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Competitive strategy and performance measurement in the Malaysian context

An exploratory study

Competitive
strategy

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Abstract

Purpose – The purpose of this paper is to contribute to a better understanding of competitive strategy and performance measurement in the Malaysian context by applying a modified version of Conant *et al's* generic strategy scale and categorizing Malaysian firms along the Miles and Snow business strategy typology.

Design/methodology/approach – Competitive strategy and performance measurement were assessed via survey. A total of 975 firms were randomly selected from the directory of Federation of Malaysian Manufacturers (FMM) as listed in 2003. Overall, 133 surveys were returned, 120 of which were usable for analysis.

Findings – Results suggest that Malaysian firms view competitive strategy differently and are more likely than their Western counterparts to emphasize the use of financial measures of organizational performance. Findings also highlight the difficulties faced when Western measurement scales are employed in non-Western emerging nations.

Research limitations/implications – Because greater emphasis was placed on financial rather than non-financial measures, results indicate a statistically significant different improvement only in sales growth and ROI performance among the three strategy categories. Strategy researchers should focus their attention to the use of multiple performance measures in assessing firm's performance as shown by the significant difference in the use of customer satisfaction and loyalty measures, as well as employee satisfaction and training measures.

Originality/value – These findings hold relevance for executives responsible for the formulation and implementation of business strategy. A better understanding of the relationship between business strategy and performance measures using the BSC perspectives of measures has been provided. The study provides some useful insights into the role of performance measures. In addition, this study conveys the message to top managers and designers of performance measurement tools – most notably the balanced scorecard – should pay particular attention to non-financial performance measures in implementing their organization's strategy.

Keywords Management strategy, Competitive strategy, Performance management, Balanced scorecard, Malaysia

Paper type Research paper



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The strategy-performance relationship has been a popular research topic over the past three decades. Specifically, research has supported the validity of strategy typologies proposed by Miles and Snow (1978) and Porter (1980), as well as various modifications and combinations of the two approaches (e.g. Mosakowski, 1993; Parnell, 1997). The majority of empirical studies on competitive strategy have examined firms in the West, most notably the USA. On the contrary, comparable research in emerging nations like Malaysia is relatively scant (Ndubisi and Koo, 2006).

This paper is concerned with three issues that have not yet been resolved:

- (1) Is the competitive strategy construct as seen through the lens of generic strategy typologies a universal phenomenon?
- (2) If so, can Western scales be utilized to measure strategy and categorize firms in non-Western environments?
- (3) What is the nature of the strategy-performance relationship in non-Western environments when different measures of performance are employed?

This paper contributes to a better understanding of these issues by applying the Miles and Snow typology and assessing performance via multiple measures with manufacturers in Malaysia.

Review of the literature

Business strategy

Broadly speaking, the literature supports the notion that various competitive strategies influence firm performance in different ways (Porter, 1980; Slater and Narver, 1993; Mosakowski, 1993; Hashim, 2000). Porter's (1980, 1985) generic strategy typology is most notable. According to Porter, a business can generate competitive advantage – and ostensibly maximise performance – either by striving to be the low cost producer in an industry or by differentiating its line of products or services from those of other businesses; either of these two approaches can be accompanied by a focus of organizational efforts on a given segment of the market.

A number of studies have demonstrated the usefulness of Porter's approach (Dess and Davis, 1984; Hambrick, 1981, Hambrick, 1983; Hawes and Crittenden, 1984; Mosakowski, 1993). Studies in emerging economies have been limited, however. Hashim (2000), for example, found that performance of Malaysian SMEs varies with the choice of the business strategies they adopted.

A second prominent typology proposed by Miles and Snow (1978) suggested that any of three stable strategic types (prospectors, analyzers, and defenders) are equally likely to perform well, given that they respond to the challenges of the adaptive cycle in a consistent fashion (Snow and Hrebiniak, 1980; Smith *et al.*, 1986; Conant *et al.*, 1990). A fourth strategy type, the reactor, does not represent a high performing strategy. In general, research has supported the validity of the Miles and Snow typology, although there have been inconsistencies. For example, Conant *et al.* (1990) found that the subjective profitability evaluations of managers in defender, prospector, and analyzer organizations were not significantly different among themselves. However, other studies found conflicting or rather mixed findings (DeSarbo *et al.*, 2005; Hambrick, 1983; Segev, 1987; Zahra and Pearce, 1990; Parnell and Wright, 1993; Parnell, 2000).

For example, Hambrick (1983) rejected Miles and Snow's (1978) proposition that prospectors and defenders both perform well, especially when one considers

differences in environment and performance measures. In general, defender firms outperform prospector firms on return on investment (ROI) and cash flow on investment (CFOI) (financial performance), but prospector firms outperform defender firms on market share change (non-financial performance) in mature-innovative industries. However, in a mature non-innovative environment, both prospectors and defenders were negatively associated with ROI and CFOI. Hambrick (1983) also suggested that the analyzer appears to be the superior strategy when compared to the two extreme strategies, as analyzers produced higher levels of both ROI and CFOI in mature non-innovative industries.

Segev (1987) found that significant positive correlations are observed between prospectors and three performance indicators (retail market share, last six months' sales, and stock price), and between analyzers and six performance indicators (retail market share, last six months' sales, profit as percentage of sales owner's equity, return on assets, and stock price). However, the defender measure was marginally positively correlated with only one of the performance indicators, owner's equity. In a similar vein, Parnell and Wright (1993) found that revenue growth is highest among prospector firms. The first-mover/pro prospector strategy was significantly correlated with revenue growth, but not with return on assets (ROA), while second-mover/analyzer strategy was not associated with either of the two performance measures. Meanwhile, the segment control/defender strategy was found to correlate significantly with ROA, but not with revenue growth.

Miles and Snow contended that all three strategic types, namely, prospector, analyzer, and defender might perform equally well. This notion is consistent with the concept of equifinality, which suggests that the same outcomes can be achieved in multiple ways with different resources, diverse transformation processes, and various methods or means (Hrebiniak and Joyce, 1985). Others have challenged this contention, however (e.g. Hambrick, 1983; Segev, 1987; Parnell, 2000).

While these issues remain unresolved, much of the prominent work in the business strategy literature has shifted from a typology orientation to a heightened role of organization-specific factors as characterized by the resource-based perspective (Foss and Knudsen, 2003; Ray *et al.*, 2004). This focus on firm resources has further defined the nature and complexities associated with variations across organizations (Barney, 2001; Barney *et al.*, 2001). The increasing interest in firm resources, however, does not mean that testing strategy typologies is no longer useful, especially in emerging economies (Leiblein, 2003; Kimura and Mourdoukoutas, 2000; Pitelis and Pseiridis, 1999). Indeed, the pace and intensity of change in the global business environment have become much more pronounced during the past two decades. As a result, speed has become more valuable as a competitive weapon, while the Internet has minimized the importance of physical boundaries and distance, and can enable firms to serve larger markets more efficiently (Kim *et al.*, 2004).

