Porter's Strategic Types: Differences In Internal Processes And Their Impact On Performance

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Abstract

This study examined differences in the environmental perceptions, management philosophy and values, and performance goals of strategic types based on Porter's generic strategies, in the context specific setting of the health care industry. Results of the study show that different strategic types differed on a number of dimensions of managerial philosophy and values, and in terms of the major goals emphasized, thus emphasizing the differences in internal processes.

Introduction

Porter's (1980) model of generic strategies is the dominant paradigm in the literature on corporate strategy (Hill, 1988; Miller and Dess, 1993). The basic premise behind this approach, which is also referred to as the "positioning school," is that an industry's structure plays a compelling role in determining the competitive strategies potentially available to an organization in the industry. The generic strategy types of overall cost leadership, differentiation, and focus suggested by Porter are quite similar to other typologies in the literature on corporate strategies. For example, Porter's overall cost leaders are similar to Miles and Snow's (1978) "defenders," and Hambrick's (1985) "efficient misers." Similarly, Porter's "differentiators" are comparable to Miles and Snow's "prospectors" and Miller and Friesen's (1986) "innovators." Empirical evidence has demonstrated that different strategic types within an industry employ different mixes of strategic variables, compete differently (Kim and Lim, 1988; Lamont, Marlin and Hoffman, 1993), and therefore, achieve different levels of performance (Morrison and Roth, 1993; Beekum and Ginn, 1993).

Miller (1989) refers to these strategic types as "gestalts" since they "represent tightly integrated and mutually supportive parts, the significance of which can be best understood by making reference to the whole (pg. 243). Empirical research on Porter's strategies has mainly focused on the performance implications of these strategic types (e.g. Hambrick, 1983; Dess and Davis, 1984). There have been few systematic attempts (Ashmos & McDaniel, 1996), however, to develop an integrated and complete under-

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standing of how the difference in the internal processes, goals and behaviors of organizations that pursue one or more of Porter's generic strategies affects their performance. It has been noted that unless there is a strong alignment between the strategy and the organization's internal processes, organizational performance may suffer (Miller and Friesen, 1986). However, in the absence of concrete empirical evidence strategic decision makers lack the necessary guidance for creating the internal processes that would support the successful pursuit of the generic strategies. The current study attempts to fill that lacuna by examining the differences in the internal processes, goals, and behaviors of organizations pursuing Porter's generic strategies and by relating these differences to the successful pursuit of the strategies.

The study first examines differences in the environmental perceptions, management philosophy and values, and performance goals of these organizations. Next, the study attempts to identify those differences in the internal processes and behaviors that account for performance differences within each strategic groups. Finally, implications of the findings are discussed in terms of organizational adaptations that could create a better environment-strategy-performance fit. The study's importance rests on a number of factors. First, an improved understanding of the differences in the behaviors and internal processes of different strategic types will be helpful in understanding how a firm's strategic orientation may manifest itself regarding future directions. It would also provide insight into the patterns of strategic adaptation and their implications for managerial practices. Finally, identification of specific internal processes and behaviors that account for differences in performance within each strategic type would help the managers in building or maintaining complementarities between their business strategy and the internal organizational processes that would facilitate the successful execution of the strategy.

Choice Of Industry Setting For The Study

The study used a sample of acute care hospitals. The choice of the health care industry as the setting for this research was considered particularly appropriate for three important reasons. First, it has been noted that the health care industry accounts for over 12 percent of our national GNP and thus warrants serious attention from management scholars (Blair and Boal, 1991). Second, in recent years, the health care industry has gone through what many observers believe are "quantum changes" (Fottler, 1987: 367), and these changes have affected industry profitability. Vogel, Langland-Orban and Gapenski (1993) report that while the average profit margin for hospitals was around 2 percent in 1984, it declined to -0.2 percent in 1990. A 1990 survey by Deloitte and Touche reported that 43 percent of 1765 responding hospital executives believed that their organizations could fail within five years (Cleverley and Harvey, 1992). As the health care environment becomes increasingly turbulent and as the hospital industry becomes more market dominated, the industry is going through some major restructuring and many institutions have demised (Prospective Payment Assessment Commission (PPAC), 1995; Shortell, 1988). Hospitals are, accordingly, adopting a variety of strategic postures in order to create a sustainable competitive advantage (Coddington and Moore, 1987).

Finally, as strategic planning is becoming more common in the health care industry (Subramanian, Kumar, and Yauger, 1993, 1994), the applicability of findings generated in general management contexts to the health care industry has come under close scrutiny. A number of researchers (e.g. Fottler, 1987; Kumar, Subramanian and Yauger, 1997a, 1997b) have questioned the external validity of generic management findings to the health care sector on the basis of factors such as the difficulty of defining and measuring output and the complexity of the political, legal and financial environments confronting these organizations (for a full review see Blair and Boal, 1991).

Development Of Research Hypotheses

Porter's Generic Strategies

Porter (1980) proposed that, regardless of industry context, organizations can choose from one of three generic strategies to compete at the business level. The general framework suggested by Porter for competitive analysis and strategy formulation has been applied in the hospital industry for quite some time. Porter's model of generic strategies has been found to be particularly useful to the hospital industry because of the explicitness with which it captures the essence of the strategy formulation process (Autrey and Thomas, 1986).

