Barriers to Entry and First Mover Advantages of a Small Pioneering Company in the Modern Competitive Environment.

By

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TO WHOM IT MAY CONCERN

RE: CONFIDENTIALITY CLAUSE

Due to the strategic importance of this research it would be appreciated if the contents remain confidential and not be circulated for a period of five years.

Sincerely,

B.S. Oosthuis
DECLARATION

This research has not been previously accepted for any degree and is not being currently submitted in candidature for any degree.

Signed: ..........................................................

Date: 6/8/2003  096187
Acknowledgements

I would like to thank my wife, Katja, and my daughters Cayla and Challen, for their consideration, support and sacrifices that were endured.

My appreciation also goes to Professor Thomson for her guidance and support.
ABSTRACT

This study investigates two strategic issues that small pioneering companies should always place emphasis on. Barriers to entry and first mover advantages carry such strategic significance that it should be a priority of any pioneering company, regardless of size. Contemporary studies have questioned the absolute ability of barriers to entry to thwart the entrance of new competitors in an industry, or the sustainability of first mover advantages. The implication being that barriers to entry and first mover advantages should not be high on a strategic agenda, as initiatives in this regard can be overcome by companies with superior resources, or due to the diverse strategies and objectives of companies.

This study considers the case of a small pioneering company and analyses the competitive environment of the industry it intends to enter. The analysis utilises Porter's Five Forces Framework in a modified form. The framework was chosen as it considers the structural determinants of an industry, from which competitive pressure elements such as barriers to entry and first mover advantages can be identified and analysed. This modification is necessary as first mover advantages are typically separate considerations for pioneering companies in strategic formulation. This analysis considers the Five Forces of competitive pressure, but replaces first mover advantages with competitive rivalry, due to the particular circumstances encountered by pioneering companies. The relevant determinants of competitive pressure are then identified and ranked, in terms of priority, to give guidance to the strategic planning, formulation and implementation process. The analysis stops short of developing a full strategic plan but is sufficient to highlight the competitive issues that will need to be considered.

The case study illustrates how barriers to entry and first mover advantages can still be fundamental to the strategic development process, regardless of the resources and strategy of potential entrants. The case study also proposes a model that spatially depicts the prioritisation of the ensuing strategic issues that are precipitated when analysing Porter's Five Forces Framework.
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CHAPTER 1  INTRODUCTION

1.1 Background

New companies are confronted with many strategic decisions and considerations. What markets to enter, product type and configuration, pricing policies, marketing strategies are just a few considerations that need to be addressed when starting any type of enterprise. Entrepreneurs or originators of pioneering companies will need to consider all of these factors, but will need to place specific emphasis in certain issues due to the pioneering nature of their venture. The issue of protecting the pioneering company's interests against threats, irrespective of the source, will require specific consideration in the quest to achieve and sustain a competitive position in its particular market place. Barriers to entry and first mover advantages are two factors that can lead to competitive advantage over later entrants and assist in sustaining such advantages.

Empirical studies from the 1950s to the 1980s attempted, with some success, to confirm the ability of certain industry characteristics to develop barriers to entry. Most of these studies tried to confirm the existence of barriers to entry by detecting above average profitability in the industries analysed. This relationship was proposed through the hypothesis that concentrated industries exhibit higher profitability, and that barriers to entry contribute towards concentrated industries. The majority of studies attempted to identify blanket factors, causing barriers to entry over a broad array of types of industries, in order to prove the generality of these factors.

Later studies focused on identifying the occurrence of entry, as a measure of barriers to entry, as opposed to industry profitability. Contemporary studies have concluded that barriers to entry are ineffective against large corporations who wield the market power, and possess the resources, to overcome almost any barrier to an industry. The efficacy of barriers to entry is further diluted by market contingencies arising from the diverse strategic nature and objectives of companies. These contingencies endow companies with the desire, or necessity to circumvent, negate or boldly confront barriers to entry even in the appearance of it being futile. These companies exhibit
diverse strategies that enable them to challenge the accepted industry structure norms, and possibly alter the basis of competition.

The later studies have appeared to diminish the strategic significance of barriers to entry, and first mover advantages, as they are no longer deemed to be absolute. These findings however seems to reinforce the need to evaluate barriers to entry and first mover advantages against specific entrants, criteria and industry conditions instead of trying to prove global relevance.

The majority of strategic research has been undertaken for going concern companies, and is generally geared towards large companies and corporations. As a consequence some of the strategic tools are not fully applicable to small pioneering companies. These tools need to be either modified or discarded by small pioneering companies when undertaking their strategic development process. Porter’s Five Forces of Competition Framework is one such example, as pioneering firms encounter no competitive rivalry from direct competitors. This does not mean however that strategic thinking should ignore potential rivalry, but should focus on keeping out direct competitors initially. These issues are best addressed by concentrating on developing first mover advantages. First mover advantages receive significant attention by strategists but do not get mentioned in Porter’s Framework. Although first mover advantages often involve building barriers to entry, first mover status often confers additional market power in developing barriers to entry.

1.2 Motivation for the Study

Pioneering companies encounter some different strategic challenges than other companies. The nature and composition of potential competitors is of paramount importance to pioneering companies, due to the opportunities afforded by first mover status. Tools that are used to plan, formulate and implement strategy have been developed for existing companies. Porter’s Five Forces of Competition Framework is universally accepted as an appropriate starting point to identify competitive issues, in order to formulate strategic policy. Porter’s Framework however is not completely
applicable to pioneering companies and its competitive environment. The framework needs to be modified to incorporate first mover advantages that, together with barriers to entry, should be foremost in pioneering companies’ strategic thinking.

Contemporary research concludes that barriers to entry are not as effective, as originally hypothesised, due to the ability of larger companies to overcome them with the use of their greater resources, or via the acquisition of companies already in the industry. This was further exacerbated by the ability of any company to overcome or circumvent barriers to entry with the prudent application of innovative strategies. Small pioneering companies are particularly vulnerable as they are likely to encounter many new entrants who are endowed with greater resources than them. The barriers to entry resulting from first mover advantages are however slightly more insulated with regard to entrance due to acquisition.

The latest research brings into question the ability of small pioneering companies to sustain competitive advantage, due to first mover status and barriers to entry. This ability can only really be determined by considering the particular circumstances and industry structure. This study considers the case of Disc Golf S.A., a small pioneering company in the sport and leisure industry. The evaluation of the competitive pressures that Disc Golf S.A. will be exposed to could indicate if first mover advantages and barriers to entry would be worthwhile pursuing. The effect of diverse strategies however can only be determined with hindsight, as the numerous options and their combinations can not be known.

From a personal perspective, the author prepared the business plan for Disc Golf S.A. Operations have commenced, on a small scale, and indications are that considerable effort needs to be expended in order to attract customers to sample this new activity. Budgetary constraint limits the ability to market the concept as desired, resulting in the extension of milestones and lengthening of projected timeframes, further stressing the importance of first mover advantages and barriers to entry. This slow development affords later entrants the time and opportunity to develop manners of entering the industry and competing directly against Disc Golf S.A. This necessitates the revisiting of strategy, particularly the initiatives to develop barriers to entry and first mover advantages, to ensure that all options are considered and thoroughly
evaluated. This study achieves these objectives and also ranks the pertinent issues for prioritisation during the strategy development process.

1.3 Problem Statement

Can a small pioneering company rely on barriers to entry and first mover advantages in the modern competitive environment?

1.4 Objectives of the Study

This study evaluates the competitive pressures that a small pioneering company is likely to encounter in order to develop opportunities for first mover advantages and establish barriers to entry. It seeks to establish a framework to evaluate and rank factors that influence the competitive environment, and utilises a model for spatially representing these priorities. Finally, the study determines whether a small pioneering company like Disc Golf S.A. can still utilise first mover advantages and barriers to entry, regardless of the nature, strategies and resources of potential new entrants.

1.5 Research Methodology

This research is in the form of a case study. Two issues are addressed in the research; a modified version of Porter's Five Forces of Competition Framework is proposed and evaluated; and the suitability of small pioneering companies identifying and pursuing first mover advantages and barrier to entry is tested. This qualitative approach does not attempt to prove the rule, but through the case study, states a case for considering the particular conditions and circumstances in strategic formulation, even in apparent contrast with currently accepted academic and empirical findings.
The research aims to illustrate, by way of example, that industry structure conditions and circumstances leading to first mover advantages and barriers to entry can still be fundamental to a pioneering firms strategic endeavours.

The case study is also used to test the applicability and value of a modified Porter's Five Forces Framework, to assess the competitive environment that a pioneering company is likely to encounter. A model that assists in illustrating the prioritised issues from the framework analysis is also tested in the case study.

1.6 Limitations of Study

The intention of part of the research could be viewed as providing the exception that disproves the rule. This philosophy only illustrates the suitability of pursuing first mover advantages and barriers to entry opportunities, for the case study, but also opens possibilities of applicability to other cases.

The case study attempts to illustrate the applicability and value of an additional strategic tool that may or may not be useful to other pioneering companies. It has already been stressed that particular circumstances and conditions are contingent for the suitability of first mover advantages and barriers to entry, but this tool provides a framework to determine if such conditions are evident.

The case study does not provide a particular strategy, but utilises the framework to identify and prioritise competitive issues that should be addressed in the strategic development process. These issues still need to be developed, along with other considerations, to form a comprehensive and coherent strategy that could provide a sustainable competitive position, as a result of first mover status.
1.7 Structure of the Study

Chapter 2 presents the literature review with regard to barriers to entry and first mover advantages. Porter’s Five Forces of Competition Framework is modified to accommodate first mover advantage issues, and Richard D’Aveni’s Spheres of Influence model is modified to rank the competitive factors from a competitive forces analysis.

Chapter 3 presents a case study of Disc Golf S.A., a small pioneering company entering the sport/leisure industry. The case study is an extract from the business plan for the new venture. The case provides the data that is evaluated against the theoretical framework in Chapter 4. The evaluation considers the competitive pressures that Disc Golf S.A. will encounter, according to the framework and model proposed in Chapter 3.

Chapter 5 presents conclusions from the study and makes recommendations that could be beneficial to other small pioneering companies.
CHAPTER 2  STRATEGY IN CONTEXT

2.1 Introduction

If an industry is stable, Porter's Five Forces of Competition (1980) is the ideal framework to commence analysis of the competitive forces that a company will encounter. The importance of the various forces will vary depending on the industry structure, which will become evident upon careful analysis using the Framework. An analysis of the industry utilising Porter's Framework will enable a company to assess the threats that it will encounter and then, with the use of other strategic tools, develop strategies to protect the company's present and future position. Regardless of the industry structure, a pioneering company will place specific emphasis on barriers to entry, and first mover advantages. These strategic elements are likely to be the cornerstone of any pioneering company's' strategic endeavours upon start-up, and throughout the company's lifetime.

Theoretical and empirical aspects of Porter's Five Forces Framework and first mover advantages are discussed below. They provide a platform from which to analyse the threats and possible defences available to pioneering companies embarking on a new venture.

2.2 Porter's Five Forces of Competition

Michael Porter of the Harvard Business School developed a framework for classifying and analysing the structural forces of competition in an industry. The five forces of competitive pressure are analysed in a framework in order to determine the profitability of an industry. Profitability is viewed as the rate of return on capital relative to the cost of capital. These five forces consist of three sources of horizontal competition; those of substitutes, new entrants, and competitive rivals, and two sources of vertical competition; namely the bargaining powers of suppliers and buyers. Figure 2.1 depicts the Five Forces of Competition Concept.
Although there is debate over how successful the framework is in determining profitability of an industry, the framework at least helps identify competitive forces in an industry and assists in highlighting the drivers and basis for competition in the industry. The framework should only be applied at strategic business unit level, and not at corporate level, due to the diverse and complex nature of a corporate conglomerates' market. The dynamic nature of markets and their structural drivers means that a snapshot analysis with the framework would not be effective. An understanding of the possible changes in an industry, as well as discontinuities, is required in order to undertake a competent analysis. This may require the revisiting of the analysis in light of changes in the market, or in the event of any discontinuities, caused by changes in the macro environment. Each competitive force is not independent of the others, or their particular determinants. Changes in any particular force may precipitate changes with other competitive forces, and if significant enough, affect the industry's competitive nature.
Contributions to the factors impacting on the five competitive forces proposed by Porter have been numerous. Each competitive force will be separately discussed below, together with their relevant determining factors. Table 2.1 lists the various determinants of competitive pressure that will be discussed.

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2.2.1 Industry Rivalry

The competitive forces posed by industry rivalry are typically the aspects that receive the most attention from corporate strategists. A strategy focused on competitive rivalry may not be optimal however, if the determinants of competition in an industry are emerging from other forces. Factors that need to be considered in order to determine the state of competition in an industry, and possibly the profitability in an industry are:

Industry Growth

Growth in an industry, which may be a result of industry life-cycle, may determine the intensity of competition. A low growth industry is more susceptible to aggressive fights for market share than a high growth industry, where incumbents and new entrants may be satisfied with increased revenue that high industry growth furnishes.
High Fixed Costs/Value Added

An industry where fixed costs are high relative to value added, or products are perishable, could lead to rivals cutting prices to gain market share to spread the fixed costs over increased sales, or in an effort to move perishable goods. A price-cutting tendency in these industries would be increased in conditions where demand is low.

Intermittent Overcapacity

Industries that are prone to intermittent overcapacity are likely to increase competitive activity in order to compensate for the shifts in the supply-demand equilibrium. Intermittent overcapacity can often occur where augmented output can only be achieved in large increments, possibly due to economies of scale.

Product Differentiation

A product that cannot be differentiated from rival products is likely just to become a commodity. Due to the lack of differentiation, a commodity can only be distinguished utilising pricing policies. These pricing policies generally take the form of price-cutting and assists in increasing competitive activity. Cartelisation of commodity industries may be possible if the industry is concentrated. Members of the cartel can achieve higher profitability than normal if their collective market power can successfully control supply, and in turn pricing.

