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Relationship between generic strategies, competitive advantage and organizational performance: an empirical analysis

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Abstract

In recent years, there has been a growing intensity of competition in virtually all areas of business in both markets upstream for raw materials such as components, supplies, capital and technology and markets downstream for consumer goods and services. This paper examines the relationships among generic strategy, competitive advantage, and organizational performance. Firstly, the nature of generic strategies, competitive advantage, and organizational performance is examined. Secondly, the relationship between generic strategies and competitive advantage is analyzed. Finally, the implications of generic strategies, organizational performance, performance measures and competitive advantage are studied. This study focuses on: (i) the relationship of generic strategy and organisational performance in Australian manufacturing companies participating in the “Best Practice Program in Australia”, (ii) the relationship between generic strategies and competitive advantage, and (iii) the relationship among generic strategies, competitive advantage and organisational performance. © 1999 Elsevier Science Ltd. All rights reserved.

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1. Introduction

Recent years have witnessed a growing intensity of competition in virtually all areas of business, whether at home or abroad, in markets upstream for raw materials, components, supplies, capital and technology as well as in markets downstream for consumer goods and services (Henderson, 1983; Wind and Robertson, 1983). This has resulted in greater attention to analyzing competitive behavior and competitive strategies under different environmental conditions. Typologies of generic competitive strategies or “strategy types” have, for example, been proposed by McGee and Thomas (1986), Porter (1980, 1985) and empirically tested by Galbraith and Schendel (1983) and Miller (1986). These authors have examined the levels of performance associated with these strategy types along with their organisational characteristics and the type of environmental conditions

under which these different types of competitive strategy are most likely to be pursued by the organization.

In the industrial organization and business strategy literature, considerable interest has been centered on identifying generic business strategies or strategy types based on strategy components, such as the scope or domain of the business, resources deployment in marketing, production and R&D, asset management or parsimony, and degree of vertical integration (Miles, 1982; Miller, 1986; White, 1986). The primary emphasis has been on examining the link between strategy, environment and performance in an effort to achieve a position of competitive advantage. A number of typologies or taxonomies of business and competitive strategies have been identified, some based on a priori conceptual frameworks, others on empirical studies. The number and precise nature of the strategy types identified varies widely, depending on the specific components or variables included, as well as the exact methodology employed.

This study has been undertaken to address some of these gaps in the present research base. The purpose of this study is to: (1) identify the nature of generic stra-

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gies and organisational performance in Australian manufacturing companies participating in the “Best Practice Program in Australia”, (2) describe the relationship between generic strategies and competitive advantage, and (3) describe the relationship between competitive advantage and organisational performance in these companies.

2. Background for the research

According to Douglas and Rhee (1989) the two of the most widely accepted of these conceptual frameworks are Miles and Snow’s (1978) typology, and Porter’s (1980) taxonomy of three generic competitive strategies. The focus of this study is on Competitive Advantage based on Porter’s typology (1980, 1985).

2.1. Competitive advantage

Porter (1985) considered that in the long-term the extent to which the firm is able to create a defensible position in an industry is a major determinant of the success with which it will out-perform its competitors. He proposed generic strategies by which a firm can develop a competitive advantage and create a defensible position. These strategies are (i) overall cost leadership, (ii) differentiation, and (iii) focus. Porter argued that by adeptly pursuing the cost leadership, differentiation, or focus strategies, businesses can attain significant and enduring competitive advantage over their rivals (Porter, 1985). A number of empirical studies have been conducted to test the validity of Porter’s generic strategies (Galbraith and Schendel, 1983). These studies rely on Porter’s conceptual framework to identify strategic components or dimensions of relevant strategic variables as Porter’s generic strategies are essentially “ideal” types, and hence somewhat difficult to operationalise.

The majority of research on generic business or competitive strategy has been conducted in relation to US businesses. A limited number of studies have been conducted outside US, predominantly in Canada or European markets, following the classic structure, strategy, performance paradigm (Cowling, 1972; Scherer, 1980).

Other studies have examined the link between market structure and performance variables such as market share and profitability rather than examining the intervening competitive strategy variables and strategic types (Jenny and Weber, 1976; Lambin, 1976). The only study conducted in Australia is at a macro level by Yetton et al. (1992) examining the application of Porter’s typology to study the competitive advantage of Canada, New Zealand and Australia.

2.2. Conceptualization of competitive strategies

Two schools of thought have emerged regarding the conceptualization and adoption of competitive strategies. These are summarized as Porter’s generic strategies of cost leadership, differentiation, and focus. The first school of thought supports Porter in his assertion that an organization has to choose one of the generic strategies and devote total commitment of resources to it (Dess and Davis, 1984). On the other hand, several other authors have argued against Porter’s assertion, and suggest that organizations should focus on a combination of strategies that best suit their circumstances (Wright et al., 1990).

