

MARKETING STRATEGY AND COMPETITIVE ENVIRONMENT AS DETERMINANTS OF BUSINESS PERFORMANCE: A STUDY OF AMERICAN MANUFACTURERS

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ABSTRACT

This study tests the impact of five marketing strategy variables and two environmental variables on profitability. Hypotheses specify positive relationships between these variables and profitability. A LISREL framework tests the hypothesized relationships with data from large American manufacturing companies. Competitive position, defensiveness, and market attractiveness are found to have the greatest positive impact on profitability.

INTRODUCTION

A basic model, combining concepts from the business policy literature (Child 1972) and the industrial organization economics literature (Scherer 1980), has emerged to guide marketing strategy research. The model is based on the premise that certain elements of the environment give rise to a particular competitive environment. Managers within an organization then develop the organization's marketing strategy (patterns of marketing-related decisions) in response to that environment. Both the competitive environment and marketing strategy impact organizational performance (along a variety of dimensions). Working within this strategy framework, this study examines the impact of both environmental and marketing strategy variables on organizational performance.

This research effort focuses on two environmental variables, five marketing strategy variables, and one performance variable. The environmental variables, market attractiveness and competitive position, have been suggested by previous conceptual and empirical work to be major influences on a business's performance (e.g., Burke 1984; Glazer 1991). Based primarily on a review of various marketing strategy conceptualizations found in the marketing literature (as well as the business policy and strategy literature), five marketing strategy variables are considered: aggressiveness, defensiveness, adaptability, specialization, and cooperation. Profitability, the performance variable, is the most commonly studied dimension of organizational performance (Capon, Farley, and Hoenig 1990).

Market attractiveness and competitive position have been identified by previous conceptual and empirical work as major influences on organizational performance. Market attractiveness represents the long-run profit and growth potential for all participants in an industry or market, while competitive position relates to the strength of the organization relative to competition (Day 1984). The two variables thus represent key aspects of both the external and internal environment for strategic decisions. Market

attractiveness and competitive position form the basis of most contingency approaches to marketing strategy and have been included in previous attempts to develop conceptually integrated models of business performance (e.g., Park and Mason 1990).

Although one can not convincingly argue that the five marketing strategy variables considered here cover all aspects of marketing strategy, it is argued that they represent crucial areas and serve as an adequate starting point for assessment of marketing strategy-performance relationships. Boxer and Wensley (1986) identify three crucial areas of marketing-related interaction between an organization and its external environment: interaction between the organization and its competitors, interaction between the organization and its customers, and interaction between the organization and other parties in the organization's channel of distribution. Each of the five marketing strategy variables considered here is focused on one of these areas of interaction.

Aggressiveness is concerned with the interaction between an organization and its competitors. The variable reflects degree of competitiveness (or competitive posture) in relations with competing organizations. Early PIMS studies (e.g., Buzzell, Gale, and Sultan 1975), prescriptions grounded in the growth-share matrix (Boston Consulting Group 1972), and Porter's (1980) generic cost leadership strategy emphasize the importance of aggressiveness in seeking market share. This aggressive or competitive orientation is often cast in military terms. Kotler and Achrol (1981), for example, describe "attack strategies" aimed at increasing market share.

Defensiveness, adaptability, and specialization focus on the interaction between an organization and its customers. Defensiveness refers to the emphasis placed on preserving current products and markets. Fornell and Wernerfelt (1988) indicate that defensive marketing strategy involves reducing customer exit and product/brand switching through switching barriers and customer satisfaction. Defensiveness also reflects the notion of "defense"; (Kotler and Achrol 1981) and "hold" (Buzzell, Gale, and Sultan 1975) strategies aimed at holding current customers and thereby maintaining relative market share. Adaptability reflects the extent to which a business attempts to identify and capitalize on emerging market opportunities. Thus, it reflects the key dimension underlying the Miles and Snow (1978) strategic typology (McKee, Varadarajan, and Pride 1989). Specialization reflects the extent to which a business attempts to create a unique product (or set of products) that is perceived by consumers as clearly superior in value. Specialization, generally termed differentiation, has been suggested as a key strategy dimension in the marketing (Abell 1980), business policy (Hall 1980), and industrial organization economics (Porter 1980) literature.

Cooperation is concerned with the interaction between an organization and other parties in the organization's channel of distribution. The variable refers to an overall coordinative posture in relations with other members of the marketing channel system. Traditionally, marketing channels consisted of "highly fragmented networks in which loosely aligned manufacturers, wholesalers, and retailers . . . bargained with each other at arm's length, negotiated aggressively over terms of sale, and otherwise behaved autonomously" (McCammon 1970, p. 43). Beginning in the 1950s, planned vertical marketing systems, which strategically link various parts of the production and marketing process, emerged and began to displace traditional marketing channels. Cooperation reflects an organization's reliance on these

systems.