Organizations that pursue the generic strategy of overall cost leadership seek to become the lowest cost producers in the industry. By emphasizing cost control, such organizations aim to make above average returns even with low prices. This strategy usually involves "the construction of efficient-scale facilities, rigorous pursuit of cost reductions from experience, tight cost and overhead control, avoidance of marginal customer accounts, and cost minimization in areas like R&D, service, sales force, advertising, and so on" (Porter, 1980: 35). Research evidence suggests that in recent years, the competitive strategy of cost leadership has received much attention (Blair and Boal, 1991; Lamont et. al., 1993) in the health care industry. Health care managers have focused a great deal of attention on cost control measures in order to protect from competitive forces arising in this industry and to cope with regulatory changes (Johns, 1995).

The generic strategy of differentiation, on the other hand, aims at creating a product or service that is unique. Such organizations hope to create brand loyalty for their offerings, and thus, price inelasticity on the part of buyers. Breadth of product or service offerings, technology, special features, or customer service are popular approaches to differentiation. The differentiation strategy must typically be supported by heavy investment in research, product or service design and marketing. In trying to implement Porter's differentiation strategy, hospitals have used many different bases, such as differentiating by types of technology, quality of medical support staff, patient support services, and quality of services offered. In general, hospitals pursuing this strategy have tried to offer patients a differentiated service that provides value to them by satisfying their unique needs. By demonstrating competence and high efficiency in patient care, hospitals have attempted to create institutional loyalty and hence, price inelasticity. Prospective payment has also made this strategy more attractive because hospitals (especially for-profit hospitals) can differentiate in areas where costs are easier to control and revenues are superior (Lamont, Marlin & Hoffman, 1993).

While both overall cost leadership and differentiation strategies are aimed at the broad market, firms may also choose to confine their product or service offerings to specific market areas or may choose to offer a smaller line of products or services to the broad market, thus pursuing a strategy of focus or niche (Porter, 1980). In other words, such organizations pursue a strategy of cost leadership or differentiation either in a specific market or with specific products or services.

Porter described his cost leadership and differentiation strategies as being mutually exclusive because according to Porter, each of these strategies represent "a fundamentally different approach to creating and sustaining a competitive advantage" (Porter, 1985, pp. 17). Earlier researchers, following Porter's contention, assumed that these strategies were mutually exclusive (e.g. Dess and Davis, 1984). A number of researchers, however, have subsequently argued that differentiation and low cost are really dimensions along which firms can score high or low (e.g. Murray, 1988). Since empirical evidence (e.g. Miller, 1989) supports the latter argument, the current study classified hospitals as either pursuing the "pure" strategies of overall cost leadership or "differentiation," or pursuing a hybrid strategy of both overall cost leadership and differentiation. This study considered only

two of Porter's (1980) three generic business level strategies, viz., overall cost leadership and differentiation. The rationale for not including organizations that follow a focus strategy was that these organizations were similar to overall cost leaders and differentiators, albeit competing in a narrow segment of the broad market.

Perception Of The Environment

Recently researchers have argued in favor of examining multiple environments within a single industry (Kim and Lim, 1988; Lamont, Marlin, and Hoffman, 1993). Empirical evidence has also indicated that different organizations within the same industry face different environmental constraints and contingencies based on their competitive strategies, and accordingly have their unique perceptions of the environment (Hatten and Schendel, 1977; Kim and Lim, 1988). It has been suggested that how an organization views and interacts with different sectors of the environment depends on both "domain selection" and "domain navigation" i.e. what sectors of the environment are most relevant to an organization and with what sector the organization most frequently interacts (Bourgeois, 1980). One would also expect that organizations would report greater concern for uncertainty and unpredictability in those sectors of the environment that are most relevant to them, simply because changes within these sectors may impose important constraints on their planning, decision making and strategy implementation. Studies (Gifford, Bobbitt & Slocum, 1979; Culnan, 1983) have shown that an organization's information acquisition activities are positively related to its perceptions of uncertainty about specific environmental variables and their potential impact on performance. Since the strategic focus of an organization pursuing a differentiation strategy is on creating differentiated and unique products/services that will satisfy the customer's unique needs, one would expect that these organizations will frequently transact with the customer and the competitor sectors of the environment. An organization pursuing a cost leadership strategy, on the other hand, focuses on the creation of internal efficiencies that will help them withstand external pressures. Therefore, it appears reasonable to think that such organizations will have frequent interactions with the governmental/regulatory (given the governmental control of pricing in the health care industry) and supplier sectors of the environment.

As regards the choice and viability of generic strategies across different environmental contexts, it has been noted that a cost leadership strategy is appropriate in a stable and predictable environment (Hambrick, 1983; Miller, 1988; Kim & Lim, 1988). This is because unpredictable environments may create severe diseconomies for organizations pursuing a low cost strategy as they attempt to control costs and improve efficiency (Miller, 1988). On the other hand, a differentiation strategy has been noted to be associated with dynamic and uncertain environments (Hambrick, 1983; Miller, 1988; Kim & Lim, 1988). Differentiation often involves new technologies, unforeseen customer and competitor reaction, and a "confluence of many ...unstructured problems" (Lamont, Marlin, Hoffman, 1993, pp. 626). The linkage between choice of strategy and perceptions of the environment is also supported by the organizational learning theory which posits that the adaptive patterns of the organization influence its subsequent perceptions of the environment and, as a result affect the selection of its future strategies. Based on the above, it appears reasonable to believe that: (a) organizations pursuing a differentiation strategy will report greater environmental uncertainty than organizations pursuing a cost leadership strategy, and (b) the level of uncertainty reported in different sectors of the environment will be different between organizations pursuing a differentiation strategy and those pursuing a cost leadership strategy. Accordingly, the first hypothesis of this study is:

H1: Different strategic types will view their environments differently in terms of the level of perceived uncertainty in different sectors of the environment.