The first school of thought maintains that viable companies can seek either efficiency or differentiation. The more efficiency is sought by management, the less differentiated the company would be, while greater differentiation would be associated with a less efficient company. This school of thought reasons that the value chain required for a low-cost strategy is qualitatively different from the value chain required for a differentiation strategy. The emphasis of a differentiation strategy is on achieving (even at considerable cost) superior quality and image throughout the value chain, while the emphasis of a low-cost strategy is on lowering cost wherever possible. Because of difficulties in reconciling apparently opposed strategic thrusts, profitable companies tend to compete with one strategy only.

An opposing prospective proposes that both low-cost and differentiation strategies may be simultaneously and profitably adopted by an enterprise. According to this notion, the adoption of a differentiation strategy would entail promoting higher product quality and involve bearing higher costs across a number of functional areas in order to support the differentiation strategy. However, higher quality products would presumably lead to greater market demand, allowing the company to adopt a low-cost strategy through the attainment of higher market shares and cumulative volumes of production.

Miller and Friesen (1986) derived an empirical taxonomy of business level strategies to determine if Porter’s (1980) very popular generic types would emerge in consumer durable industries. The authors found that the cluster of business units that show distinct competencies in the areas of differentiation, cost leadership and focus dramatically outperform all the others. In fact, Miller and Friesen (1986) found that success associated with the possession of strategic advantages—the more the better—rather than strict adherence to Porter’s types. They argued that this issue certainly warrants further study as failure and success appeared to be systematic with poor performers exhibiting many weaknesses and virtually no strengths, while good performers show the opposite.

Miller (1992) argues that there are a number of dangers associated with the exclusive pursuit of a single gen-

eric strategy. He claims that strategic specialization may leave serious gaps or weaknesses in product offerings, ignore important customer needs, be easy for rivals to counter, and in the long run cause inflexibility and narrow the vision of the organization. In support of Miller, the Wright et al. (1990) study of 90 companies selected randomly from Dunn and Bradstreet's Million Dollars Directory evaluated the performance of companies using multiple strategies against those using singular strategic foci. They concluded that companies that adopt multiple strategies such as low-cost and differentiation outperform businesses that compete mainly with either one or the other.

2.3. Generic strategies and performance relationships

Wensley (1987) argues that Porter gives little evidence to support the U-shaped relationship between return on investment and market share, which is used by Porter to illustrate the dangers of being stuck in the middle. Wensley states that Porter cites only two examples, the US fractional horse power electric motor business, where the relationships "appear to hold", and the global automobile markets, where it "probably also roughly hold" (i.e., Porter, 1980). Support for the U-shaped curve can be drawn from the PIMS project and the work it provoked. For example, Schoeffler et al. (1974) stressed the importance of size related factors such as market share, total marketing expenditure and R&D expenditures in explaining variations in profit. Buzzell et al. (1975) further developed the U-shaped relationship between market share and success by arguing that a 10% difference in market share is accompanied by a difference of about 5% in pretax return on investment. Hamermesh et al. (1978) illustrated with surveys of successful low share market companies that concentration on market share was dangerously over prescriptive. Woo and Cooper (1982) outlined the differences in the strategies followed by successful and unsuccessful low market share companies operating in the same environment and concluded that "absence of a clear focus" was a major problem with unsuccessful companies.

There is empirical evidence for success in companies with low market share and companies with high market share. Evidence suggests that low market share companies that are successful have significantly different resource allocations from successful high market share companies, whereas unsuccessful ones do not (Woo and Cooper, 1982). Porter's analysis is built on such research evidence.

2.4. Comparison of generic strategies

According to Porter (1985), the notion underlying the concept of generic strategies is that competitive advantage

is at the heart of any strategy, and in order to attain competitive advantage the organization has to make a choice about the type of competitive advantage, it seeks to attain and the scope within which it will attain it.

The principal criticism of Porter's work is methodological, as many of the points that he makes do not seem to have any empirical justification. O'Schaunessy (1984) criticizes the choice of the five environmental forces which are linked to strategies, namely, buyer power, supplier power, degree of competition, threat of entry and threat from substitutes, for two reasons. Firstly, the choice seems to be arbitrary and there is little to suggest that these forces are necessarily exclusive or exhaustive. Secondly, O'Schaunessy argues that Porter gives no indication of how to operationalise any analysis based on these five forces. Porter's logic is inconsistent in relation to the use of multiple generic strategies and has been contradicted by empirical findings (White, 1986; Wright et al., 1990).

Empirical investigations also contradict Porter on the use of multiple strategies. For example, Phillips et al. (1983) found that product quality (a basis for product differentiation), through a positive association with relative market share, was negatively related to relative direct costs (an indication of cost leadership). Fine (1983) found that cost declined more rapidly for firms that produce high quality products than for firms that produced low quality ones. Thus, cost savings due to experience can be gained more rapidly for quality products.