Measurement of business performance

Research not only suggests a relationship between strategy and performance, but also that performance measures can, and perhaps should, be linked to strategy (Govindarajan and Gupta, 1985; Abernethy and Guthrie, 1994; Ittner *et al.*, 2003). Traditionally, business performance has been measured in three ways. First, financial measures provide objective artifacts of a firm's performance. Accounting data such as

return on assets (ROA), return on investment (ROI), and return on sales (ROS) have been applied to numerous studies (Bromiley, 1986; Daily *et al.*, 2002; Jacobson, 1987; Palepu, 1985). The new financial measure, economic value-added (EVA), also has been applied to some studies (Bacidore *et al.*, 1997; Chen and Dodd, 1997). However, the use of EVA is not that popular because it is too complex for managers to understand and use (Ittner and Larcker, 1998a). Proponents of using financial measures emphasize the objectivity associated with comparing the performance level of various business units along standardized lines (Sieger, 1992). However, financial measures often do not result in the valid valuation of intangible assets (Huselid, 1995). Nonetheless, financial measures remain the most popular and widely accepted approach in strategy-performance studies (Geringer *et al.*, 1989).

Second, market-based measures of performance have received considerable attention in the literature (Amit and Livnat, 1988). Market value added (MVA) has been touted in the popular press as the most accurate means of evaluating how well a firm creates shareholder wealth (Tully, 1994).

Third, qualitative measures include subjective areas of performance such as ethical behavior, stakeholder satisfaction with performance, customer satisfaction, and management satisfaction with performance (Parnell *et al.*, 2000). They may also include employee satisfaction, delivery performance, process improvement, measures of material and parts delivery time, throughput time, due-date performance, quality, machine flexibility, and inventory levels (Hendricks *et al.*, 1996). Specifically, a number of Internet businesses rely heavily on measures of web traffic to gauge performance. Viewing performance through a non-financial lens can provide insight into organizational processes and outcomes that cannot be seen via financial measures. In fact, non-financial measures are indicators of intangible assets and key drivers of firm value and may be better predictors of future financial performance than historical accounting measures, and thus should be disclosed (Ittner and Larcker, 1998b; Kaplan and Norton, 1996; Wallman, 1995).

As suggested in the previous section, the strategy-performance relationship becomes complex when one considers the vast array of performance measures that can be utilized. Further, measurement error has been cited as a critical concern throughout the management field (Gerhart *et al.*, 2000), and the extent to which it exists in the assessment of performance could raise key validity questions from research on the competitive strategy-performance relationship (Ketchen *et al.*, 2004; Parnell *et al.*, 2006).

The selection of performance measures – both for organizations and researchers – can influence the conclusions about the strategy-performance relationship (Parnell *et al.*, 2006). Indeed, many organizations are employing multiple measures of performance, as opposed to a single profitability measure that might have been used in the past. Following this logic, Kaplan and Norton (1992, 1996) developed a comprehensive performance measurement system known as the balanced scorecard (BSC). It is multi-dimensional in nature that offers a superior combination of financial measures and non-financial measures. Non-financial measures include at least three other perspectives: customers, internal business process, and learning and growth. The focus of the BSC is on vision and strategy. The BSC translates an organization's vision and strategy into a comprehensive set of performance measures that provides the framework for a strategic measurement and management system. Using BSC as a strategic management system would overcome the deficiency in traditional management systems with regard to their

inability to link a company's long-term strategy with its short-term actions (Kaplan and Norton, 1996). However, the extent to which organizations use multiple measures to actually link their performance measures more closely to strategic priorities is still largely unknown (Banker *et al.*, 2001).

In one respect, modern performance measurement in general and the BSC in particular are both targeted as improving poor strategy execution (Edwards, 2001). One of the reasons why companies often fail to translate strategy into action has to do with the performance measurement system, because they fail to collect the right information to monitor progress towards their strategic goals (Edwards, 2001). Further, different strategies coming from different functions of an organization also become a barrier to strategy implementation as most organizations have great difficulty in communicating and coordinating across these specialty functions (Kaplan and Norton, 2001). Because communicating business strategy and aligning individual goals with corporate goals are critical in many organizations, a BSC approach can provide a mean for communication and alignment of corporate strategies by cascading and linking measures to each level of organization including business units, support units, and employees.

Because each strategy is unique, each requires different types of performance measures and targets. Following this logic, Olson and Slater (2002) argued for the adoption of multi-measure approach in measuring performance, but challenged the idea that all measures are equally important irrespective of the product-market strategy adopted. They examined the relationship between the product market competitive strategy using the Miles and Snow (1978) strategy and the emphasis placed on different perspectives of the BSC. They found that prospectors emphasized the innovation and growth perspective more than analyzers, low-cost defenders, and differentiated defenders. The high performing analyzers placed greater emphasis on innovation and growth perspectives while low performers placed greater emphasis on financial perspective. The high-performing and low-cost defenders placed greater emphasis on financial perspective and lower emphasis on both customer and innovation and growth perspectives, while the high-performing differentiated defenders placed greater emphasis on the customer perspective. More recently, Ittner *et al.* (2003) found that a variation of the measurement diversity approach has the strongest association with stock market performance whereby firms that make more extensive use of a broad set of financial and non-financial measures than those with similar strategies or value drivers earn higher stock returns.

According to Miles and Snow (1978), the prospector organization tends to develop broad-based information systems with non-financial and external performance measures as well in order to suit with its effectiveness and results orientation. On the other hand, defenders tend to employ cost-oriented information systems that are efficiency and input oriented. Analyzers require a balanced set of information system emphasizing both on efficiency and effectiveness. From these attributes, it is implicitly assumed that prospectors use more non-financial performance measures and are more innovative than defenders.

Because prospector, defender, and analyzer type strategies require very different internal structures and administrative processes, the design parameters of management information systems (MIS) are also likely to differ (Abernethy and Guthrie, 1994). For example, information systems that have the characteristics of a broad scope system tend to be more effective in prospector firms than in defender

firms. According to Ittner and Larker (1998a), significant determinant of the weight placed on non-financial measures includes, among others things, the extent to which the firm followed an innovation-oriented strategy. In another related study, Govindarajan and Gupta (1985) concluded that subjective bonus systems (considered as one aspect of management control systems emphasizing on non-financial measures) were beneficial for emerging firms following “build” strategies, but detrimental to firms following “harvest” strategies.

