

Rethinking and reinventing Michael Porter's five forces model

Tony Grundy

Cranfield School of Management, UK

- *Michael Porter's five competitive forces model has been a most influential model within business schools but has perhaps had less appeal to the practising manager outside of an MBA and certain short business school courses. In this article it is argued that whilst there are a number of reasons why the model has not achieved greater currency, most importantly it can be developed a lot further.*
- *The paper looks at a number of important opportunities for using Porter's model in an even more practical way, including: mapping the competitive forces, which can vary significantly over market and competitive terrain and within the same industry; understanding its dynamics; prioritizing the forces; doing macro analysis of the sub-drivers of each of the five forces; exploring key interdependencies, both between and within each force.*

Copyright © 2006 John Wiley & Sons, Ltd.

Introduction

When Michael Porter conceived the five competitive forces model, it propelled strategic management to the very heart of the management agenda. The framework became a centre-piece of texts on business strategy and strategic management, and essential examination material on MBA and similar courses globally. But what has become of his original five competitive forces? It would appear to be the case that not a great deal has occurred to develop this thinking since the early 1980s (except, perhaps, for Hamel and Prahalad, 1994). Porter appears to have been more inter-

ested in taking his concepts to an even more macro level, particularly to the competitive advantage of countries, rather than to micro economics. Porter's model, whilst it has done extremely well in occupying textbook space, does not seem to have captured the imagination of other theorists. In contrast with the resource-based theory of competitive advantage, which has spawned a considerable literature, it seems to have become, as it were, frozen in time.

*The five competitive forces
model propelled strategic
management to the
very heart of the
management agenda*

*Correspondence to: Tony Grundy, Cranfield School of Management, Cranfield University, Cranfield, Bedford MK43 0AL, UK.
E-mail: a.grundy@cranfield.ac.uk

Today, and well over 20 years since Porter's original, major publication, there is still relatively little real awareness amongst mainstream managers, both at senior and middle levels of Porter's original concept. If one were to take a sample based on attendees at strategic management courses at a particular business school, for example, it could be estimated that between 15% and 20% were familiar with these early Porter concepts and perhaps only 5% had actively used this at an explicit, analytical level. Interestingly, if this is compared with the awareness level of basic SWOT analysis, a crude estimate is of 90–95% awareness and at least 50% active use. Whilst Porter was propelled to fame on the back of this and other intellectual advances, it seems an odd, if not disappointing, phenomenon that this original breakthrough has had somewhat little currency amongst practising managers. Why is this the case? Some possible reasons for this are that:

- Porter's framework is relatively abstract and highly analytical.
- Whilst Porter's original framework explained the criteria for assessing each of the five competitive forces, he did so in the language of micro-economic theory, rather than in terms of its practicalities.
- His model was highly prescriptive and somewhat rigid, leaving managers, and indeed teachers in business schools, generally inhibited from being playful, flexible and innovative in how they applied this powerful framework.
- Whilst the framework does help to simplify micro economics, its visual structure is relatively difficult to assimilate and its logic is somewhat implicit. Managers tend to like analytical concepts spelt out in very simple terms, otherwise they find it difficult to adapt to their default, fluid strategic management style [sometimes characterized as 'logical incrementalism' (Quinn, 1980) or as 'emergent strategy' (Mintzberg, 1994)].

In this paper, it is argued that Porter's five competitive forces model is a vitally important

concept and one that certainly merits the attention of all practising senior managers. It is also argued that to operationalize it more effectively requires significant further development. This is demonstrated with a practical example taken from the health club market, which has grown significantly in many countries over the past 10 years, but has been heavily impacted by shifts in competitive pressure. However, it is first necessary to examine how Porter's model could be developed further by studying the existing literature to see to what extent it has been developed, if at all.

The literature — has it moved on?

Academics do not seem to have been minded to explore and expand Porter's framework, with very few attempts to develop Porter's model having been made. Whilst there are references to Porter's model in many research papers, the principal contribution of this paper is to expand Porter's model into a far richer system of analysis, which managers can then operationalize and subsequent changes in their practices can then be studied in future research.

A critique of the model: value and limitations

Porter's five competitive forces are depicted in **Figure 1**. Porter's starting point was that he wanted to account for long-term variances in the economic returns of one industry versus another. His genius resided in distilling the complex micro-economic literature into five explanatory or causal variables to explain superior and inferior performance, through:

1. The bargaining power of the buyers.
2. Entry barriers.
3. Rivalry.
4. Substitutes.
5. The bargaining power of the suppliers.

The value of Porter's model was thus that it appeared to offer the following attributes:

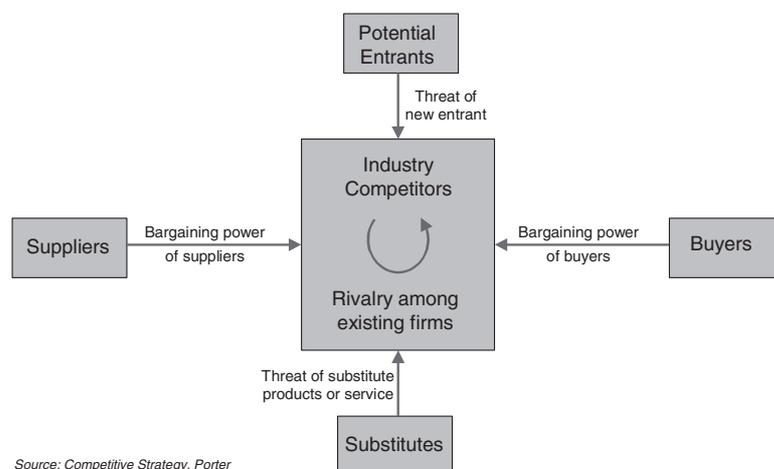


Figure 1. These forces determine industry profitability.

- It simplified micro-economic theory into just five major influences.
- It effectively and before its time applied 'systems thinking'.
- It showed how 'competitive rivalry' — the central box of the model — is very much a function of the other four forces.
- It helped to predict the long-run rate of returns in a particular industry.
- It went beyond a more simplistic focus on relative market growth rates in determining industry attractiveness.
- It helped combine input-output analysis of a specific industry with industry boundaries via entry barriers and substitutes.
- It emphasized the importance of searching for imperfect markets, which offer more national opportunities for superior returns.
- It emphasized the importance of negotiating power and bargaining arrangements in determining relative market attractiveness.
- It focused managers on the external environment for more than traditional 'SWOT' analysis.
- It oversimplifies industry value chains: for example, invariably 'buyers' may need to be both segmented and also differentiated between channels, intermediate buyers and end consumers.
- It fails to link directly to possible management action: for example, where companies have apparently low influence over any of the five forces, how can they set about dealing with them?
- It tends to encourage the mind-set of an 'industry' as a specific entity with ongoing boundaries. This is perhaps less appropriate now where industry boundaries appear to be far more fluid.
- It appears to be self-contained, thus not being specifically related, for example, to 'PEST' factors, or the dynamics of growth in a particular market.
- It is couched in economic terminology, which may be perceived to be too much jargon from a practising manager's perspective and indeed, it could be argued that it is *over-branded*.