Porter (1980) argued that the three generic strategies differ in dimensions other than the functional differences noted above. Implementing them successfully requires different resources and skills. The generic strategies also imply differing organisational arrangements, control procedures and incentive systems. The generic strategies may also require different styles of leadership and can translate into very different corporate cultures and atmosphere.

According to Armstrong (1987) Toyota topped ratings of product reliability and customer satisfaction while simultaneously producing cars for US\$1500 less per unit than their US rivals by using the techniques of managing conflict across functions. Similarly, Mitchell (1987) observed that in North America, the Kellogg Company has buttressed its impressive lead in the breakfast cereals industry by simultaneously leading in the introduction and development of new production techniques, new product introductions, and brand loyalty. If Porter's admonitions against pursuit of multiple strategies are taken seriously, other firms may be discouraged from emulating Toyota and Kellogg, and as a result, they may risk erosion of their competitive position (Armstrong, 1987).

Karnani (1984) on the basis of a game-theoretic mathematical model, further argues, that the relationship

between differentiation and average cost position is determined by the net result of two opposing forces. Firstly, high differentiation probably leads to a high cost position independent of scale. Secondly, high differentiation leads to high competitive strength, which leads to high market share, which in turn leads to low average cost position. Which of these two forces is stronger will, largely depend on the specific situation. Thus, Karnani's model leads to the same conclusion reached by Phillips et al. (1983) on the basis of their empirical research: high differentiation and low cost are not necessarily incompatible, contrary to the previous literature (Porter, 1980; Hall, 1980).

Porter (1980) suggests that a high differentiation position often requires the perceptions of exclusivity, which is incompatible with high market share. Contrary to this view, the empirical study of Phillips et al. (1983) indicates there is a significant and positive relationship between "*relative product quality*" and "*relative market position*". In other words, Phillips et al. find a positive relationship between differentiation and market share. Karnani (1984) indicates that the substitutability relationship between cost position and differentiation is governed by a multiplicative relationship. Therefore, there is an interaction effect between cost position and differentiation; that is, if a firm is very weak in either aspect, it is likely to be a poor performer. According to Karnani (1984), the above dichotomisation offered by Porter (1980) is invalid. Differentiation is a continuum, and it is not true that a firm has to have either low or high differentiation. Similarly, cost position is a continuum.

3. Organisational performance

Performance is a recurrent theme in most branches of management, including strategic management, and it is of interest to both academic scholars and practicing managers. While prescriptions for improving and managing organisational performance are widely available (Nash, 1983), the academic community has been preoccupied with discussion and debates about issues of terminology, level of analysis (i.e., individual, work unit, or organization as a whole), and conceptual bases for assessment of performance (Ford and Schellenberg, 1982).

The performance concept and the broader area of organisational effectiveness, and its importance has been widely recognized by several scholars (Connally et al., 1980).

The treatment of performance in research settings is perhaps one of the thorniest issues confronting academic research today. With the volume of literature on this topic increasing, there appears to be little hope of reaching any agreement on basic terminology and definitions (Venkatraman and Ramanujam, 1986). Several authors have argued the importance of organisational or business

performance along three dimensions namely: (i) theoretical (Cameron and Whetten, 1983), (ii) empirical (Ginsberg and Venkatraman, 1985; and (iii) managerial (Nash, 1983).

The narrowest conception of business performance centers on the use of simple outcome based financial indicators that are assumed to reflect the fulfillment of the economic goals of the firm and is referred to as the financial performance, which has been the dominant model in empirical strategy research (Hofer, 1983; Venkatraman and Ramanujam, 1986). Typical of this approach would be to examine such indicators as sales growth, profitability (reflected by ratios such as return on investment, return on sales, and return on equity), earnings per share and so forth. Furthermore, reflecting the popular and current view that "market" or "value-based" measurements are more appropriate than accounting-based measures (Hax and Majluf, 1984), some strategy studies have employed such measures like market-to-book or stock-market returns and its variants (Montgomery et al., 1984). Nevertheless, this approach still remains very much financial in its orientation and assumes the dominance and legitimacy of financial goals in the firm's system of goals (Venkatraman and Ramanujam, 1986).

A broader conceptualization of business performance would include emphasis on indicators of operational performance (i.e., nonfinancial) in addition to indicators of financial performance. Under this framework it would be logical to treat such measures as market-share, new product introduction, product quality, marketing effectiveness, manufacturing value-added, and other measures of technological efficiency within the domain of business performance (Smith and Grimm, 1987; Tushman and Romanelli, 1985; Venkatraman and Ramanujam, 1986).

4. Research methodology

This study was a survey of all companies that participated in the first and second rounds of the Australian Best Practice Program (1991, 1992) conducted by the Australian Manufacturing Council in collaboration with the Department of Industrial Relations. A total of 237 companies participated in the Australian Best Practice Program of which some 23 companies described service as their main domain of business and was therefore excluded from this study. A total of 214 manufacturing companies forms the sample frame for this study.

