celeribus, which washes three times faster than any other machine on the market. Market awareness of this machine is growing. The development costs of the Celeribus were significant. At present the company is making heavy losses on production of this product.

Analyse the product portfolio of DAL using the Boston Consulting Group matrix.

Answer: Domestic Appliances Ltd

THE BOSTON CONSULTING GROUP MATRIX



The steam oven appears to be a star at the moment since it has a relatively large market share in what is a high growth market. The Celeribus is a problem child as it has generated losses to date, and has a relatively low market share in a high-growth market. The challenge facing the management of DAL is to convert the product into a star. The dishwashers are cash cows as even though the rate of market growth is low, DAL has a relatively high market share. Cash generated can be used

not only to further develop stars but also problem children where it is deemed appropriate. The washing machines will soon become dogs as they are no longer able to be sold in certain markets.

ANSOFF'S PRODUCT-MARKET MATRIX

In an ever-changing business environment it is vital that the management of any organisation can successfully identify directions for strategic development. This requires that management has a thorough understanding of the environment in which its organisation exists. In considering the options available for the strategic development of its business, management could make use of Ansoff's product-market matrix. The matrix helps management understand and assess marketing or business development strategy. Any business, or part of a business can choose which strategy to employ, or which mix of strategic options to use. This is a relatively simple way of looking at strategic development options.

Ansoff's matrix is one of the best-known frameworks used in the determination of growth strategies. The matrix is commonly used by organisations which have growth as a main objective. Ansoff's matrix offers strategic choices in order to achieve this objective, with four main categories to choose from.

	Existing products	New products
Existing markets	Market penetration	Product development
New markets	Market development	Diversification

Market penetration

In pursuing a strategy based on market penetration, management is attempting to sell greater volumes of existing products into existing markets. This is a low-risk strategy which is most unlikely to lead to high rates of growth. This may involve increasing revenue by, for example, promoting the product or repositioning the brand. However, the product is not altered in any way and no attempt is made to find any new customers. The emphasis is solely upon 'selling more of the same products to the same customers'.

Market development

In pursuing a strategy based on market development, management is attempting to sell the existing product range in a new market. This means that the product remains the same but it is marketed to a new audience.

Exporting the product, or marketing it in a new region, is an example of a market development strategy.

Product development

In pursuing a strategy based on product development, management is attempting to sell a new product to existing customers. Efforts are focused on the development and innovation of new product offerings with which to replace existing ones. New products are then marketed to existing customers. This often occurs within the automobile market where existing models are updated or replaced and then marketed to existing customers.

Diversification

In pursuing a strategy based on diversification, management is attempting to sell completely new products to new customers. There are two types of diversification – related and unrelated diversification. Related diversification means that management remains in a market or industry with which it is familiar, for example a chocolate manufacturer diversifying into ice cream (the food industry). Unrelated diversification occurs where the investing company has neither previous industry nor market experience – where the chocolate manufacturer invests in the clothing industry, for example.

The model, like many other models, has little predictive capability. However, in using a model which focuses on alternative strategic options, management will be able to assess the level of risk attached to each potential strategic option. For example, the adoption of a strategy of market penetration entails the lowest risk, whereas a strategy based upon diversification has the highest risk especially when the entry strategy is not based upon the core competences of the organisation.

EXAMPLE 3

FB Gymsnasiums Ltd was founded in 2000 by Fred Benson, who previously worked as an engineer in a business which manufactured bespoke machinery. Fred is a keep-fit enthusiast who has, in the past, spent much of his spare time at home exercising with 10 separate exercise machines. During recent months he had become increasingly frustrated at the lack of space available in which to house his exercise machines. Fred designed and built a single machine, unique in design, which could be quickly adapted to function as any of the 10 separate exercise machines he used. He named the machine 'The Space-trimmer'.

Word soon spread that Fred had developed a unique machine which could be used in what was becoming an increasingly popular activity, namely home exercise. Fred built machines for friends and family and was soon asked to build machines for neighbours. Fred realised the potential of The Space-trimmer, gave up his job as an engineer, and set up his own business to make and sell the machine. As home exercise grew in popularity, demand for The Space-trimmer also grew and in 2001, FB Gymsnasiums Ltd sold 8,000 machines. Since that time, however, sales volumes have fallen during each subsequent year, and are forecasted at only 3,000 units for 2006. Management is well aware that strategies for growth are urgently required. Ansoff's product-market matrix may be used to derive the following options for The Space-trimmer.

	Existing products	New products
Existing markets	<ul style="list-style-type: none"> Relaunch the machine Discount the machine Promote the machine 	<ul style="list-style-type: none"> Develop a new range of machines Manufacture machines for specific exercises, eg running
New markets	<ul style="list-style-type: none"> Export the machine Market the machine via the Internet 	<ul style="list-style-type: none"> Manufacture fitness and physiotherapy equipment for hospitals Manufacture customised wheelchairs

As you can see there are many strategic options facing FB Gymsnasiums Ltd, which now must decide on which strategy or strategies should actually be implemented. This will involve a consideration of a number of factors including the level of competition, the available resources, and management's intuitive 'feel' for the business. ■

REFERENCES

- Johnson G, Scholes K, and Whittington R, *Exploring Corporate Strategy*, FT Prentice Hall, seventh edition, 2005
- Porter M E, *Competitive Strategy*, Free Press, 1980

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