Management Philosophy And Values

Management philosophy and values refer to the belief system developed by an organization regarding the way the organization should be managed to achieve the purpose of the strategy (Zahra, 1987). Research emphasizing the "fit" between strategy and structure has shown differences in the belief systems of organizations pursuing different strategies (Lenz, 1980). Miles and Snow (1978) have noted that the belief systems developed by "Defenders" and "Prospectors" regarding the way the organization should be managed are different. Organizations pursuing a cost leadership strategy stress internal efficiency and protection of their domain. Given this strategic orientation their core values are likely to focus on creating effective internal systems and minimizing unproductive organizational processes. Differentiators on the other hand, emphasize growth, innovation and learning, and are interested in external expansion to achieve profitability. Their dominant management philosophy will, therefore, value creativity and organizational learning. Therefore:

H2: Different strategic types will vary significantly in their management philosophy and values

Goal Emphasis

At the heart of successful strategic adaptation is the articulation of strategic goals that help the organization create distinctive competencies. Successful execution of strategy requires the creation of a "fit" based on the interaction between the external dependencies and internal capabilities (Snow & Hrebiniak, 1980). Because of differences in this pattern of interaction, different strategic types will prioritize their goals differently (Schultz & Alton, 1983). In general, organizations pursuing a differentiation strategy attempt to create differentiated product/s and service/s that are perceived as unique by customers, provide value to them, and create loyalty, and hence, price inelasticity on the part of the buyers. Given this strategic orientation, it appears reasonable to expect that these organizations would put a high priority on achievement of such goals as success of new services/facilities, success in retaining customers, and ability to fund future growth. Organizations pursuing a cost leadership strategy focus a great deal of attention on cost control measures which enables them to make above average returns even with low prices. Successful achievement of this strategy are likely to result in the articulation of such goals as controlling operational expenses, increasing overall revenue, and improving return on capital. It is accordingly hypothesized that:

H3: Different strategic types will differ significantly in terms of their goal emphasis.

Strategy-Internal Processes Alignment

Miller (1988) argued that managers and designers of organizations should pay particular attention "to maintaining or building complementarities between business strategy and its structural ... contexts" (page 304). Since these strategy types are gestalts, unless there is a strong alignment between the strategy and the organization's internal processes, organizational performance may suffer (Miller and Friesen, 1986). Since the main focus of a differentiation strategy is on finding new market opportunities and continually redefining the organization's domain, it is predicted that high performing differentiators will place more emphasis on rewarding employee creativity, and employee education than low performing differentiators. Similarly, since a cost leadership strategy emphasizes internal efficiency and protection of domain, the high performing cost leaders will place more emphasis on developing effective personnel policies, minimizing dysfunctional turnover, and improving employee attitudes than low performing cost leaders. Also, since organizations pursuing a differentiation strategy take a proactive stance and are interested in the futurity of decisions, the high performing differentiators are likely to put greater emphasis on such goals as the ability to fund future growth, success in retaining customers and success of new services/facilities. Organizations pursuing a cost leadership strategy largely quest for organizational effectiveness and efficiency, and are less

interested in decision futurity. Accordingly, the high performing cost leaders are likely to focus more heavily than low performing cost leaders on achievement of such goals as increasing overall revenue, improving return on capital, and controlling expenses, each of which is directed at creating a sustainable competitive advantage based on internal efficiencies. Accordingly, it is hypothesized that:

H4: Better performing organizations will show a stronger alignment between strategy and their internal processes than poorer performing ones.

Method

Sample

The data for this study was collected between April-June of 1995 as a part of a larger study on management practices in hospitals. The sample for this study was chosen randomly from the list of "acute care hospitals" in the 1993 American Hospital Association (AHA) Guide to the Health Care Field. An "acute care hospital" is a hospital in which the average length of stay for all patients is less than 30 days and that provides care for short term patients.

A pre-notification letter was first mailed to the chief administrators of 600 acute care hospitals, informing them of the study being conducted and its importance to academicians and health care professionals. Two weeks later, a questionnaire titled "Business Practices Survey"[1] together with a personal letter was mailed to the same 600 chief administrators. In the letter, respondents were told that the aim of the survey was to investigate current business practices, and the importance of certain performance criteria among hospitals. Respondents were assured of anonymity. A total response of 171 (28.5%) was obtained, yielding usable response of 159 completed questionnaires. The profile of the sample organizations shows a reasonable spread of hospitals based on profit orientation, size, location, and age. In the absence of secondary data, with which the sample for this study could be compared to ensure its representativeness, sample bias was assessed using the time-trend extrapolation test (Armstrong and Overton, 1977). The assumption underlying this test is that non-respondents are more like late respondents than early respondents. No differences were apparent between these two groups (early respondents and later respondents) in terms of size ($F = .15$, $p > .70$), location ($F = 1.79$, $p > .18$), age ($F = 3.62$, $p > .06$), and profit orientation ($F = .03$, $p > .87$).