The sample was limited to 1991, 1992 because the Australian Best Practice Program has only existed since 1991. A third round has been excluded from the study as this round is yet to be decided. The names and associated details of these companies were classified and could not be released by the Australian Manufacturing Council.

A common thread linking 214 companies selected for

this study was their corporate intention of improving their competitive position by introducing work-place reforms and adopting an overall organisational change program (AMC, March 1991). This common linkage along with the fact that all the companies were manufacturing was considered directly relevant for the nature of this study.

The data reported in this paper were obtained from 214 Australian manufacturers involved in the 1991, 1992 Best Practice Program conducted by the Australian Manufacturing Council and the Department of Industrial Relations. The research questionnaire comprises three sections:

Section 1. General Information

Section 2. Generic Strategy Scale

- Cost Leadership (19 items)
- Differentiation (17 items)
- Focus (6 items)

Section 3. Organisational Performance Scale

- Organisational Performance (27 items). This scale incorporates a variety of performance measurements indicated in the literature (ROI, Market Share, ROA, Performance Ratios)

The Generic Strategies Scale consists of 42 items which have been drawn from various studies (Miller, 1986; Miller and Friesen, 1986; Porter, 1985; White, 1986).

The Organisational Performance Scale consists of 27 items, many of which have been examined previously (Drazin, 1990). In each case Cronbach reliability coefficients have been established as follows:

| | |
|----------------------------------|------|
| Generic Strategy Scale | 0.82 |
| Organisational Performance Scale | 0.89 |

The data reported in this paper were obtained from 214 Australian manufacturers involved in the 1991, 1992 Best Practice Program. There were 120 returns out of a total of 214 questionnaires sent resulting in a response rate of 56.1%.

5. Operationalisation of research constructs

Responses to the generic strategies, and organisational performance items were subjected to a principal components factor analysis as a preliminary extraction technique, followed by one or more other procedures, namely varying the number of factors and rotational methods. The results of factor analyses for generic strategies are provided in Tables 1–3, while factors of organisational performance are shown in Table 4.

5.1. Cost leadership

All the factors of cost leadership exhibited overlapping variance of above 40% and therefore may be considered very good to excellent in explaining the underlying phenomenon within each factor. Table 1 reports the results of the factor analysis of cost leadership variables. The five factors extracted from 16 items of cost leadership accounted for 68.4% of the total variance.

5.2. Differentiation

Table 2 reports the results of the factor analysis of the differentiation strategy variables. Responses to the 14 items of differentiation produced four factors that accounted for 61.8% of the total variance.

5.3. Focus

Table 3 reports the results of the factor analysis of focus variables. Responses to the 6 items of focus were factor analysed into two factors that accounted for 70.1% of the total variance.

5.4. Organisational performance

Items of organisational performance was subjected to two factor extraction procedures, which are principal components analysis with varimax rotation and oblimin rotation, as well as maximum likelihoods factor analysis with direct oblimin rotation. In order to get a stable factor structure which adequately represents the data, both procedures were considered necessary for the organisational performance scale, as items of this scale include both financial and non-financial measures. Table 4 reports results of factor analysis of the organisational performance scale.

6. Development of strategic profiles of companies

In order to examine strategic profiles of sample companies, and how their profiles are related to various aspects of organisational performance, the following procedure was adopted. A new scale (COMSTRAT) consisting of five groups was developed based on the recorded mean scores for each dimension of generic strategies. Strategic profiles were developed on the basis of overall recorded mean scores of the company for each sub-scale of competitive advantage. For example, a company that considers a cost leadership strategy as the main source of competitive advantage would indicate a very high mean score (3.1–4) on all elements of cost leadership, and relatively medium to low on other dimensions of competitive advantage. A similar procedure was