Govindarajan and Gupta (1985) found that the benefits from non-financial compensation criteria are contingent on a business unit’s strategy. Moreover, evidence uncovered from Guilding’s (1999) study stated that prospector firms make greater use of, and perceive greater helpfulness in customer-focused accounting (CFA) practices. Guilding (1999) argued that the use of competitively-oriented analysis will result in a better-informed pricing and costing decision because it considers non-financial factors like competitor price reaction, price elasticity, and market growth. Meanwhile, Ittner and Larcker (1997) found that the interaction effects between quality-oriented strategies and strategic control systems on performance provide mixed result and that a quality-oriented strategy by itself has little effect on companies’ performance. They argued that strategic control practices are often negatively related to performance because incorrect measures that could not be linked to the desired strategic outcome are employed by the organization. Ittner *et al.* (1997) also provided evidence that non-financial measures play an ever increasing role in the managers’ performance evaluation where they noted that prospectors – firms with long-run focus – tend to rely more on non-financial measures than do defenders – firms with a short-run focus.

Although much is known about the strategy-performance relationship, gaps remain, especially in the context of emerging economies and multiple performance measures. Due to the exploratory nature of the present study, however, specific hypotheses were not developed. Broadly speaking, however, the study seeks to utilize multiple performance measures to support an application of the Miles and Snow typology in Malaysia.

Methods

Sample

Malaysia is an emerging economy with a business environment that differs markedly from that in the West. As a group, Malaysian firms tend to be smaller and younger than their Western counterparts, but are moving rapidly into high technology products and services. Because innovation and research and development activities are expensive and beyond the means of most firms, this remains an arduous task. Spurred by government incentives, supports and subsidies, however, many are making strides. The Malaysian manufacturing sector is very open and operates in a highly liberalized environment because it is exempted from the Foreign Investment Committee (FIC) Guidelines and market protection policies have been removed for all sub-sectors. The removal of price control policy and liberation in all sub-sectors has provided competitive strength, particularly in the automotive industry. For example, foreign investors in Malaysia’s manufacturing sector can hold 100 percent equity in projects irrespective of their level of exports.

A number of Malaysian firms gain competitive advantage through low production costs, as raw materials and labor are available at lower costs compared to competitors

from developed countries. Another additional competitive advantage is the economic and political stability in the region. Further, Malaysia's market-oriented economy and supportive government policies in terms of liberal equity policy, employment of expatriates, and attractive tax incentives, provide businesses with the opportunity for growth and success and have transformed the nation into a highly competitive manufacturing and export base. Malaysia has also moved towards a knowledge-based economy that allows firms to transact business in an environment that is geared towards information technology and educated and trainable workforce.

Because of the recent emerging impact of several factors on manufacturing industries, such as of the use of new and advanced manufacturing environment and recent trends of measuring manufacturing performance, the manufacturing industry is viewed as a particularly relevant area of study. Further, the use of performance measures are expected to be more diverse and extensive in manufacturing industries as compared to service or other types of industries. In addition, the manufacturing sectors in Malaysia is growing and plays a dominant role in the Malaysian economy by being the second largest sector (after services) in terms of its share in total GDP where it contributed 31.4 percent in 2005 and exports of manufactured goods make up more than 70 percent of the country's total exports.

Firms were randomly selected from the directory of Federation of Malaysian Manufacturers (FMM) as listed in 2003. The FMM is Malaysia's premier economic organization that has consistently led Malaysian manufacturers in spearheading the nation's growth and modernization. The FMM directory lists over 2,000 manufacturing and industrial service companies of varying sizes. Firms chosen are from various industries and are located throughout Peninsular Malaysia, particularly in Klang Valley, Penang and Kedah. Only firms with at least 25 employees were included in the target sample in order to have enough firms representing small and large firms. A questionnaire together with a cover letter was sent by mail to the chief executive officers (CEOs) and other top managers and directors asking for their participation in the study. Because of their diverse backgrounds and varied responsibilities, they are deemed to be the most appropriate personnel involving with strategy making and overall policies of the firms such as controlling and decision making, and they also have responsibility for the performance of their firms. Of the 975 questionnaires mailed, a total of 133 were returned. However, only 120 responses were usable, resulting in a usable response rate of 12.3 percent. This response rate is low but not unusual, given that Malaysian managers are typically reluctant to participate in mail surveys. Also, the sensitive and confidential nature of the information requested may contribute to the overall low response rate. Of those responding, 47 percent actually held an upper management position (e.g. CEO, managing director, general manager, and director), while the remaining 53 percent served in other capacities (e.g. marketing manager, resource/personnel manager, financial controller/accountant, manufacturing managers, operation managers, and business development managers). The majority has held their present position for at least five years.

Measures

The extent to which organizations utilized multiple performance measures was assessed using a 29-item scale comprising four dimensions: financial, customer, internal business process, and learning and growth. These measures represented

generic measures that are commonly used by manufacturing firms. Twenty items were adapted from the work of Hoque *et al.* (2001), which were originally adopted from Kaplan and Norton (1992); the remaining nine items were self-constructed. The respondents were asked to indicate the extent of their firm's use of each measure across the four dimensions using a seven-point Likert-type scale ranging from 1 (not at all) to 7 (to a great extent).

Recent improvements in actual firm performance were measured by a self-rating scale using 12 indicators taken from Mia and Clarke (1999) and Govindarajan (1984). This multiple indicators approach incorporates all aspects of quantitative and qualitative, financial and non-financial performance in the assessment (Mia and Clarke, 1999). Respondents were asked to identify the changes in the performance measures in the last three years using the scale of 1 to 7 (decreased tremendously = 1, no change = 4, and increased tremendously = 7). A weighted average performance index was obtained for each firm. A reliability check on the performance indicators produced a Cronbach's alpha value of 0.88.

Business strategy was measured by using three strategic types as proposed by Miles and Snow (1978): prospector, analyzer, and defender. The fourth type, the reactor, was considered with caution because studies by Sim and Teoh (1997) and Abdul Rashid (1997) indicate that reactors were difficult to identify in Malaysia.