Brand Identity

Brand identity and reputation, which could be achieved through differentiation, can reduce competitive activity as companies secure profitable positions through customer loyalty. The need for head to head competition is therefore reduced.
Switching Costs

The absence of switching costs between rivals’ products facilitates easy switching between products. This may cause rivals to increase competitive activity in pursuit of market share or dominance over each other.

Concentration and Balance

Concentration is the number and size distribution of companies competing within a market. Monopolies and duopolies are deemed to be more profitable than industries that are less concentrated. This is ascribed to the lack of opportunity to co-ordinate prices in a market with numerous participants. Richard Schilling (Grant 1998) however concluded that ‘the relation, if any, between seller concentration and profitability is weak statistically and the estimated effect is usually small’. Even if this link to profitability were tenuous, the existence of many companies in a market would normally lead to increased competitive action.

Companies of equal size or market power will also tend to compete against each other head to head. This rivalry, especially if matched with similar strategies, could lead to severe competitive activity in the market.

Informational Complexity

Companies may raise profitability in industries where there is a pre-dominance of asymmetrical information, or the costs of attaining pertinent information are high. Customers are locked-in to existing suppliers if the cost of obtaining information or the complexity associated with the purchasing decision is prohibitive against switching suppliers. Participants in such industries are therefore less likely to engage in vigorous direct competition.

Diversity of Competitors

Companies with diverse backgrounds in terms of origins, objectives, philosophies, strategies, and costs will be less inclined to compete purely on price. The diverse
nature of the companies in the melting pot may help to ‘lubricate’ the competitive friction that may arise between competitors in an industry.

**Corporate Stakes**

The ultimate spoils of victory in an industry may also determine the intensity of competitive activity. The higher the corporate stakes, the larger the number of companies who will be willing to fight vociferously to secure the spoils.

**Exit Barriers**

Competitive activity can also be lifted to elevated levels in industries where the exit barriers are significantly high. These industries often have companies that are forced to remain in the industry due to the high costs of exit (Eaton and Lipsey 1980). This often manifests in perpetual overcapacity in the industry, resulting in the companies accepting low margins or even negative returns on investment. These companies will often resort to competing purely on a price basis in order to ensure survival.

**2.2.2 Threats to Entry**

The second horizontal source of competitive pressure are those posed by new entrants. Both the threat of entry, as well as entry of new entrants will impact on the behaviour of incumbents, and is likely to influence the nature of competition in an industry. Incumbents are continually searching for effective barriers to entry that will discourage new entrants from attempting to enter an industry. Barriers to entry are characteristics of the industry structure that gives incumbents in an industry an advantage over new entrants, who need to overcome these obstacles, in order to compete on the same basis as incumbents.

The effect of barriers to entry can be diluted by various factors (Yip, 1982). The contention that barriers to entry is only applicable to new companies is false. Entry by existing companies can be made easier due to their accumulated resources. The immense resources possessed by large corporations effectively nullify the absolute ability of barriers to entry to prevent new entrants into any industry. There is however
large scope for effective barriers to entry against companies that possess lesser resources. Companies can also circumvent barriers through the acquisition into the industry. This does not add to the number of competitors in the industry but can have an impact on the strategy and nature of competition.

New entrants could also redefine the market and enter the fringe of the market that has lower barriers to entry. The market can be divided into strategic groups that exhibit different characteristics and hence desirability. Barriers to entry will typically be lower in the less attractive fringe groups, but could be entered to provide a platform for entry into the more attractive groups. Entry into an attractive group is still likely to be subject to barriers, called mobility barriers by Porter (1998), which may be less onerous to overcome than entry barriers. The heterogeneity of competitive strategies can offer other opportunities to lessen or circumvent barriers to entry.

These resources, and the existence of diverse strategic permutations provide the contingencies that dilute the efficacy of barriers to entry. There is however a continuum of barriers to entry that would become effective, dependent on the resources and strategies of potential entrant companies. Barriers to entry can therefore only be properly assessed when the particular capabilities and intentions of a new entrant are known. Although there is much debate as to the efficacy of barriers to entry in increasing industry profitability, the principal barriers to entry are discussed below.

Economies of Scale

Economies of Scale can contribute to barriers to entry (Bain 1956; Harrigan 1981; Porter 1980). Most markets exhibit an economy of scale, where unit costs reduce to a specific minimum, with increased output. Economies of scale may be exhibited in all functions in a company and not just in production. Unit costs may remain static or even increase with further increases in output or may fluctuate to achieve multiple minimum unit costs, at various higher levels of output. If there are multiple minimum scales, the lowest output, exhibiting minimum unit costs is the minimum efficient scale. If the minimum efficient scale in an industry is achieved at a large output, the
costs associated with achieving that output might be so high that it could prohibit new entrants from entering the market. Such output may also lead to overcapacity and affect the supply/demand equilibrium and reduce prices, resulting in the industry becoming less attractive.

Companies that enter a market at less than the minimum efficient scale will be at a cost disadvantage against incumbents operating at minimum efficient scale (Yip 1982). The full extent of the disadvantage will depend on the steepness of the unit cost/output gradient and the ability of the entrant to differentiate their product or operate in niche markets. Companies entering at efficient scales may initially experience drastic under-utilisation of capacity, as they would not yet have the market share to warrant such capacity. This could also lead to higher unit costs, due to inefficiency and redundancy or reduced profitability, via reduced prices in the effort to gain market share.

**Patents, Trademarks and Trade Secrets**

The existence of proprietary products or procedures that ensure legal protection or copyright revenues to the proprietary firm could also pose barriers to entry in knowledge intensive industries (Krouse 1984). New entrants will have to decide whether to pay royalties for proprietary information, or commit capital for research and development in order to circumvent these obstacles. The costs of this royalty may be sufficiently high so that it may give the patent holder a durable competitive advantage over the entrant. The R&D costs may also be sufficiently high as to place the new entrant at a competitive disadvantage. Either of these circumstances may effectively dissuade a new entrant from entering a market.

Trade secrets similarly also pose barriers to entries if new entrants are not privy to innovative procedures or products that would enable them to compete evenly with incumbents in an industry. The holders of any trade secrets will withhold such information in order to assure a sustainable competitive advantage. New entrants will therefore have to accept an inferior market position, commit R&D funds to circumvent their knowledge deficiencies, or decide that the market is not that attractive and elect not to enter it.
Brand Identity/Product Differentiation

Product differentiation (Bain 1956; Porter 1980) and brand building (Krouse 1984) are measures intended to develop customer loyalty and preference. If customer loyalty is achieved, new entrants may have to spend disproportionately on advertising and promotions in order achieve similar customer loyalty. Such expenditure may be prohibitive for new entrants, or may lead them to accept niche positions in periphery, less profitable groups of the market.

Switching Costs

In instances where there are significant switching costs (Porter 1980) associated with swapping suppliers, either due to the complex nature of the product or service, or the particular relationship between the supplier and customer, new entrants may be discouraged from entering such markets. If indeed they decide to enter the market, contingency measures aimed at enticing customers to switch suppliers need to be implemented. These measures may include manners of avoiding/reducing switching costs or subsidising some or all of the costs involved with switching. If these measures are too costly, or difficult to implement, switching costs will pose a significant barrier to entry.

Capital Requirements

The nature of some industry structures is such that it requires large capital investments in order to enter that industry (Bain 1956; Harrigan 1981; Porter 1980). These capital requirements are other than investments required for achieving economies of scale, establishing brand identity and meeting government regulations, which are also determined by the nature of a particular industry, but are dealt with elsewhere. Some industry characteristics that may require high absolute capital expenditure and therefore a potential for posing barriers to entry are discussed below:

R & D - industries where technology is advanced and rapidly changing may require high investments in research and development in order to compete effectively.
New entrants may be discouraged (Harrigan 1981), due to the high risks associated with such large investments that may only provide a limited probability of success. Advertising - industries that utilise intensive advertising, not necessarily to increase brand loyalty but purely due to the nature of the industry, may discourage new entrants if the level of advertising required does not offer sufficient returns (Demsetz 1979).

Sunk Costs - an industry that requires a large amount of unrecoverable costs when starting up will add to the risk that a new entrant will face (Baumol and Willig 1981). Potential entrants will be less willing to enter an industry if a high percentage of their outlay can not be recovered if the venture is unsuccessful.

Access to Distribution

New entrants into an industry may encounter limited access to distribution channels due to limited shelf space, risk aversion or preference of retailers, and marginal costs associated with adding an additional product. The costs associated with gaining access to the correct channels or developing new distribution channels, may be too great and could act as a barrier to entry (Karakaya and Stahl 1989).

Absolute Cost Advantages

Incumbents may experience cost advantages (Bain 1956; Harrigan 1981) other than those from economies of scale over new entrants. These cost advantages are normally a consequence of earlier entry into a market. Some of the sources of cost advantage are discussed below:

Learning/Experience Curve - unit costs typically reduce as cumulative output increases due to greater efficiency afforded by collective learning and experience. New entrants are naturally higher up the experience curve and will therefore exhibit higher unit costs. If this cost advantage can be sustained for lengthy periods, the experience effect could pose a barrier to entry.

Access to Strategic Inputs - earlier access to strategic inputs (Scherer 1970) and resources and locations could also lead to cost advantages. Incumbents can
monopolise scarce strategic resources, forcing new entrants to pay a premium on, or
be forced to utilise inferior inputs.

Proprietary Low-Cost Product Design - ownership of a proprietary low-cost
production method can offer a barrier to entry (Karakaya and Stahl 1989) if new
entrants have to pay a royalty to utilise the process, or increase unit costs by utilising
inferior processes or developing their own low-cost processes.

**Government Policy**

The costs of conformance to government regulations and standards in some industries
can be so high for new entrants that they pose significant barriers to entry (Dixit and
Kyle 1985; Grabowski and Vernon 1986). These costs and effort consumed in
attaining the licences, approvals, and adhering to environmental and safety standards,
set out by government regulation, may be too great to justify entrance into that
industry. Such high costs that may have been incurred by incumbents in that industry,
are now sunk costs, and may pose at exit barriers. Alternatively government
regulations may have been less onerous at the time of their entry and therefore less
costly.

**Expected Retaliation**

The anticipated, rather than actual retaliation of incumbents to new entrants in an
industry may be so vigorous as to discourage entry (Needham 1976), and thereby pose
a barrier to entry. Actual retaliation to new entrants cannot be considered a barrier to
entry, as entry would already have occurred. If incumbents protected their market
position against new entrants previously, with aggressive retaliation tactics, and signal
to any new potential entrants that similar retaliation would be forthcoming, then
potential new entrants would be less attracted to enter the industry.

Table 2.2 lists various possible sources of barriers to entry together with studies that
have been undertaken on each source.
Table 2.2    Market Entry Literature Review

<table>
<thead>
<tr>
<th>Barriers</th>
<th>Source</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost advantage of incumbents</td>
<td>Bain 1956; Day 1984; Harrigan 1981; Henderson 1984; Lieberman 1987; Porter 1980; Scherer 1970; Schmalensee 1981; Weizsacker 1980; Yip 1982.</td>
<td>One of the most important entry barriers, and usually results from economies of scale and learning curve effects.</td>
</tr>
<tr>
<td>Capital requirements</td>
<td>Bain 1956, Eaton and Lipsey 1980; Harrigan 1981; Porter 1980.</td>
<td>The need to invest large financial resources in order to compete or enter new markets constitute barriers to entry, and is higher in capital intensive industries.</td>
</tr>
<tr>
<td>Customer switching costs</td>
<td>Mcfarlan 1984; Porter 1980.</td>
<td>Switching costs prevent the buyer from changing suppliers, and technological changes often raise or lower these costs.</td>
</tr>
<tr>
<td>Access to distribution channels</td>
<td>Porter 1980,1985.</td>
<td>First or early market entrants use intensive distribution strategies are to limit the access to distributors for the potential market entrants.</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Barriers</th>
<th>Source</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertising</td>
<td>Brozen 1971; Comanor &amp; Wilson 1967; Demsetz 1982; Harrigan 1981; Netter 1983; Reed 1975; Reekie &amp; Bhoyrub 1981.</td>
<td>Heavy advertising by firms already in the market increases the cost of entry for potential entrants and affects brand loyalty as well as the extent of economies of scale by causing cost per dollar revenues to decline.</td>
</tr>
<tr>
<td>Number of competitors</td>
<td>Harrigan 1981.</td>
<td>Market entry is expected to be more likely during periods of increasing in corporations and less likely after a lag, during periods when higher numbers of business failures occur.</td>
</tr>
<tr>
<td>Research and development</td>
<td>Harrigan 1981; Schmalensee 1983.</td>
<td>This barrier is usually short-lived. Incumbent firms may prevent the entry of new firms by investing effectively in R&amp;D, which increases technological scale economies and forces the ongoing industry context to evolve in a way that would make subsequent attempts to enter more ineffectual.</td>
</tr>
<tr>
<td>Price</td>
<td>Needham 1976; Smiley and Ravid 1983.</td>
<td>Price warfare can be a significant deterrent to entry, particularly in industries where firms are more likely to lower their prices to fill under-utilised plants.</td>
</tr>
<tr>
<td>Technology and technological change</td>
<td>Arrow 1962; Ghadar 1982; Porter 1985; Reinganum 1983</td>
<td>Usually present in high technology industries and can actually raise or lower economies of scale, which is one of the major sources of cost advantages.</td>
</tr>
<tr>
<td>Barriers</td>
<td>Source</td>
<td>Implications</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>---------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Seller concentration</td>
<td>Bain 1956, 1968; Crawford 1975; Mann 1966.</td>
<td>Entry is unlikely to be as easy in highly concentrated as in less concentrated markets. The higher the degree of concentration, the greater the effect of barriers on profit; the lower the degree of concentration, the lower the effect of barriers on profit.</td>
</tr>
<tr>
<td>Divisionalisation</td>
<td>Schwartz and Thompson 1986.</td>
<td>Only expected in profitable or oligopolistic industries. Incumbent firms create new independent divisions more cheaply than potential entrants who must incur additional overhead costs for entry.</td>
</tr>
<tr>
<td>Brand name or trademark</td>
<td>Krouse 1984.</td>
<td>New entrants to an industry are denied the benefits of brand name created by others as a result of the exclusive rights to use given with a trademark. Usually a weak barrier.</td>
</tr>
<tr>
<td>Sunk costs</td>
<td>Baumol and Willig 1981.</td>
<td>Contribute to entry barriers that can also give rise to monopoly profit, resource misapplication, and inefficiencies.</td>
</tr>
<tr>
<td>Incumbents expected reaction to market entry</td>
<td>Needham 1976; Yip 1982.</td>
<td>May deter market entry only if the incumbent firms are able to influence potential entrants expectations about the post entry reaction of the incumbents.</td>
</tr>
</tbody>
</table>


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The undue preoccupation with barriers to entry could lead to disadvantages (Yip 1982) if the continued focus on these barriers is not justified. Incumbents could lose their competitive advantage, or find themselves at a disadvantage, if they fail to identify trends and developments that alter the nature of competition in their industry. This complacency could lead to ‘gateways’ to entry as new entrants identify opportunities in the industry. Companies benefiting from barriers to entry should constantly be aware of developments, which could alter the basis of competition, and ensure they do not waste resource on sustaining barriers that will not be effective.