Measures Used In The Study

Porter's Generic Strategies

Based on the activities associated with differentiation and low cost strategies, Narver and Slater (1990) developed scales to measure the extent to which an organization uses these two strategies. Narver and Slater (1990) have reported satisfactory reliability for the scales and have provided evidence of validity. This study used a modified (to suit the hospital environment) version of this scale. The differentiation strategy was measured using a four item, seven point scale, that asked respondents to indicate the extent to which their institution engaged in competitive activities involving: (1) introducing new services/procedures, (2) differentiating services from competitors, (3) offering a broader range of services than the competitors, and (4) utilizing market research to identify new services.

To measure the strategy of overall cost leadership, respondents were asked to indicate on a seven point scale the extent to which their institution engaged in the following six activities: (1) achieving lower cost of services than competitors, (2) making services/procedures more cost efficient, (3) improving the time/cost required for coordination of various services, (4) improving the utilization of available equipment, services and facilities, (5) performing analysis of costs associated with various services, and (6) improving availability of diagnostic equipment and auxiliary services to control costs.

Reliability for the two scales was .85 and .86 and far exceeded the recommended .7

threshold (Nunnally, 1978). The item-total correlation for the items in the scales ranged between .65 and .85, with the majority of correlations being .70 and above, indicating that the items included in the scale were all related to a common construct. The inter-correlation between the two scales was .42 and was statistically significant. This is not surprising since Porter's generic strategies have been empirically determined as not being mutually exclusive (Murray, 1988).

Perceptions Of Environment

A hospital's relationship with its external environment was measured in terms of six sectors of the environment: customers, competitors, suppliers, financial/capital, government/ regulatory, and labor union. A total of 22 items make up the six scales that measure the six sectors of the environment. The scale constructed and validated by Miles and Snow (1978, pp. 280) requires respondents to "rate the characteristics or behaviors of various sectors on the degree of their predictability" using a seven point scale with 1 = predictable and 7 = unpredictable. This study used a modified (to suit the hospital environment) version of the Miles and Snow (1978) scale. The internal reliability of the six scales used for assessing respondent's perceptions of the six sectors of the external environment was between .78 and .93; which exceeds the recommended level (Nunnally, 1978). The correlation between the six scales was between .12 and .57 (with three of the six correlations being significant), thus indicating that perceptions about the six environmental sectors are not independent. This is understandable since different sectors of the environment are related to each other and a judgment about them could very well be correlated (Dill, 1958).

Management Philosophy And Values

Management's philosophy and values were assessed using a scale constructed by Hitt & Ireland (1986). This scale examines the importance that an organization attaches to innovation and creativity, formulating effective personnel policies, organizational learning, improving employee attitudes, optimizing turnover, and motivating and rewarding employees. The respondents were asked to indicate on a 7 point Likert-type scale, where 1 = of little importance and 7 = of extreme importance, the importance their organization attaches to various issues. The reliability for the scale was .89.

Measures Of Performance Goals And Organizational Performance

Earlier studies examining performance differences across strategic types (e.g. Hambrick, 1983; Lenz, 1980) have primarily examined performance goals in terms of financial measures such as return on capital (ROC), increase in revenue, improving profit margin, and the ability to fund future growth internally Also, studies using samples of hospitals have used occupancy rate as a performance goal (Lamont, et. al, 1993). In addition to the above mentioned "traditional" performance goals, this study used three other performance goals specifically relevant to hospitals. Return on new services/ facilities was used as a measure of the effectiveness with which the hospital utilizes capital allocated for expansion. Success in retaining patients, which is a function of clinical quality, patient satisfaction, and employee attitudes and behaviors, was used as the other effectiveness measure. The hospital's ability to control operational expenditure was used as a measure of efficiency. The eight measures indicated above were used as both performance goals and organizational performance were both measured using a modified version of an instrument developed by Gupta and Govindrajan (1984).

The respondents were first asked to indicate on a 7 point Likert-type scale, where 1=of little importance and 7 = of extreme importance, the importance their organization attaches to various performance criteria. The respondents were then asked to indicate on a second 7 point Likert-type scale, where 1 = highly dissatisfied and 7 = highly satisfied, the extent to which their organization was currently satisfied with their performance on each of the same perform-

ance criteria. For each performance measure, a weighted average was computed by multiplying the "satisfaction" score with the "importance" score.

Results

Controlling for the effects of Size and Profit Orientation on Performance

The effects of relative size and profit orientation were controlled for while examining the strategy-performance relationship. Prior research has indicated that larger organizations have superior technological capabilities, and superior human and financial resources to pursue differentiation strategies (Liu, 1995). The relative size variable is also known to potentially capture some revenue as well as some cost effect (Scherer, 1980). Therefore, the size of a hospital may have an impact on a hospital's ability to pursue various strategies. In terms of profit orientation, hospitals were classified as either for-profit or not-for- profit. Profit orientation was controlled for since it affects the ability of the hospital to obtain resources (Fottler, Blair, Whitehead, Lans, and Savage, 1989) and hence could be critical in determining the extent to which it can successfully pursue different strategies.

Common Method Variance

Before proceeding with the data analysis, it was necessary to address the possibility of common method variance. Addressing this issue was deemed important since all the measures in this study were based on self-report data. Although the use of self-report data is common to management research, it has been noted to create common method variance problems (Boyd and Fulk, 1996) which can either inflate (Williams, Cole and Buckley, 1989) or suppress (Ganster, Hennessey and Luthans, 1983) the magnitude of relationships being investigated. An examination of the basic statistics (means and standard deviations) related to the variables being examined in this study did not show any evidence of compressed or inflated range in response thus indicating that common method variance was not a significant issue for this study.