A multi-item scale developed by Parnell (1997), based on the work of Conant *et al.* (1990) was used to operationalize the Miles and Snow strategic typology. This new multi-item scale represents a multivariate measurement of strategy that contains a broad set of strategic variables (Hambrick, 1980). This is parallel with Parnell's (2000) suggestion that the combination strategy to be viable over the long run and can be associated with superior performance. There were 12 questions in total, each consisting of four statements, one for each possible strategy (see Appendix). Each respondent was required to indicate agreement or disagreement with each statement concerning their organization by using a seven-point Likert scale ranging from "1 = Strongly disagree" to "7 = Strongly agree". The terms prospector, analyzer, defender, and reactor were omitted from the questions in order not to indicate that the types necessarily represent good or poor strategy.

Findings

Descriptive statistics

Table I provides the profile of the responding firms that constitute a broad spectrum of business activities. The majority of the firms are from electrical and electronics product manufacturing (25); followed by iron, steel, and metal product manufacturing (18); food and beverage manufacturing (13); and rubber and plastic product manufacturing (11). There were seven respondents each in the paper, printing, packaging, and labeling product manufacturing; chemicals and chemical products manufacturing; and pharmaceutical, medical equipment, cosmetics, toiletries, and household products manufacturing. Furniture and wood-related product manufacturing had five respondents, while textile, clothing, footwear, and leather manufacturing and machinery and equipment manufacturing had four respondents each. Firms with annual sales turnover greater than RM21 million accounted for 82.3 percent of the total. The majority of the firms have total gross asset of less than RM50 million (52.6 percent), while those with total gross asset

Primary business activity	Frequency	Percent
Electrical and electronics product manufacturing	25	21.0
Iron, steel, and metal product manufacturing	18	15.1
Food and beverage manufacturing	13	10.9
Rubber and plastic product manufacturing	11	9.2
Paper, printing, packaging, and labeling product manufacturing	7	5.9
Chemicals and chemical product manufacturing	7	5.9
Pharmaceutical, medical equipment, cosmetics, toiletries, and household products	7	5.9
Furniture and wood related product manufacturing	5	4.2
Textile, clothing, footwear, and leather manufacturing	4	3.4
Machinery and equipment manufacturing	4	3.4
Other manufacturing	18	15.1
Total	120	100
<i>Annual sales turnover:</i>		
Less than RM10 mil	4	3.4
RM10-RM20 mil	17	14.3
RM21-RM50 mil	33	27.7
RM51-RM100	30	25.2
Above RM100 mil	35	29.4
Total	119	100
<i>Total gross assets:</i>		
Less than RM50 mil	54	47.4
RM50-RM70 mil	20	17.5
RM71-RM100 mil	14	12.3
RM101-RM150 mil	5	4.4
Above RM150 mil	21	18.4
Total	114	100
<i>Total number of employees:</i>		
Less than 100	13	10.8
100-200	30	25.0
201-400	40	33.3
401-600	16	13.3
Above 600	21	17.5
Total	120	100

Note: Total figures are not equal due to missing values

Table I.
Profile of the responding
firms ($N = 120$)

above RM150 million represented 18.4 percent. Most firms have a total number of employees of 400 or less (69.1 percent) and those with greater than 200 employees make up about 64.1 percent of the sample. When taking number of employees as a measure of firm size, this result reflects that majority of firms are considered as large or medium large.

Strategy measurement

Several strategy measurement approaches were applied. The first approach assessed the degree to which the firm emphasizes a given strategy by computing the mean score across the twelve items. Utilizing mean scores to measure strategy is consistent with Segev's (1987) approach. A reliability check using Cronbach's (1951) alpha was done to

test the internal consistency of the business strategy constructs. This test produced the alpha coefficients of 0.89 (prospector), 0.86 (analyzer) and 0.56 (defender). Following Nunnally (1978), alpha coefficients of 0.50 to 0.60 were deemed acceptable for exploratory research. The strategy with the highest mean was assigned to each firm, resulting in 23 prospectors, 81 analyzers, five defenders, one reactor, and ten ties. Correlations among the four measures were high and significant, ranging from 0.246 to 0.757, however. Hence, this approach did not distinguish strategies well among the firms and was not pursued further.

Next, the 12 items for each of the four strategies were factor analyzed, each forcing loadings on a single factor. The prospector and analyzer scales each loaded fairly well, with 11 out of 12 loadings over 0.30 and most over 0.50. However, the defender and reactor scales did not load well, each with five items loading below 0.30 (see Table II). The lack of reasonable loadings across the four factors indicated that the scales did not provide a viable measure of competitive strategy for Malaysian firms.

Given the difficulty associated with traditional measures, a second factor analysis was conducted with all 48 items. A scree test was applied to determine the appropriate number of factors. The first three eigenvalues generated were 11.051, 3.797, and 2.507, while the next twelve ranged from 2.104 to 1.026. Three factors accounted for 36.154 percent of the variance. Hence, a natural cut-off of 2.5 was utilized and a three-factor solution was pursued with a varimax rotation.

Many items did not load well on any of the three factors, so several factor analysis iterations were applied to reduce the number of items. First, 11 items loadings below 0.400 were eliminated and the remaining 37 items were factor analyzed again. Second, six items loading below 0.500 were eliminated and the remaining 31 items were factor analyzed again. Third, 12 items loading below 0.600 were eliminated and the remaining 19 items were factor analyzed again. Finally, seven items loading below 0.700 were eliminated, resulting in a parsimonious 12-item scale with each item loading above 0.700 on one factor and below 0.200 on the other two factors. Factor scores were computed for each factor and strategies were assigned to firms according to the highest score. As a result, 50, 20, and 50 firms were assigned to the three strategies respectively (Table III).

Item	Prospector	Analyzer	Defender	Reactor
1	0.506	0.146	0.732	0.240
2	0.768	0.587	0.246	0.405
3	0.808	0.743	0.146	0.072
4	0.640	0.399	0.305	0.488
5	0.014	0.778	0.821	0.051
6	0.704	0.669	-0.091	0.513
7	0.671	0.638	0.144	0.297
8	0.703	0.521	0.361	0.582
9	0.680	0.431	0.810	0.410
10	0.819	0.759	-0.044	0.724
11	0.818	0.760	0.234	0.549
12	0.365	0.715	0.365	0.144

Table II.
Results of original factor
analyses by strategy

Item	Abbreviated wording	(<i>n</i> = 50) Factor 1	(<i>n</i> = 20) Factor 2	(<i>n</i> = 50) Factor 3
3D	Efficient producer of goods and services	0.759	0.086	0.040
3P	Highly innovative	0.852	0.031	0.110
3A	Customers feel as if we understand them	0.795	0.104	0.072
5A	Most in-tune with customer demands	0.731	0.114	-0.028
8P	Leader in the industry	0.747	-0.052	-0.166
10A	Market products exceptionally well	0.788	0.007	0.030
10P	Quick and effective response to customers	0.775	-0.059	0.022
11P	Concentrate on innovation	0.776	-0.126	-0.013
5P	Unique products and services	0.040	0.986	-0.108
5R	Different attributes in products and services	0.006	0.988	-0.102
1D	Offer lowest possible price	-0.024	-0.132	0.863
5D	Lowest priced products and services	0.054	-0.056	0.869