2.2.3 Threat of Substitution

Substitute products typically limit the profit potential in an industry by placing a ceiling on the prices that can be charged (Porter 1980). Substitute products that pose the most threat are ones that are subject to trends improving their price/performance trade-off, and emanate from industries that earn high profits. The ability of substitute products to limit profit is determined by:

Relative Price/Performance

Consumers will evaluate the relative price/performance characteristics of a product and their substitutes when considering a purchasing decision. If close substitutes are readily available, then a comparison is relatively simple. In the absence of close substitutes, consumers are likely to be comparatively insensitive to price, as they are unable to make a price/performance evaluation. The more complex the product or service, the more difficult it is to discern performance differences.

Propensity to Substitute

The threat of a substitute product will also depend on the propensity of a consumer to switch between competing products. A consumer who is brand loyal is less inclined to undertake a price/performance analysis than a consumer who is relatively indifferent about the product. Other consumers may be more inclined to expend time and energy on a price/performance trade-off if the product consumption has a large significance to them, either as an end-user or as part of their own product offering.
Switching Costs

The switching costs associated with swapping to a substitute will impact both the relative price/performance of the products, as well as the propensity of the consumer to substitute. A substitute product that is favourably priced may be rejected if the switching costs of the product are too great to justify substituting the product.

2.2.4 Threats From Buyers

Buyers can negotiate prices, demand better quality or service, or play various suppliers up against each other, which will all effect profitability in the suppliers' industry. The relative profitability of two parties involved in a transaction will be dependent on their relative economic power (Grant 1998). Buyers who exhibit economic power over their suppliers could impose serious threats to the supplier (Porter 1980). There are two types of factors that determine the relative power of a buyer:

Buyer's Price Sensitivity

The extent to which a buyer is sensitive to price will impact how strongly the buyer will try and exert economic power over its suppliers. Their price sensitivity will be influenced by:

Component Price/Total Cost - if the supplier's component is a considerable portion of the total cost of the buyer's product, the buyer will be sensitive to price issues.

Product Differentiation - the less differentiated the product, the more willing the buyer is to switch products on the basis of pricing.

Competitive Intensity - the more intense the competition amongst buyers, the more inclined they will be to negotiate lower prices.

Brand Identity - a buyer will be less price sensitive if they can leverage a products brand identity, or if their product has a brand identity of its own.

Quality/Performance - buyers will be less price sensitive when the product supplied is important to the quality or performance of the buyers product or service.
Buyer Profitability - buyers will be more price sensitive if they operate in an industry that exhibits low profitability.

Decision-Makers Incentives - purchasing departments often receive incentives to reduce costs to the organisation. If the decision-makers in a purchasing department receive suitable incentives to reduce costs, they will apply pressure on suppliers to lower their prices.

Bargaining Leverage

Price sensitivity reflects a motive to apply power over suppliers. Bargaining leverage indicates the ability of one party to exert power over another. Bargaining power could ultimately be considered the consequence of a decision to refuse to deal with another party, and depends on the effectiveness and credibility with which each party makes this threat (Grant 1998). Gamesmanship will therefore play an important part in developing bargaining leverage. Bargaining power could be quantified as the relative cost that each party sustains as a result of the transaction not been undertaken. Bargaining leverage is determined by:

Relative Concentration - the lower the number of buyers that determine product demand, the greater the cost of losing such buyers.

Purchase Volume - buyers who purchase large volumes are in a position to exert more leverage over suppliers.

Switching Costs - bargaining leverage is enhanced if switching costs are low or non-existent to a buyer.

Substitute Availability - the availability of substitute products, in the absence of significant switching costs, will increase a buyers bargaining leverage.

Buyer Information - buyers well informed about a suppliers products, prices and competitors is better positioned to bargain with suppliers. Asymmetric information may reduce a buyers bargaining position, but may be detrimental to the buyer/supplier relationship.

Backward Integration - the ability of a buyer to integrate backwards will enhance its bargaining leverage. If a buyer can demonstrate its ability not to transact with a supplier, it will be well placed to bargain with suppliers.
Retailers in particular, are in a position to gain significant bargaining power over manufacturers' if they can influence consumers' purchasing decisions.

2.2.5 Threats from Suppliers

Suppliers are also able to influence their customers by altering the quality of products and services, or raising prices (Porter 1980). The relationship, and therefore influences, between suppliers and buyers is largely analogous to the relationship between buyers and their suppliers, as discussed above. The more salient determinants of supply power are reiterated below:

Influence on Buyers Costs or Differentiation - if a supplier’s product is instrumental to a buyers cost structure or product differentiation, the supplier may exert substantial influence over the buyer.

Switching Costs - if significant switching costs exist, a supplier can effectively lock-in a buyer, resulting in a strong bargaining position.

Forward Integration - if a supplier’s threat of forward integration is more credible than a buyer’s threat of backward integration, the supplier will be in a favourable bargaining position.

2.3 First Mover Advantage

First mover advantages are potential advantages that are available to a pioneer who introduces a new product, utilises a new process, or enters a new market. This kind of advantage is reflected in the inverse relationship between order of entry and market share. Table 2.3 furnishes some studies that reinforce the relationship between order of entry and market share and also emphasises the significance of fundamental marketing and strategic concepts and principals. Although order of entry can influence market share, studies have shown that strategic product positioning and promotion are better determinants of market share. Porter (1985b) contends that first movers reap benefits, to the extent that they can preserve temporarily won advantages, and ultimately define the competitive rules in their industry. Porter (1980) also states
that maturity of the industry and the stage of the product life-cycle are crucial in determining first mover advantages. First mover advantages have been more effective in growing industries and in the early stages of a product life cycle.

Table 2.3 Overview of Empirical Studies on Order of Entry and First Mover Advantage

<table>
<thead>
<tr>
<th>Study</th>
<th>Principal Finding(s)/ Conclusion(s)</th>
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<tbody>
<tr>
<td>Robinson and Fornell (1985) Analysed 371 mature consumer goods businesses.</td>
<td>First-movers were found to have higher market shares than later entrants. On average, first-movers had a market share of 20%, versus 17% for early followers and 13% for late entrants. Significant degrees of lateness effects were found. Early followers had significantly higher market shares than late followers; however, the difference was much smaller than the difference between first-movers and early followers.</td>
</tr>
<tr>
<td>Robinson (1988) Studied 1209 mature industrial goods businesses.</td>
<td>First-movers were found to have higher market shares than later entrants. On average, first-movers had a market share of 29%, versus 21% for early followers and 15% for late entrants. Order of entry alone explained 8.9% of the variation in market share. First-movers also tended to have higher product quality, broader product lines, and broader served markets.</td>
</tr>
<tr>
<td>Lambkin (1988) Examined 129 start-up and 187 adolescent businesses.</td>
<td>Order of market entry was found to have a significant effect on market share for both start-up businesses and adolescent businesses. Among start-up businesses, on average, market pioneers had a market share of 24%, versus 10% for early followers as well as late entrants. Among adolescent businesses, on average, first-movers had a market share of 33%, versus 19% for early followers and 25% for late entrants.</td>
</tr>
<tr>
<td>Sample Survey and Archival Studies</td>
<td>The first firm to offer and promote a new type of product was found to receive a substantial and enduring sales advantage. Later entrants were in a position to overtake the pioneers by offering new benefits.</td>
</tr>
<tr>
<td>Table 2.3 Cont.</td>
<td>For six of the seven cigarette types studied, the first firm to offer, promote, and widely distribute a brand for which there was a favourable market trend was found to substantial and receive an often enduring sales advantage.</td>
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</tr>
<tr>
<td>Whitten (1979)</td>
<td>Examined the introduction of 7 cigarette types.</td>
</tr>
<tr>
<td>Spital (1983)</td>
<td>In 17 of 22 innovations studied, the first manufacturer to produce a design was found to hold the largest market share in that design from the date of first production until the time of the study. This result was explained by the lengthy period required to qualify vendors and the practice of &quot;designing-in&quot; technology. No lateness effect was observed.</td>
</tr>
<tr>
<td>Flaherty (1983)</td>
<td>A small negative simple correlation was found between order of market entry and market share of lead technology, but product quality and skills in application engineering moderated the relationship.</td>
</tr>
<tr>
<td>Urban et al. (1986)</td>
<td>Of the four independent variables investigated (market positioning, advertising expenditures, order of entry, and time between entries into the market), the first two variables were found to be more important explanators of market share than order of entry. No lateness effect was observed.</td>
</tr>
<tr>
<td>PIMS Database Studies</td>
<td></td>
</tr>
<tr>
<td>Srinivasan (1988)</td>
<td>Early followers have lower marketing and R&amp;D expenses than first-movers. Early followers have marginally lower product quality and market shares than first-movers, but followers in product-market in the initial stage of their life cycle have higher product quality and larger market shares. Early followers in the initial phase of a product-market life cycle are more profitable than first-mover because of higher market shares and lower marketing and R&amp;D expenses.</td>
</tr>
<tr>
<td>Miller, Gartner, and Wilson (1989)</td>
<td>A significant inverse relationship was found between order of entry and market share. First-movers had higher quality, better service, and more differentiated products than later entrants. No lateness effect on share was observed.</td>
</tr>
</tbody>
</table>
Table 2.3 Cont.

<table>
<thead>
<tr>
<th>Study</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parry and Bass (1990)</td>
<td>Studied 593 consumer goods businesses and 1287 industrial goods businesses. Pioneers were observed to have higher market shares than followers. The extent to which pioneers have a share advantage depends on industry type (concentrated, non-concentrated) and end-user purchase amounts.</td>
</tr>
<tr>
<td>Lilian and Yoon (1990)</td>
<td>Analysed 112 industrial products in 7 French industry sectors. The third through fifth entrants were more successful than first and second entrants; successful products, irrespective of timing, benefited from entry early in the product life cycle; delay of entry accompanied production and marketing expertise of followers.</td>
</tr>
<tr>
<td>Mitchell (1991)</td>
<td>Studied 314 entrants into 5 technical sub-fields of the diagnostic imaging industry. Entry order effects on market share and survival depend on whether the first-mover is an industry incumbent or newcomer. Newcomers benefit from early entry and incumbents perform better with later entry. A significant &quot;survivor bias&quot; observed in relationship between entry order and market share.</td>
</tr>
</tbody>
</table>

Sample Survey and Archival Studies


First mover advantages could be in the form of barriers to entry or sources of sustainable competitive advantage. Barriers to entry extend the period that the first mover enjoys a monopoly whilst some temporal barriers (Patterson 1993) confine benefits to the first mover exclusively.

First mover status does not guarantee sustainable advantages as illustrated by the numerous examples of small pioneers being out-muscled by large companies with superior resources and strategies. Kerin and Varadarajan (1992) stated, "the overall magnitude of first mover advantage is the composite effect of a multiplicity of factors. The degree of fit between the environmental opportunity and the first mover's skills and resources, the firm's ability to capitalise on potential sources of first mover advantage, the moderating effects of product/market contingencies on the factors underlying the positional advantages of the first mover, competitive strategies of the
First mover status endows a pioneer with potential to exploit new opportunities in the absence of direct competitors. This short-term monopoly allows the pioneer not only to exploit the new market, but more importantly, influence the structure of the market to best suit them. There are various types of opportunities available to the pioneer, through which they can extract either absolute cost or differentiation advantages.

2.3.1 Pre-emption Opportunities

These are opportunities by virtue of simply being there before any other competitors:

Scale and Experience Economies - first movers will benefit from economies of scale, particularly if their output capacity is sufficient to fulfil the foreseeable demand, and unit costs reduce with increased output. Experience economies of value activities will also accrue as the first mover leads the way down the experience curve (Henderson 1984). This type of advantage can be quite durable if the experience is kept proprietary.

Marketing Cost Asymmetries - the varying degree of consumer consumption experience leads to differences in marginal effects of advertising between the first mover and later entrants. A first mover will initially benefit from promotional messages in an uncluttered environment, until later entrants introduce multiple messages, that will diminish the effectiveness of all promotional messages. Buzzell and Farris (1977) found that sales promotion expenditures, as a percentage of sales, were lower for pioneers than for later entrants.

Relationships and Collaboration - the forging of relationships and collaboration with market participants can be a rich source of competitive advantage. The pre-emption of such relationships is therefore also a potential source of competitive advantage, as they can be concluded before later entrants even enter the market. These relationships could be with buyers, suppliers, or any other participant in the industry who could contribute to the competitive position of the first mover. Collaborative
relationships therefore have potential to entrench the first mover in the industry and contribute to sustainable barriers to entry.

Cost Asymmetries in Factor Inputs - early negotiations for factor inputs could lead to favourable contracts with suppliers (Patterson 1993). First movers could negotiate favourable prices, or consume the majority of input supply, and push up the prices for augmented supply to later entrants.

Spatial Pre-emption

The pre-emption of locations, both physical and perceptual, can provide a basis for first mover advantages (Kerin and Varadarajan 1992).