Data Analysis

Data analysis involved two statistical procedures. To identify the strategic types of hospitals based on their use of generic strategies a cluster analysis was used. Having determined the different strategic types that exist among hospitals, differences in the internal processes and behaviors were examined using MANCOVA and univariate analysis of variance. Since hospital size and profit orientation are known to have an influence on the hospital's internal functioning they were used as covariates to remove their influence from the analysis.

Cluster Analysis for Developing Types of Strategic Orientation

The cluster analysis technique is designed to develop an empirical taxonomy in a way such that organizations within a group exhibit a similar kind of strategic orientation with similar emphasis on the two generic strategies, but so that among groups the emphasis placed on the two generic strategies are distinct (Haire, Anderson and Tatham, 1987). The cluster analysis based on hospitals' use of the two generic strategies of low cost and differentiation uncovered a three-group taxonomy of hospitals. To provide an overview of the similarities and dissimilarities among the three strategic groups, the mean and standard deviation of each generic strategy type within each group are provided in Table 1. An examination of results presented in Table 1 reveals that among the three strategic types, there are clear differences in the primary emphasis placed on the two generic strategies. To facilitate discussion, the strategic groups have been labeled I through III.

Group I characterizes about 36 percent of the hospitals in the sample and portrays a primary emphasis on cost leadership (mean = 6.55). The hospitals in this group place average emphasis on the differentiation strategy. Hospitals that fall in this group, therefore, are labeled

Table 1
Means, Standard Deviations, Group Sizes and Percentages of Sample for Porter's Generic Strategy Groups (N=159)

Porter's Generic Strategies	Porter's Generic Strategy Groups I	II	III	Total	F-value*
Cost Leadership	6.55 (.77)	4.25 (.50)	6.15 (1.08)	5.77 (1.15)	37.16
Differentiation	4.73 (1.05)	6.36 (.49)	5.46 (1.20)	5.44 (1.22)	39.42
Group Size	57	44	58	159	
% of Sample	36	28	36	100	

Standard deviations are in parentheses.
* F-values are significant at $p < .001$

as *cost leaders*. Group II characterizes about 28 percent of the hospitals. Hospitals in this group show below average emphasis on the cost leadership strategy. However, their primary emphasis is on the differentiation strategy (mean 6.36). It appears that hospitals in this group are primarily using differentiation as their competitive strategy and are accordingly labeled as *differentiators*. Finally, about 36 percent of the hospitals were classified in group III. This group is characterized by an above average emphasis on differentiation (mean 5.46). Also, the hospitals in this group are high in terms of cost leadership emphasis (mean 6.15). Hospitals in this group, therefore, appear to be pursuing a combination of cost leadership and differentiation strategies. Using Porter's terminology, these hospitals are labeled as "*hybrids*".

MANCOVA to Determine Differences Across Strategic Types

Three separate Multiple Analysis of Covariance tests (MANCOVA) were employed to determine if hospitals categorized as having different types of strategic orientation differed in terms of their: (a) environmental perceptions, (b) management philosophy and values, and (c) performance goals. Because these internal processes and behaviors may be related to relative size and profit orientation, MANCOVA was used to control for their effects.

Results presented in Table 2 show that the three strategic types differed significantly in terms of their perceptions of uncertainty on three of the six environmental sectors. Hospitals in the *differentiator* group perceived the competitor and customer sectors as being more uncertain than did other strategy groups, while hospitals in the *cost leadership* group perceived the supplier and governmental/regulatory sectors as being more uncertain. Hospitals in the *hybrid* group, perceived the governmental/regulatory, customer, and competitor sectors of the environment as most uncertain. These results generally support the first hypothesis of the study which had predicted that different strategic types will perceive different levels of uncertainty in different sectors of the environment. However, the contention that organizations pursuing a differentiation strategy will perceive overall greater environmental uncertainty than organizations pursuing a cost leadership strategy was not supported by the results.

The management philosophy and values (Table 3), as identified through the importance that an organization attaches to innovation and creativity, formulating effective personnel policies, organizational learning, improving employee attitudes, optimizing turnover, and motivating and rewarding employees, shows that the three strategy types have different belief systems regarding the way the organization should be managed to achieve the purpose of the strategy. The *cost leadership* group placed greater empha-

Table 2
Results of Mancova and Univariate F test: Three Generic Strategy Groups on perceptions of environmental sectors

Environmental Sectors	Porter's Generic Strategy Groups			
	Cost Leadership (Cluster 1)	Differentiation (Cluster 2)	Hybrid (Cluster 3)	F Value
1. Suppliers	4.62 (.87)	3.69 (0.99)	3.82 (1.08)	3.59*
2. Competitors	3.49 (1.00)	4.00 (1.14)	3.92 (.93)	3.29*
3. Customers	3.86 (1.16)	4.27 (1.07)	4.01 (1.17)	1.28
4. Financial/capital	3.32 (1.18)	3.39 (1.28)	3.04 (1.11)	1.06
5. Government/regulatory	4.57 (1.38)	3.86 (1.21)	4.41 (1.20)	3.95*
6. Labor unions	3.40 (1.35)	3.35 (1.11)	3.15 (1.22)	0.45
7. Overall perceived uncertainty	3.88 (1.16)	3.76 (1.13)	3.73 (1.12)	1.02

Multivariate Analysis of Covariance with size and profit orientation as covariates F = 1.28.