Table III.
Results of original factor
analyses

Strategy and performance

The first and strongest factor includes several characteristics – innovation, production efficiency, and customer orientation (hereafter termed IEC) – that are not usually found in a single strategy in Western studies. In some respects, however, this strategy represents what scholars have called the “combination strategy”. Porter (1980) originally suggested a business attempting to combine emphases on more than one pure strategy – in his typology, low costs and differentiation – invariably will end up “stuck in the middle” (Porter, 1980, p. 41), a notion that received considerable early support (Dess and Davis, 1984; Hambrick, 1981, Hambrick, 1983; Hawes and Crittendon, 1984). However, his contention was challenged by a number of studies (Buzzell and Gale, 1987; Buzzell and Wiersema, 1981; Hall, 1983, Hill, 1988; Murray, 1988; Parnell, 1997; White, 1986; Wright, 1987). Whereas Porter contends that the assumptions associated with low costs and differentiation are incompatible, those in the “combination strategy school” have argued that businesses successfully combining strategic approaches that appear to be in contention may create synergies that overcome any tradeoffs that may be associated with the combination. This argument can be extended to the ostensible opposites identified in the IEC strategy, namely innovation and production efficiency.

At the firm level, innovation has been defined as the adoption of an idea or behavior pertaining to a product, service, device, system, policy, or program, that is new to the adopting organization (e.g. Daft, 1982; Damanpour and Evan, 1984). Innovation can be categorized into product and process innovation (Damanpour and Gopalakrishnan, 2001). Product innovation can be defined as new products or services introduced to meet an external user or market need, while process innovation is defined as new elements introduced into an organization’s production or service operations which may include input materials, task specifications, and equipment (Utterback and Abernathy, 1975). While product innovations have a market focus and are primarily customer driven, process innovations have an internal focus and are primarily efficiency driven (Utterback and Abernathy, 1975). Hence, these results may suggest that firms in this category focus on both product and process innovation. A positive relationship between product innovations and process innovations has been found among Malaysian manufacturers (Che Ha, 2006). Similarly, Damanpour and Gopalakrishnan

(2001) found that the adoption of product innovations is positively associated with the adoption of process innovations.

The second factor emphasizes product and service uniqueness, a characteristic usually associated with product innovation. Indeed, some Malaysian firms can be characterized by the manufacture of higher value added products and an emphasis on the production and sale of more technology-intensive products. Given the influence of rapid technological change, increased global competition of products and markets, emergence of new manufacturing environment, many manufacturers are beginning to offer products that are differentiated, unique, and innovative. However, it seems that they focus more on product innovations rather than process innovations when only product and service uniqueness appeared to be important factors, motivated by increasing market share, winning customer loyalty, and staying ahead of competition. Many of these manufacturers appear to be from the electronics and electrical goods sectors. Results reveal that only 20 Malaysian manufacturers are in this category, however, suggesting that they are still new and product innovations seem to occur more frequently than process innovations in a firm's early life as explained by Abernathy and Utterback (1978). It appears that they gained first mover advantages through adoption of product innovations.

The third factor emphasizes low prices, a characteristic usually associated with production efficiency. This factor is consistent with Malaysian manufacturers' general emphasis on cost containment and low-cost manufactured products. Because they tend to focus on production efficiency and rely on cheap labor and materials, they are more likely to focus on process innovation rather than product innovation if they are innovative at all. We suspect that these firms may be older, having started as family-owned business dealing with cottage industries and later being transformed into large corporations. As such, they may still rely on old technology due to limited financial resources, and are able to offer lowest possible price for their products and use price as their competitive advantage. Outsourcing production and operations is perhaps one of the reasons that manufactures could maintain cost competitiveness. Not surprisingly, results show that the number of firms in this category is greater than in the previous one, possibly due to the stable Malaysian environment. These firms appear to resemble defenders (Miles and Snow, 1978), firms that emphasize low cost relative to competitors and maintain a stable and narrow products or service tend to succeed in a low environmental uncertainty.

Analysis of variance (ANOVA) tests were applied to determine if performance improvements were associated with strategy categories (see Table IV). Significant differences were found in only two of the measures, sales growth and return on investment (ROI). Only performance improvement in sales growth and ROI were significantly different among the three types of firms. Because sales growth and ROI represent pure financial variables, these results suggest that Malaysian firms rely more on financial measures in evaluating business performance as compared to non-financial measures. Historically, sales, sales growth, net profit and gross profit were among the financial measures preferred by the Malaysian manufacturing firms (Kassim *et al.*, 1989). In both instances, firms in the first strategy category, (IEC) reported the greatest performance improvements, followed by firms in the third (low price) and the second (uniqueness) categories.

	Group	N	Mean	Std dev.	Std error	F-value	Significance
Productivity	1	50	7.40	13.253	1.874	1.132	0.326
	2	20	5.05	0.999	0.223		
	3	50	4.98	1.116	0.158		
	Total	120	6.00	8.626	0.787		
Costs	1	50	3.92	1.291	0.183	0.917	0.403
	2	20	3.60	0.754	0.169		
	3	50	3.62	1.292	0.183		
	Total	120	3.74	1.220	0.111		
Quality	1	50	7.48	13.233	1.871	0.190	0.827
	2	20	5.50	0.761	0.170		
	3	50	6.98	13.306	1.882		
	Total	120	6.94	12.065	1.101		
Delivery	1	50	7.52	13.225	1.870	1.066	0.348
	2	20	5.30	0.733	0.164		
	3	50	5.16	0.976	0.138		
	Total	120	6.17	8.592	0.784		
Market share	1	50	7.20	13.280	1.878	1.244	0.292
	2	20	4.30	0.865	0.193		
	3	50	4.88	0.982	0.139		
	Total	120	5.75	8.643	0.789		
Sales growth	1	50	5.06	1.185	0.168	3.478	0.034
	2	20	4.30	1.031	0.231		
	3	50	4.76	1.041	0.147		
	Total	120	4.81	1.125	0.103		
Operating profits	1	50	5.06	1.132	0.160	0.501	0.607
	2	20	4.20	1.152	0.258		
	3	50	6.32	13.446	1.902		
	Total	120	5.44	8.708	0.795		
Cash flow	1	50	7.02	13.315	1.883	0.254	0.776
	2	20	9.15	21.194	4.739		
	3	50	6.34	13.428	1.899		
	Total	120	7.09	14.830	1.354		
ROI	1	50	5.00	1.161	0.164	7.676	0.001
	2	20	3.75	1.293	0.289		
	3	50	4.30	1.418	0.201		
	Total	120	4.50	1.366	0.125		
New product dev.	1	50	7.02	13.310	1.882	0.251	0.779
	2	20	9.15	21.194	4.739		
	3	50	6.36	13.446	1.902		
	Total	120	7.10	14.834	1.354		
R & D	1	50	6.92	13.341	1.887	0.285	0.753
	2	20	9.25	21.178	4.736		
	3	50	6.28	13.470	1.905		
	Total	120	7.04	14.855	1.356		
Personnel dev.	1	50	7.24	13.274	1.877	1.053	0.352
	2	20	5.10	1.071	0.240		
	3	50	4.86	1.030	0.146		
	Total	120	5.89	8.630	0.788		