Table 1
Principal components factor analysis matrix of cost leadership variables

| Cost leadership items | | Factors | | | | |
|-----------------------|--|-------------|-------------|-------------|-------------|-------------|
| | | SL | IM | HCD | EI | VC |
| | Supplier Logistics (SL) (0.83) ^a | | | | | |
| 4a | Supplier–vendor performance in cost control | 0.82 | 0.17 | 0.11 | 0.06 | 0.04 |
| 4b | Supplier–vendor performance in quality | 0.82 | 0.10 | 0.24 | 0.14 | 0.17 |
| 4c | Supplier–vendor performance in delivery | 0.70 | 0.20 | 0.16 | 0.11 | 0.11 |
| 5 | Effectiveness of value added products | 0.61 | 0.20 | 0.28 | 0.03 | 0.09 |
| | Inventory Management (IM) (0.84) ^a | | | | | |
| 3c | Inventory turnover of finished products | 0.15 | 0.85 | 0.07 | 0.13 | 0.15 |
| 3a | Inventory turnover of raw material | 0.13 | 0.84 | 0.16 | 0.07 | 0.13 |
| 3b | Inventory turnover of work in progress | 0.32 | 0.81 | 0.12 | 0.14 | 0.10 |
| | Human Capital Development (HCD) (0.80) ^a | | | | | |
| 2b | Continuous improvement in supervisor skills | 0.18 | 0.14 | 0.83 | 0.12 | 0.08 |
| 2a | Continuous improvement in shopfloor skills | 0.19 | 0.14 | 0.78 | 0.16 | 0.02 |
| 2c | Continuous improvement in management skills | 0.22 | 0.11 | 0.75 | 0.32 | 0.14 |
| | Efficiency Improvement (EI) (0.78) ^a | | | | | |
| 1d | Utilisation of software technologies | 0.05 | 0.07 | 0.25 | 0.83 | 0.12 |
| 1b | Improvement of software technologies | 0.05 | 0.12 | 0.27 | 0.79 | 0.14 |
| | Value Chain (VC) (0.72) ^a | | | | | |
| 1a | Improvement in hardware technologies | 0.07 | 0.16 | 0.07 | 0.35 | 0.68 |
| 7a | Effectiveness of components of primary value chain | 0.26 | 0.10 | 0.09 | – 0.11 | 0.68 |
| 1c | Utilisation of hardware technologies | – 0.04 | 0.23 | 0.06 | 0.32 | 0.67 |
| 7b | Effectiveness of components of secondary value chain | 0.17 | 0.09 | 0.27 | 0.18 | 0.65 |
| | Eigen values | 6.60 | 2.23 | 1.80 | 1.24 | 1.14 |
| | Percentage of variance | 34.7 | 11.7 | 9.50 | 6.50 | 6.00 |
| | Cumulative variance | 34.7 | 46.4 | 55.9 | 62.4 | 68.4 |

^aCronbach liability coefficient.

Table 2
Principal components factor analysis matrix of differentiation variables

| Differentiation items | | Factors | | | |
|-----------------------|--|-------------|-------------|-------------|-------------|
| | | CS | TL | PD | LD |
| | Customer Service (CS) (0.79) ^a | | | | |
| 13 | Speed and effectiveness of decision making systems | 0.75 | 0.09 | 0.24 | 0.06 |
| 14 | Customer service | 0.74 | – 0.11 | 0.22 | 0.24 |
| 5 | Quality of product and services | 0.67 | – 0.01 | 0.31 | 0.13 |
| 12 | Human resource management | 0.64 | 0.21 | 0.34 | – 0.10 |
| 6 | Dependability of delivery | 0.63 | 0.03 | – 0.14 | 0.31 |
| 17 | Price difference | 0.58 | 0.13 | – 0.18 | – 0.13 |
| | Technology Leadership (TL) (0.80) ^a | | | | |
| 4 | Unique technology | 0.10 | 0.82 | 0.20 | 0.10 |
| 2 | Unique assets | 0.07 | 0.79 | – 0.02 | 0.06 |
| 3 | Unique product | – 0.00 | 0.72 | 0.34 | 0.19 |
| 1 | Unique skills | 0.02 | 0.64 | – 0.04 | 0.08 |
| | Product Differentiation (PD) (0.72) ^a | | | | |
| 15 | Product image | 0.05 | 0.05 | 0.84 | 0.04 |
| 16 | Innovation in marketing techniques | 0.28 | 0.08 | 0.80 | 0.14 |
| | Logistic Differentiation (LD) (0.75) ^a | | | | |
| 8 | Flexibility in volume mix | 0.00 | 0.16 | 0.08 | 0.85 |
| 7 | Flexibility in product mix | – 0.00 | 0.25 | 0.21 | 0.79 |
| | Eigen values | 5.13 | 2.31 | 1.73 | 1.33 |
| | Percentage of variance | 30.2 | 13.6 | 10.2 | 7.90 |
| | Cumulative variance | 30.2 | 43.8 | 54.0 | 61.8 |

^aConbrach reliability coefficient.

Table 3
Principal components factor analysis matrix of focus variables

| | Focus items | Factors | |
|---|--|-------------|-------------|
| | | PNM | CNM |
| | Product Niche Markets (PNM) (0.81) ^a | | |
| 2 | Market segmentation | 0.87 | 0.19 |
| 1 | Specialist product | 0.85 | 0.13 |
| 3 | Resource alignment | 0.78 | 0.16 |
| | Customer Niche Markets (CNM) (0.75) ^a | | |
| 5 | Size of customer groups | 0.23 | 0.88 |
| 6 | Customer types | 0.23 | 0.79 |
| 4 | Product line breath | 0.05 | 0.72 |
| | Eigen values | 2.93 | 1.28 |
| | Percentage of variance | 48.8 | 21.3 |
| | Cumulative variance | 48.8 | 70.1 |

^a Cronbach reliability coefficients.