There are, however, several limitations to Porter's framework, such as:

- It tends to over-stress macro analysis, i.e. at the industry level, as opposed to the analysis of more specific product-market segments at a micro level.

Porter's model was thus a valuable and workable concept but one that had some significant practical drawbacks, unless of course the model was developed further. This paper now argues that Porter's concept merely scratches the surface of its full potential.

Perhaps the very success of Porter's original model led to it not being adequately

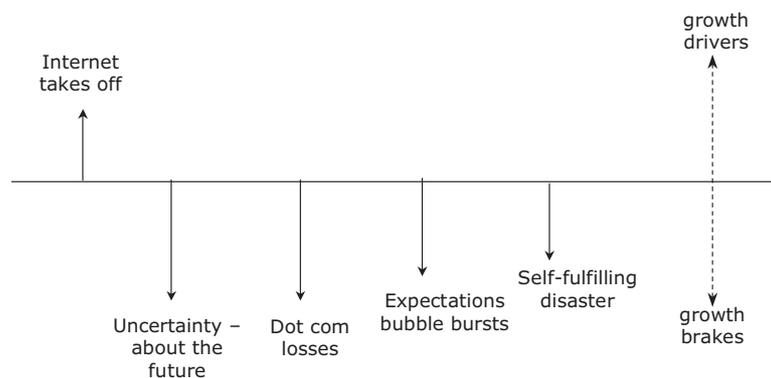


Figure 2. Growth drivers: dot.com market for shares, 2000.

challenged or developed further, and indeed it could be claimed that this process is now well overdue. The five competitive forces are interdependent with other strategic analysis tools, which deal with the external environment and with each other, and this can be developed into a more comprehensive and coherent 'system'. Suggestions for further analysis include:

1. The model can be prioritized within a force field analysis format.
2. The individual forces can be broken down at a micro level.
3. The framework can be transformed into a more dynamic model, both at the industry level and at a more micro, transactional level.
4. The five forces analysis needs to be applied, segment by segment, across the business.

The following subsections seek to develop Porter's model, both to improve its analytical power and to increase its range of applications. This is illustrated in the context of a fast-changing market — the health club industry.

Interdependencies of the model

The influences on the five competitive forces are examined first. Conventional strategy literature highlights the need to think about factors outside the industry. Indeed, PEST (or political, economic, social and technological factors) is possibly the second most widely-

known strategy technique after SWOT analysis. However, there is a profound gap between PEST and SWOT analysis, and this is only partly met by Porter's five forces. A linking technique is that of Grundy's 'growth drivers' (Grundy, 2004).

Figure 2 gives an example of growth driver analysis, helping us to represent the forces that, directly or indirectly, cause or inhibit market growth over a particular time period. Space precludes an in-depth development of this model here, but this will be used in conjunction with the five competitive forces later in the paper in the analysis of the health club industry. However, an important feature to note here is that it is part of a system (see **Figure 3** below).

Figure 3 captures, in an 'onion' model format, the key domains that need to be thought through, within the overall competitive climate, beginning with:

- PEST factors
- growth drivers
- Porter's five competitive forces
- competitive position.

These layers of the onion are highly interdependent, which might be a very useful phenomenon for managers to learn about and to apply. For example, where the PEST factors are generally hospitable, growth is encouraged and the full impact of the five competitive forces may not be felt and may thus be latent. However, where the PEST factors become

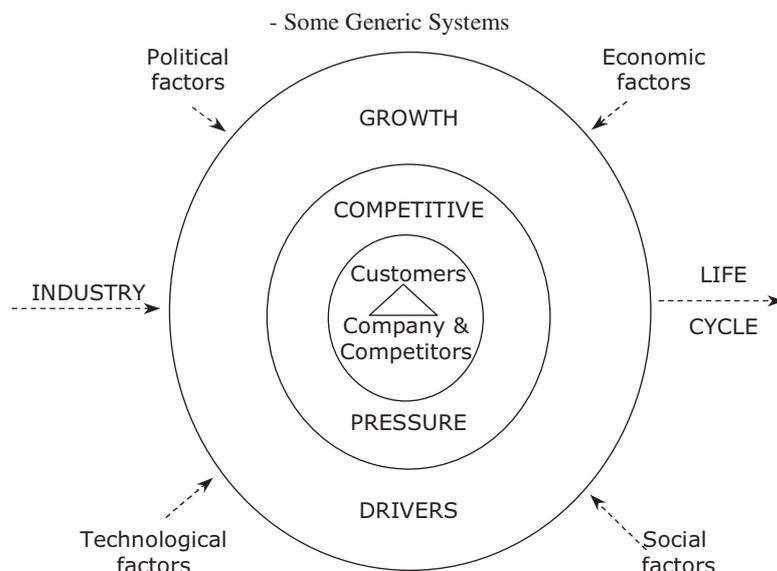


Figure 3. The 'competitive climate'.

inhospitable, this will clearly dampen the growth drivers, and if the growth drivers within a particular market are themselves tightening, for example due to life-cycle effects, then this will put a disproportionate and adverse pressure on Porter's five forces, particularly in the bargaining power of buyers, and also upon rivalry. Furthermore, a high-growth environment may encourage entrants and a low one will discourage these. The result can lead to a collapse in confidence and in prices unless there are lots of exits, for example, in the health club market in the UK in 2002–3, as will be seen later.

Indeed, it may be helpful not to call it 'Porter's five forces model', particularly when introducing it to a team or wider organization. An alternative is to call it 'competitive pressures', which is less jargon-laden but includes the five forces more as a checklist. This relabelling of the model has many attractions, especially as it may seem strange and foreign to everyday management discourse. This may mean that 'early adopters' will feel self-conscious using it with their colleagues. As probably most intellectual contact with the technique is typically via a management text, an MBA or on a public strategy programme rather than on an in-company event, individ-

ual managers may feel reluctant to use it with their more novice peers. Besides these external interdependencies, Porter's five competitive forces are themselves highly interdependent with each other — again something only implicit in Porter's and other texts. **Figure 4** now plots their main interdependencies.

