Business Strategy Design Patterns

The Porter Patterns

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1 Abstract

This paper describes five widely-applicable business strategy patterns. The initiate patterns where inspired Michael Porter's work on competitive strategy (1980). By applying the pattern form we are able to explore the strategies and consequences in a fresh light.

The patterns form part of a larger endeavour to apply pattern thinking to the business domain. This endeavour seeks to map the business domain in patterns, this involves develop patterns, possibly based on existing literature, and mapping existing patterns into a coherent model of the business domain.

2 Pattern Thumbnails

Cost Leadership	Build an organization that can produce your chosen product more cheaply than anyone else. You can then choose to undercut the opposition (and sell more) or sell at the same price (and make more profit per unit.)
Differentiated Product	Build a product that fulfils the same functions as your competitors but is clearly different, e.g. it is better quality, novel design, or carries a brand name. Customer will be prepared to pay more for your product than the competition.
Market Focus	You can't compete directly on cost or differentiation with the market leader; so, focus on a niche in the market. The niche will be smaller than the overall market (so sales will be lower) but the customer requirements will be different, serve these customers requirements better then the mass market and they will buy from you again and again.
Sweet Spot	Customers don't always want the best or the cheapest, so, produce a product that combines elements of differentiation with reasonable cost so you offer superior value. However, be careful, customer tastes can change, competitors may increase their differentiation or reduce their prices and steal your market.

One True Strategy	Your strategy is broken, you can't sell product the way you did. You don't know what your new strategy should be: low cost? high quality? Choose a new strategy and stick with it, don't flip flop between one and another, you will never succeed and customers will be confused.

3 Objective and audience

This paper is part of an ongoing project to apply *Patterns thinking* to the business domain. This paper will remain a work in progress for some time.

Ultimately it is hoped this work will result in insights into the business domain that will prove useful to businesses and business people.

In the meantime, the main audience for this paper will be members of business strategy community, principally students.

If you have found this paper interesting, if you have something to add to this paper: an insight into a pattern, a force, an example or a resulting consequence please contact the author with your contribution.

4 A Pattern Language of Business Strategies

4.1 Patterns

Pattern languages where originally conceived by the architecture community (Alexander, 1977) and since the early 1990's have been widely used to document software development practise. While most of these patterns have centred on the technical aspects of software some authors have moved beyond the purely technical aspects, e.g. Coplien and Harrison (2004) have used patterns to discuss issues of organisation structure. The techniques of pattern writing are increasingly being applied to new fields, e.g. the pedagogical patterns project (Bergin, 2004). Peter Seddon (2003) has pointed out the potential to apply patterns to the field of business study but few patterns exist in this domain.

There are a growing number of patterns on business related topics, these fall into two broad categories. The first group still connects with patterns, e.g. Consumer Trust in Electronic Commerce (Kaluscha and Grabner-Kräuter, 2003), while the second group applies the pattern form to non-IT related business issues, e.g. Customer Interaction (Rising, 2002). These patterns fall into the second group and seek to extend the use of patterns to the heart of business strategy.

Those readers from the business strategy community unfamiliar with pattern languages are recommended to read *Software Patterns Management Briefing* (Coplien, 1996).

Conversely, those from the patterns community unfamiliar with the language and theory of strategic management, and the work of Michael Porter in particular, may like to consult one of the large number of web sites providing summaries, e.g. Wikipedia (2004).

4.2 Implementation

The patterns presented here consciously lack the implementation guidance commonly included with patterns. This is because these patterns deal with issues of strategy, the implementation of such strategies is varied and complex and therefore outside the scope of these patterns. Further patterns are needed to detail implementation issues.

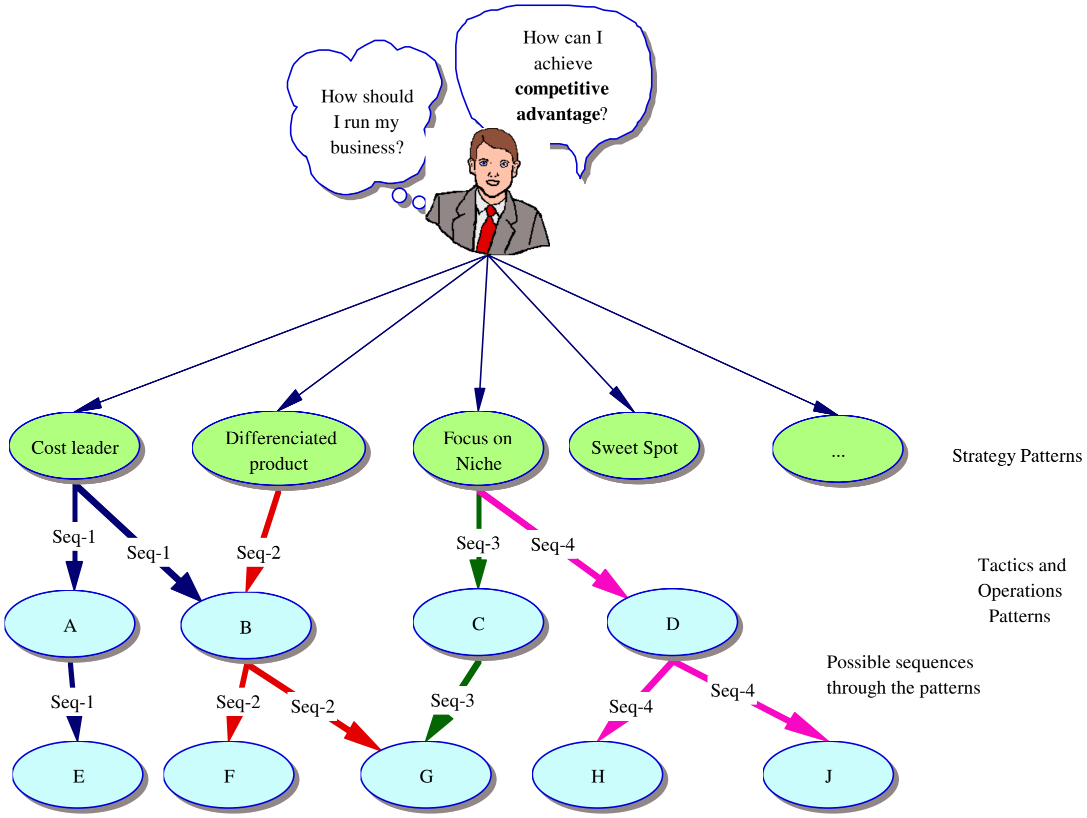

Figure 1 - Strategy patterns lead to other patterns, there are many sequences through the pattern language

There are multiple ways to implement each of these strategies, for example, cost leadership could be produced through a vertically integrated corporation producing every product from raw materials, alternatively, it could be achieved by an firm with practically no assets at all but sub-contracts and outsourcing agreements with many competitive suppliers. Deciding upon the strategy is the starting point; once this is done each organization will need to find its own route to implementation.