Competitive
strategy**17****Table IV.**
ANOVA results:
performance
improvement

It is possible that firms in the IEC category are able to successfully integrate innovation and efficiency into their organizational operations in a way that meets customer expectations and demands and ultimately leads to the greatest performance improvement. The combination of innovation, efficiency and customer orientation characteristics has created the value-added advantage for these firms as compared to two other types of firms. Hence, a balanced emphasis of process and product innovations is more effective in helping organizations maintain or improve their level of performance than either process or product innovations alone (Damanpour and Evan, 1984). Hence, firms in the first category are able to produce and sell highly innovative products that meet the customer demands in terms of quality and price.

A firm's competitiveness over time depends on its ability to adopt both types of innovations, and this simultaneous adoption of product and process innovations is positively associated with performance (Damanpour and Gopalakrishnan, 2001). Similarly, Ettl (1995) found that integrated product-process development practices enhance manufacturing firm performance. As firms in the IEC category are more customer-oriented, results show that they are more successful compared to other two categories of firms, suggesting that a customer-oriented strategy was perceived by Malaysian firms to be more important. This is consistent with research suggesting that strong product customization and customer service significantly correlates with sales among Malaysian firms (Mohamed *et al.*, 2002).

Product innovations are often perceived to offer more advantages than process innovations because product innovations may generate higher revenues from significant price premiums relative to reduction in manufacturing costs due to process innovations (Damanpour and Gopalakrishnan, 2001). Hence, one might expect that firms in the second category would report greater performance improvement in sales growth and ROI than did those in the third category. However, the results appear to contradict this logic. One plausible reason for this outcome could be that many Malaysian customers – as opposed to those in other countries – are more concerned with price rather than uniqueness and innovativeness of the products. This phenomenon could be true when considering Malaysia as a developing country where level of per capita income is rather low compared to developed countries, and thus contributing to low purchasing power. Further, Malaysian customers tend to be more conservative in their buying habits and look more for affordable products.

We believe the data support the notion that sales are primarily linked to product quality and cost. While being early or first to market may please the customer, it does not necessarily influence purchase behavior because quality and cost could be the major purchase decision criteria, a notion consistent with other research. Tatikond and Montoya-Weiss (2001) found that customer satisfaction is significantly correlated with quality, cost and sales. In a similar vein, Mohamed *et al.* (2002) found that Malaysian firms perceived monitor cost elements activity as important competitive factors.

Given the stable Malaysian environment, firms in the third category also seem to be more successful than those in the second category. In addition, although firms in the second category are more innovative and have more product development capabilities, they might lack operational and marketing capabilities. As Tatikond and Montoya-Weiss (2001) warned, integrating operations and marketing perspectives of product innovation is key to success. Likewise, with respect to the association of product innovation and performance, Che Ha (2006) found that product innovation is

positively associated with marketing effectiveness and financial performance among Malaysian manufacturers.

Analysis of variance (ANOVA) tests were also applied to determine if preferences for business performance measures were associated with strategy categories. Results of the tests appear in Tables V-VIII. Five significant differences were found.

Firms in the IEC and uniqueness categories were more likely than firms in the low price category to select ROI as a business performance measure. Nonetheless, firms in the low price category showed some improvement in ROI performance. Many low cost firms might not rely on product nor process innovations in order to remain competitive and therefore not engage in investment projects that require them to use a performance measure such as ROI to evaluate the efficiency of the investments. On the other hand, firms in the IEC and uniqueness categories prefer to use ROI measures because they are more likely to engage in innovation activities that require a lot of investment projects.

Firms in the IEC category were more likely than firms in the other categories to select customer satisfaction and customer loyalty as business performance measures.

	Group	<i>N</i>	Mean	Std dev.	Std err	<i>F</i> -value	Signif.
Operating income	1	50	5.92	1.122	0.159	0.621	0.539
	2	20	6.30	1.031	0.231		
	3	50	7.78	13.201	1.867		
	Total	120	6.76	8.556	0.781		
Sales growth	1	50	6.06	0.956	0.135	0.783	0.460
	2	20	6.00	0.918	0.205		
	3	50	5.84	0.817	0.116		
	Total	120	5.96	0.893	0.081		
Sales revenue	1	50	6.06	0.935	0.132	1.542	0.218
	2	20	6.20	0.768	0.172		
	3	50	5.82	0.941	0.133		
	Total	120	5.98	0.917	0.084		
ROI	1	50	5.70	1.147	0.162	3.855	0.024
	2	20	5.60	1.142	0.255		
	3	50	5.08	1.175	0.166		
	Total	120	5.43	1.186	0.108		
Cash flow	1	50	5.86	1.088	0.154	1.010	0.367
	2	20	6.20	0.951	0.213		
	3	50	9.12	18.581	2.628		
	Total	120	7.28	12.052	1.100		
Manufacturing cost	1	50	5.96	1.228	0.174	0.709	0.494
	2	20	5.75	1.118	0.250		
	3	50	5.70	1.015	0.144		
	Total	120	5.82	1.123	0.102		
Economic value added	1	50	5.26	1.523	0.215	0.772	0.464
	2	20	9.25	21.166	4.733		
	3	50	6.68	13.387	1.893		
	Total	120	6.52	12.174	1.111		