Locations - first movers could secure the most desirable locations (Porter 1985b) that could lead to sustainable advantages.

Perceptual Space - first movers could monopolise the product characteristics of a market.

Distribution Space - first movers are in an ideal position to secure leading marketing intermediaries, unique channels and prime shelf space, leaving less desirable distribution options to later entrants.

Market Segments - first movers are able to select and dominate the best, most profitable markets and niche's, forcing later entrants to enter less desirable markets.

Early Profitability - The temporary monopoly afforded first movers allows them to pursue price skimming and receive extra-ordinary high profits. These profits could provide the first mover with precious resources that can be used to secure other, more sustainable, first mover advantages (Porter 1985b).

2.3.2 Technological Opportunities

Product and Process Innovations - the leadership in product and process innovations could be converted into sustainable advantage and pose barriers to entry if the innovations are patented or copyrighted (Kerin and Varadarajan 1992). Later
entrants would then be required to pay royalties in order to share in the innovations, or outlay capital for research and development to copy the innovations. Licensing fees however rarely offset the loss of competitive advantage, but may be desirable if the company can not exploit the innovation satisfactorily, or operates in a low profitability industry.

Organisational Innovations - organisational innovations are intangible improvements to an organisation that are hard to mimic or reproduce that contribute to competitive advantage (Lieberman and Montgomery 1988; Patterson 1993). They are therefore deemed to be more durable than product and process innovations and hence more desirable.

2.3.3 Behavioural Opportunities

These opportunities alter the behaviour and perceptions of consumers and participants in an industry.

Switching Costs - a first mover could develop both contractual and non-contractual costs associated with switching to alternative products. These costs could pose a barrier to entry and protect the market share of the first mover (Porter 1985b).

Reputational Advantages - a first mover could be perceived as an innovator and product leader in an industry. This image could lead to favourable brand loyalty (Kerin and Varadarajan 1992).

Communication Good Effects - a first mover can influence consumers' perception of the relative importance of a product or service attribute, and its ideal combination, to the point that it becomes the industry standard (Teece 1987). Being the industry standard confers numerous advantages and opportunities to an organisation.

Information and Consumption Experience Asymmetries - consumers are likely to be more informed and familiar with a first mover's product due to their longer exposure to the product. Buyer uncertainty, information search and evaluation costs
could influence consumers' trial and repurchase behaviour in favour of the first mover's product (Nelson 1980). This kind of brand loyalty, particularly in consumer markets, with experience goods, or if the consequence of making a purchase mistake is high, could lead to a sustainable advantage provided the product continues to meet or exceed the consumers' requirements.

2.3.4 First Mover Disadvantages

First mover status provides an opportunity for advantages but also exposes opportunities for disadvantages. A free-rider effect can take place where later entrants are able to benefit from the experiences of a first mover by either reducing cost, or implementing superior strategies, once market uncertainty has been resolved. First movers are better positioned to exploit the advantages rather than guard against the disadvantages. First mover disadvantages have the capacity to mitigate, nullify or even overwhelm the first mover advantages available to a pioneer. The decision on whether to be the first mover can only be undertaken when both the pros and cons of such a move has been analysed.

Pioneering Costs

The costs of pioneering may be considerable and possibly avoided or reduced by later entrants (Porter 1985b). Higher costs that could be incurred by a first mover include:

- Gaining Regulatory Approval - costs for gaining regulatory approval may be higher for the pioneer if the authorities face a new learning curve. Later entrants may benefit if they no longer require such regulatory approval, or if the procedure is streamlined due to learning effects.
- Achieving Code Compliance - similar benefits may accrue to later entrants as for gaining regulatory approval.
- Educating Customers - later entrants can piggyback on the efforts of pioneers to educate buyers resulting in reduced costs, resources and effort.
- Developing Infrastructure and Complementary Products - later entrants can similarly piggyback on the efforts of pioneers when developing infrastructure and complementary products.
High Cost of Early Inputs - the cost of input to a pioneer may be higher if the input is scarce due to initial low demand. Later entrants may encounter lower input prices if increased demand produces economies of scale to the input producers.

Market Uncertainty

Later entrants can develop their strategy, with better insight, from more current information regarding the projected demand and trends in an industry (Porter 1985b). First entrants may also forgo scale economy advantages in the face of uncertain demand.

Change in Consumer Needs

Later entrants could benefit by adapting their offering as consumers' needs and technology requirements evolve over time (Lambkin 1988). A first mover's offering may be less attractive in light of these changing consumer needs and may require extensive and costly modifications.

Specificity of Investments

First movers may have committed unrecoverable investments in technology and processes that have become obsolete or are costly to modify. Later entrants may time their entry to embrace the current technology and processes (Porter 1985b).

Technological Diffusion and Discontinuities

Technological pioneering advantages including patents can be mitigated by diffusion of technology via reverse engineering, publication of research findings, and mobility of trained employees. Approximately 60% of successful innovations are imitated within four years (Kerin and Varadarajan 1992). As indicated above, a first mover with inflexible commitments to dated technology can be severely prejudiced versus a fast follower in the event of a technological discontinuity.
**Low Cost Imitation**

Later entrants can gain an advantage if they are continually able to imitate the first mover, whilst incurring lower imitation and modification costs than the innovators own costs. Mansfield, Schwarz, and Wagner (1981) suggested that the cost of imitation is approximately two-thirds the cost of innovation.

**Learning from Pioneer's Mistakes**

Corporate strategy formulation is a dynamic process from which strategists collectively learn from their experiences and mistakes. Later entrants not only have the benefit to learn from their own experiences and mistakes, but also possess the hindsight to learn from a first movers experiences and mistakes. Such hindsight could provide the basis for a more efficient allocation of resources and efforts by a later entrant.

### 2.4 Synopsis

Porter's Five Forces Framework is a good starting point for analysing the competitive nature of an industry that a pioneering company is about to enter. If the industry is relatively stable, utilising the framework will determine the source of threats within the industry, reveal the competitive nature of the industry, and lay a platform for strategic planning. The framework may even indicate the level of profitability anticipated in the industry, but fails to entirely encapsulate the competitive issues that a pioneering firm will consider in strategic planning. The framework is intended for all companies as a strategic tool but a pioneering firm will not initially encounter direct rivals in its industry. Although issues concerning industry rivalry may be relevant at a later stage, emphasis on identifying and building first mover advantages is more appropriate when considering the threats of competitors. Porter's Five Forces Framework for pioneering companies therefore should concentrate on issues aimed at exploiting first mover advantages rather than the threat of presently non-existent rivals.
Table 2.4 illustrates a guideline for analysing competitive threats utilising a modified version of Porter's Five Forces Framework specifically for pioneering companies. The modification places emphasis on enhancing barriers to entry and identifying and exploiting first mover advantages prior to the emergence of direct competitors. Some of the issues listed under industry rivalry may still be relevant to strategic planning but are omitted here. This framework is intended to assist strategic planning for a company embarking on a pioneering venture. If barriers to entry are not successfully imposed, Porter's traditional framework will then need to be utilised to develop strategic contingencies against direct competitors.

Table 2.4 - Competitive Pressure Framework for Pioneering Companies

<table>
<thead>
<tr>
<th>Determinants of Supplier Power</th>
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<tbody>
<tr>
<td>Differentiation of Inputs.</td>
</tr>
<tr>
<td>Switching Costs of Suppliers and Firms in the Industry.</td>
</tr>
<tr>
<td>Presence of Substitute Inputs.</td>
</tr>
<tr>
<td>Supplier Concentration.</td>
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<tr>
<td>Importance of Volume to Supplier.</td>
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<tr>
<td>Cost Relative to Total Purchases in the Industry.</td>
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<tr>
<td>Influence on Buyers Cost or Differentiation.</td>
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<tr>
<td>Forward Integration.</td>
</tr>
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Table 2.4 Cont.

<table>
<thead>
<tr>
<th>Entry Barriers</th>
<th>First Mover Status</th>
<th>Substitution Determinants Of Threat</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advantages</strong></td>
<td><strong>Disadvantages</strong></td>
<td><strong>Relative Price</strong></td>
</tr>
<tr>
<td>Economies of Scale.</td>
<td>Pioneering Costs</td>
<td>Performance.</td>
</tr>
<tr>
<td>Switching Costs.</td>
<td>Educating Customers.</td>
<td></td>
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<tr>
<td>Capital Requirements</td>
<td>Product/Infrastructure Development.</td>
<td></td>
</tr>
<tr>
<td>R &amp; D.</td>
<td>High Input Costs.</td>
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</tr>
<tr>
<td>Sunk Costs.</td>
<td>Changing Consumer Need.</td>
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</tr>
<tr>
<td>Access to Distribution.</td>
<td>Specificity of Investments.</td>
<td></td>
</tr>
<tr>
<td>Absolute Cost Advantages</td>
<td>Technological</td>
<td></td>
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<tr>
<td>Proprietary Learning Curve.</td>
<td>Discontinuities and Diffusion.</td>
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<tr>
<td>Government Policy.</td>
<td>Exit Barriers.</td>
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<tr>
<td>Expected Retaliation.</td>
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<thead>
<tr>
<th>Determinants Of Buyer Power</th>
<th>Bargaining Leverage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Price Sensitivity</strong></td>
<td><strong>Relative Concentration.</strong></td>
</tr>
<tr>
<td>Price/Total Cost.</td>
<td>Purchase Volume.</td>
</tr>
<tr>
<td>Product Differentiation.</td>
<td>Switching Costs.</td>
</tr>
<tr>
<td>Competitive Intensity.</td>
<td>Substitute Availability.</td>
</tr>
<tr>
<td>Brand Identity.</td>
<td>Buyer Information.</td>
</tr>
<tr>
<td>Quality/Performance.</td>
<td>Backward Integration.</td>
</tr>
<tr>
<td>Buyer Profitability.</td>
<td>Pull-Through.</td>
</tr>
<tr>
<td>Decision Makers’ Incentives.</td>
<td></td>
</tr>
</tbody>
</table>
Porter's Five Forces Framework is one of several tools that are used for strategic planning and formulation. It focuses on the composition and nature of competition in an industry, but does not stress the relative importance of the individual determinants of competitive pressure. The framework does allow ranking of the individual factors within each type of competitive force, but is unable to rank factors across the Five Forces. Richard D’aveni (2001) developed a model to spatially represent a company's product offering against competitors and substitutes, that ranks each market relative to the company's particular strategy and objectives.

D’aveni’s model arranges certain markets according to their attractiveness and the company’s relative strength and strategies. Table 2.5 shows the matrix how the various markets are classified. Core Markets are those that have high attractiveness and the company's product has high relative market strength. This is the market that the company wants to dominate and defend vigorously. Vital markets are those with low market attractiveness, but the market is crucial to the company's success in the core market. The company would ideally possess a product with market strength in this market, which has synergies with its product/s in the core market, in order to fortify the core product. Pivotal markets are those that exhibit potential for high market attractiveness and could become a vital or core market in the future. A company would strive to achieve relative market strength in these areas, to be well placed if the market potential is realised and becomes more important. Buffer and forward markets are markets with low and high attractiveness respectively that are more expendable, but are still none the less crucial to the company's strategy. Buffer markets are zones that insulate the core, vital, and pivotal markets from extreme competitive activity. A company would place products in a buffer zone to deflect attention from its main markets and would not normally seek, nor be in a strong position, to dominate such markets. Forward markets are similar to buffer zones as they are intended to deflect attention from core markets, but products are specifically selected to compete and attack competitors in their core markets, to try and ensure security of their own core market. A company will have relative weakness in a forward market, but the attractiveness of the market could make later market development a possibility.
Table 2.5  
D’aveni’s Market Classification

<table>
<thead>
<tr>
<th>Market Attractiveness</th>
<th>Relative Market Strength</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Weak</td>
</tr>
<tr>
<td>High</td>
<td>Forward</td>
</tr>
<tr>
<td>Low</td>
<td>Buffer / Forward</td>
</tr>
<tr>
<td>Potentially High</td>
<td>Power Vacuum</td>
</tr>
</tbody>
</table>

Figure 2.2 graphically depicts how the spheres of influence of the various markets protect the central core.

Figure 2.2  
Dáveni’s Spheres of Influence
This sphere of influence model could be adapted to represent and rank all the relevant determinants of competitive pressure that are considered in Porter's Five Forces Framework. This model could list the competitive determinants, from the Five Forces Framework, concentrically around a central core, with the strategically more important determinants closer to the core than less important factors. This ranking helps identify the issues that need to be prioritized when utilizing other models (e.g. SWOT Analysis) in the strategic development process, and would assist in separating the crucial from secondary issues that will require strategic planning, formulation and implementation. The factors would be ranked according to the type of competitive impact and the significance to the particular industry, as illustrated by the Strategic Pioneering Matrix in Table 2.6.

**Table 2.6 Strategic Pioneering Matrix**

<table>
<thead>
<tr>
<th>Competitive Impact</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>Moderate</td>
<td>Important</td>
<td>Critical</td>
</tr>
<tr>
<td>Neutral</td>
<td>Secondary</td>
<td>Moderate</td>
<td>Important</td>
</tr>
<tr>
<td>Negative</td>
<td>Moderate</td>
<td>Important</td>
<td>Critical</td>
</tr>
</tbody>
</table>

Critical factors would be those that have high significance to the industry and could pose both positive and negative competitive impacts. These factors should receive paramount priority and ensuing strategies will be critical to the success of the venture. Important factors are those with medium industry significance that have both positive and negative competitive impact, and high industry significance with neutral competitive impact. These factors also pose significant influence on the industry and need to be addressed if the venture is going to be successful and sustainable. Strategies emanating from these factors should reinforce the critical strategies and seek to entrench a sustainable competitive advantage. Moderate factors have low industry significance with positive and negative competitive impact, and medium industry significance with neutral competitive impact. These factors cannot be ignored as they may develop the capacity to influence a venture's success. Strategies
resulting from moderate factors, like D'aveni's buffer and forward zones should be used to engage potential competitors in their core markets and possibly gain new ground, thereby further insulating the core strategies. Secondary factors are those that exhibit low industry significance and neutral competitive impact. These factors are not considered pressing, as they do not currently contain much strategic significance.