The absence of implementation in these patterns does not mean that patterns cannot be applied. The lack of implementation highlights the need for more patterns at the tactical and operational level.

The actual set of patterns followed by an organization forms a sequence. The exact sequence of patterns employed by a firm may be unique to the firm, each firm will need to discover the sequence of patterns that work for it. (For more discussion of pattern sequences see Coplien and Harrison (2004).)

5 Mapping Porter to Patterns

Porter's original work has been used as the basis of a number of subsequent business studies but none have taken the pattern form to this author's knowledge.

Porter defines *five forces* that affect any business: buyer power, supplier power, threat of new entrants, availability of substitutes and competition within the industry - shown in Figure 2. These forces equally affect all the firms within an industry; firms are differentiated by their ability to deal with these forces.

These forces shape the industrial environment and affect all firms within a given industry. In pattern terminology, Porter's forces actually form the Context for the pattern. These forces alone cannot explain why a firm chooses one strategy over another; if these were the only forces considered then all firms would arrive at the same strategy. A naive analysis may thus conclude that all firms should adopt the same strategy.

Although individual firms will experience the *five forces* differently they are primarily tools for industry level analysis. Other forces particular to a firm will play a role in determining the strategy, e.g. access to resources, location, existing capabilities, history, local law.

Porter claims these generic strategies are applicable to firms in any market, thereby implying a broad context for the patterns. Even so, the forces present, and each firm's ability to react to them means that firms should not consider all strategies equally applicable for their position. Choosing between strategies is not an arbitrary choice.

While both Porter and pattern literature use the term *force* the meaning is somewhat different. Both mean "some pressure influencing the final decision" however, the pattern community seeks to resolve a force Porter does not. For him a given *force* exists, one must take the force into account in make a decision but the force remains. Patterns seek to resolve forces removing, or at least offsetting the force. From a pattern perspective, Porters *forces*, being essentially unresolvable actually form part of the context within which the pattern exists.

This paper uses Porters *five forces* to set the context for the patterns. Where it is possible to mitigate the force it is also included in the forces section of the pattern and the resolution included in the consequences section.

> It might be helpful to consider Porter's five forces as *General Forces*, while forces that are specific to each pattern are *Specific Forces*. Future versions of this paper may adopt these titles in order to avoid confusion between the two different types of force.

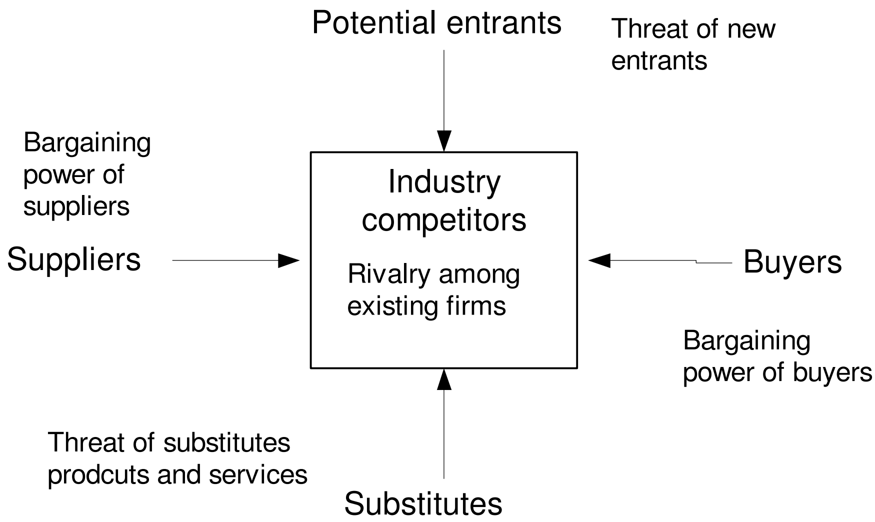

Figure 2 - Forces driving industry competition (Porter, 1980, p.4)

Ultimately, Porter argues that all businesses achieve competitive advantage either through cost advantage or through being different from ones competitors. The objective of applying one of these patterns is therefore to achieve one of these positions.

Although Porter originally defined the generic strategies as analysis tools to provide reference point for measuring firms' behaviour they are not abstract notions. Firms do actively choose to follow one strategy over another. Indeed, Porter has been know to write prescriptions based on these strategies.

The pattern perspective also leads us to consider what problem the pattern seeks to solve. Porter's strategies present solutions, the implicit problem is *how does a firm achieve competitive advantage?*

These patterns exist in a dynamic business environment with powerful feedback mechanisms. The consequences of resolving one force may be the creation of a new force. While new forces may be noted as consequences of the pattern it is beyond the scope of these patterns, or any literature, to fully explore the ultimate consequences.

Patterns are traditionally concerned with how ideas are implemented in real life. In documenting these patterns a conscious decision has been made to reference current examples of these strategies rather than document every nuance of Porter's theory.

The author hopes to hear from those who have actually implemented these patterns.

6 Comment elements of patterns

The patterns described here represent alternative solutions to the same problem. Each pattern is based on the work of Michael Porter (1980). The relationship between the patterns if shown in Figure 3.

Porter's own *five forces* are used to help set the shared context for the patterns. Although they address a common problem, within a common context each solution is the result of different forces.

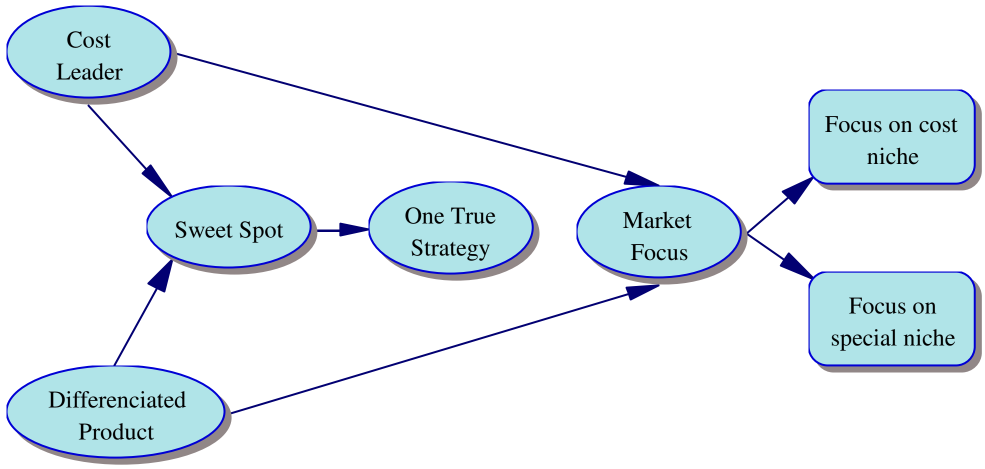

Figure 3 - Pattern road map for this paper

Common Problem How should a business organisation position itself, and arrange its business processes, to obtain **competitive advantage**?