Porter's five competitive forces are therefore both *highly interdependent* with the other subsystems in the external environment, rather than being relatively stand-alone. This figure plots the interdependencies internal to the five competitive forces:

Porter's five competitive forces are highly interdependent

- Between 'bargaining power of buyers' and 'entry barriers': buyers may actively encourage new entrants, thus reducing entry barriers.
- Between 'bargaining power of buyers' and 'substitutes': buyers may actively search for

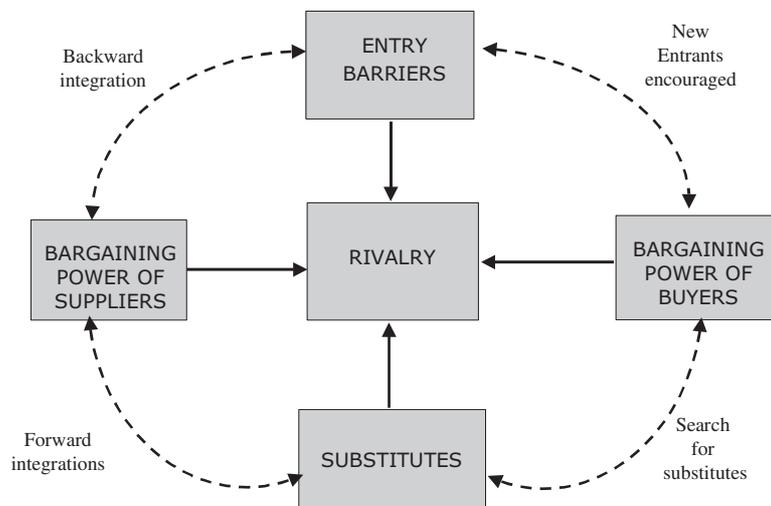


Figure 4. Porter's five competitive forces: key internal interdependencies.

substitutes, thereby encouraging them in a similar fashion.

- Between 'entry barriers' and 'bargaining power of suppliers': new entrants may seek to enter the market by backward integration, either by acquiring suppliers or via alliances.
- Between 'substitutes' and 'bargaining power of suppliers': suppliers may seek to leapfrog over existing industry competitors by marketing and selling substitutes.

The refined model in Figure 4 thus illustrates the extent to which each of Porter's five forces needs to be understood as a wider, interacting system as in 'systems thinking' rather than as a self-contained unit. Whilst Porter's original concept explains some of these system interdependencies, these are underdeveloped and implicit. Indeed, the conventional input-output industry boundaries model, which appears to have been the starting point for the five forces, can be put to one side. Indeed, some new and quite interesting opportunities can be developed.

The five forces do need to be prioritized. Porter's teaching methodology (as per his Harvard Business School video cases) involves ticking each force for whether it is favourable, neutral or unfavourable. The scores are:

√ √ √ Favourable
 √ √ Neutral
 √ Unfavourable

Unfortunately, because of the original composition of the model, it is defined as being mainly about negative strategic characteristics like buyer power, supplier power, rivalry and substitutes — it is quite difficult to apply the above scoring method. For instance, where buyer power is high, the model's user is encouraged to think this is a bad thing, therefore the score is one tick, or plainly unfavourable. In many instances, especially on initial learning, the model's scores can come out incorrectly. Porter's model, as it is currently framed, thus presents an immediate barrier to its assimilation. Furthermore, the above scoring does not take into account the relative importance and weighting of each score. Whilst two-dimensional grids can do this trade-off, the approach is still a little cumbersome. An alternative approach is to borrow from the vector format, originally applied in force field analysis, for enablers and constraints of organizational change. Not only does this model easily separate out whether a force is favourable or unfavourable, but the length of the arrows can also be used to illustrate its incidence or severity and its

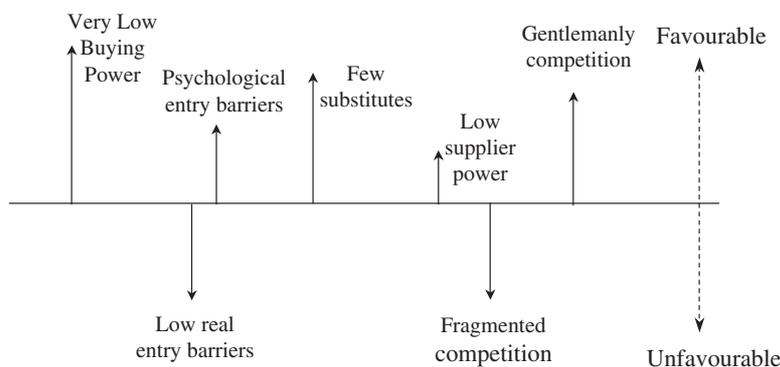


Figure 5. Funerals case: sample outputs (3); five competitive forces.

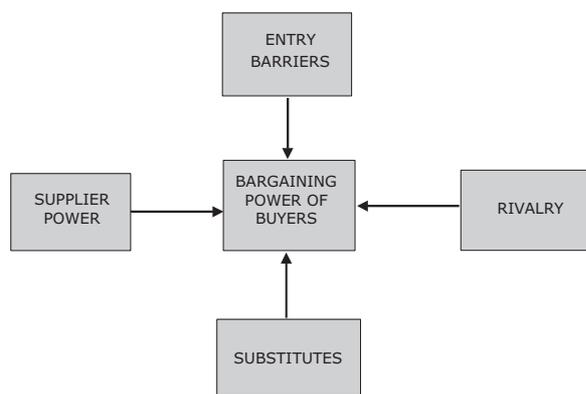


Figure 6. Porter's five competitive forces: bargaining power.

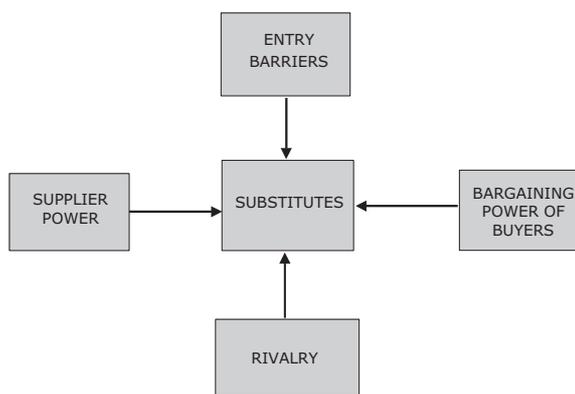


Figure 7. Porter's five competitive forces: substitutes.

importance. Also, where a force can be split into sub-forces (discussed in the next subsection) it can depict these sub-forces easily.