Standard deviations are in parentheses.
[a] 3, 155 degrees of freedom.
* $p < .05$

Table 3
Results of Mancova and Univariate F test: Three Generic Strategy Groups on management philosophy and values

Management Philosophy and values	Porter's Generic Strategy Groups			
	Cost Leadership (Cluster 1)	Differentiation (Cluster 2)	Hybrid (Cluster 3)	F Value
1. Developing effective personnel policies	6.25 (0.81)	5.85 (1.18)	5.52 (1.15)	7.12**
2. Minimizing employee turnover	5.86 (0.98)	4.84 (1.17)	5.36 (1.14)	12.36***
3. Improving employees' attitudes	5.07 (1.20)	6.16 (0.76)	5.97 (0.97)	18.94***
4. Rewarding creativity	4.56 (1.33)	5.55 (1.11)	5.04 (1.49)	8.26**
5. Effective grievance resolution	5.82 (0.95)	5.08 (0.96)	5.32 (0.96)	5.23**
6. Employee education	5.14 (1.17)	6.10 (0.91)	5.90 (0.85)	14.61***

Multivariate Analysis of Covariance with size and profit orientation as covariates F = 4.41***

Standard deviations are in parentheses. [a] 3, 155 degrees of freedom. *** $p < .001$, ** $p < .01$

sis than the other two groups on "formulating effective personnel policies," "minimizing turnover," and "effective grievance resolution", all of which are designed to achieve and promote internal efficiency in operations. The *differentiator* group, on the other hand, placed highest emphasis of all the three groups on "rewarding creativity," "improving employees' attitudes," and providing "employee education", processes that are critical for creating and sustaining advantage over the competitors. Hospitals in the *hybrid* group, however, placed almost equal emphasis on all of the values, thus indicating absence of a firm belief or a clear philosophy. These results support hypothesis 2 which had predicted that different strategic types will vary significantly in their management philosophy and values.

The importance attached to various goals (Table 4) shows a clear difference in what the different strategic types deem as important, thus providing support for hypothesis 3. The articulation of goals is reflective of the pattern of interaction that the organization has chosen to create to manage the environment-strategy fit. Consistent with the theoretical propositions advanced in the literature (Miles & Snow, 1978), the three strategic types were found to prioritize their goals differently. The *cost leadership* group placed greater emphasis than the other two groups on increasing revenue, return on capital, profit margin, occupancy rate and controlling operational expenses, all of which are related to creating and sustaining a cost advantage. Hospitals in the *differentiator* group, on the other hand, placed highest emphasis of all the three groups on offering new services, having funds for growth, and successfully retaining customers -- goals that are focused externally toward customers and competitors. The *hybrid* group's emphasis appeared to be divided in terms of cost curtailment and differentiation. Therefore, this group placed high emphasis on revenue increase

Table 4
Results of Mancova and Univariate F test: Three Generic Strategy Groups on importance of organizational goals

Organizational Goals	Porter's Generic Strategy Groups			
	Cost Leadership (Cluster 1)	Differentiation (Cluster 2)	Hybrid (Cluster 3)	F- Value
1. Increasing revenue	6.27 (0.88)	5.00 (1.50)	5.46 (1.34)	10.75***
2. Improving return on Capital	6.22 (0.94)	5.76 (1.10)	5.30 (1.32)	7.12**
3. Improving profit margin	6.27 (1.03)	5.12 (1.51)	5.75 (1.17)	9.52***
4. Success of new services	5.84 (0.80)	6.55 (0.63)	6.08 (1.10)	6.91**
5. Ability to fund future growth	6.60 (0.81)	6.16 (1.18)	5.39 (1.36)	13.44***
6. Success in retaining customers	4.79 (1.49)	5.70 (1.28)	5.53 (1.30)	6.03*
7. Occupancy rate	6.07 (0.88)	5.64 (0.86)	5.93 (0.97)	2.79
8. Success in controlling expenses	6.75 (0.54)	6.00 (0.70)	6.40 (1.07)	9.36**

Multivariate Analysis of Covariance with size and profit orientation as covariates F = 2.04**

Standard deviations are in parentheses.
[a] 3, 155 degrees of freedom.
*** p<.001, ** p<.01, * p<.05.

and controlling expenses, as also on offering new services and being able to retain patients.

Finally, the study's fourth hypothesis was tested by examining if there were differences in the internal processes of high performing and low performing hospitals included in the two strategy groups of cost leaders and differentiators. Since the *hybrid* group lacked a clear strategic focus, it was not included in the analysis.

For each type of strategy, i.e. differentiation and cost leadership, a performance measure was selected that best matched the purpose and objective of the strategy. Successful introduction of new services was chosen as the performance measure to separate high and low performers that pursued a differentiation strategy. The rationale for selecting this measure was that the primary thrust of the differentiation strategy among hospitals has been on attempting to offer patients new and differentiated (e.g., high-tech, not commonly available) services that provide value to them by satisfying their unique needs (Lamont, Marlin and Hoffman, 1993). Hospitals in the differentiator group with above median score on this performance measure were classified into the high performing group, while hospitals with below median score on the performance measure were classified into the low performing group.

Success in controlling expenses was the performance measure used to classify cost leaders as high and low performers. The choice of this performance measure was based on the reports of other empirical studies which found that hospitals pursuing a cost leadership strategy primarily focus on cost control measures for successful execution of this strategy (e.g., Lamont, Marlin and Hoffman, 1993). Thus, hospitals in the cost leadership group with above median score on this measure were classified as high performers while those with below median score were categorized as low performers.