This ranking may require review if the industry structure and composition changes significantly. Such changes and trends would necessitate a review of strategy in any event. The relevant factors are then spatially arranged in spheres of influence according to their ranking, as shown in Figure 2.4.

**Figure 2.4**  Industry Competitive Pressure Sphere of Influence
CHAPTER 3  

CASE STUDY

3.1 Introduction

Disc Golf S.A. is an example of a small pioneering company in the sport/leisure industry. Selected excerpts of the business plan are presented below to utilise as a case study to analyse the determinants of competitive activity in its industry.

Disc Golf S.A. intends to introduce disc golf into Southern Africa. The South African Disc Association will govern the establishment and operations of various disc sports and the associated activities, as well as development of disc sports. Disc Golf S.A. will introduce disc golf, and will seek to grow and maintain the activities throughout Southern Africa. Disc golf has a well-established professional tour in the United States and Europe. Other disc activities that will be established are, double disc and ultimate disc.

3.2 Disc Golf Concept

Disc golf is a fun, inexpensive, healthy and environmentally friendly game that can be enjoyed by people of all ages and abilities. It is played much like traditional golf, only instead of hitting a ball into a hole you throw a disc into an elevated metal basket. As players progress from the “tee” to the “hole,” the trees, shrubs and terrain changes in and around the “fairways” provide challenging obstacles. Ultimately, the “ putt” is tossed into the basket and the hole is completed. The goal is the same: to complete the course in the fewest number of shots. Disc Golf S.A. will establish and operate golf courses throughout the country. Each course will have a clubhouse facility that will include a pro shop, for the purchase of discs and accessories, and will also provide refreshments and ablution facilities.

As with traditional golf, disc golf utilises a wide variety of discs with various functional capabilities. There are ranges of drivers, mid-range “irons”, as well as
putters that provide the flight and distance trajectories required for the wide assortment of shots available to play disc golf. Disc Golf S.A. will initially introduce a small range of discs and will expand the range when the demand dictates. The discs will ultimately be manufactured in South Africa, but will initially be imported from Innova Discs in the United States. The target baskets will also be produced in South Africa. The tee boxes are indicated using two tee indicators. Concrete tees may be installed at some courses to provide a more stable launching platform.

3.3 Stage of Development

The entities of the South African Disc Golf Association (SADGA) and Disc Golf S.A. have been established. Suitable course locations have been identified and negotiations regarding lease options are on-going. Investigations into production of discs and basket are well advanced and only require sufficient demand and funding for tooling set-up.

3.4 Propriety Rights

The various discs and baskets have had American patents, but the international patents have expired. There are therefore no proprietary rights that will hinder any operations, as they are planned in South Africa. The technology of the discs is quite complex. The prohibitive costs of product development have necessitated a collaborative relationship with an established disc supplier. Disc Golf S.A. has secured the right to produce Innova discs under licence in South Africa. Innova is a well-established manufacturer with approximately 60% of the world golf disc market of 2.5 million.
3.5 Government Approvals

There are no specific government approvals that will be required for the various operations. The South African Disc Golf Association has applied for recognition with the South African Sports Commission (SASC) as well as affiliation with other national sports authorities, and will embark on an extensive development campaign for the sport.

3.6 Product Liability

There are no foreseen product liability issues concerning the discs and accessories. Public liability, for incidents occurring due to the activities of disc golf, will be required.

3.7 Production

Production of the golf discs, baskets and dog discs will be undertaken by local partners in South Africa. The initial golf discs, ultimate and double discs will also be imported, but may be manufactured locally at a later stage. The manufacture of all the other accessories will be outsourced to various suppliers.

3.8 Marketing Plan

The characteristics of the industry are presented and the marketing initiatives discussed below.
3.8.1 Industry Profile

The size, potential and trends in the industry are factors that determine the characteristic and opportunities in that industry.

Current Market Size

The current market size is that of the existing sport and leisure industry. The low, entry level, skill requirements of disc sports together with the affordable set up and participation costs, makes most activities accessible to the majority of the population. LSM's 4 to 10, being situated in urban areas are natural target segments, but the market appeal goes beyond these definitions and must also include children under the age of 16 years old. The higher LSM's however, with their consequent higher income levels, are more frequent seekers of leisure activities. The market size for each individual disc golf course is therefore virtually only limited to the population of the region surrounding the facility, who could easily visit the facility.

A publication by the Sports Information and Science Agency estimated the total contribution of sport to the South African economy at nearly R16 billion in 1999. This figure includes the contribution of sporting goods, participation, spectatorship, commercial sponsorship, sporting bodies, clubs and local authorities and includes the revenue from employment in the sector. This does not include the contribution of leisure activities however.

Market research undertaken in 1999 by BMI Sport for the South African Sports Commission investigates the participation by adults in sport throughout South Africa. The research estimated that 33% of the population, over the age of 18, participated in sport to some extent. The research found a steady increase in participation, as well as a substantial increase in participation in the Black, Coloured and Indian population. Sporting codes that require minimal equipment costs (with the exception of cycling) exhibited the higher participation growth rates in the period 1986 to 1999. The reasons for this trend are not too difficult to find. The greater access to sporting amenities for the majority of the population is the single most influential factor that has led to greater participation in sport in South Africa.
The market size for a disc golf course is estimated on a geographic basis. Each possible course location is evaluated against the population in the immediate vicinity of the course. Specific attention will be placed on the higher income earners and high concentration of school-going children and teenagers. The South African Disc Golf Association has a unique development opportunity as the activity is a brand new concept in Africa. The development programme in previously disadvantaged communities, although likely to be different from the golf course model, will ensure that these communities are not “disadvantaged” with regard to disc sports.

**Growth Potential**

As the disc sport industry will be introduced into South Africa, the growth potential is vast. The mass appeal of disc sports, coupled with its low costs, will provide good growth potential even when the initial market share has been achieved. Disc golf has grown at 16% worldwide for the past 5 years.

**Industry Trends**

The sport and leisure industry in South Africa has grown steadily in recent years. People are spending more on leisure activities, and the number of leisure seekers has increased. This trend can be illustrated in the growth of traditional golf in South Africa, although it is essentially a costly, exclusive type of activity. The proliferation and popularity of golf driving ranges is an additional indicator of the growth of golfing activities.

Given the large potential for leisure activities, the selection of sport orientated leisure options is still fairly limited. There is however still potential for other activities to successfully capture some share of the leisure market. Disc Golf is an ideal activity for penetration of this market due to its low cost and skill requirements.

The disc golf industry in the United States, which is overwhelmingly the largest market, is concentrated in the temperate southern states. The majority of the over 1000 courses in the country are located in parks and on learning institution's grounds. Most courses are not pay-for-play, but are installed and operated by disc golf
enthusiasts and the disc suppliers. Membership of the Professional Disc Golf Association (PDGA) is dominated by males between the age of 20 and 50. Although the sport is popular with under 20 year-olds, their membership to the Association is not high. Ownership of the discs and associated accessories is higher amongst members of the Association, who are naturally enthusiastic about playing the sport.

The lack of proprietyship of the courses in the US only grants vested interest in disc golf with the disc and accessory suppliers and the PDGA. The growth in the industry may have been more remarkable if there were a greater number of committed stakeholders, who where actively promoting participation in disc golf. The growth attained to date is therefore quite impressive considering that it was largely driven by enthusiastic volunteers who do not profit financially out of their endeavours. The PGDA targets schools in their efforts to increase player participation and has had some success in introducing disc golf as part of the formal physical education curriculum in certain districts.

Disc Golf S.A., with its status as course operator, disc and accessory vendor and development coordinator will have a more direct investment and interest in the success of the introduction of disc golf into South Africa. This concentrated focus and incentive for the successful adoption of this new activity will motivate the entire organisation to achieve its stated objective of introducing and growing disc golf in the country.

### 3.8.2 Competition Profile

The disc sport industry is essentially brand new in South Africa, but existing sport and leisure providers will be competition to the disc golf industry. The existing sport and leisure industry for individuals, families and also corporates is therefore seen as a substitute product to disc golf. Disc golf will compete for market share against all leisure activities from movie watching and rental, tenpin bowling, mashie golf and action cricket, as an alternative attraction to leisure funds. Disc golf however offers a unique proposition as the activities are both cost effective and easy to adopt. This attractive product offering could command a significant market share, and with appropriate marketing will maintain this market share. Figure 3.1 illustrates a leisure
industry product matrix that compares leisure activities with respect to equipment cost and activity cost. Disc golf, including the purchase of a single disc, is well positioned against the other leisure activities with the exception of golf.

**Figure 3.1** Equipment / Activity Cost Matrix

![Leisure Industry Product Matrix](image)

Figure 3.2 below illustrates a matrix of the activity costs versus the skill requirements of leisure activities. The illustration shows that disc golf is well positioned to compete for a significant share of the leisure market, as it is easily comparable to activities such as putt putt, tenpin and movie going in terms of affordability and accessibility.

**Figure 3.2** Skill Requirement - Activity Cost Matrix

![Leisure Industry Product Matrix](image)
Once established, threats from copycat enterprises will offer direct competition. A first mover strategy needs to be properly implemented to develop sufficient barriers to entry and competitive advantage over these copycat enterprises. The establishment, or option to establish courses at prime locations countrywide is seen as a crucial mechanism in developing barriers to entry. The relationships developed with suppliers, landowners and administrators will also contribute to building and maintaining a competitive advantage.

3.8.3 Customer Profile

The wide appeal of disc golf results in a broad customer profile. Disc golf suits people of all ages are who are looking for an aerobic outdoor leisure activity. The typical location of disc golf courses will attract people who wish to enjoy the natural attributes of our parks and public open spaces. Naturally, customers with disposable income and sufficient time to pursue leisure activities will be more attracted to disc golf. Although disc golf provides good exercise, it is not too strenuous, so that it would discourage potential participants. The game can be played at an individuals’ preferred tempo, with due consideration for the other disc golfers. Males have predominantly played disc golf, but the customer profile must include females, either individually, or as part of the family or corporate environment. The low costs and entry skill requirements of disc golf makes the activity an ideal family outing that can be enjoyed by the whole family unit.

3.8.4 Customer Benefits

Disc golf offers a new alternative for people seeking an aerobic outdoors leisure activity. Participants can get a reasonable workout in a picturesque natural setting, whilst enjoying a recreational game or even a more competitive challenge. They can therefore enjoy the natural attributes of their environment, and at the same time receive some healthy exercise. Participants can achieve a wide range of skill proficiency, but still start with a low entry skill requirement. They can also reap the enjoyment achieved by improving their skill and performance as they learn to play the game more proficiently.
Ultimately disc golf tournaments will be offered at various courses for those who prefer the competitive challenges that the sport offers. Ideally South Africa could form part of the well-established professional tour in the United States as they seek to expand their horizons.

3.8.5 Target Markets

Although disc golf has a wide market appeal, there are certain target markets that will be concentrated on. The LSM categorisation of markets does not sufficiently capture the extents of our potential market. LSM groups 4 to 10 will constitute part of the target market for the disc golf courses, whilst LSM 1 to 3 may receive more emphasis in the development programme in the rural areas.

The golf courses will target school children, students and young adults between the ages of 13 and 30 years old, as well as targeting corporate participation. Naturally this targeting will be aimed at the more affluent members of the community who are more inclined to indulge in leisure activities. This initial targeting will be through direct marketing to the schools and institutions. It is through this targeted segment that Disc Golf S.A. hopes to achieve a more family oriented participation. Corporate participation will also be targeted as disc golf offers an easy and cheap alternative for companies to undertake team-building exercises and promotions that the entire organisation can partake in.

The development side of the disc golf initiative will target schools in the previously disadvantaged areas. Although golf courses may not exist in the same format as in the urban areas, facilities will be provided that enable the community to participate, without having to pay for it. The objectives of the development programme would be to engender a mass appeal for the game, ensuring that no particular community is detrimentally disadvantaged. The responsibility for development will be with the South African Disc Golf Association, who will be able to lobby parastatal organisations for financial assistance.
3.8.6 Market Penetration

Each individual proposed golf course would be evaluated against its surrounding population and the demographics thereof. In order to simplify the analysis, the financial model of a typical 'likely case' course will be projected. Each proposed course would then be evaluated to see if the required number of disc golfers, for that course, is sufficiently less than a maximum penetration deemed suitable. If that particular course does not meet the stated criteria, it will then be evaluated against the required golfers of a 'worst case' course scenario. This worst-case scenario assumes low participation at the course, no growth after a year, and does not include a clubhouse expansion that is modelled after a year in the 'most likely' scenario.

The demographic data that will be used for the analysis is the 1996 Census data. Unfortunately the 2002 census data will only be available in March 2003. The assumptions made in the analysis are however broad enough to allow sufficient leniency for the inaccuracy of the dated data. 2002 data will be used to verify the assumptions made.

3.8.7 Marketing Campaign

Marketing of disc golf and the courses will primarily be done via the 'Buzz' marketing concept. This entails event-based, direct marketing to the target markets and influencers in the form of personal contact and demonstration, and utilising the power of word-of-mouth referrals. 'Buzz' marketing will be undertaken by the directors, course managers and hired marketers, who will target schools and corporations with physical demonstrations of the sport, and issue promotional literature. A marketing company, who specialises in sport orientated events, has been retained. This marketing company will offer professional advice as well as their infrastructure and industry contacts in the implementation of the marketing campaign. Demonstrations, exhibitions and competitions, held in public nodes, will also be used to gain exposure for disc golf. These events will be planned to maximise the exposure of disc golf to audiences in shopping centres, beaches and other mass gatherings. The exorbitant cost of traditional mass media will restrict the use of this media to opportunistic campaigns that promise mass exposure with minimal cost.
Issuing of pamphlets and other promotional items will be mostly done at exhibition opportunities, but will also be issued without demonstration. The issuing of literature without demonstration will however only be aimed at carefully focussed markets where they are expected to be more favourably received. These include issuing to schools as the children leave the premises, delivery at corporate premises, and at toll plazas and shopping centres at the beginning of the holiday periods.