Context The business organization exists in a competitive market.

Market Environment

- Firms are profit maximises.
- Firms operate in a free market environment where economic laws of supply and demand are allowed to operate without interference.
- Consumers, be they individuals or businesses, behave in a (mostly) rational manner.
- Government's role is confined to a) facilitating an orderly market environment, b) potential customer responding to economic signals.
- The market is a close approximation of *perfect competition*.
- Competition is asymmetrical: firms pursing one strategy will find themselves competing with firm pursing different strategies. For example EasyJet (a cost leader) competes on the London-Paris route with Air France (a product differentiator) and Eurostar trains (a product differentiator).

Porter's *five forces*

- **Buyers** are free to switch to other goods (substitutes) and are sensitive to price, they accept there is usually a trade off between price and quality, there is no "free lunch."
- **Substitute** goods exist competing for buyers money. Some substitutes are defined as *perfect substitutes*, e.g. a Panasonic VHS recorder maybe a *perfect substitute* for a Sony VHS

machine, while others *are close substitutes*, e.g. a Philips DVD player. More distant substitutes may be more different still, e.g. a trip to the cinema.

- Ultimately, given time, all goods may substitute for all other goods, e.g. money saved from not buying a new VHS may be used to finance a new house.
- **Suppliers** must compete for firms business in terms of price and quality. A variety of suppliers ensures that no one supplier can exert undue influence over the firm.
- **New entrants** are free to enter the market provided they can secure the resources (capital, labour, knowledge) required to enter the market. Above normal profits will attract new potential entrants to the market, however, not all of these potential entrants will be able to secure the required resources.
- Similarly, where firms cannot make at least normal profits they will leave the market. There are no unusual barriers to market exit. However, some firms may resist leaving a market either through inertia or high fixed costs.
- **Rivalry** between firms is always present, in some cases more intense than in others. Firms should assume that if they fail to serve a market segment then an existing firm (or new entrant) will seek to exploit the segment.

7 Pattern: Cost Leadership

"The first strategy, ..., is to achieve overall cost leadership in an industry through a set of functional policies aimed at this basic objective. Cost leadership aggressive construction of efficient-scale facilities, and cost minimization in areas like R&D, services, sales force, advertising and so on. A great deal of managerial attention to cost control is necessary to achieve these aims." (Porter, 1980, p.35)

Context The business organization exists in a competitive free market where customers are rational. *(See above for more detail.)*

Problem How should a business organisation position itself, and arrange its business processes, to obtain **competitive advantage**?

Forces **Buyers** are powerful and very price sensitive. The primary criteria for choosing product X instead of the competitor Y is price, by implication brand loyalty is low.

Close **substitutes** are widely available, products are often of a commodity nature, e.g. baking flour. Even where products are not commodities they exhibit compatible interfaces, and functionality, e.g. all European video recorders use 220-240V power supply and play the same tapes.

There may be a range of goods which are not seen as perfect substitutes but given a large enough price differential may become possible substitutes, e.g. Business class airline passengers may not consider budget airlines a good substitutes, but offered a large enough cost saving will substitute EasyJet for KLM.

Price Elasticity: The combination of price sensitive buyers and close substitutes makes it possible to reduce revenue from the sale of an individual item yet increase overall revenue because more items are sold at the lower price.

Costs determine selling price, the firm must sell goods at a price which covers both the production costs and at least normal profit.

Therefore...

Solution

> "The firm strives to be the lowest-cost supplier and thus achieve superior profitability from an above average price-cost margin." (Dobson and Starkey, 1993, p.56)

By achieving lower productions costs than any competitor the firm is able to either:

- Undercut the sales price of rivals, thereby realising extra profit through greater sales volume;

or

- Sell at the same price as rivals, and realise higher profits per item sold.

Low cost producers do not necessarily sell at a low price. The low cost producer always has the option to set at a low price, unlike producers with higher costs. The optimal retail price for the firm must be set with reference to the market environment.

In order to realise a position of cost-leadership the firm must control some resource that provides a cost advantage. Such resources may take the form of:

- Economies of scale: by producing on a larger scale than rivals the firm is able to recognise reduced average costs per unit.
- Access to superior production resources: the firm gains access to superior resources than competitors, e.g. better raw materials, cheaper labour.
- Knowledge: the firm may be able to patent a production process which provides for cheaper manufacture, or the firm may develop a particular expertise in the manufacture of its goods beyond that of its competitors.

In order to implement this pattern firms must not only control costs but strive to continually reduce costs. This may entail[1]:

- Exploiting economies of scale to the maximum even if that means supplying rival firms with "own brand" (or OEM) products.

[1] It is hoped a future paper will look at *patterns of cost control and reduction*.

- Exploiting economies of scope, e.g. Tesco supermarkets use their shops to sell clothes and electrical goods in addition to traditional groceries.
- Minimises expenses, e.g. WalMart executives share hotel rooms when on business trips.
- "Outsource to customer", e.g. Ikea customers must collect their own purchases from the warehouse.

To sustain cost advantage over the long run the firm must be able to secure exclusivity to the source of its cost advantage and ensure its renewal. For example, a firm that bases its advantage on access to cheap labour may only gain a transient advantage because it is not be able to prevent competitors from using the same labour force at the same price. Conversely a firm that bases its advantage on superior management and succeeds in hiring the best managers and training new recruits may be able to secure a long-term advantage.

Consequences

Buyers will choose the seller with lowest price, these sellers will maximise their sales. Any price increase will result in a fall in sales as buyers switch to alternative suppliers.

Close **substitutes** that differ from the commodity product must trade on their differences rather than similarities. Alternative products that do not clearly differentiate themselves from the market leader(s) and cannot undercut the market price will not produce profits and will be forced from the market.