Results presented in Table 5 show some significant differences in management philosophy and values, and goal emphasis between high and low performers in the cost leadership strategy group. The sub-group analysis shows that high performing cost leaders are different from low performers in terms of their emphasis on developing effective personnel policies, minimizing employee turnover, and employee education. Taking together, these differences are indicative of a distinct philosophy adopted by high performing hospitals to implement a strategy of internal efficiency. Similarly, in terms of goal emphasis, the high performing group gives greater emphasis on increasing overall revenue, improving return on capital, improving profit margin, improving occupancy rate, and controlling operational expenses. Once again, the emphasis put on these goals shows the more focused approach adopted by successful cost leaders in aligning their internal processes with the chosen strategy.

Results presented in Table 6 show that in the differentiator group, high performing hospitals have different philosophies and values and emphasize different goals as compared to the low performing group. In terms of management philosophy and values, high performing differentiators put greater emphasis on rewarding creativity, and on employee education - both of which are critical to support the strategy. High performing hospitals in this group also appear to put greater emphasis on such goals as improving return on capital, success of new services, ability to fund future growth, and success in retaining customers - goals that are critical for successful implementation of a differentiation strategy. The results of this analysis provide support for hypothesis 4.

Discussions And Managerial Implications

The discussion that follows provides a substantive interpretation of the differences in the internal processes and behaviors of different strategic types in the hospital industry. The discussion is framed in terms of the implication of the findings for organizational adaptation that could create a better environment-strategy-process fit. Given the changes in the industry environment, top managers of health care organiza-

Table 5
Results of Manova and Univariate F-tests: Management Philosophy and Values and Goal Emphasis on the Performance of the Differentiator Group

Management Philosophy and Values/ Goal Emphasis	Organizational Performance[a] High Performance (n=20)	Low Performance (n=24)	F-value
Management Philosophy and Values			
1. Developing effective personnel policies	5.93 (0.75)	5.79 (1.13)	0.34
2. Minimizing employee turnover	4.73 (1.05)	4.96 (1.12)	0.55
3. Improving employees' attitudes	6.24 (0.91)	6.08 (0.94)	0.37
4. Rewarding creativity	5.96 (1.23)	5.18 (1.18)	5.30*
5. Effective grievance resolution	5.01 (0.79)	5.15 (1.23)	0.38
6. Employee education	6.55 (0.71)	5.73 (0.83)	4.57*
Significance of Overall Model	F = 1.44		
Organizational Goal Emphasis			
1. Increasing overall revenue	4.75 (1.58)	5.22 (0.90)	2.03
2. Improving return on capital	6.06 (1.09)	5.49 (1.13)	4.63*
3. Improving profit margin	4.61 (1.22)	5.73 (0.89)	1.74
4. Success of new services	6.88 (0.69)	6.28 (1.01)	4.05*
5. Ability to fund future growth	6.66 (0.59)	5.77 (1.01)	7.62**
6. Success in retaining customers	6.27 (0.47)	5.23 (0.93)	17.74***
7. Occupancy rate	5.56 (1.34)	5.72 (1.50)	0.16
8. Success in controlling expenses	5.86 (0.95)	6.13 (0.82)	1.10
Significance of Overall Model	F = 2.06*		

[a] measured by successful introduction of new services
standard deviations are in parentheses
*** p<.001, ** p<.01, * p<.05.

tions have been forced to recognize organizational competencies and weaknesses, resolve strategic issues, and develop coherent strategies (Zajac and Shortell, 1989; Bekum and Ginn, 1993). An understanding of the organizational processes needed for the successful implementation of the generic business level strategy alternatives would provide hospital decision makers with a clearer understanding of how to position and manage their organizations.

Results of this study show that within a given industry there are distinct strategic types, each of which has its own, and somewhat unique perceptions of the industry environment. Past research has seldom attempted to directly link the organization's strategic orientation with its subsequent attempt to monitor environmental change, and to this extent information about patterns of adaptations made by organizations pursuing different strategies has been generally lacking (Snow & Hrebiniak, 1980; Zahra, 1987; Miller, 1989). Results of this study show that different strategic types perceive different levels

Table 6
Results of Manova and Univariate F-tests: Management Philosophy and Values and Goal Emphasis on the Performance of the Low Cost Leader Group

Management Philosophy and Values/ Goal Emphasis	Organizational Performance[a] High Performance (n=38)	Low Performance (n=19)	F-value
Management Philosophy and Values			
1. Developing effective personnel policies	6.46 (1.16)	5.83 (1.03)	5.46*
2. Minimizing employee turnover	6.20 (1.08)	5.08 (1.09)	5.64*
3. Improving employees' attitudes	4.96 (1.08)	5.39 (1.26)	2.29
4. Rewarding creativity	4.38 (0.94)	4.90 (1.07)	1.22
5. Effective grievance resolution	5.96 (1.11)	5.60 (1.09)	2.02
6. Employee education	5.35 (0.80)	4.65 (0.85)	4.07*
Significance of Overall Model	F = 2.13*		
Organizational Goal Emphasis			
1. Increasing overall revenue	6.67 (0.92)	5.44 (1.46)	15.64***
2. Improving return on capital	6.53 (0.91)	5.60 (1.25)	11.55**
3. Improving profit margin	6.60 (0.90)	5.68 (1.37)	9.92**
4. Success of new services	5.64 (0.89)	5.95 (1.01)	1.76
5. Ability to fund future growth	6.21 (0.90)	5.94 (0.71)	2.07
6. Success in retaining customers	4.70 (0.72)	4.83 (0.59)	2.56
7. Occupancy rate	6.44 (1.13)	5.33 (1.60)	10.14**
8. Success in controlling expenses	6.95 (0.51)	6.34 (1.04)	8.30**
Significance of Overall Model	F = 3.18**		