Table 4
Principal components factor analysis matrix of organisational performance variables

| | Organisational performance items | Factors | | | |
|----|--|-------------|-------------|-------------|-------------|
| | | FP | FM | L | ME |
| | Financial Performance (FP) (0.83) ^a | | | | |
| 27 | Increased value of assets due to regular good performance | 0.77 | 0.05 | 0.07 | 0.05 |
| 24 | Return on investment (ROI) | 0.74 | 0.05 | 0.01 | 0.21 |
| 26 | Increasing value of business | 0.74 | 0.20 | 0.03 | 0.13 |
| 23 | Return on total assets exceeds the return from the capital markets | 0.70 | 0.08 | 0.06 | 0.25 |
| 25 | Satisfaction of shareholders with company's performance | 0.68 | 0.21 | 0.10 | 0.01 |
| 21 | Good profit margin on sales | 0.59 | 0.25 | 0.02 | 0.07 |
| | Financial Management (FM) (0.82) ^a | | | | |
| 9 | Effective debt control systems | 0.04 | 0.82 | 0.15 | 0.21 |
| 8 | Collection of account when due | 0.12 | 0.78 | 0.08 | 0.36 |
| 3 | Payment of accounts due | 0.00 | 0.70 | 0.20 | 0.03 |
| 10 | Few debts | 0.30 | 0.59 | 0.05 | 0.02 |
| 7 | Effective cost control systems | 0.36 | 0.51 | 0.24 | 0.17 |
| | Leverage (L) (0.60) ^a | | | | |
| 2 | Reduce profit margin for products | 0.07 | 0.01 | 0.79 | 0.01 |
| 11 | Use of debt to upgrade assets | 0.01 | 0.32 | 0.72 | 0.17 |
| 12 | Use of debt to finance other debts | 0.10 | 0.20 | 0.50 | 0.12 |
| 20 | Competitive prices for products | 0.23 | 0.36 | 0.50 | 0.16 |
| | Marketing Effectiveness (ME) (0.68) ^a | | | | |
| 22 | Rapid turnover of inventories | 0.10 | 0.08 | 0.09 | 0.70 |
| 18 | Maintenance of market share for products | 0.36 | 0.05 | 0.24 | 0.51 |
| 19 | Percentage in market share | 0.30 | 0.04 | 0.27 | 0.51 |
| | Eigen values | 7.15 | 2.68 | 1.90 | 1.72 |
| | Percentage of variance | 26.5 | 9.90 | 7.00 | 6.40 |
| | Cumulative variance | 26.5 | 36.4 | 43.4 | 49.8 |

^a Cronbach reliability coefficients.

adopted to identify strategic groups for each sub-scale of competitive advantage.

According to Porter (1985), cost leadership and differentiation are the only two main types of strategic choices available to a company, while a focus strategy is an issue of scope rather than a strategy and is only suitable for

smaller companies targeting on a narrow market segment. In this study, some companies have recorded either high mean scores on both cost leadership and differentiation strategies, or medium to low mean scores in both these strategies, which according to Porter would be generally classified as *stuck in the middle companies*

and may only be successful in some limited type of industries. The *stuck in the middle companies* in this study have been classified into two groups. Companies that recorded a very high mean in both cost leadership and differentiation strategies were classified as *star* companies which aim to effectively and successfully utilize both strategies. Companies that recorded medium to low mean scores in both strategies were classified as *stuck in the middle companies*. On the basis of the above analysis, five groups were developed. It should be noted that focus group companies were treated as a separate entity and did not have any influence on other strategic groups. The five groups are listed below (see Fig. 1).

Group 1—stuck in the middle (N = 53). In this group, only those companies that scored low mean scores (0–2) on both cost leadership and differentiation strategies were included.

Group 2—star (N = 21). The companies included in this group recorded high mean scores (3.1 or higher) on both cost leadership and differentiation strategies.

Group 3—cost leaders (N = 22). This group consists of companies that recorded the highest mean scores (3.1–4) for cost leadership and relatively low to medium mean scores for any other strategy.

Group 4—differentiators (N = 14). Similarly, this group consists of companies that recorded the highest mean scores for differentiation, and relatively low to medium mean scores for any other strategy.

Group 5—focus companies (N = 9). The companies included in this group scored the highest mean scores for focus, and relatively low to medium scores for other strategies. Focus companies were treated as a separate entity.