Figure 5 gives an example of this format within the funeral industry. Here the funeral business is depicted as being relatively attractive, particularly through the low bargaining power of buyers and less threat of substitutes. Immediately, using this visual picture, one can challenge the judgements supporting these outputs. Most importantly, its overall visual balance gives immediate interpretation of the industry's overall attractiveness more effectively than by simply adding together the ticks as in Porter's approach. Figure 5 thus enables the user to choose *which* of the five forces is most important, both in isolation and also in terms of its effects on the system. The forces here are depicted as vector lines, whose

length depends on perceived importance and favourability.

How each force relates to the others can now be examined, as explored in Figure 6. The first permutation looks at the bargaining power of the buyers in the centre of the framework.

In Figure 6 the bargaining power of the buyers at the centre is increased by competitive rivalry, the availability of substitutes, low entry barriers and low supplier power. The bargaining power of the buyers is thus not a separate element to consider when using the five forces, but needs thinking through in relation to the others.

In Figure 7, the threat of substitutes (at the centre) is now increased by buyers keen to shop around and by low rivalry amongst existing competitors. Entrants may choose to enter via offering substitutes and once again

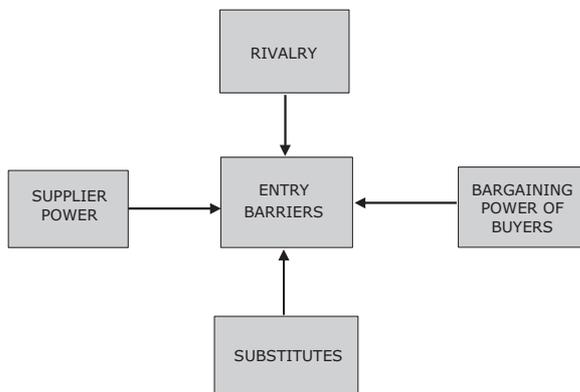


Figure 8. Porter's five competitive forces: entry barriers.

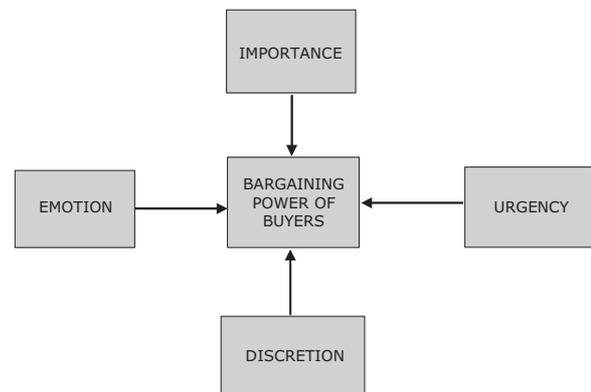


Figure 9. Buyer power: micro forces.

suppliers might seek to leap-frog existing competitors via the route of substitutes.

In **Figure 8**, with entry barriers at the centre, buyers may reduce entry barriers or encourage substitutes by their search for better value. Rivalry will of course discourage entrants and supplier power may do the same. Besides being novel in structure (the five forces model is always presented in the standard Porter format), Figures 6–8 give managers far greater flexibility in their use of the model and hopefully more insights. In short, there are many interdependencies both external and internal to Porter's five competitive forces, and these are unlikely to be taught at the present time to practising managers, let alone used by them. This means that they are likely to struggle to get deep insights about the structure and dynamics of their external environment purely by using the conventional model and its associated analysis.

The next subsection attempts to examine the forces within forces. This is more helpful and easier to remember for managers than the relatively ad-hoc qualitative considerations in the conventional texts.

The micro competitive forces

Whilst Porter does give some narrative help for assessing the five forces, this is not presented in the very powerfully distilled and visual format of his original model. For example, for *competitive rivalry*, Porter asks us to think

about things like the relative concentration of rivals, such as how many are in the marketplace and with what mass, together with the number of different strategic groups of similar competitors. By extracting from Porter's text and by observation of the main considerations which managers actually make, a pilot framework can be developed to move the five forces down to another level. Additionally, Porter merely lists these considerations and managers appear often inclined to consider them as 'additive'. However, the next set of figures show how the effects may be 'additional' amplified by each set of micro forces. Each one of the five forces may therefore have some sub-ingredients, which are worthwhile exploring. The following models are potentially viable frameworks put forward for further experimentation and research to test their resilience and to learn from their application more generally. A particularly interesting application would be to use these to explore how the five forces work at a micro level even for individual business transactions. Figures 9–13 can be used either literally to think through each force visually, or as a convenient way of thinking of their underlying drivers.

Taking the bargaining power of buyers (**Figure 9**) first, this appears to be a function of:

- Importance — in terms of value added.
- Urgency — in terms of lead times to consumption.
- Discretion and emotion.

The choice of these criteria is quite interesting. Importance and urgency we derive from prioritization. Urgency can be measured according to the lead times required to satisfy the need. Discretion is defined as being the extent to which customers have to fulfil a need or not. For example, in most European countries a funeral is perceived to be essential and non-discretionary. Finally, emotion is a very often neglected force in management, albeit one that is of relatively obvious significance to customers. Taking an everyday practical example of this: in the case of a toothache, which comes on very suddenly, an individual might be advised by a dentist who reports that he believes the root is nearly dead and advises root canal treatment. This treatment is both urgent and important, and is also not discretionary. It is also highly emotional. Should you shop around for the cheapest price for a treatment? Probably not, indeed as a customer you would be very price-indifferent and may choose to pay some £300 for it to be fixed, even if this involved borrowing the money.

These micro forces are interdependent. For example, to some extent discretion may go down if the purchase is highly emotional. Also, importance may tend to reduce the degree of discretion. Turning now to theory and to the next set of micro forces or entry barriers, **Figure 10** can be examined.

These entry barriers can be usefully broken down into the following ingredients:

- Physical: is it possible to get access to customers or to resources?
- Information: to what extent is it possible to acquire knowledge not only about the 'what' of the industry, but also about its 'how'? (The latter being bound up in tacit competences.)
- Economic: what will it actually cost to enter the market?
- Psychological: is this a market where it is comfortable to be?

To illustrate the final point, the funeral business appears, using Porter's five forces, to be a highly attractive market. However, for the vast majority it would not seem to be a psychologically attractive industry to enter.