[a] measured by success in controlling expenses standard deviations are in parentheses.
*** p<.001, ** p<.01, * p<.05.

of uncertainty in different sectors of the environment, and the environmental sectors in which greatest uncertainty is perceived are those that have greatest impact on the successful implementation of a chosen strategy. Thus, the *differentiator* group perceived greater uncertainty in the customer and competitor sectors, while the *cost leadership* group perceived greater uncertainty in the supplier and government/regulatory sectors. A possible implication of this finding for the managers involved in strategy execution would be that they need to closely monitor the sectors of the environment that appear to be most closely associated with a chosen generic strategy, since changes in these sectors may create important constraints in effective strategy implementation. Designing an environmental scanning system that specifically gathers information on these sectors, and creation of organizational systems that allows for a quick dissemination of this information would facilitate effective organizational response to the changes in these sectors.

Strategic types were also found to differ

on a number of dimensions of managerial philosophy and values. Since strategy formulation is a continuous and on-going process (Bourgeois, 1980), such information may be useful in gaining an understanding of how the organization's strategic orientation may manifest itself as it tries to match its structure and processes with its strategy. Management philosophy and values are among the important contributors to an organization's culture (Harris, 1994). To the extent that management philosophy and values are strategically appropriate, they contribute to the creation of an organizational culture that allows organizations to interact with the external environment in an effective manner (Kottler & Heskett, 1992). This study has identified management values and philosophy associated with different strategic types, and hospital managers need to be cognizant of their impact during the strategy execution process.

Differences noted in this study in the organizational goals emphasized by each strategic type provide useful insight into the behaviors of organizations pursuing different strategies within the same industry. Goals are the desired outcomes and provide a rationale for organizational activities associated with the execution of organizational strategy (Perrow, 1970). They also communicate management's philosophy and intentions (Drucker, 1954). Not surprisingly, the study noted some important differences in the goals of organizations with different strategic orientations. The goals that this study found associated with different strategic types should provide guidance to the managers as they try to clarify and determine what their organizations should accomplish for the successful pursuit of a chosen strategy. The importance of this process in successful strategy execution is also reflected in the finding that the *hybrid* group lacked a clear focus, both in terms of their strategy formulation and strategy implementation.

Finally, the fact that hospitals whose internal processes were well aligned with the chosen competitive strategy performed better than the hospitals that lacked this alignment has important implications for the strategic management of hospitals. The strategy of overall cost leadership and differentiation are ways by which an organization can secure a position in the market. In order to successfully defend this position and secure a sustainable competitive advantage, the organization has to develop structures and processes internally which are complementary to its strategy. Organizations that pursue a particular strategy but lack an alignment between the strategy and their internal processes are thus lacking the critical complementarities that enable them to secure a sustainable competitive advantage which can be leveraged into successful performance.

In summary, decision makers must know what the complementary internal processes are that support the successful pursuit of a chosen strategy. The main contribution of the current study is its clear delineation of the management philosophy and values that go hand-in-hand with a particular strategy as also the organizational goals that help such organizations defend their strategic position. The key implication is that each strategy is accompanied by a unique set of internal processes and it is the strong alignment between strategy and these processes that translates to successful performance. It has been observed that the difference between the winners and the losers (in the health care industry) is likely to be their ability to strategize, that is, to develop and implement plans to position themselves to take advantage of the rapidly changing market, product, technological and social environments relative to their competitors (Shortell, Morrison, and Robbins, 1985). In this regard, the contributions of this study are twofold. First, it empirically examined the nature of the application of Porter's generic strategies within the hospital setting thus providing hospital managers some additional insight about a central strategic management concept. Second, it identified specific internal processes required for the successful strategy implementation thus providing hospital decision makers with a better understanding and advice on how to deal with the competitive forces within their industry.

The results of the current study must be

interpreted with caution because of the uniqueness of the health care industry. Research has pointed out the "social transformations" taking place in the industry (Blair and Boal, 1991), the uniqueness of many of its organizational forms (Fottler, 1987), as also the need for health care administrators to effectively blend the social role such organizations play with the market mentality needed to succeed in the health care industry of today. The difficulty of measuring and defining output, the existence of limited organizational or managerial control over physicians, the profession most responsible for generating both revenues as well as expenditures, the increasing power of buyer groups, as well as the complex and pluralistic political, legal and financial environments confronting health care organizations make this industry unique and different from others.

Suggestions For Future Research

While the uniqueness of the health care industry makes it interesting and important for researchers and practitioners, it also necessitate the use of caution in generalizing results of studies using health care samples to non-health care settings. Future researchers may like to replicate this study in the broader industry context, so as to assess the generalizability of the findings of this study. It would also be interesting to compare the similarities and differences among organizations in manufacturing and service industries. Recent research (Lamaont et. al., 1993) has shown that organizations do change their strategic group membership as a result of sudden and dramatic changes in the environment. Future researchers may examine the changes in internal processes that accompany strategic group membership.

Endnote

1. Complete copy of the questionnaire is available from the senior author.

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