Branding of the discs and accessories offers numerous opportunities to the company. The strong branding that Innova Discs possesses worldwide will assist in branding efforts in South Africa. Corporate sponsorship may open avenues to advertising in the broadcasting and print media. Advertising and sponsorship opportunities on the courses will be optimised as much as possible. These opportunities may require the approval of the various landowners though.

3.9 Related Services and Spin-offs

Commercial spin off and related services will be similar to that of traditional golf and other leisure sports. Discs, disc bags, clothing items and associated accessories will be introduced. Opportunities for advertising and disc golf travel packages will be exploited once the concept of disc golf has achieved sufficient recognition. Negotiations with Innova Discs in the United States are also ongoing concerning export opportunities.

The South African Disc Association will launch the other disc sports and oversee their operations. The adoption of double disc and ultimate will help to nurture a disc culture in South Africa. Disc golf will naturally reap the benefit of a strong disc culture.

The opportunity to market discs for leisure use for dogs will be explored. A patent for the dog disc is still in effect, and negotiations with the patent holder will be undertaken.
3.10 SWOT Analysis

A SWOT analysis is undertaken to determine the strengths and weaknesses that the company exhibits, whilst identifying the opportunities and threats that the competitive environment offers.

3.10.1 Preamble

Disc Golf S.A. is bringing a brand new concept into the market. There is no existing market for disc golf in South Africa, and consequently no direct competitors. Disc golf will however be competing for a share of the sport and leisure market, and will later be facing direct competition from copy-cat initiatives. The attractiveness and weaknesses of disc golf, as opposed to other sport and leisure activities, have been dealt with throughout the text and will not be considered in the SWOT analysis. The SWOT analysis will hence only consider the strengths, weaknesses, opportunities and threats facing Disc Golf S.A. in attempting to introduce disc golf into the country.

A comprehensive SWOT analysis would not be possible at this stage, particularly the strength and weaknesses, because the entity of Disc Golf S.A. has not been fully developed. Disc Golf S.A. is still essentially a business idea and therefore does not exhibit exhaustive attributes that could be analysed in terms of strength and weaknesses. There are however attributes that can be analysed. Opportunities and threats faced by Disc Golf S.A. are more identifiable, and will be discussed below.

3.10.2 Strengths

The company exhibits various strengths that are discussed below:

Product Idea

The concept and introduction of disc golf, and all the attractions of the concept, is seen as a strong strength initially. This strength however will be diluted as soon as the concept has been introduced. The introduction of a new, exciting and accessible
sporting/leisure activity with mass appeal will place Disc Golf S.A. in a favourable light if successfully implemented.

**First Mover Benefits**

A strength that is just as critical as the product idea is the first mover strategy. This strategy is crucial in developing barriers to entry for copycat initiatives that go a long way in neutralising the weaknesses and threats that will be encountered by Disc Golf S.A. Some of the first mover benefits that have been developed, are considered strengths, and also build competitive advantage are listed below.

**Securing Prime Locations** - A disc golf course should ideally utilise 8 - 10 hectares of land. Land of this size is quite difficult to find in the prime locations required. Disc Golf S.A. has approached Local Councils and Universities, who own most of the suitable properties in the proposed cities and towns, to obtain permission to use their parks and public open spaces as disc golf courses. Negotiations with the various authorities are ongoing and have been successful to date. The use of privately owned land in central locations, although not undesirable, would be too costly for a start up company and will only be considered when the company has sufficient funds to target private land.

Proposals for courses in Johannesburg, Pretoria, Durban, Cape Town, Ballito, Pietermaritzburg, East London, Port Elizabeth, Bloemfontein and Polokwane have been submitted and are well advanced. Although not all proposed courses would be opened simultaneously, Disc Golf S.A. is endeavouring to secure options on the use of the properties at other locations for later development.

**Relationships Developed** - As a result of negotiations with local authorities and universities, relationships have been developed with these entities that build barriers to entry to any direct competitor.

More significantly, the relationship developed with Innova Discs, who is the market leader in manufacturing disc golf discs and accessories, places a major
obstacle to any direct competitors. Innova has agreed to supply discs at a favourable introductory price, and also to permit Disc Golf S.A. to manufacture under licence, when the local demand justifies setting up production in South Africa. This strategic, collaborative relationship affords Disc Golf S.A. the access to disc manufacture, and provides Innova with a new market to augment their current global strategy. Technology and the geometry of disc golf discs are quite complex, and Innova are willing to share their extensive expertise and technology under the licence agreement. Disc Golf S.A. will be able to piggyback on the research and development efforts and benefit from the experience/learning curve that Innova has achieved.

South African Disc Association - The establishment of the South African Disc Association, although a democratically elected, non-profit organisation, will also provide barriers to entry. The South African Disc Golf Association has applied for the recognition of disc golf with the South African Sports Commission (SASC). Recognition will require any similar association to seek affiliation with the South African Disc Golf Association, if they too desire recognition. The management of Disc Golf S.A. currently occupies and controls the board of the South African Disc Golf Association. Recognition by the SASC also opens many doors with regard to the development of the sport. The SASC is the gatekeeper in terms of development proposals in South Africa. No funds, or support will be granted from government and parastatal authorities without the explicit sanction of the SASC. Business, which plays a major role in funding development programmes, will naturally favour development programmes that have the sanction of the SASC.

Organisational Capabilities

Although the organisational structure is relatively bare, the management team provides a core with a varied mix of experience and competencies. This enthusiastic team is highly motivated to make a success of the promising opportunity that they are faced with. The management team are also aware of their shortcomings and would welcome advice and assistance that could be offered by finance providers or other experienced mentors.
3.10.3 Weaknesses

The company also possesses some weaknesses that are discussed below:

**Lack of Patent Protection**

There is no patent protection that would effectively prevent competitor activity for disc golf. The lack of patent opportunities necessitates the development of other barriers to entry.

**Lack of Precedent / Research Data**

Disc golf is very popular in the United States of America, but it is run differently to the way Disc Golf S.A. intends to operate in South Africa. The American sport and leisure market is also materially different in many regards to the South African market. In the absence of market research or history, that could give a reasonable indication of the South African markets response to disc golf, the introduction of disc golf will carry a certain element of risk. Although Disc Golf appears to be an ideal activity for the South African market, there is no directly correlated research data that could assist in reducing this risk element.

**Lack of Suitable Locations**

The commercial success of disc golf in South Africa will rely on the courses being attractive and accessible to the urban population of the country. The size of land required, and the desired location, precipitates very few really ideal locations for disc golf courses. The high costs of commercial land makes it prohibitive to seek private land until Disc Golf is more established in the country. Although the scarcity of ideal locations can become a strength if prime locations are secured, compromises have been made in the selection of some courses in areas. The major compromise has been the selection of property that is not large enough to accommodate an 18-hole golf course. This weakness has been overcome, to some degree, by prudent course selection and design, utilising the natural topography and vegetation of the smaller properties. Developing a course with fewer than 18 holes has also been considered. It
should also be noted that any direct competitor, unless blessed with unlimited funding, would also find it difficult to secure ideal locations.

3.10.4 Opportunities

The opportunities open to Disc Golf S.A. are numerous. Disc golf operates almost exactly the same as traditional golf in the United States except on a smaller, less commercial manner.

Disc Golf Course Options

Course Clubs and Competitions - Each course could set up a club like traditional golf clubs and hold regular competitions for members and visitors. Special events (e.g., Ladies events) can be used to increase awareness of the courses and disc golf in general.

Corporate Events - Disc golf offers a simple and non-exclusive team-building event to corporate companies who are always looking for alternative activities to try and enjoy.

School Events - Disc golf is an ideal activity for all school children. The disc courses will target the schools to achieve a high adoption rate in the schools. Efforts will be made, and facilities provided, to introduce Disc Golf at regular physical education lessons and recreation periods at the schools. School leagues would also be introduced as soon as disc golf has achieved sufficient popularity at schools.

Night Events - Disc golf can be played at night. Glow-in-the-dark discs are already on the market and could offer good opportunities for product differentiation. Offering night events would require additional infrastructure however in the form of additional lighting and security.

Novelty Events - Disc golf can be played in almost any terrain. Special novelty events in extreme or unusual conditions or on the beach can be held as fun events that will help raise the profile of disc golf.
Development

Disc Golf S.A. will encounter many opportunities to assist the South African Disc Golf Association with the development of disc golf. Their involvement will help to raise the profile of disc golf and thereby help to attract golfers to the various disc golf courses.

Franchise Opportunities

Disc Golf S.A. intends to control numerous courses all around the country, but will not necessarily be interested in every possible location. The opportunity to franchise disc golf courses in those locations, that are not overtly attractive to Disc Golf S.A., will be seriously considered.

Sponsorship

If disc golf attracts the expected amount of patrons, it will also naturally attract sponsors who would take advantage of the marketing opportunities that disc golf offers. The financial model includes some revenue from sponsorship.

3.10.5 Threats

The threats faced by the company are listed below:

New Entrants

The threat of new entrants into the market is considered the single most important threat to the profitability of this venture. Although Disc Golf S.A. has developed considerable barriers to entry to these new entrants, constant vigilance will be needed to build additional barriers and insure that the threat of new entrants is always minimised.
Golf Course Leases

Disc Golf S.A. has endeavoured to secure short-term leases of the golf courses initially, to contain fixed costs, and thereby reduce the risk associated with a new enterprise. The short-term nature of month-to-month leases on properties poses a threat to the sustainability of the courses. Disc Golf S.A. will propose long-term leases with the landowners as soon as the long-term profitability of the courses has been proven. The cancellation of leases with local authorities, as a result of community objections to the golf courses on public property or otherwise is also a realistic threat. The majority of courses proposed on public land is generally underutilised and has attracted undesirable elements on the property. Regular activities on public property would assist in eradicating these elements as well as offering much needed leisure activities to the community.

Inclement Weather

Disc golf will be adversely affected by rain and windy conditions. No playing will occur during inclement weather and will thus affect the revenue of the courses. This threat is more prevalent in certain areas, and is also seasonal. Lost revenue due to inclement weather has been factored in to the financial model via conservative participation figures. With the exception of the Western Cape, inclement weather will typically occur in the summer months when disc golf will be more popular. This effect has a tendency to produce a more regular revenue stream throughout the different seasons. The Western Cape is likely to receive more revenue during the spring and summer months, whilst suffering reduced revenues through the autumn and winter months.

Profitability and Capital Structure

The high gross profit and high fixed costs exhibited by the financial model makes the profitability of the company highly sensitive to revenue which, is directly correlated to number of rounds sold. The threat that the courses do not achieve the revenue estimated in the financial model would adversely affect the profitability of the company. The risk is further exacerbated by the high initial debt-to-equity ratio in the
capital structure of the company. The assets of the company do not adequately cover this debt. The financial model tries to place conservative estimates on the revenue, in order to reduce the occurrence and threat of lower than projected revenue.

Course Security

Security of patrons whilst on the premises is always a threat to the sustainability of any company. Security was a major consideration in selection of possible sites for disc golf courses. As most public land is not secured with a perimeter fence, the selection of appropriate neighbourhoods and precincts was carefully undertaken. These considerations need to be contrasted with the lack of really ideal locations for possible disc golf courses.

Public Liability

Injuries caused by flying discs pose the threat of legal action against the disc golf course operator. Public liability insurance is a necessity to cover the threat of legal action. Disc Golf S.A. will provide sufficient public liability cover for all the disc golf courses that it operates. The costs of public liability, fire and theft insurance has been accommodated in the financial model.

Transaction Exposure

Transaction exposure, caused by the need to import discs from the United States, also poses a threat to the margins achievable for selling the discs. The volatility of the Rand versus the US Dollar does influence the budgeting for the company. Fortunately only the discs need to be imported, and their cost only makes up a portion of the costs to the company. The effect of transaction exposure will be reduced when discs are eventually manufactured in South Africa. There will still be exposure, as royalties will be denominated in US Dollars. The royalty expense however will not be great, and will be easily afforded with the higher margins that will be achieved with locally manufactured discs.
3.11 Summary

The case provides background to the concept, company and industry that will be analysed utilising the proposed framework and model. The case did not include a complete competitive analysis, but the data supplied will be sufficient to conduct an analysis, and determine the scope for first mover advantages and barriers to entry.
CHAPTER 4 \hspace{1cm} CASE STUDY EVALUATION

4.1 Introduction

The case study did not specifically analyse the competitive pressure in the sport and leisure industry. The business plan, from which the case study was extracted, placed emphasis on the SWOT analysis, which would have considered certain elements of competitive pressure. The proposed competitive pressure framework for pioneering companies will now be utilised to assess the competitive environment that Disc Golf S.A. will encounter, and the strategic options associated with a first mover status. Only factors that have relevance to the Disc Golf case study will be considered in the framework whilst those that are deemed to have low or no relevance will be omitted from the analysis. Most of the evidence presented has been extracted from the case study, but additional input has been given by virtue of the author’s privileged position of preparing the business plan. Once the determinants of competitive pressure have been identified, they will then be ranked for the purposes of guiding strategic planning, formulation and implementation.

4.2 Threat of Entry

The case offers some scope for developing barriers to entry against later entrants. Structural issues that provide potential to barriers to entry, excluding those that are specifically related to first mover status, are discussed below:

4.2.1 Economies of Scale

Opportunities for economies of scale are existent for operations, marketing and production. Their existence however is not sufficient to pose significant barriers to entry. The net effect of the economies of scale could however significantly impact costs and in turn the overall profitability of the company.
Operationally, fixed costs that are not site specific, could be reduced due to economies of scale if they could be spread over a number of disc golf courses in one geographic region. These fixed costs constitute a large portion of the costs projected in the business plan and would certainly impact on overall profitability. Centres like Durban, Johannesburg and Cape Town can sustain numerous courses and would therefore exhibit the greatest potential for economies of scale.

Similarly there is a potential for economies of scale for marketing expenses in larger centres, where the costs can be shared by the individual courses. Marketing has been identified as a crucial issue to instil a disc sports culture in South Africa. As it is the intention to operate disc golf courses throughout the country, there will definitely be a benefit of economies of scale for marketing on a national basis.