Table V.
ANOVA results:
financial measures

	Group	N	Mean	Std dev.	Std err	F-value	Significance
Market share	1	50	7.88	13.176	1.863	0.430	0.651
	2	20	4.90	1.373	0.307		
	3	50	7.04	13.326	1.885		
	Total	120	7.03	12.082	1.103		
Customer response time	1	50	7.72	13.213	1.869	0.949	0.390
	2	20	5.60	1.046	0.234		
	3	50	5.50	1.165	0.165		
	Total	120	6.44	8.590	0.784		
On-time delivery	1	50	8.04	13.152	1.860	0.967	0.383
	2	20	6.15	0.813	0.182		
	3	50	5.74	1.157	0.164		
	Total	120	6.77	8.548	0.780		
Customer complaints	1	50	9.64	18.489	2.615	1.819	0.167
	2	20	5.85	1.137	0.254		
	3	50	5.24	1.721	0.243		
	Total	120	7.18	12.108	1.105		
Number of warranty claims	1	50	4.70	2.092	0.296	2.330	0.102
	2	20	9.30	21.181	4.736		
	3	50	4.66	1.986	0.281		
	Total	120	5.45	8.834	0.806		
Customer satisfaction	1	50	5.92	0.778	0.110	5.633	0.005
	2	20	5.35	1.226	0.274		
	3	50	5.20	1.309	0.185		
	Total	120	5.53	1.145	0.104		
Customer loyalty	1	50	5.78	1.250	0.177	3.948	0.022
	2	20	5.00	1.717	0.384		
	3	50	5.10	1.329	0.188		
	Total	120	5.37	1.402	0.128		
Percentage of returns due to poor quality	1	50	5.02	1.995	0.282	0.534	0.587
	2	20	5.05	1.761	0.394		
	3	50	4.66	1.923	0.272		
	Total	120	4.88	1.921	0.175		
Number overseas deliveries	1	50	8.84	18.669	2.640	0.077	0.926
	2	20	9.90	21.024	4.701		
	3	50	10.46	22.652	3.203		
	Total	120	9.69	20.638	1.884		

Table VI.
ANOVA results:
customer measures

The greatest use of customer satisfaction and customer loyalty measures is consistent with the characteristics of the firms in the IEC category where they seem to be more customer-oriented compared to firms in the other categories. This is consistent with the work of Mohamed *et al.* (2002), who found that Malaysian firms considered customer as the focal points in a firm's activity when there is positive relationship between customizing the products to the users' needs and customer service activities to firm sales and profitability.

	Group	<i>N</i>	Mean	Std dev.	Std err	<i>F</i> -value	Significance	Competitive strategy
Materials effic. variance	1	50	7.68	13.230	1.871	0.218	0.805	21
	2	20	5.60	1.465	0.328			
	3	50	6.76	13.416	1.897			
	Total	120	6.95	12.127	1.107			
Labour efficiency variance	1	50	7.62	13.236	1.872	0.249	0.780	
	2	20	5.35	1.461	0.327			
	3	50	6.88	13.372	1.891			
	Total	120	6.93	12.113	1.106			
Ratio of good to total output at each production process	1	50	7.70	13.216	1.869	0.315	0.731	
	2	20	5.15	1.461	0.327			
	3	50	7.08	13.355	1.889			
	Total	120	7.02	12.103	1.105			
Manufacturing lead time/cycle time	1	50	7.70	13.216	1.869	0.187	0.830	
	2	20	5.75	1.410	0.315			
	3	50	6.96	13.361	1.890			
	Total	120	7.07	12.092	1.104			
Rate of material scrap loss	1	50	7.36	13.320	1.884	0.096	0.909	
	2	20	5.95	1.234	0.276			
	3	50	6.86	13.401	1.895			
	Total	120	6.92	12.144	1.109			
Defect rate	1	50	7.66	13.269	1.877	0.321	0.726	
	2	20	5.75	1.164	0.260			
	3	50	8.86	18.671	2.641			
	Total	120	7.84	14.746	1.346			
Setup and changeover time	1	50	6.96	13.371	1.891	0.316	0.730	
	2	20	9.75	21.036	4.704			
	3	50	6.76	13.387	1.893			
	Total	120	7.34	14.807	1.352			
Material and changeover flexibility	1	50	6.92	13.375	1.892	0.935	0.395	
	2	20	4.75	1.618	0.362			
	3	50	10.34	22.661	3.205			
	Total	120	7.98	17.032	1.555			

Table VII.
ANOVA results: internal
business process
measures

Firms in the IEC category were also more likely than firms in the other categories to select employee training and employee satisfaction as business performance measures. Human capital is considered to be the most important asset in a learning organization because it is a source of innovation and strategic renewal (Bontis, 1999). Training and satisfaction are considered important performance measures for firms in the IEC category because they depend on employees to generate skills and ideas to deal with products and meet customer needs. Hence, they show the greatest use of measures pertaining to employees. Although Malaysia is moving towards a knowledge-based economy that emphasizes knowledge workers, this process is still in the early stages. Having engineering and technical as well as marketing skills is still a challenge for the Malaysian manufacturing sector as skills sets in most firms are mainly at senior

	Group	N	Mean	Std dev.	Std. err	F-value	Significance
Number of new patents	1	50	3.76	1.923	0.272	1.958	0.146
	2	20	7.90	21.521	4.812		
	3	50	3.50	1.729	0.245		
	Total	120	4.34	8.903	0.813		
Number of new product launches	1	50	4.64	1.871	0.265	0.793	0.455
	2	20	8.75	21.314	4.766		
	3	50	5.80	13.560	1.918		
	Total	120	5.81	12.317	1.124		
Time-to-market new products	1	50	4.46	1.787	0.253	1.794	0.171
	2	20	8.35	21.411	4.788		
	3	50	4.14	1.641	0.232		
	Total	120	4.97	8.828	0.806		
Employee satisfaction	1	50	5.36	1.290	0.182	2.647	0.075
	2	20	4.80	1.704	0.381		
	3	50	4.76	1.333	0.189		
	Total	120	5.02	1.402	0.128		
Employee training	1	50	5.86	0.904	0.128	5.889	0.004
	2	20	5.45	1.234	0.276		
	3	50	5.12	1.172	0.166		
	Total	120	5.48	1.123	0.102		

Table VIII.
ANOVA results: learning
and growth measures

management level. Besides, the use of sophisticated and advanced manufacturing technologies is still beyond the means of some Malaysian manufacturers. Therefore, Malaysian firms are still left behind in terms of new product developments, high value-added and high-tech products compared to their counterparts in the West.

Conclusions and future research

Using a multi-item scale to measure Miles and Snow's strategy, the data reveal that many Malaysian manufacturing firms are actually pursuing IEC and low price strategies, possibly due to the stable and less uncertain environment. Because greater emphasis was placed on financial rather than non-financial measures, results indicate a statistically significant different improvement only in sales growth and ROI performance among the three strategy categories. The present study also suggests that strategy researchers should focus their attention to the use of multiple performance measures in assessing firm's performance as shown by the significant different in the use of customer satisfaction and loyalty measures, as well as employee satisfaction and training measures.