In **Figure 11** competitive rivalry is also a function of the following:

- Commitment to the market.
- The number of players.
- Their strategy and disposition.
- Their similarity to or difference from one another.

The number of competitors refers here to the sheer quantity of players in the market. The more similar they are, the more likely that competition will be head-on. Also, the more deeply committed they are, the more severe the rivalry will be. Finally, their mind-set will influence the manner of their competition with one another. Clearly, these micro forces

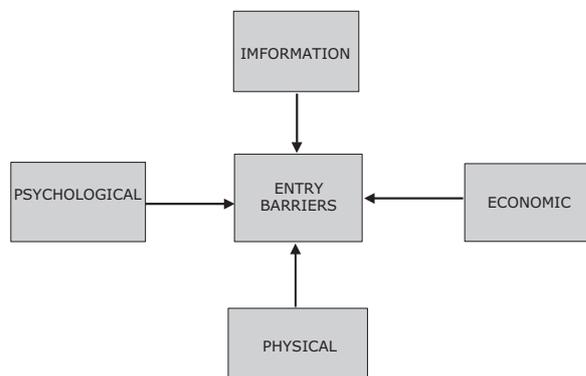


Figure 10. Entry barriers: micro forces.

Porter's Micro Forces -Rivalry

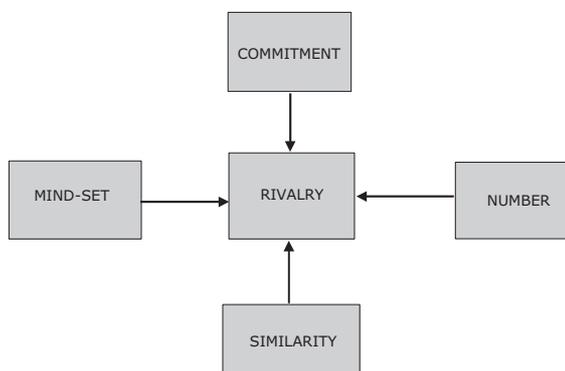


Figure 11. Porter's micro forces: rivalry.

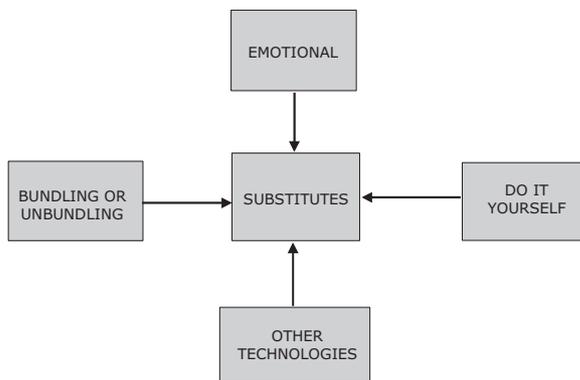


Figure 12. Porter's micro forces: substitutes.

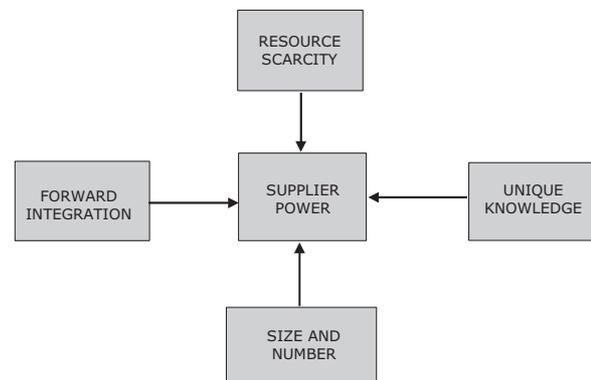


Figure 13. Porter's micro forces: supplier power.

are also interdependent as, for example, the existence of a small or large number of rivals might shape their mind-set. Also, their commitment and more general mind-set are also clearly interlinked.

Turning next to the force of substitutes, **Figure 12** displays its more micro-level forces. The figure reveals the following:

- *Do it yourself* — in-sourcing the activity, for example by making an expensive, sourced-out consultancy service an internal one.
- *Other technologies* — looking at other ways of achieving the same value, for example e-learning has substituted many technical training areas.
- *Emotional* — the extent to which the purchase is emotional or not.
- *Bundling or unbundling* — the customer's ability to do something either as part of something else, or to take a packaged offering and to capture value it by breaking up the value-added activity into its smaller components.

Again, the micro forces may be interdependent and other technologies may facilitate bundling and unbundling.

The final analysis is **Figure 13**, which examines supplier power. These four micro forces can be summarized as follows:

- *Unique knowledge* — if the supplier(s) has some unique capability this will obviously enhance their power.

- *Size and number* — where there are a very small number of very large suppliers this will obviously increase their power.
- *Resource scarcity* — where resources are scarce and preferably permanently, this again will help promote supplier power.
- *Forward integration* — the supplier's capacity to integrate forward in the industry chain will improve their competitive power.

Clearly, aspects of this force and of the others too suggest linkages and overlaps with the resource-based theory of competitive advantage. Again, these micro forces are interdependent. For instance, where there are few suppliers and high resource scarcity, this will multiply supplier power. Also, where suppliers have unique knowledge, this might facilitate towards integration, perhaps through strategic alliances. Whilst there may be other ways of grouping the various sub-forces within the framework, these models do seem to be both plausible and practical, and go beyond the fragmentary and narrative approaches found in the literature. Also, it has been demonstrated here that each one contains some rich and insightful interdependencies. One principal benefit is that they encourage managers to think in more depth about each force rather than at a superficial level. Secondly, they will help managers to understand how these sub-forces interact with each other.

For example, just as the interdependencies were drawn for **Figure 4**, the original five forces, the same could be done for these

figures. For instance in Figure 9, the importance of a purchase is linked with its emotional content, discretion is partly linked to urgency, and urgency needs to be traded off with importance.

Competitive dynamics

Porter's five competitive forces is traditionally a very static model, which diminishes its usefulness, but it can be given a more dynamic perspective and quite easily. Competitive dynamics can be explored at a macro and a micro level. At a macro level, these can be seen impacting dynamically over the industry cycle, for example for the bargaining power of the buyers and entry barriers (Figure 14). As an industry reaches maturity, entry barriers often increase (favourable) but the bargaining power of the buyers also increases (unfavourable). Each one of the five competitive forces can be plotted individually in a similar way.