Economy of scale is the primary reason that disc production will not initially be undertaken in South Africa. The low level of demand is such that the set-up costs would be too prohibitive for disc production. The lack of demand, and the required technology would also lead to severe overcapacity that would result in increased costs. Although there are economies of scale for the production of baskets and disc golf accessories, these are not deemed to be of great significance.

The inability of economies of scale to produce barriers to entry diminishes, but does not eliminate, the strategic significance of this factor. Economies of scale will certainly assist in reducing the overall level of costs and supports the operation of multiple disc golf courses in large centres.

4.2.2 Capital Requirements

The capital requirements for R&D for the production of discs could pose a significant barrier to entry. This is contingent on the ability to copy the exact geometry and attributes of the various discs. The aerodynamic complexities of the discs would require a significant amount of research and development if they were to be investigated from scratch. This barrier to entry however could be circumvented if the discs are purchased from registered producers in the United States. Although this route would elevate the costs of the discs, this premium is not prohibitive at all.
4.2.3 Absolute Cost Advantages

Absolute cost advantages that have the capacity to build barriers to entry typically arise out of early entry into a market. These issues will be dealt with when considering first mover advantages.

4.2.4 Expected Retaliation

The threat of vigorous retaliation to new entrants has capacity to build barriers to entry for Disc Golf S.A. Retaliatory actions will determine the success of competing against actual new entrants, whilst signalling intent and exhibiting the ability to effectively retaliate, will determine the ability to build barriers to entry. Disc golf S.A. therefore needs to clearly signal their intent to defend their competitive position and devise ways that will impute credence to their ability to be able to retaliate successfully.

4.3 First Mover Advantages

The sport and leisure industry is well established in South Africa. The industry is still growing and can not be considered a mature industry. Disc golf is a new concept in the industry, and if successfully introduced, has a good growth potential. These factors produce ideal conditions for identifying and exploiting first mover advantages in an industry. First mover status may not confer sustainable competitive advantage but still needs to be considered, even if they only provide transient advantages or barriers to entry.

4.3.1 Economies of Scale and Experience

Economies of scale have already been identified as relevant to the case study. First mover status provides an ideal opportunity to realise economies of scale, and at the same time usurp all the available market demand. Implementation at the correct scale could satiate the limited demand for disc golf, and effectively shut out any potential
new entrants. The selection of the number of courses, both regionally and nationally, is therefore an important strategic consideration that can build barriers to entry.

An economy of scale also exists in the procurement of the imported discs. This economy is however not too prohibitive as the minimum efficient order is not too great.

Economies of experience may become apparent as Disc Golf S.A. progresses along its learning curve. Every organisation needs to continually learn as their cumulative experience increases. A first mover often encounters a steeper learning curve due to its pioneering nature. Disc Golf S.A. must continually attempt to convert economies of experience into an advantage that they can exert over any other competitors. These advantages will be more durable if the learning can be kept proprietary or secret and prevents later entrants from free-riding on the experience of Disc Golf S.A.

4.3.2 Relationships and Collaboration

Disc Golf S.A. has already established a relationship with Innova Discs that has the potential for first mover advantages and barriers to entry. This relationship offers lower input costs, licence agreements and access to innovative technology and R&D, that could insure that first mover advantages are maintained. This relationship must be developed so that the full potential can be realised. The continued association with Innova is also beneficial, as they have already established a powerful international brand for discs and accessories. Although the brand is not yet familiar in South Africa, it will be easier to establish, due to its successes elsewhere.

The crucial matter of disc golf course locations is dealt with elsewhere, but also involves the establishment of relationships with the various landowners. These landowners are mostly Local Councils, as most courses are earmarked for public open spaces. Establishing good relationships with these landowners will assist in securing desirable locations for the courses, which will place a considerable barrier to entry to later entrants. The most desirable agreement with the landowners would involve a lengthy lease of the property, but a shorter-term lease would initially be more prudent, to reduce the risk associated with the venture. This dilemma could be resolved by
gaining an initial short-term lease, with an option for a more permanent lease agreement thereafter. As with the relationship with the powerful disc supplier, the landowners pose serious risks and threats, and it would be prudent to maintain and develop a close working relationship with all these suppliers.

4.3.3 Input Factor Cost Asymmetries

Disc Golf S.A. has negotiated preferential rates for the supply of the imported discs. This cost asymmetry will be a first mover advantage that can be sustained, as Innova Discs has agreed to refer any disc purchasers in Southern Africa to Disc Golf S.A. If any later entrant elects not to deal with Disc Golf S.A., Innova will charge a premium when selling discs to them. Innova Discs is the dominant disc supplier in the industry, and accounts for over two-thirds of total worldwide sales. All other disc suppliers in North America also have to pay royalties to Innova as they are the patent holder of the disc golf disc. Innova Discs have also agreed to allow Disc Golf S.A. to manufacture their discs, under licence in South Africa, as soon as demand is great enough to make local manufacture financially attractive. The variable costs of local manufacture, including the royalty fee, will greatly reduce input costs and total costs if production levels are at an efficient scale.

4.3.4 Location Pre-emption

Disc golf course locations pose a major opportunity for developing barriers to entry and sustainable first mover advantages. The severely limited selection of commercially viable locations, throughout the country, endows the first mover with a significant competitive advantage over later entrants. This consideration is fundamental to the sustainable profitability of the venture and receives high strategic priority.

The case indicates that suitable locations have been identified countrywide. Disc Golf S.A. needs to secure these sites in order to reap these potential advantages. All suitable locations may not be developed simultaneously but still need to be secured, either with options or otherwise, to prevent their development being pre-empted by later entrants.
4.3.5 Distribution Space Pre-emption

The distribution of discs and associated disc golf accessories will be undertaken at individual golf courses, but the case does not mention distribution through intermediaries such as sports retailers. If distribution will be undertaken via retailers, a first mover would benefit by securing the more attractive distributors. The more attractive distributors are likely to be the large national chains, which are unlikely to allow a small pioneering firm much preference, unless the product offering is very attractive. This advantage therefore will probably be limited to the opportunity to place the product in leading retail stores.

4.3.6 Market Segment Pre-emption

The selection of disc golf course locations is made, to a large degree, with market segmentation in mind. Any advantages accruing to the pre-emption of desirable locations would consequently hold true for market segmentation pre-emption as well.

4.3.7 Early Profitability

If the introduction of disc golf is successful and Disc Golf S.A. is able to maintain a monopoly, profitability may be at elevated levels. Such a favourable position, which is only a possibility, would free up valuable capital that could be used to further enhance first mover advantages. The surplus capital could be best used to develop more courses and upgrade existing courses, to reinforce the barriers to entry and first mover advantages, and possibly extend the period of monopoly. Although this eventuality is contingent on numerous factors, Disc Golf S.A.'s strategic initiatives should always be conscious of reinvesting surplus capital into projects that could cement their position in the industry.

4.3.8 Product/Process Innovation

Disc Golf S.A. is not in a position to benefit directly from patent or copyright innovation, but could benefit indirectly through their association with Innova Discs. The essence therefore of this advantage to them is grounded in the pre-emption of a relationship and collaboration with Innova Discs.
4.3.9 Organisational Innovation

The case study did make mention of the opportunity to franchise the concept, although only as a secondary issue. Franchising could be viewed as an organisational innovation, although a rather common one these days. Franchising could be an attractive alternative, depending on the particular strategy of the company. Franchising would then reward the first mover with franchising revenue, whilst providing later entrants with an opportunity to enter the market, without the need for head to head competition with the first mover. The franchising option should always be considered, as it would dramatically reduce the operational requirements for Disc Golf S.A. should they become too onerous.

4.3.10 Reputation

The favourable reputation frequently gained by first movers is often invaluable in developing brand identity. The scope for differentiation is analogous to that of traditional golf courses. The more attractive, scenic and challenging a disc golf course, the more popular it is likely to be. This means that a favourable reputation for being a first mover is unlikely to be of much advantage. The more likely advantage would be that the activity would be known as disc golf regardless of what later entrants called the concept, as is the case with adventure golf being called Putt Putt.

Disc Golf S.A. could however gain benefit from a favourable reputation if their product offering was expanded to include products that can be more differentiated. This may be applicable to the associated disc activities that will follow the introduction of disc golf. Apart from the other synergistic benefits, these new initiatives may gain favour due to the established reputation that has already been built.

4.3.11 Communication Good Effects

The manner in which Disc Golf S.A. intends to introduce the concept into South Africa is challenging as it is not only a new market, but will also be developed in a slightly different manner than elsewhere in the world. This can be achieved however because a first mover is in a position to determine the format and nature of a new
product, without the fear of it being rejected due to the consumers' prior expectations. If successfully undertaken, the first mover's product offering is likely to dictate the industry standard.

Disc Golf S.A. is therefore in a good position to influence the nature and composition of disc golf activities in South Africa. It is imperative that the selected combination is attractive to consumers, but allows some leeway to 'standardise' some attributes that will give them a competitive edge over the later entrants.

4.4 First Mover Disadvantages

First mover status could also pose disadvantages for Disc Golf S.A. These issues need to be considered as they have potential to erode the benefits from pioneering, and even place the first mover at a disadvantage to later entrants.

4.4.1 Educating Customers

The concept of disc golf is unknown in South Africa and most of the initial marketing efforts will be expended on educating consumers about the concept. This situation is likely to develop marketing cost asymmetries against the first mover, who will raise awareness to the benefit of later entrants. Later entrants would incur less marketing expenses as their need to educate the consumer is diminished. There is no effective manner of reducing the benefit to later entrants, other than insuring that the first mover benefits from these marketing efforts more than a later entrant would.

4.4.2 Market Uncertainty

There is considerable market uncertainty associated with introducing disc golf into South Africa as it involves a totally new concept in a new market. The absence of any precedent for a similar type product in the country, and for the proposed concept anywhere else in the world, further increases market uncertainty. The ability of a first mover to mould the market is definitely restricted and mistakes, due to incorrectly interpreting the market, will certainly be made.
The adage that prevention is better than cure is relevant here. Thorough market research, like this framework analysis attempts in part to do, would minimise the misinterpretations due to market uncertainty, but mistakes will still be made. Misinterpretations, when made, should be hidden from or at least disguised to later entrants, in order to minimise the hindsight benefit to them. If a later entrant is unsure of the source of resolution of market uncertainty, they will be less favourably positioned to gain benefit from it. Often the causes and resolution of market uncertainty become obvious with hindsight, making the task of obscuring it very difficult.

4.4.3 Specificity of Investments

Unrecoverable investments that will be most at risk are the commitments to long-term leases, and the development undertaken at the individual disc golf courses. These investments will be forfeited in the event of incorrect location selection. Later entrants would benefit from hindsight if Disc Golf S.A. established a course in a particular geographic region, or targeted a particular market, which turned out to be unsuccessful. The later entrant would not only benefit from the resolution of market uncertainty, but also from the losses incurred by the first mover due to the unrecoverable investments.

The decision to produce discs locally will also incur unrecoverable costs that may be at risk. Both the decision to manufacture locally, and the type of technology to utilise contain risk elements. The demand may be insufficient to warrant local manufacture and a large portion of set-up costs will be unrecoverable. The type of manufacturing technology selected may become dated or obsolete, also resulting in unrecoverable expenses, either through required modifications or technology replacement. The likelihood of injection moulding technology, which is used for disc production, becoming drastically obsolete is however quite remote. These investment decisions need to be carefully considered, as they will contain positive and negative consequences for the first mover.
4.4.4 Learning from Pioneer's Mistakes

Learning from the first mover’s mistakes has already been introduced when dealing with resolution of market uncertainty. First mover mistakes, other than market uncertainty originated, can also be a source of hindsight learning benefits for later entrants. As with market uncertainty, the most effective safeguard against later entrants is to try avoid mistakes, and then try and mask the cause of the mistakes if possible.

4.5 Threat of Substitution

First movers, as is the case with Disc Golf S.A., often encounter the primary need to gain market share from substitute products, rather than concentrate on the threat posed by substitute products. Disc Golf S.A. will pioneer a new market, but will have to carve its own market share out of the existing sport and leisure industry. The industry characteristics that the first mover utilises to attract market share may however facilitate the threat of substitutes, once the market share has been captured. The key to dealing with this double-edged sword lies with blunting the edge that substitutes can utilise to prise away market share gained.

4.5.1 Relative Price/Performance

The leisure industry product matrices in figures 3.1 and 3.2 illustrates that disc golf is favourably placed, in terms of relative price/performance, in the industry. These illustrations indicate that disc golf should be able to capture and maintain a portion of the market. This status quo should be maintained by ensuring that the relative price/performance remains favourable.

4.5.2 Buyer Propensity to Substitute

Consumers in the sport and leisure industry often partake in numerous different activities and experiment with new activities. Their complex and varied leisure requirements result in most consumers regularly seeking different activities at various
times. This equates to a high propensity to substitute, which places the market in a continual state of flux, where participants all command their own share. Leisure seekers will always partake in multiple leisure activities, the key is to offer an activity that is attractive enough to command a reasonable share of the market.

4.5.3 Switching Costs

Disc Golf S.A. will provide discs for sale or hire at the golf courses. The discs are the only equipment that is mandatory when playing disc golf. This means that there will not necessarily be switching costs to change from one leisure activity to disc golf. Similarly, unless discs and disc golf equipment have been purchased, there are little costs preventing anyone from discontinuing disc golf. The issue of switching costs have therefore been neutralised.

4.6 Threats from Buyers

The extremely low concentration of buyers and relatively low purchase volume in the sport and leisure industry makes the threat from individual buyers very low. The threat of clubs, organisations and other collective groups are also individually very low in the industry. There are issues relating to buyers price sensitivity and bargaining leverage that Disc Golf S.A. should however address.