Price elasticity: If enough suppliers reduce selling price we may expect a point to be reached where price is no longer the deciding factor in a purchasing decision. It may still be an important factor but in markets such as colour TV sets and laptop computers price has ceased to be a pre-dominant issue.

Market share: Low prices and a desire to minimise costs through exploiting economies of scale and scope often leads firms to acquire a particularly high market share, e.g. soap manufacturers Unilever and Proctor & Gamble.

In time, the need to reduce costs through such economies may create a secondary force for consolidation. Smaller firms may find they need to merge to recognise the economies needed. This will result in a concentration of market share in the hands of a few big players, e.g. Acer, Dell and HP dominate the PC market.

Entrants: Although incumbent firms may be able to earn above normal profits entrants may find it difficult to enter the market because cost leaders are able to erect a number of barriers to entry. For example, prices may be kept artificially low (i.e. below the point of short run profit maximisation) thus making it difficult for a new entrant to recognise any profit. Alternatively, even the threat of a price war may deter some new entrants from opening.

Efficiency: In this highly competitive market producers will be driven to produce at the most efficient level possible. In order to guard against a quantum improvement in efficiency from a competitor all players must strive for continually improving efficiency.

Cost leader firms who choose to take efficiency gains as profits rather than reducing price risk being out competed by rivals who eventually recognise the same efficiency gains but are prepared to undercut the market price to buy market share.

Quality[2]: Constant emphasis on cost reduction may result in a reduction in product quality as firms substitute cheaper alternative materials, employ cheaper - less skilled - workers and accept corner-cutting in order to keep costs down and output high.

However, reducing quality carries its own cost. Using cheaper materials and labour may increase the number of faults, product returns and amount of waste, thereby reducing efficiency.

This effect gives rise to an alternative quality scenario in which an emphasis on cost reduction produces higher quality - see "Quality is Free" (Crosby, 1980). For firms such SouthWest Airlines efforts to reduce cost are complementary to improving quality, e.g. more on-time arrivals means fewer cancelled flights.

Examples SouthWest Airlines in the USA and EasyJet in Europe: these airlines provide a basic air transport at low cost. Few, if any, of the frills offered (e.g. business class) by *full-service airlines,* are provided and extras (e.g. in flight drink) are charged for.

The Netto supermarket chain sales strategy is entirely based on low prices. In the UK it does not offer deli counters or loyalty cards in contrast to rivals such as Tesco and Sainsbury's. To reduce transaction costs the chain does not accept credit cards or cheques preferring cash and debit cards which are cheaper to process.

Dell Computer is renown for the ability to build and sell cheap PC computers. The company is best known for its "build to order" strategy which reduces inventory costs.

8 Pattern: Differentiated Product

"The second generic strategy is one of differentiating the product or service offering of the firm, creating something that is perceived *industrywide* as being unique. ... differentiation strategy does not allow the firm to ignore costs, but rather they are not the primary strategic target." (Porter, 1980, p.37)

Context The business organization exists in a competitive free market where customers are rational. *(See above for more detail.)*

Problem How should a business organisation position itself, and arrange its

[2] Hopefully, a future paper will look at *patterns of quality management*.

business processes, to obtain **competitive advantage**?

Forces Customers consider the quality of goods, brand, technology, dealer network and a host of other factors in addition to price. For a significant number of **buyers**, price is not the most important factor.

Close **substitutes** are available and while buyers do not buy on price alone arbitrarily raising prices will reduce sales as some customers find they cannot afford the product.

Opportunities exist to differentiate products from one another, and in particular, the products of the market leader.

Therefore...

Solution The firm seeks to create the perception of uniqueness for its product - some *X-factor*. This may be rooted in an actual uniqueness, quality, technology, distribution or brand and marketing, these factors are often combined to enhance the differentiation. e.g. Apple Computers differentiate on technology and ease of use while Nike shoes differentiate on image.

Advertising may be deployed to help enhance the sense of uniqueness. Rather than just informing customer of availability, price and features advertising should be used to build the product image.

As before, the firms' ability to successfully pursue this strategy depends on access to some limited resource. So, Nike has an image resource, created and maintained by its marketing group and Apple has a technology resource through its people. Other firms may combine a set of resources, e.g. Volkswagen combined brand, design and manufacturing quality.

Careful management of the uniqueness may still allow the firm to pursue economies of scale and scope, e.g. while not competing in the budget price band Nike is able to sell shoes at a variety of price points in different markets.

Consequences **Buyers:** Once uniqueness has been established in the market the firm does not need to compete on price alone. While price may still be a factor in consumer decisions it is not the primary factor. Buyers who are concerned to acquire the *X-factor* find their power is reduced, e.g. a consumer who wants Apple OS X has little choice but to purchase an Apple computer.

Entrants: Successfully executing this strategy makes it very difficult for others to enter into direct competition. Firms will either devise their own competitive uniqueness factor, e.g. Reebok competes with similar products to Nike but branding makes the products different, or firms will need to adopt a different strategy altogether, e.g. Apple and Dell compete for the same customers using different strategies.

Substitutes: As noted above it is very difficult for firms to enter into direct competition with a firm that has clearly differentiated itself.

Although substitutes may be freely available, and even cheaper, lacking the *X-factor* they can never be perfect substitutes.

However firms ignore substitutes at their own risk. The US department stores Sears did not appreciate the ability of WalMart to become a substitute retailer, this has been repeated in the UK market where Boots the Chemist failed to appreciate moves by Tesco and WalMart/Asda to sell the same goods.

Industry competition: Rivals may copy the market leader in order to compete. Emulation may be possible where the *X-factor* is quantifiable, e.g. car manufactures like Honda and BMW no longer enjoy as clear a lead in quality they once did. Where the *X-factor* is a brand image it can be more difficult to emulate, e.g. does Puma emulate the image of Nike, or does it offer a different image?

Alternatively, rivals may choose asymmetric competition and pursue a different strategy, e.g. Daimler-Benz pursues a build to order strategy against BMW in some markets.

Growth and Product stretch: Possession of an established *X-factor* allows a firm to enter new markets even where is it has no obvious connection, e.g. Virgin is able to stretch its brand from airlines, to electricity supply and credit cards.

Careful management is required to ensure the original product is protected, e.g. Volkswagen used its abilities in car design, manufacturing and marketing to rejuvenate Skoda, however - possibly to Volkswagen's surprise - some customers then opted to purchase cheaper Skodas instead of the more expensive but very similar Volkswagens.

The need to retain exclusivity may preclude the firm from gaining **market share**. This can be offset through product stretch and economies of scope provided the risks are considered and managed.