The benefit of the model in Figure 14 is that it encourages managers to think about how industry structure is likely or liable to change in the future. It also helps them to reflect on why the industry has changed in recent times. Besides modelling competitive pressure over time, this can also be overlaid by, for example, growth drivers over time (high versus low). The competitive forces may also vary over time at the level of an individual business transaction (at a micro level). For instance,

where a large management consultancy gets involved with a blue-chip client, during the tendering stage the customer's bargaining power might be high. However, once the consultants start to do work it often becomes increasingly difficult for the client to control variations and the total cost of further stages of work. Another typical example is that of going into a restaurant where bargaining power of the buyer diminishes in stages: (a) when they go into the restaurant, (b) when they sit down, (c) when they order and (d) when they have courses 1, 2 and 3. Of course it is possible to walk out or pay for the meal so far, but this is psychologically difficult, especially where the 'buyer' is a group of people.

The relevance of Figure 15 is that it allows managers to use the five forces at an everyday level and to track the impact of these forces, especially of bargaining power over a typical transaction lifecycle. Besides plotting these dynamics at both a macro and a micro level, it is also important to examine their underlying drivers. Not only are these a function of the industry lifecycle effects and of the cumulative learning of key players, but also of a particular mind-set. 'Mind-set' is emphasized by at least some writers on strategy, yet primarily in the company-specific rather than industry context. The 'industry mind-set' has been defined as: *'The perceptions, expectations and assumptions about the industry — now and future'*.

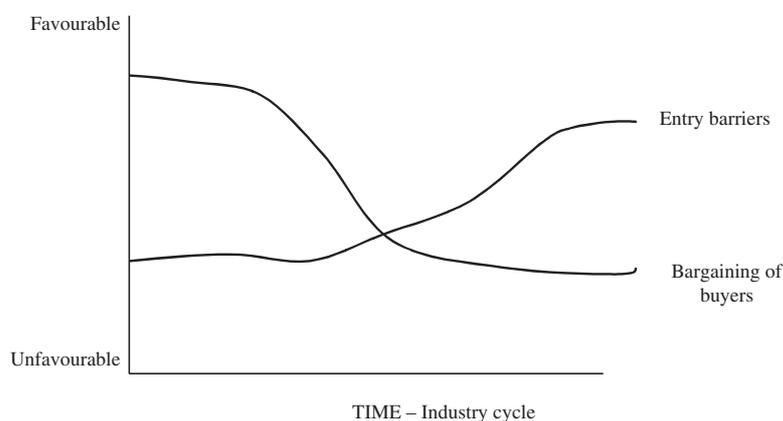


Figure 14. Macro-level competitive dynamics.

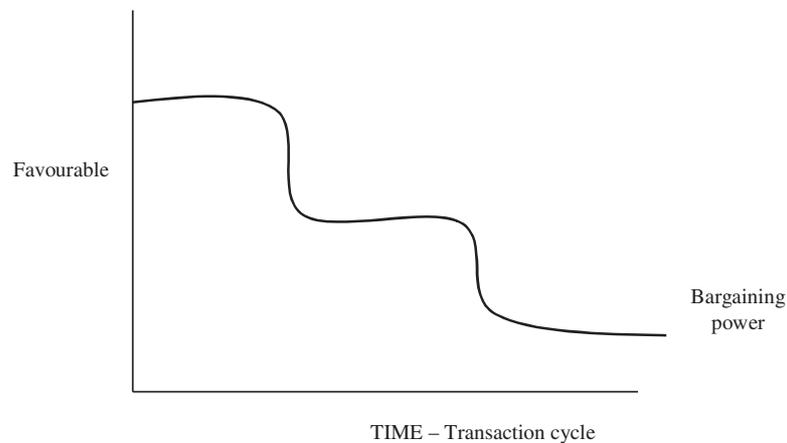


Figure 15. Micro-level competitive dynamics.

The significance of this concept is that:

- Managers should beware thinking that the structural properties of Porter's five forces are a 'given'. In part, these forces are a reflection of a softer mind-set of the industry. This mind-set is often shared between players within the industry and can be disrupted by players who can and will think differently.
- The strength and homogeneity of an industry mind-set will reduce the responsiveness of the industry to disruptive change and to facilitate rapid market share build-up by a new entrant. For example, in the UK Dyson Appliances built a dominant market share of the carpet cleaner market with a bagless model in just two and a half years. Its competitors were in a state of shock and denial for a further two years before they imitated the company. Dyson now sells its products in the USA.
- It helps us to link external analysis and Porterian competitive strategy with the resource-based theory of competitive advantage of the firm, by highlighting how mind-set can help a company to transcend the competitive forces and by deploying different marketing and innovative skills.
- By studying the industry mind-set and by using the more advanced analysis techniques of competitive forces, which have been explored here, managers can achieve strategic breakthroughs.

Mapping competitive forces: horizontally and vertically

Porter's *Competitive Strategy* (1980) focused principally on analysis at the industry level. However, this could be inappropriate, particularly as the competitive landscape for a business might be of highly variable attractiveness. For example, consider the fees for a one-day strategy course, comparing rates from independent consultants to that of a business school, with daily rates ranging from £1000 to over £10,000 per day. When Porter posed the question '*Why are some industries more attractive than others?*', it is necessary to answer with 'It depends on which product/market/sector you are talking about'. Industry structures are like a landscape and highly variable in their attractiveness, meaning that Porter's model must be used in a more discriminating and localized way to describe them. This 'attractiveness' can be represented in two-dimensional space, horizontally across sectors and vertically, in terms of the extent to which it is focused on differentiation versus cost leadership. Simple matrices like **Figure 16** might help managers in their thinking. Three ticks means 'favourable', whilst two ticks are 'neutral' and one tick is 'unfavourable'. Figure 16 illustrates this with the different sectors of the funerals industry.

Figure 17 now examines the competitive forces map within the carpet cleaning market

in the UK, 1995–2004. Previously, apart from one or two deluxe models like the ‘Kirby’, the vast majority of models were of similar perceived use value and price. Following Dyson’s entry with a bagless, cyclonic, modern-looking and premium-priced model, the competitive map of the industry was altered.

The majority of purchases became cyclonic and premium-priced, but they left a void at the bottom of the market, whereby 2003–4, new entrants emerged and Hoover began to capture share with light, cyclonic, cheap machines priced at £30–£50 each. Here the overall competitive shape of the market has moved from a more pyramid shape to an eclipse. Pictures like Figure 17 can help managers to explore and create competitive changes.