4.6.1 Product Differentiation

The differentiation achieved between disc golf and other leisure activities will contribute to how buyers switch between the activities, based purely on price. The limited scope available for differentiating and brand building must be maximised by making the golf courses as attractive and accessible as possible. Augmenting facilities at the course and clubhouse will assist to differentiate disc golf from other sport/leisure activities. Opportunities for corporate days, school events, parties and club competitions have become the norm in the industry rather than differentiation mechanisms. Disc Golf S.A. also offers these functions but needs to investigate different avenues to try and differentiate themselves from the pack. Differentiation
mechanisms should try and achieve synergy with the unique offering that disc golf provides, in order to prevent simple imitation.

4.6.2 Substitute Availability

Most sport and leisure activities are relatively easy to substitute, as they all attempt to attract the finite funds available for sport and leisure. Although buyers individually pose no great threat if they prefer a substitute activity, Disc Golf S.A.’s product offering must still be attractive and sufficiently differentiated to insure that disc golf captures its appropriate market share.

4.7 The Threat of Suppliers

Suppliers pose a significantly higher threat to Disc Golf S.A. than buyers do. The following considerations therefore should receive higher priority, in the strategic process, than the threats discussed above. The two suppliers that cause the significant threats are the individual landowners, and the disc manufacturer Innova Discs.

4.7.1 Innova Discs

Innova has the potential to exert immense pressure on the activities of Disc Golf S.A. The current relationship is fortunately one of collaboration, but could be quite detrimental if Innova’s intentions were to change. Innova remain focused as a disc and accessory manufacturer and are not interested in being disc golf operators. They have had no immediate plans to exploit the African market and have welcomed the approach by Disc Golf S.A. to introduce disc golf into South Africa.

Innova has the capabilities, resources and brand identity to exert power over Disc Golf S.A. if it elected to. They are clearly the largest of a small group of disc manufacturers and currently lead the market in disc innovation. The African market is fairly insignificant to them as they are currently pursuing more lucrative export opportunities in Europe and the Far East. The supply of their discs is a major cost component to Disc Golf S.A. and is also a crucial aspect to the differentiation and
brand building initiatives in South Africa. Innova are also the disc patent holders and have agreed to licence disc manufacture in South Africa at a later stage.

All these factors, Innova’s capacity and potential motives to forward integrate, together with their strategically vital collaborative relationship stresses the singular importance of maintaining a strong relationship between Disc Golf S.A. and Innova. The risk of placing this much reliance on a particular supplier is however too great. Strategic planning also needs to incorporate manners in which to reduce the threat posed by Innova, should the relationship sour.

4.7.2 Disc Golf Course Landowners

The threat from owners of the proposed disc golf courses is also of strategic importance. These owners, who are predominantly Local Councils, possess the limited desirable locations for potential disc golf courses. The strategic importance of these locations infers significance to the landowners, who control these resources. The securing, or option of long-term leases will assist in reducing the threat of these suppliers. The threat of the Local Council’s integrating forward also exists, but operating a commercial enterprise would be a deviation from Local Government objectives. The critical budget constraints that face local government may however cause them to reconsider their commercial orientation, or more likely, motivate them to demand higher rates for leasing their properties. The eventual ownership of the disc golf course properties would ultimately negate the threat from the landowners, but this would only occur at very high costs that would destroy the viability of the concept at this stage.

Although it has already been determined that close relationships with Innova and landowners is a strategically crucial initiative, contingency plans must be investigated to mitigate the effects in the event of the breakdown of these relationships.
4.8 Strategic Prioritisation and Ranking

The above-mentioned determinants of competitive pressure can now be prioritised and ranked according to the strategic Pioneering Matrix. The ranking will enable the more crucial issues, concerning competitive pressure, to be prioritised when applying other strategic tools and developing strategy.

<table>
<thead>
<tr>
<th>Item</th>
<th>Significance</th>
<th>Impact</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Barriers to entry</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economies of scale for courses</td>
<td>Medium</td>
<td>Positive</td>
<td>Important</td>
</tr>
<tr>
<td>Marketing economies of scale</td>
<td>Low</td>
<td>Positive</td>
<td>Moderate</td>
</tr>
<tr>
<td>Production economies of scale</td>
<td>Medium</td>
<td>Positive</td>
<td>Important</td>
</tr>
<tr>
<td>Capital requirements</td>
<td>Low</td>
<td>Neutral</td>
<td>Secondary</td>
</tr>
<tr>
<td>Expected retaliation</td>
<td>Medium</td>
<td>Positive</td>
<td>Important</td>
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<tr>
<td><strong>First mover advantages</strong></td>
<td></td>
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</tr>
<tr>
<td>Economies of scale for courses</td>
<td>Medium</td>
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<td>Important</td>
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<tr>
<td>Procurement economies of scale</td>
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<td>Neutral</td>
<td>Secondary</td>
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<tr>
<td>Economies of experience</td>
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<td>Important</td>
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<tr>
<td>Relationship with Innova</td>
<td>High</td>
<td>Positive</td>
<td>Critical</td>
</tr>
<tr>
<td>Relationship with landowners</td>
<td>High</td>
<td>Positive</td>
<td>Critical</td>
</tr>
<tr>
<td>Cheaper input costs</td>
<td>Medium</td>
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<td>Important</td>
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<tr>
<td>Course location pre-emption</td>
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<td>Positive</td>
<td>Critical</td>
</tr>
<tr>
<td>Distribution space pre-emption</td>
<td>Low</td>
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<td>Moderate</td>
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<tr>
<td>Market segment pre-emption</td>
<td>As per course location pre-emption</td>
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<tr>
<td>Early profitability</td>
<td>Low</td>
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<tr>
<td>Product/process innovation</td>
<td>Low</td>
<td>Positive</td>
<td>Moderate</td>
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<tr>
<td>Franchising</td>
<td>Low</td>
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<tr>
<td>Reputational effects</td>
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<tr>
<td>Communication good effects</td>
<td>High</td>
<td>Positive</td>
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<tr>
<td>Item</td>
<td>Significance</td>
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<tr>
<td><strong>First mover disadvantages</strong></td>
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<tr>
<td>Educating customers</td>
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<td>Negative</td>
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<tr>
<td>Market uncertainty</td>
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<td>Specificity of investments</td>
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<td>Learning from Pioneer's mistakes</td>
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<td>Moderate</td>
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<tr>
<td><strong>Threat of substitution</strong></td>
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<tr>
<td>Relative price/performance</td>
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<tr>
<td>Buyer propensity to substitute</td>
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<td>Secondary</td>
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<tr>
<td>Switching costs</td>
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<tr>
<td><strong>Threat from buyers</strong></td>
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<tr>
<td>Product differentiation</td>
<td>Medium</td>
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<tr>
<td>Substitute availability</td>
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<tr>
<td><strong>Threat from suppliers</strong></td>
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<tr>
<td>Innova Discs</td>
<td>Medium</td>
<td>Negative</td>
<td>Important</td>
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<tr>
<td>Disc golf course landowners</td>
<td>Medium</td>
<td>Negative</td>
<td>Important</td>
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</tbody>
</table>

Figure 4.1 illustrates the prioritising of the competitive issues that were considered in the framework. This model can now be utilised to guide strategic initiative to try and build competitive arising from first mover status.
Figure 4.1  Disc Golf S.A. Competitive Spheres of Influence
CHAPTER 5 CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This study investigates if first mover advantages and barriers to entry could still be fundamental to a small pioneering company's strategic thinking. These obstacles may be overcome or circumvented with superior resources or divergent strategies, but such eventualities are contingent on the circumstances and conditions of the particular scenario. The ability of barriers to entry and first mover advantages to provide sustainable competitive advantage to small pioneers can only truly be determined once a comprehensive analysis of the competitive environment is undertaken. Porter's Five Forces of Competition Framework provides a first step of analysis by systematically analysing the competitive forces in an industry. The framework considers the structural elements in an industry that will identify the potential for barriers to entry and first mover advantages. The selected strategies, the actual potential entrants, their resources and strategies, and market contingencies will ultimately determine if that potential can be realised.

5.2 Porter's Five Forces of Competition Framework

This study focused on this analysis of the industry, with particular emphasis on issues facing pioneering companies. A modified Porter's Five Forces Framework was utilised to determine the competitive nature of a pioneer's market. This framework incorporates the issues concerning first mover advantages and replaces the considerations of industry rivalry, which are not yet relevant to a pioneering company. Pioneering companies should place emphasis on deterring direct competitors before dealing with rivalry in an industry. The modified framework (Table 5.1) therefore focuses on developing advantages from first mover status and building barriers to entry against potential entrants, whilst still considering the relevant issues of threats from substitutes, suppliers and buyers.
Table 5.1  **Pioneer Competitive Forces Framework**

<table>
<thead>
<tr>
<th>Determinants of Supplier Power</th>
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<tbody>
<tr>
<td>Differentiation of Inputs.</td>
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<tr>
<td>Switching Costs of Suppliers and Firms in the Industry.</td>
</tr>
<tr>
<td>Presence of Substitute Inputs.</td>
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<tr>
<td>Supplier Concentration.</td>
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<tr>
<td>Importance of Volume to Supplier.</td>
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<tr>
<td>Cost Relative to Total Purchases in the Industry.</td>
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<tr>
<td>Influence on Buyers Cost or Differentiation.</td>
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<td>Forward Integration.</td>
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<td>Table 2.4 Cont.</td>
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<tr>
<td><strong>Advantages</strong></td>
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<tr>
<td>Absolute Cost Advantages</td>
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<tr>
<td>Proprietary Learning Curve.</td>
</tr>
<tr>
<td>Expected Retaliation.</td>
</tr>
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<tr>
<td></td>
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</tbody>
</table>
Table 2.4 Cont.

<table>
<thead>
<tr>
<th>Determinants Of Buyer Power</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Price Sensitivity</strong></td>
</tr>
<tr>
<td>Price/Total Cost.</td>
</tr>
<tr>
<td>Product Differentiation.</td>
</tr>
<tr>
<td>Competitive Intensity.</td>
</tr>
<tr>
<td>Brand Identity.</td>
</tr>
<tr>
<td>Quality/Performance.</td>
</tr>
<tr>
<td>Buyer Profitability.</td>
</tr>
<tr>
<td>Decision Makers’ Incentives.</td>
</tr>
<tr>
<td><strong>Bargaining Leverage</strong></td>
</tr>
<tr>
<td>Relative</td>
</tr>
<tr>
<td>Concentration.</td>
</tr>
<tr>
<td>Purchase Volume.</td>
</tr>
<tr>
<td>Switching Costs.</td>
</tr>
<tr>
<td>Substitute Availability.</td>
</tr>
<tr>
<td>Buyer Information.</td>
</tr>
<tr>
<td>Backward Integration.</td>
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<tr>
<td>Pull-Through.</td>
</tr>
</tbody>
</table>

The Pioneer Competitive Framework should be used for companies who create or introduce new products and enter new markets, in order to determine the competitive nature of the industry. If the efforts to deter new entrants fail, the pioneer will then need to consider the effect of direct competitors on the industry, and develop strategies to deal with them. Porter’s Framework would then be appropriate to analyse the competitive environment.

5.3 Ranking and Prioritising Competitive Issues

Porter’s Five Forces of Competition Framework does not allow for the ranking and prioritisation of factors considered in the framework. A model was proposed that spatially depicts the priority from a number of possible considerations. This model, an adaptation of D’aveni’s Sphere of Influence Model, can be used to depict the importance of contributory factors by placing them concentrically about a core. The key issues are situated near the core, with the less important ones spread around the fringes, as shown in Figure 5.1.
The determinants of competitive pressure, from the Pioneer Competitive Forces Framework can be ranked according to the Strategic Pioneering Matrix (Table 5.2). The ranking dictates the position of the individual determinants in the model.

**Table 5.2 Strategic Pioneering Matrix**

<table>
<thead>
<tr>
<th>Competitive Impact</th>
<th>Significance to Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>Positive</td>
<td>Moderate</td>
</tr>
<tr>
<td>Neutral</td>
<td>Secondary</td>
</tr>
<tr>
<td>Negative</td>
<td>Moderate</td>
</tr>
</tbody>
</table>
A Case Study of Disc Golf S.A. was presented of a small company that plans to pioneer the concept of disc golf into South Africa. The data in the case was used to test the proposed framework and prioritisation model. The case was analysed and strategic issues ranked according to the Pioneer Strategic Matrix. The prioritisation of these issues was then depicted in the Disc Golf S.A. Competitive Spheres of Influence model.

Figure 5.2  Disc Golf S.A. Competitive Spheres of Influence

These issues, with cognisance to their relative priorities, must be considered throughout the strategic formulation process.
5.4 Summary

Although the absolute ability of barriers to entry and first mover advantages can be diminished, the study indicates that there are still opportunities for small pioneering companies to exploit first mover advantages and build barriers to entry, even when faced with the possibility of being threatened by entry from large corporations. Certain opportunities, when properly exploited, could lead to competitive advantages against all later entrants. The potential of such opportunities is dependant on numerous structural and situational conditions which can best be summarised by Kerin and Varadarajan (1992), 'the overall magnitude of first mover advantage is the composite effect of a multiplicity of factors. The degree of fit between the environmental opportunity and the first mover's skills and resources, the firm's ability to capitalise on potential sources of first mover advantage, the moderating effects of product/market contingencies on the factors underlying the positional advantages of the first mover, competitive strategies of the first mover and later entrants, and later entrant advantages combine to determine the overall magnitude of a first mover advantage.'

The study however warns against blindly pursuing first mover advantages and barriers to entry, without due cognisance to evolving developments in the industry. Undue reliance on these factors could lead to gateways to entry or even disadvantages if they prevent first movers from correctly interpreting emerging trends.

The results of the analysis strongly indicate that first mover advantages and barriers to entry have great significance to the success of Disc Golf S.A., and should be foremost in its strategic endeavours. This structural significance is valid regardless of the size and strategy of potential entrants. The analysis demonstrates the particular ability of first mover status to confer sustainable competitive advantage and structural barriers for the pioneer. The model provides guidance as to what issues should be pursued in further strategy development. The model does not however assure the success of any first mover and barriers to entry initiatives, it merely indicates the ability and suitability of such initiatives to develop a competitive advantage in the industry.
6 BIBLIOGRAPHY