Price: Buyers are not completely powerless, firms still need to price their products competitively but no longer need to price them minimally. A hypothetical buyer may be prepared to pay a £400 premium to run OS X on a MacIntosh but if asked for a £500 premium may opt for a Dell running Windows.

Examples

Nike, Reebok and Adidas pursue a strategy of product differentiation through branding in the sports shoes market.

Toyota differentiates its products not just on branding but quality and design.

Apple Computers pursues a strategy of technical differentiation, using different CPUs, operating systems and sales channels to the rest of the personal computer market.

9 Pattern: Market Focus

"The final strategy is focusing on a particular buyer group, segment of product line, or geographical market; ... the entire focus strategy is built around serving a particular target very well. The strategy rests on the premise that the firm is thus able to serve its narrow strategic target more effectively or efficiently than competitors who are competing more broadly." (Porter, 1980, p. 38)

Context There is an identifiable group of potential customers who are poorly served by broadly based firms. While their needs may be served by mainstream products, these buyers have some specific need(s) that may be better met by more specialised products.

Problem How should a business organisation position itself, and arrange its business processes, to obtain **competitive advantage**?

Forces **Buyers** exercise significant power over firms because of these specialised needs.

Entrants: Specific knowledge is required to undertake this strategy, the market niche and customers must be understood in detail. In some cases, simply knowing who the buyers are may be difficult. In other cases specialised knowledge, production facilities, logistics management or other resources may be required to meet such needs.

Buyers are sensitive to **substitutes**, even close substitutes may not be good enough. Purchasing a substitute involves the buyer in some compromise, possibly in terms of a higher price, or reduced functionality or efficiency.

Therefore...

Solution The firm seeks to understand the needs of a specific customer, or group of customers in more depth and supply products that are specifically differentiated for their requirements.

Differentiation may be based on cost through the design and manufacture of specific products that forego costly features required by the broader market. For example, a firm supplying audio systems to Nissan alone need not spend money on advertising and customer services, thereby allowing them to offer Nissan a very competitive price.

Firms may achieve their focus by combining several differentiating factors in one product, the audio firm for example will not only supply at lower cost but will also undertake to integrate into Nissan's *Just In Time* manufacturing process.

Firms pursing this strategy often combine elements of product and service to enhance differentiation. For example, the UK supermarket chain Waitrose combines high quality food produce with superior service.

Variations Porter suggests two variations to this strategy, these echo the two previous patterns: cost focus and differentiation focus.

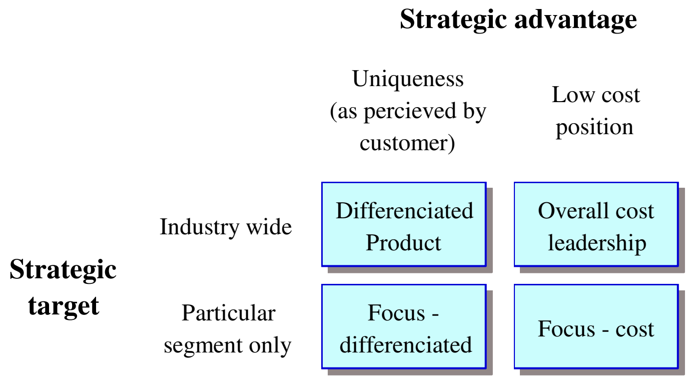

Figure 4- Three generic strategies and variation in the Focused strategy (Adapted from Porter, 1980, p.39)

Achieving focus may mean reducing cost and differentiating a product at the same time. Tailoring a product to a customer's needs may provide an opportunity to remove costs and enhance differentiation. Alternatively, a customer may demand additional features one year and reduced costs the next. The important point is that the *Market Focus* strategy remains focused on the customer, not on the cost or differentiation itself, as is the case with the *Overall Cost Leadership* and *Differentiation.* Obviously, for firms focused on low cost within a niche price must be set lower than close substitutes.

Consequences

> "The firm achieving focus may also potentially earn above-average returns for the industry. Its focus means that the firm either has a low cost position with its strategic target, high differentiation, or both." (Porter, 1980, p.39)

Buyers are better served by companies pursing this strategy than by generic suppliers. If managed well this can lead to a virtuous circle as the focused firm improves its product offering allowing it to win more business from customers.

However, it is possible for firms to become over dependent on a small number of customers, these customers are then able to squeeze the profits of their suppliers who have become so focused they are unable to supply alternative customers.

Entrants - Barriers to entry: The need for a detailed understanding of customer needs, and a focused product offering may deter new entrants to the market. However, large customers may be able to enter the market themselves, e.g. large car manufacturers will often contract out the most component manufacturing, however, they may retain a small facility to ensure they can replace failing suppliers.

The threat of **substitutes** will never go away. Over time substitutes should become less attractive, particularly if the firm is able to add a service offering to an actual product, e.g. integrating with a customer supply chain.

However, focused firms may find mass market products threaten their market. For example, using clustering technology, cheap mass market PCs running Linux can now replace specialist super-computers.

Firms which have focused on cost reduction will need to maintain, and even reduce, costs over time as the broader market exhibits greater economies of scale.

Industry competition: In such a complex market a focused firm needs to be pro-active in ensuring that it is meeting, and exceeding, its customers requirements. Since the firm has based its entire strategy on serving a particular customer group better than the general market it must continue to ensure that it does so.

Further, the firm needs to be aware of changes in both its own market, and its customers market to ensure it is not surprised and undermined by changes in the environment. The firm should therefore engage in market scanning to spot potential competitors, changes in customer taste and technology changes before they happen.

Competition is more complex than in other strategies because of the nature of substitutes and buyer power. The niche nature of the market would imply a limited number of competitors.

Growth can present a challenge to focused firms. Indeed, the whole concept of "market share" is difficult to define if the market constitutes relatively few customers by design. Nor is it useful to consider the wider market including substitutes since the firm does not wish to compete here. Finding growth opportunities for the focused firm - without losing focus - can be challenging.

By definition focused firms have chosen to service a niche market. Where the niche has been defined geographically even small firms may need to look abroad for similar niches to continue expanding.

Alternatively, firms may seek growth by growing the niche, e.g. having decided to focus on premium air-travel British Airways attempted to pursued more customers to upgrade from Economy class.

Some firms may need to accept a static market size for their niche. In this case the firm must either seek to improve its profitability or look to diversify its product portfolio.