A final application of Porter’s five forces is at a micro level to departments, projects and to individual roles, for each one of Porter’s five forces may be very relevant to each one of these situations. For example, an individual may face rivals, might be substituted or have to try to fend off new entrants to his/her value-adding role.

In conclusion it is necessary to break down the analysis of Porter’s five forces on a segment-by-segment or on a mini strategy basis. This helps to make Porter’s framework far more context-specific and applicable at the firm level. Indeed, Porter’s model can be applied right down to the project level and to the level of an individual’s role where there may be variable rivalry, substitutes, bargaining power, etc. Indeed, in teaching Porter’s five forces these less obvious applications are often found to be perceived of higher value by managers.

The above has explored more advanced ways of applying Porter’s five forces at a more general level. This can now be applied more specifically using the health club industry in the UK as an example.

	Basic funerals	Deluxe funerals	Pre-need market
Buyer Power	✓✓✓	✓✓✓	✓✓
Entry barriers	✓✓	✓✓✓	✓✓
Rivalry	✓✓✓	✓✓✓	✓✓✓
Substitutes	✓✓✓	✓✓✓	✓✓
Supplier Power	✓✓	✓✓	✓✓
Overall attractiveness	13	14	11

Figure 16. Porter’s five forces: segmentation.

Competitive pressure in the health club industry 1995–2004 (a case study)

In 1995 the UK health club industry was at a turning point. The recession of the early 1990s

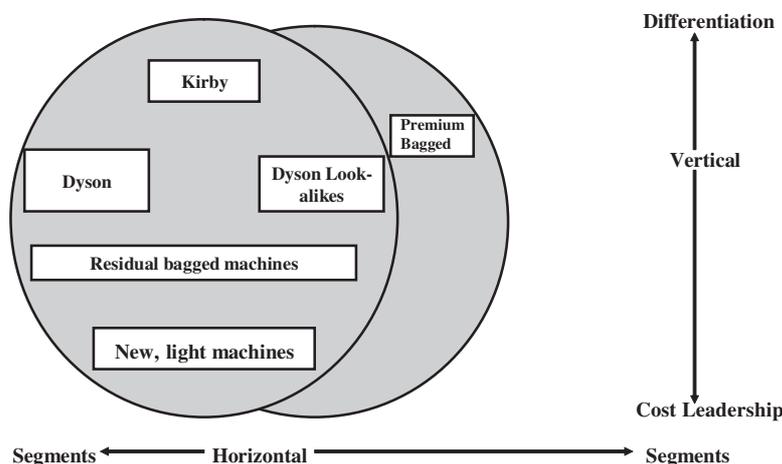


Figure 17. Mapping the five competitive forces — the carpet cleaning market, 2004.

had inhibited growth but had also sustained a low competitive rivalry. However, key players in the industry had identified considerable latent growth as the rate of penetration of the potential market was low. These conditions triggered a wave of major expansion as the economy grew again through new site development. Also, existing players grew by acquisition, creating greater industry concentration, hopefully a positive factor. Many buyers were relatively new to the market, being either newcomers to a gym, or because of industry 'churn' as many people rapidly dropped out of the gym. This meant that many were unsophisticated in their information available, making it easier for companies to charge reasonably high prices relative to the standard and value added of what they actually offered. Current margins were good, sites in the industry were available and reasonably cheap, and the industry mind-set was very positive. Over 1996–2001 there followed a major expansion in capacity with players chasing market share and neglecting the future set of five competitive forces which it was just about to encounter.

Just as Hamel and Prahalad extolled us to think about '*future competitive position*' as well as '*present competitive position*', so we should anticipate competitive dynamics (see Figure 15) by thinking about '*future competitive forces*' and against the surrounding growth drivers and PEST factors (see Figure 3). One company that took advantage of this opportunity was *Topnotch*. In the 1990s Topnotch was a small chain of independent health

clubs with an appeal to the younger market segments and with a theme of excitement. Fundamentally, however, Topnotch was a lowest price operator with a lack of scale and little brand awareness — two of the critical success factors necessitated by the future five competitive forces which it was about to enter (after 2001).

In 2001, Topnotch floated its shares on the stock market and used these funds, after considerable transaction costs, to expand into a chain of over 20 clubs. For reasons of speed, many of these new sites were acquisitions of existing ones.

At the time of flotation, financial markets saw this market as 'very attractive' — seeing growth prospects but not perhaps inquiring into probable trends and discontinuities in both growth drivers and PEST factors. They therefore played a highly encouraging role in this expansion. The effect of 9/11 on the service economy and of economic slowdown generally had a particularly sudden and adverse effect on this industry, and especially on Topnotch. This can be analysed using an extended Porter's five forces combined with '*from-to*' analysis (see Table 1).

Overall, the '*from-to*' analysis represents a negative shift in forces and one significant enough to cause a decline in margins. When combined with volumes being lower than expected and with over-enthusiastic expansion of many companies' central costs, the effect was, predictably, profit warnings across the industry. By 2002, Topnotch, like many other chains, was in financial trouble. Yet

Table 1. Porter's five forces: '*from-to*' analysis

	From	To	Because of
Bargaining power of buyers	Medium	High	Buyers more discerning, experienced and price-sensitive
Rivalry	Medium	Very High	Companies desperate to find health club capacity — producing discounting, etc.
Substitutes (threat of)	Medium	Medium/High	Buyers can find alternatives — thus saving money
Entry barriers	Low/Medium	Medium	Sites now so expensive — hard to enter — but could change again
Suppliers	Low — staff High — sites	Low — staff Medium — sites	Variable

instead of looking for further ways to adapt the industry mind-set, the reactive response of the industry generally was simply to reduce their largely unnecessary costs. In 2002 Topnotch went into administration, although a major part of it is still in operation today.

Clearly the above was a very painful learning process for all of those involved, particularly investors and many staff, and also for the entrepreneurs who led this growth surge, into the teeth of the (future) five competitive forces. If an in-depth analysis had been performed as of 1996–8 of the future competitive climate for 2001–4 (Figure 3), then much of this financial pain might have been avoided. As Matthew Harris, CEO of the original Topnotch and of its remaining, independent sites, today reflects:

I hadn't really heard about the five competitive forces to be honest. I had absorbed a lot of management theory from various sources, especially the financial stuff but I just felt from everything I saw, heard about and imagined, that we could only win through this growth. I first saw Porter's five forces well after we had gone over the precipice. It didn't seem very helpful at the time as I couldn't see what I could really do with it in that situation and it did seem quite theoretical.