7. Generic strategies on organisational performance factors

Analysis of variance was utilized to examine the relationships between the dimensions of competitive

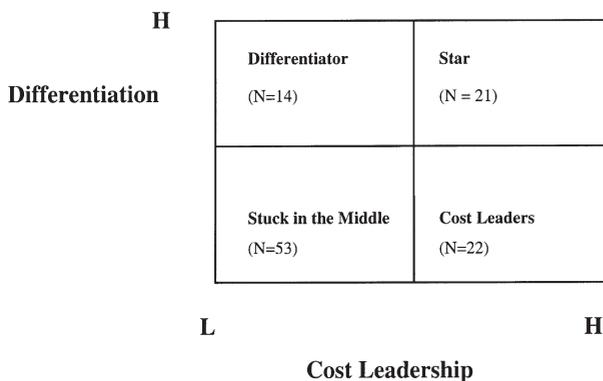


Fig. 1. The distribution of companies by extended generic types.

advantage and factors of organisational performance, namely: financial performance, financial management, leverage, and market effectiveness. In addition, the mean scores for the dimensions of competitive advantage were also compared for significant differences in relation to overall performance.

7.1. Cost leadership on organisational performance factors

The results presented in Table 5 indicate that overall, high and medium cost leaders recorded significantly higher mean scores on all factors of organisational performance compared to low cost leadership companies. High cost leadership companies recorded significantly higher mean scores compared to medium or low cost leadership companies for financial performance ($X = 2.90, 2.43$ and 1.91 , respectively), financial management ($X = 3.13, 2.50$ and 2.19 , respectively), leverage ($X = 2.50, 2.25$ and 2.19 , respectively), and market effectiveness ($X = 3.01, 2.55$ and 1.93 , respectively). These findings reveal that high cost leadership companies seem to place significantly more importance on all aspects of organisational performance. Further, high cost leadership companies also recorded significantly higher mean scores for overall/total performance.

Medium cost leadership companies recorded a significantly higher mean score than low cost leadership companies for financial performance ($X = 2.43$ and 1.91 , respectively), market effectiveness ($X = 2.55$ and 1.93 , respectively), and overall performance ($X = 2.17$ and 1.74 , respectively). This finding reveals that medium cost leadership companies place significantly more importance on financial performance to maintain smooth cash flow and market effectiveness.

7.2. Differentiation on organisational performance factors

As shown in Table 6 overall the results indicate that both high and medium differentiators recorded significantly higher mean scores on all factors of organisational performance compared to low differentiation companies. High differentiators recorded significantly higher mean scores compared to medium and low differentiation companies for financial performance ($X = 3.03, 2.44$ and 1.94 , respectively), financial management ($X = 3.11, 2.64$ and 2.10 , respectively), leverage ($X = 2.54, 2.27$ and 1.88 , respectively), and market effectiveness ($X = 2.26, 2.21$ and 1.77 , respectively). These findings reveal that high differentiators seem to place significantly more importance on all aspects of organisational performance. Further, high differentiators also recorded a significantly higher mean score for overall/total organisational performance, and medium differentiation companies recorded significantly higher mean scores for financial

Table 5

One-way analysis of variance for mean scores of respondents classified by cost leadership groups on factors of organisational performance ($N = 120$)

| Organisational performance factors | Cost leadership groups ^a | | | <i>F</i> | Significant difference groups |
|------------------------------------|-------------------------------------|------------|----------|----------|-------------------------------|
| | Low (1) | Medium (2) | High (3) | | |
| Financial performance | 1.91 | 2.43 | 2.90 | 10.48*** | 1–3, 2–3, 1–2 |
| Financial management | 2.19 | 2.50 | 3.13 | 16.58*** | 1–3, 2–3 |
| Leverage | 1.91 | 2.25 | 2.50 | 3.72* | 1–3, 2–3 |
| Market effectiveness | 1.93 | 2.55 | 3.01 | 13.75*** | 1–3, 2–3, 1–2 |
| Overall organisational performance | 1.74 | 2.17 | 2.67 | 27.03*** | 1–3, 2–3, 1–2 |

^aScale: 0 = no contribution, 1 = minimum contribution, 2 = moderate contribution, 3 = considerable contribution, 4 = high contribution.* $p < 0.05$, *** $p < 0.001$.

Table 6

One-way analysis of variance for mean scores of respondents classified by differentiation groups on factors of organisational performance ($N = 120$)

| Organisational performance factors | Differentiation groups ^a | | | <i>F</i> | Significant difference groups |
|------------------------------------|-------------------------------------|------------|----------|----------|-------------------------------|
| | Low (1) | Medium (2) | High (3) | | |
| Financial performance | 1.94 | 2.44 | 3.03 | 12.02*** | 2–3, 1–3, 1–2 |
| Financial management | 2.10 | 2.64 | 3.11 | 12.53*** | 2–3, 1–3, 1–2 |
| Leverage | 1.88 | 2.27 | 2.54 | 4.04* | 2–3, 1–3 |
| Market effectiveness | 2.08 | 2.59 | 2.96 | 7.06*** | 2–3, 1–3, 1–2 |
| Overall organisational performance | 1.77 | 2.21 | 2.62 | 13.36*** | 2–3, 1–3, 1–2 |

^aScale: 0 = no contribution, 1 = minimum contribution, 2 = moderate contribution, 3 = considerable contribution, 4 = high contribution.* $p < 0.05$, *** $p < 0.001$.

performance ($X = 2.64, 1.94$), financial management ($X = 2.64, 2.10$), and market effectiveness ($X = 2.59, 2.08$) compared to low differentiators. Further, medium differentiators also recorded a significantly higher score for overall/total organisational performance compared to low differentiation companies.