Where a firm excels at meeting a customer's needs for one product there may be opportunities to work for the same customer with different products. This strategy was followed by the large accounting (e.g. Arthur Anderson, KPMG, etc.) firms who typically started by providing audit services to a customer, later the firms expand by providing consultants for planning, human resources, IT or other fields.

Price: Those firms focused on differentiation that succeed in adding value to a product for specific customers we can expect it to be may be able to charge a higher price than competitors. For example, car manufacturers may be prepared to pay more to a supplier who can integrate with their just-in-time manufacturing process.

Advertising is limited since relationships are built over time. It may be used to foster a particular image for the company brand (e.g. Anderson Consulting/Accenture) or, where public sector contracts are involved to appeal to public sentiment, e.g. EADS and Boeing both engaged in public advertising when competing for the RAF[3] air-tanker contract.

Partnerships: Since firms need detailed knowledge of their customer requirements they often attempt to portray the transaction as a partnership that can last and grow over time. Customers too may prefer this arrangement as long as it continues to offer value for money and improved services and goods.

Examples

Cafe Direct: "Cafe direct pay coffee farmers the best price for their beans, so they give us the pick of the crop, and you get a superior cup of coffee." (From the coffee bag) Focused on proving UK consumers with quality coffee while supporting coffee growers through *Fair Trade* practices.

Fly Be: a UK budget airline with a geographical focus on regional cities (e.g. Birmingham and Southampton). It competes with both full service carries such as British Airways and BMI on price, and with major budget carriers like RyanAir and EasyJet on geography.

John Lewis Waitrose: a supermarket chain focused on providing quality foods to Britain's more affluent consumers. The firm is concentrated in South East England; average shop sized is significantly less than competitors and budget goods are absent.

Related patterns:

It's a Relationship, Not a Sale (Rising, 2002)

Stuck in the middle

Michael Porter describes firms that fail to follow one of the generic strategies and instead cherry pick the bits they like as *Stuck in the middle*. For him, a firm must follow one and only one strategy.

However, it is sometimes hard to make a choice between *Cost Leadership* and *Differentiation*. The firm would like to service both those customers who are price conscious and those who are looking for something different. Why restrict your sales to half the market?

It may be possible to find a *Sweet spot* where products are different but still reasonably priced but this it can be hard. Often the differentiation buyers are looking for is simply quality, the price v. quality trade-off is as old as the markets themselves.

Get the trade-off wrong and the firm will find price conscious buyers are lured away to cheaper competitors, while quality conscious buyers move to

[3] The United Kingdom's airforce is known as the RAF - the Royal Air Force.

competitors offering higher quality. The firm's base is undermined and efforts to appeal to one particular group will accelerate the loss of the second group.

This can be difficult for a firm, particularly one which has past success with a *Sweet spot* strategy. Managers may be unable or unwilling to loose one group of customers. In their attempts to find a new strategy they may move between a reworked *Sweet spot*, attempt *Cost Leadership* and try to *Differentiate* their offering. Such firms need *One True Strategy*.

10 Pattern: Sweet spot

"The three generic strategies are alternative[s], ... the firm failing to develop its strategy in at least one of the three directions - a firm that is 'stuck in the middle' - is in an extremely poor situation." (Porter, 1980, p.41)

"successful firm[s] that, according to Porter's definition, ought to be stuck in the middle [dominate] a number of UK markets" (Dobson and Starkey, 1993, p.64)

Also known as Stuck in the middle

Context There are a number of competitors in the market offering a mix of low cost/low price and differentiated products.

Problem How do you reconcile customers who want low-prices and a quality (i.e. differentiated) offering?

Forces Some **buyers** purchase based on cost but, others are heavily influenced by quality, brand name or other differentiator.

Close **substitutes** are readily available to consumers. Such alternatives represent different price/quality trade-offs. The attractiveness of substitutes to consumers increases, as competitors are able to offer lower prices or enhance the differentiation of their products.

Therefore...

Solution Differentiate your offering and simultaneously offer a low price to customers. Your retail price may not be the lowest in the market, neither is it the most differentiated available but by combining elements of both you offer customers a valuable proposition.

Costs must be kept down while simultaneously keeping good quality. Suppliers can only be allowed to improve quality and price if the market will accept the new trade-off. This requires careful supplier management. It may be necessary to forego some quality improvements if the accompanying cost increase would move the goods outside of the price/quality trade-off.

The company must track sales and customer preferences closely to ensure it is offering the best price/quality offering. If customers become more price sensitive your offering may loose its attractiveness.

Consequences Buyers purchase your products for value. They can buy superior quality elsewhere (i.e. a more differentiated product) but this will carry a higher price. Similarly, they can buy cheaper products but they quality will be lower. However, your product offers a price/quality trade off which is attractive.

Successfully implementing a *Sweet Spot* strategy is harder than it looks. The firm must tread a careful path, keeping prices low but quality high. Competitor firms may attack the firm by offering lower prices or better quality. Equally, customer may become more price sensitive or become complacent about the quality you offer, either way sales can be lost.

Although Porter considers this position to be problematic it is possible to derive a competitive advantage form careful blending of two distinct strategies. However, as the examples show, this position may not be sustainable in the long term. A firm following a *Sweet Spot* strategy should be aware of the risks and aware that it may need to change strategy at some future date.

The existence of a firm following a *Sweet Spot* strategy may indicate an opportunity to re-segment the market. Where this is the case opportunities exist for other firms to following one of the three generic strategies to cherry-pick customers from the *Sweet Spot* company.

Examples Until the mid-1990's the UK supermarket group Sainsbury's successfully pursued a *Sweet Spot* strategy. The chain offered customers quality food at low prices - marketed under the advertising slogan "Good food costs less at Sainsburys." In the late 1990's the rise of Tesco's as a low cost alternative to Sainsburys, and the entry of Wal-Mart through the purchase of the ASDA chain meant Sainsburys' prices no longer looked low.

Volkswagen purchased the Czech car manufacturer Skoda in 1991. Investment and knowledge transfer from the Germany company has enabled Skoda to produce cars that sell for less than similar VW vehicles. Unfortunately for VW, it seems that some customers purchased the cheaper Skoda in preference to similar Volkswagens.

As budget airlines such as EasyJet and South-West Airlines have become an everyday part of flying legacy carriers have responded by offering cheaper economy fares with the benefits of a full-service airline. The airlines can still charge fares higher than the budget airlines because they offer superior service. However, at the time of writing it is not clear if this strategy will survive in the long term.