Looking back on the experience and reflecting on the competitive situation as we have now, I can see its now obvious relevance. Besides the obvious cost reduction which it implied we are now focusing on how we can turn the buying power of the buyers to our advantage in our marketing strategy. I can certainly see how the forces interplay with each other and with the rest of what is going on and even down to a very specific transaction like someone joining or leaving us.

In sum, the short case above has helped to bring alive some considerations of this paper, particularly of the interdependency of the forces both within each other, with PEST factors and growth drivers. It also illustrates

how operating managers, however senior, can fail to see the full potential of the technique.

Conclusions: possible ways forward

This paper has shown how Porter's five competitive forces model could be much developed by:

- Combining it and interrelating it with other tools such as growth drivers and PEST factors.
- Examining other systemic interdependencies.
- Prioritizing it with the competitive force field type of analysis.
- Examining the sub-forces at work.
- Examining the dynamics and the impact of the industry mind-set.
- Segmenting markets to examine the variations within the competitive landscape.

Porter's model thus offers significant potential for both further conceptual development and for practical application. Other areas, which are beyond the scope of this paper, are its application to:

1. Acquisition decision-making.
2. Alliances.
3. Account management, especially in understanding the industry structure, critical success factors, options and areas of possible company value-added customers.
4. Negotiating large contracts. It would be of considerable help here both in decision-making and in deal-making.

Perhaps because the technique was born in economics and perhaps because it was so very successful initially, significant attempts to apply it across a range of practical management issues or to evolve it further appear to have failed to occur.

Unless we in the academic world are prepared to reinvigorate old concepts and in an imaginative way as proposed in this paper, techniques like Porter's five forces might be destined to fall into the same lifecycle phase

of maturity and decline as real businesses. This would be a shame because the model, if applied properly and more subtly, will generate very important insights for managers. Without significant rethinking and development they may become forgotten due to new management trends, which may turn out to be less powerful and far more superficial.

Besides applying new ideas to the teaching and practical application of Porter's five forces, this also offers a most promising area for future research, especially to explore how managers respond to using more advanced and detailed approaches to Porter's model as contained here. Future research could, for example, focus on questions such as:

- When using Porter's five forces model, how do managers' cognitive perceptions and emotions interact with each other to shape their judgements?
- To what extent does introducing managers to Porter's five forces subsequently influence their thinking, discussions, decisions and actions, and how if at all?
- What are the barriers, as perceived by managers, to using their model effectively and why do these exist?
- Where managers have not been made aware of Porter's model, to what extent do they conceptualize their competitive environment in similar ways or not?
- How might managers perceive the relevance of Porter's five forces to the more micro project and individual role level?

Hopefully this paper will excite strategy academics to revisit its power and potential.

Biographical note

Tony Grundy is a Senior Lecturer in Strategic Management at Cranfield University School of Management and an active independent management consultant. Tony is the author of 17 books, including *Be Your Own Strategy Consultant* published by Thomson Learning. Before joining Cranfield, his previous career spanned Ernst and Young, BP, ICI and KPMG.

Tony is on the editorial board of *Strategic Change*.

References

- Avila EA. 2001. Competitive forces that drive engineer recruitment and retention. *Leadership and Management in Engineering* **1**: 17-23.
- Chen JCH, Cheng PP, Chen YS. 2001. Decision criteria: a theoretical foundation of Pareto principle to Porter's competitive forces. *Journal of Organizational Computing and Electronic Commerce* **11**(1): 1-14.
- Covey S. 1989. *The Seven Habits of Highly Effective People*. Simon and Schuster: London.
- DeWit B, Meyer R. 1988. *Strategy: Process, Content, Context*. International Thomson: London.
- Grant RM. 1991. The resource-based theory of competitive advantage: implications for strategy formulation. *California Management Review* **33**(3): 114-135.
- Grundy AN. 1995. *Breakthrough Strategies for Growth*. Pitman Publishing: London.
- Grundy AN. 1997. Strategy mix and the industry mind-set. *Journal of General Management* **22**(4): 16-30.
- Grundy AN. 2001. Competitive strategy and strategic agendas. *Strategic Change* **10**(5): 247-260.
- Grundy AN. 2003. *Mergers and Acquisitions*. Capstone Press: Oxford.
- Grundy AN. 2004. Rejuvenating strategic management — 'The Strategic Option Grid'. *Strategic Change* **13**: 111-123.
- Grundy AN, Brown LR. 2002a. *Be Your Own Strategy Consultant — Demystifying Strategic Thinking*. International Thomson Publishing: London.
- Grundy AN, Brown LR. 2002b. *Strategic Project Management*. International Thomson Publishing: London.
- Hamel E, Prahalad CK. 1994. *Competing for the Future*. Harvard Business School Press: Boston, MA.
- Johnson G, Scholes K. 1989. *Exploring Corporate Strategy*. Prentice Hall: Hemel Hempstead.
- Lewin K. 1935. *A Dynamic Theory of Personality*. McGraw-Hill: New York.
- Lynch R. 1997. *Corporate Strategy*. Pearson Education: Harlow.

- Mahan JF, McGowan RA. 1998. Modelling industry political dynamics. *Business and Society* 37(4): 390-414.
- Mintzberg H. 1994. *The Rise and Fall of Strategic Planning*. Prentice Hall: Hemel Hempstead.
- Mintzberg H, Quinn JB, Ghoshal S. 1995. *The Strategy Process*. Pearson Education: Harlow.
- Passemar D, Kleiner BH. Competitive advantage in global industries. *Management Research* 23(718): 111-118.
- Pecotich A, Hattie J, Li P-L. 1999. Development of industries: a scale for the measurement of perceptions of industry structure. *Marketing Letters* 10(3): 403.
- Porter EM. 1980. *Competitive Strategy*. The Free Press/Macmillan: New York.
- Porter EM. 1985. *Competitive Advantage*. The Free Press/Macmillan: New York.
- Porter EM. 1990. *Competitive Advantage of Nations*. Macmillan: New York.
- Quinn JB. 1980. *Strategies for Change — Logical Incrementalism*. Richard D. Irwin: Illinois.
- Senge P. 1990. *The Fifth Discipline — The Art and Practice of the Learning Organisation*. Century Business.
- Thomson and Strickland. 1978. *Strategic Management — Concepts and Cases*. Irwin/McGraw-Hill: New York.
- Thurlby B. 1998. Competitor forces are also subject to change. *Management Decision* 36(1): 19-25.
- Ward FW, Novak M. 1997. How rationality shapes business ethics. *Journal of Business Ethics* 16(12/13): 1381-1392.