7.3. Focus on organisational performance factors

The results shown in Table 7 indicate that both high and medium focus companies recorded significantly

higher mean scores for financial performance and financial management compared with low focus companies. In the case of leverage, no significant differences were found in the recorded mean scores of focus companies. High focused companies placed more importance on market effectiveness compared to medium and low focused companies, and for overall performance, both high and medium focused companies recorded significantly higher mean scores than low focused companies.

Table 7

One-way analysis of variance for mean scores of respondents classified by focus groups on factors of organisational performance ($N = 120$)

| Organisational performance factors | Focus groups ^a | | | <i>F</i> | Significant difference groups |
|------------------------------------|---------------------------|------------|----------|----------|-------------------------------|
| | Low (1) | Medium (2) | High (3) | | |
| Financial performance | 2.17 | 2.64 | 2.91 | 7.49*** | 2–3, 1–3, 1–2 |
| Financial management | 2.36 | 2.83 | 2.97 | 7.15*** | 2–3, 1–3, 1–2 |
| Leverage | 2.10 | 2.35 | 2.40 | 1.53 | |
| Market effectiveness | 2.42 | 2.63 | 3.04 | 4.06* | 2–3, 1–3 |
| Overall organisational performance | 1.97 | 2.38 | 2.44 | 7.49*** | 2–3, 1–3, 1–2 |

^aScale: 0 = no contribution, 1 = minimum contribution, 2 = moderate contribution, 3 = considerable contribution, 4 = high contribution.* $p < 0.05$, *** $p < 0.001$.

Table 8

One-way analysis of variance for mean scores of respondents classified by generic competitive strategy choices on factors of organisational performance ($N = 120$)

| Organisational performance factors | Generic competitive strategy choice ^a | | | | | <i>F</i> | Significant difference groups |
|------------------------------------|--|------|------|------|------|----------|-----------------------------------|
| | (1) | (2) | (3) | (4) | (5) | | |
| Financial performance | 2.27 | 3.04 | 2.64 | 2.53 | 2.70 | 4.19** | 5–2, 3–2, 4–2, 1–2, |
| Financial management | 2.49 | 3.24 | 2.74 | 2.56 | 2.37 | 5.15*** | 3–2, 4–2, 1–2, 5–2 |
| Leverage | 2.24 | 2.48 | 2.44 | 2.10 | 2.11 | 0.95 | |
| Market effectiveness | 2.40 | 3.05 | 2.94 | 2.33 | 2.88 | 5.04*** | 3–2, 5–2, 1–2, 4–2, 5–3, 1–3, 4–3 |
| Overall organisational performance | 2.08 | 2.77 | 2.41 | 2.22 | 1.83 | 8.69*** | 4–3, 1–3, 1–2, 5–2, 5–3 |

^a1 = stuck in the middle, 2 = stars, 3 = cost leaders, 4 = differentiators, 5 = focus companies.

** $p < 0.01$, *** $p < 0.001$.

8. Choice of generic strategies of competitive advantage on organisational performance

The results shown in Table 8 indicate those star companies (Group 2) recorded significantly higher mean scores for both financial performance and financial management than any other groups. This finding suggests those star companies that utilize both cost leadership and differentiation strategies effectively are more likely to enhance their financial performance and financial management compared with any other group. None of the groups recorded significantly different mean scores for the leverage factor ($F = 0.95$, $df = 113$, $p > 0.05$).

In the case of market effectiveness, both star companies and companies pursuing cost leadership strategies recorded significantly higher means than any other group. This finding suggests that companies pursuing effective multiple strategies as well as cost leadership principles are more closely associated with market effectiveness compared to any other groups. In terms of overall performance, both star companies and cost leadership companies recorded significantly higher means than any other groups.

9. Conclusions

The results of empirical research suggest there are significant differences in the configuration of variables by organizations adopting different generic strategies. There are also significant performance differences across generic types. However, our results do not support Porter (1980, 1985) since they suggest those combination strategies

under certain circumstances are more successful than those organizations dedicated to single strategic thrust. In fact, the finding of performance differences in our sample is surprising since the sample consists of highly successful companies under Australian conditions. In a random sample these differences would have been reality magnified. These results make an important contribution in that they are based on rigorously developed scalar measures of high reliability and internal consistence.

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