11 Pattern: One True Strategy

"there seems to be a tendency for firms in difficulty to flip back and forth over time among the generic strategies." (Porter, 1980, p.42)

Context Your *Sweet-spot* strategy is no longer working, it has become difficult to generate adequate profits from the value proposition. The market remains both cost and quality conscious but you don't know whether to pursue *Cost Leadership* or *Differentiation.*

Problem Do you sell on price to cost-conscious buyers, or, on quality to discerning buyers?

Forces Some **buyers** purchase based on cost, others are heavily influenced by quality but, recently the two groups have become more polarised. Price sensitive buyers expect lower prices - and may be prepared to sacrifice some quality - while quality conscious buyers want better products - and may accept a price increase.

There is an opportunity to segment the market, but, in doing so you will loose customers and therefore revenue.

Adopting *Cost Leadership* will enable you to offer lower prices, but you will need to withdraw from the quality conscious segment.

Alternatively, adopting *Differentiation* will allow you to offer quality products but you will need to withdraw from the price sensitive segment.

The *Sweet spot* strategy is not the success it used to be. Has the sweet spot moved to a new price/quality point? Or has it disappeared altogether?

Withdrawing from any segment is difficult. The firm has fixed costs and assets which are not easy to get rid of, e.g. a retailer moving to a strategy based on quality differentiation must close shops in price sensitive areas, however, it may be difficult to exit property leases on many properties.

Adopting a new strategy will mean lower revenue in the short term as you no longer serve one group of customers, but it is unclear that serving the other group(s) better will increase long term revenue.

Therefore...

Solution Carefully decide on your new strategy and stick with it, do not change course when problems occur. Whatever strategy you follow will have problems, failure to execute one clear strategy will make things worse.

When deciding your new strategy explicitly consider the possibility that the sweet-spot has moved, if you decide to continue with *Sweet spot* strategy understand why the price/quality point has moved and where you expect to find it. Define criteria so you know when you find it.

Understand which customer segment(s) you intend to serve and which you are not. Differentiate your product offering so it appeals to your target segments.

Don't be scared to loose existing customers who not targeted by your new strategy. It may be tempting to compromise and offer them inducements to remain customers but this is not part of your strategy.

Clearly differentiate your offering from your competitors. Use advertising to inform customers of your change of direction.

Be prepared to burn your bridges where necessary, dispose of operations which do not fit with the new strategy even if they are profitable. Burning your bridges will help hasten your change of strategy and clearly signal to managers and employees that there is no going back.

Consequences Revenue will fall in the short term as you withdraw from some market segments. It may be that your new strategy will generate lower revenue than the old one, this is acceptable as long as the overall profit margin increases. In either case, be aware that it will take time for the new strategy to show through in revenue or profits.

If you are seeking to move to a new sweet spot it will be harder to signal your new position to customers. It might take time for them to recognise that your price/quality trade-off is once again better than the competition.

There is no guarantee that the new strategy is the best one available or even that it is viable. Sticking to a failing strategy will result in bankruptcy as surely as alternating between different failing strategies. Market conditions change and new entrants enter the field, sometimes it is wrong to stick to *One True Strategy.*

Examples During the 1980's the rise of the desktop computer fundamentally changed the market IBM operated in. During the 1980's the company attempted to reposition itself several times, indeed, it could sometimes appear that different groups had different strategies. By 1992 the firm was embarked on a break-up strategy. Louis Gerstner (2003) tells how the firm once again changed strategy in 1993 and held firm to single strategy which proved successful.

There are many counter examples of firms which have been unable to find and execute a successfully strategy. In 1980 Michael Porter suggested British Leyland as an example of a company stuck in the middle. Over the last 25 years the firm has been privitised, sold, resold, renamed (MG Rover), saved from closure, attempted to sell quality, attempted to sell cheap, partnered with Honda, owned by BMW, and now partners with various Asian manufactures. All strategies have failed and the company seems little better off than it was in 1979.

12 Discussion

12.1 The Patterns

As noted at the beginning of this paper, Porter claims these models are universal, thereby implying that regardless of how the forces, specifically his own *five-forces*, manifest themselves these models should still be applicable. However, for any individual firm all forces will manifest themselves differently thereby making the adoption of one strategy superior in terms of competitive position.

Porter's own *five forces* contribute to understanding the market the firm faces but do not directly contribute to determining which strategy the firm should follow. Additional forces beyond these five seem to hold the key to determining which pattern is applicable to a firm.

Whether the "stuck in the middle" pattern is always an anti-pattern remains a debatable issue. Clearly there are some firms which seem caught between one of the other strategies. It also seems clear that without a focus firms may compromise their position, sending mixed signals to workers and customers concerning their offering. However, the middle position may offer a competitive position in the right market environment. The question seems to be: is it possible to maintain a middle position over the long term?

12.2 Business Patterns

In a competitive business environment there are many variables. Attempts by a firm to control and influence one will result in responses from other economic players, e.g. competitors, customers and workers. This leads to a highly dynamic environment with multiple feedback loops.

Actually attempting to balance and resolve the forces becomes particularly difficult. It is here that patterns perhaps have the most to offer the business environment, however, it also complicates their construction.

12.3 Future work

These patterns show it is possible to use the pattern technique to tackle business strategy and analysis. Further, this paper has highlighted opportunities for patterns of: cost control and reduction, and quality management.

There are two obvious directions for pattern mining in the business domain. One is centred on functional areas, e.g. Patterns of Operations Management may include "Cost reduction through outsourcing", "Work follows labour" and "Substitute machines for people", Patterns of Corporate Social Responsibility could include "Engage with Stakeholders" and "Employee Community Involvement."

The other direction concerns specific to business sectors, e.g. Patterns for Retail Operations, Patterns for Professional Services Organisations, Patterns for Entrepreneurs.

13 Epilogue

The aim of writing *Business Strategy Design Patterns* was to see if the concepts and techniques of pattern writers, specifically software pattern writers, could be applied to the business. My gut feeling was always "Yes" and so a second objective was to inject pattern techniques into the business domain.

Given these objectives the decision to adapt Michael Porters work was obvious. Not only did Porter's work contain forces and solutions - making it look readily adaptable - but by adapting one of the best known works on business strategy I hoped to send a message to both the pattern and business writers.

Thus, I had three objectives for this paper:

- Adapt Porters work to Pattern form
- Validate Patterns in a business context
- Inspire more cross-over works of business and patterns

13.1 Adaptation

It quickly became clear that the way Porter talked about *forces* was different to the way pattern writers talk about *forces*. Both are talking about a power which effects a business, but for Porter the *forces* define the business environment, following any one of his generic strategies leaves the *force*, and its effect on the business unchanged. However, for pattern writers a *force* is something that should be resolved. Once a pattern has been applied the *force* will either be removed or it will be bounded.