At the level of practice, these findings hold the greatest relevance for those executives responsible for the formulation and implementation of business strategy, a better understanding of the relationship between business strategy and performance measures using the BSC perspectives of measures has been provided. In this respect, the study provides some useful insights into the role of performance measures as information to be used by managers to support the achievement of their organizations' strategic objectives. In addition, this study conveys the message to top managers and designers of performance measurement tools – most notably the balanced scorecard

– should pay particular attention to non-financial performance measures in implementing their organization's strategy (Atkinson, 2006). Measures such as customer satisfaction, customer loyalty, employee training, and employee satisfaction are important for Malaysian manufacturing firms. This is particularly true for those firms that consider innovation, production efficiency, and customer orientation (IEC) as their predominant competitive weapons. Significant improvement in financial performance, such as sales growth and ROI, is evident among firms pursuing an IEC strategy as compared to other firms pursuing either low price or uniqueness strategies. By incorporating a group of non-financial performance measures into a performance measurement system and using them more extensively, firms with an IEC strategy can outperform their counterparts with different strategies on sales growth and ROI. At a theoretical level, the primary relevance of this study lies in its extension of the contingency theory. Relating BSC measures to other contingent variables would contribute to knowledge about contingent relationships. Also, by addressing strategy implementation issues with the aid of the BSC could contribute to the body of knowledge in strategic management. This study also contributes to the existing performance measurement and BSC literature by providing empirical evidence on the ability of the broader measurement to improve financial performance.

It is important to stress that the findings of this study should be interpreted within the parameters of the research design and evaluated in the light of several limitations that also relate to future research directions. First, the sample was taken only from the FMM directory where the population is limited to only the manufacturing firms that are members of the association. Thus, the sample was relatively small and not necessarily comprehensive. Also, confining the sample only to manufacturing firms could provide a potential source of bias to generalizability. Thus, future research should study larger sample size using industries beyond manufacturing.

Second, there are limitations concerning variable measurement. The instruments for both business strategy and BSC measures were rather novel. Further study could lead to refinement of the BSC measures variables where other performance measures within the dimensions of financials, customers, internal business processes, and learning and growth and other features of BSC could be identified in future research. As the strategy construct was limited to the Miles and Snow typology, subsequent researchers might do well to extend this research by using other taxonomies of strategy. Finally, this study focuses only on two types of contextual variables, strategy and performance measures. Future research could also incorporate other features of management control and performance measurement systems as well as other contextual variables to identify additional types of relationships or effects on firm performance. For example, environment could be an important contextual variable that can influence firm performance. It is the fact that economic growth in Malaysia was achieved within an environment of relatively low inflation.

Third, the application of Western scales to non-Western samples remains a difficult process (Parnell and Hatem, 1997; Peng *et al.*, 2003) and the present study was no exception. When scales are translated or modified to address cultural differences – as was the case with the present study – then direct comparisons between distinct cultural groups can be difficult. Although results from the present study lend support to the application of a given scale across languages and cultures, additional work is

needed to develop and refine measurement scales that are reasonably reliable and valid for cross cultures comparison.

Finally, additional research on business strategies and performance measurement is needed in Malaysia. Much can be learned from the progress that has been made during the last few decades. In many respects, for example, findings from the present study lend support to previous work on the BSC and performance metrics. Nonetheless, additional work is needed to clarify how firm behavior in Malaysia compares and contrasts to that of its Asian and Western counterparts.

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Appendix. Strategy survey items

Note: P = Prospector, A = Analyzer, D = Defender, and R = Reactor. These strategy codes are provided in this Appendix for clarity but were not included in the survey instrument.

1. Considering our products and services, we:
 - D. primarily seek to provide our products and services at the lowest possible price;
 - P. primarily seek to differentiate our products and services from those of our competitors;
 - R. tend to emphasize one or more factors such as quality, price or uniqueness for a while, and later emphasize other factors;
 - A. primarily seek to provide products and services most consistent with consumer demands.
2. In the future, we plan to position our company in the marketplace as:
 - A. one that does the best job meeting consumer demands;
 - R. one that does whatever generates the greatest return at that time;
 - D. one that satisfies the demands of a particular group of consumers exceptionally well;
 - P. one that leads that way in new products and services.
3. If asked about our company, most current and prospective customers would:
 - D. consider us to be an efficient producer of goods and services;
 - P. consider us to be highly innovative;
 - A. feel as if we understand them well as consumers; and
 - R. identify us with no particular area of distinctive competence.
4. How does your company view change in the marketplace or our external environment?
 - P. we usually try to initiate change;
 - R. we don't think much about change;
 - A. we usually try to adapt to change
 - D. we usually try to resist change.

5. Most current and prospective customers probably:
- D. see our products and services as among the lowest priced available;
 - A. see our products and services to be the most in-tune with customer demands;
 - P. consider our products and services to be among the most unique;
 - R. see different attributes in our products and services.
6. Relative to our competition, we:
- P. generate more than our share of new products and services;
 - R. do some things well for a while, and then concentrate on other areas;
 - A. are the most competent marketers in the industry;
 - D. provide products and services primarily to a well-defined customer group.
7. In the future, we primarily plan to:
- R. do lots of things, nothing in particular;
 - P. focus on high innovation;
 - A. learn more about our customer;s
 - D. improve our efficiencies.
8. Current and prospective customers probably:
- A. see us as adapting well to the changes in the market;
 - R. are unclear about the way we modify our products and services over time;
 - D. view our products and services as stable and traditional;
 - P. see us as a leader in the industry.
9. One of our goals for the future is to offer products and services that:
- P. are easily differentiated from those of our competitors;
 - R. contribute to profits, regardless of what we sell;
 - D. are similar to those of our competitors, but at a lower cost
 - A. meet specific consumer demands.
10. If you were to ask our present and potential customers, most would say:
- R. different things about our organization;
 - A. that we market our products exceptionally well;
 - P. that we respond to the needs of our customers very quickly and effectively;
 - D. that we dominate one segment of the market, but are weak in most others.
11. Our company concentrates most on:
- R. different areas that constantly change;
 - D. high efficiency;
 - P. innovation;
 - A. understanding our customers.

12. We plan to:

D. remain steadfast and consistent, regardless of changes and trends in the marketplace;

A. modify our products and services as necessary in order to meet changes in the marketplace;

P. redefine our industry;

R. make major changes to our strategy as dictated by the marketplace and our competitors.

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