Since Porters *forces* operate at the industry level and define the environment the firm must operate in they correspond more closely to the concept of "Context" to a pattern writer. In some of the patterns it is enough to discuss Porter's *forces* in the Context, for others, the *force* does result in a specific result within the pattern, that is, the *force* operates as a typical pattern *force* which needs to be resolved somehow.

Forces have a special place in a pattern since they drive two other sections. Forces are part of the problem statement, it is often said that "Forces define problem" meaning: only when we understand and can state the forces at work can we clearly state the problem the pattern addresses. Usually, we split forces into their own section so they may be clearly identified, this leaves the problem statement as a short "sound bite" of the problem we seek to address.

Forces also drive the consequences section of the pattern. Since we seek to resolve the forces it is necessary to state what the forces look like after the pattern has been applied. Thus, we usually see the consequences section mirroring the forces section of the paper.

In Porters work the *forces* do not define the problem. Indeed, Porter never considers "the problem" as a distinct entity. Yet the problem is clear: How can a company achieve (sustainable) competitive advantage?

From the point of view of an adaptor this difference in the definition of forces was difficult. Firstly the forces I expected to document where not the forces I needed to document. Secondly, I had work with two definitions of "forces" in one paper. (A problem repeated in this epilogue.)

I found myself drawing on the examples to uncover the forces and problem. While it is clear that some companies are pursuing a given strategy (e.g.

SouthWest Airlines pursues cost leadership) it is not so clear why the company has chosen to do so.

The need for examples provided another difference. It quickly became apparent that Porters examples needed updating. In the 25 years since Porters original work the companies have changed and so too have the markets they exist in and strategies they pursue.

Perhaps one difficulty that should have been foreseen at the outset was the nature of "generic" strategies. The strategies are considered equally applicable, that is, a Widget manufacture can choose to follow any of the three strategies they choose to, and the results will be equally valid. As the paper points out, this is not the case, the choice between strategies is not arbitrary.

For example, there is no point in my local supermarket chain deciding tomorrow to become a *Cost Leader,* WalMart already occupies that position, nor is there any point in them deciding to follow a naked *Differentiation* strategy, how would they differentiate themselves?

We are returned to the question of forces. My local supermarket cannot become a *Cost Leader* because their is already a force called *WalMart* which must be resolved, likewise there is a force *differentiatable attribute* to be considered.

The resolution to these problems in adapting Porter to the pattern format was to move the patterns away from Porters original work. Concentrating the patterns on internal consistency rather than consistency with the original text makes for more solid patterns. (This experience was further validated with *Patterns for the Innovative Company* (Kelly, 2004).)

Finally there is the question of *Stuck-in-the-middle*. Initially this was written as an "anti-pattern" but anti-patterns are difficult beasts. At the simplest level an "anti-pattern" is a pattern that results in a worse situation. However, to have any practical use it is essential that the anti-pattern describes how to fix the situation. As such the anti-pattern quickly become a *solution to a problem in a context*, i.e. a regular pattern rather than an anti-pattern.

The *Stuck-in-the-middle* pattern highlighted this contradiction. I could describe the vicious circle of actions that lead to deteriorating environment but - unlike Porter - I needed to provide a solution. A further complication was the view that the *middle position* could actually be beneficial.

The resulting tension in the pattern resulted in a pattern of two halves. Post EuroPLoP I took the decision to remove *Stuck-in-the-middle*. Contained within text where two patterns, *Sweet Spot* and *One True Strategy*, which are given here. However, even more than the other three patterns these two patterns are works in progress.

13.2 First hand experience

A valid criticism of this work is that it contains little first-hand experience of what it is like to implement these patterns. This is true. Such experience would undoubtedly have made for better patterns - perhaps different patterns.

However, it is doubtful if anyone currently writing patterns has first hand experience of implementing these strategies.

The question of how much first-hand experience is required to write a pattern is bigger than this essay. There is a second question that should also be asked: should a lack of first-hand experience stop a pattern from being written? That is, is it better to have a pattern without first-hand experience written, or for the pattern to remain locked inside someone's head? "I can see the pattern, but I've never done it so I can't write the pattern."

13.3 Pattern Form

This paper deliberately adopted a highly structured pattern form. In doing this I was forced to examine explicitly each of the pattern elements. Adopting a less structured form could have allowed boundaries to be crossed. If a business strategy pattern can be written in a highly structured form it can be written in a more relaxed form, the reverse is not so obviously true.

A second reason for adopting this form was to highlight the pattern elements to readers new to patterns. Without the structured form and clear sections one could be left wondering what the "patterns" add to a general description of Porters work.

Although this form made writing somewhat more difficult I think it worked in the end. By forcing Porter's work into clear defined sections the pattern emerged.

13.4 Future of business patterns

I feel the field of business patterns is now validated. Now only through my own work but through the work of others too. The quest now must be to map the existing work, fill in the gaps and bring this work to the attention of the business community and the writers in the business community.

A significant problem exists in relation to existing work. Many patterns exist which can easily be applied to the general business domain, for example, many - probably most - of Coplien and Harrison's (2004) organizational patterns can be applied to generalised business and team work situations. However, as they are written in the language of software development - programmers, testers and bug - they may not come to attention of those in other fields. Even where they do, it may not be obvious to the non-IT reader how these patterns relate to their field.

13.5 Conclusion

Of my three objectives:

- I found Porters work to be more difficult to adapt to the pattern form than I anticipated. Adaptation shows limits in both the patterns form and Porters work. The work needs to move beyond Porter to succeed as a pattern.
- The application of patterns to the business domain has been proven, business should provide a rich source of new patterns.

- I don't know yet if I have inspired any new works but this work has been successful in highlighting (at least to myself) the various authors working in this domain or closely related fields.

To some degree no pattern is ever finished. Certainly *The Porter Patterns* feel like a beginning not an ending. A second paper, *Patterns for the Innovative Company* was workshopped at VikingPLoP 2004 together these papers form the nucleus of an endeavour to map the business patterns.

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July 2004	EuroPLoP Writers workshop at Kloster Irsee
September 2004	Post conference revisions - new format, *stuck in the middle* replaced with *Sweet Spot* and *One True Strategy.* Added thumb nails and various other minor changes.
October 2004	Revisions to September version. (Placeholder left for epilogue.)
October 2004	Added epilogue, other minor revisions.
Latest version	http://www.allankelly.net/patterns

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