One performance variable, profitability, is considered in this study. Conceptual and empirical literature in marketing, business policy, and industrial organization economics suggests that each environmental and marketing strategy variable considered here is positively related to an organization's profitability. This literature is summarized in the following section, which also presents the research hypotheses.

RESEARCH HYPOTHESES

Studies utilizing the PIMS database indicate that market attractiveness (in the form of profitable, growing markets for a business's products and services) has a major positive impact on business performance. Buzzell and Gale (1987), summarizing approximately 15 years of PIMS research, suggest that some markets have high inherent profit and growth potential, while in others even the most capable and skillful competitors earn only modest rates of return.

H1: Market attractiveness positively affects profitability.

Competitive position, in terms of market share and competitive capabilities, has also been found to directly impact business performance. Both PIMS-based models and portfolio models provide evidence supporting this relationship (for a summary of these findings, see Kerin, Mahajan, and Varadarajan 1990).

H2: Competitive position positively affects profitability.

Early PIMS studies (e.g., Buzzell, Gale, and Sultan), prescriptions grounded in the growth-share matrix (Boston Consulting Group 1972), and various "marketing as warfare" frameworks (e.g., Kotler and Achrol 1981) emphasize the positive impact of an aggressive marketing orientation on business performance. More recently, aggressive market share objectives and attempts to rapidly build share have been linked to business success in new markets (McDougal and Robinson 1990).

H3: Aggressiveness positively affects profitability.

Many strategy frameworks point to the positive performance impacts of a defensive marketing orientation (e.g., Buzzell, Gale, and Sultan 1975; Kotler and Achrol 1981). Testing the defensiveness-performance link, Venkatraman (1989) finds some support for a positive relationship between a business unit's defensive posture and elements of business performance.

H4: Defensiveness positively affects profitability.

Alderson (1965) emphasizes the importance of new products, product improvements, and new markets for existing products in attaining a differential advantage and high performance levels. Two studies from the 1980s also link proactiveness (in terms of product innovation, participation in new markets, etc.) to

superior performance of American (Venkatraman 1989) and Korean (Kim and Lim 1988) businesses.

H5: *Adaptability positively affects profitability.*

Specialization is identified as a strategy for success in the marketing (Abell 1980), business policy (Hall 1980), and industrial organization economics (Porter 1980) literature. Alderson (1965) also suggests that selective communication appeals and market segmentation may serve as bases for high performance.

H6: *Specialization positively affects profitability.*

A considerable amount of work in the marketing literature suggests that businesses can improve performance by recognizing their vertical interdependence with other organizations and strategically coordinating actions with them accordingly (e.g., Childers and Ruekert 1982; McCammon 1970).

H7: *Cooperation positively affects profitability.*

RESEARCH METHODOLOGY AND MEASUREMENT PROCEDURE

A preference for perceptual data is reflected in the choice to operationalize environmental, marketing strategy, and performance variables in terms of managerial perceptions. A four-step procedure, adapted from Churchill (1979), was used to develop sets of measures for environmental, strategy, and performance variables. These steps were (1) generation of a sample of items, (2) data collection, (3) measure purification, and (4) measure assessment.

Generation of a Sample of Items

Each variable must be captured through a multi-item scale or set of items (Churchill 1979). An initial pool of items was generated through a review of marketing and business policy and strategy literature. This pool of items was evaluated by a group of six faculty and doctoral students familiar with marketing strategy concepts. The items were also translated into statements and administered to a group of business professionals. Based on these procedures, 53 potential indicators related to the eight variables were identified. These potential indicators were reviewed, modified, and translated into precisely worded statements. The survey instrument included these 53 statements.

Data Collection

Data collection was accomplished by mail questionnaire. The unit of analysis for this study is the business (a corporate division, subsidiary, or affiliate), represented by an organizational informant. Questionnaires were mailed to the Chief Executive Officers, Presidents, or General Managers of divisions, subsidiaries, or affiliates of the 530 largest American manufacturing companies (identified through *Dun's Business Rankings*). Using the *Directory of Corporate Affiliations* and the *Directory of Leading Private Companies*, a list of 4,707 manufacturing divisions, subsidiaries, and affiliates of these

530 companies was compiled. A systematic sample of 1,381 divisions, subsidiaries, and affiliates (businesses) was drawn from this sampling frame. Every third business was selected and designated as part of the sample. The head of each business was selected to serve as a key informant. The questionnaire, a self-addressed return envelope, and a personalized cover letter were mailed to each key informant. Each questionnaire contained 53 statements related to the eight study variables, as well as additional material.

A total of 388 usable questionnaires were returned, a response rate of 28.10% (388/1,381). The responses were randomly assigned to two data sets. The first data set (termed the development sample), consisting of data from 107 respondent businesses, was analyzed with the objective of purifying (or improving) measures of environmental, marketing strategy, and performance variables. The second data set (termed the assessment sample), consisting of data from 281 respondent businesses, was used both to assess measures and to test the hypothesized relationships presented above.

Measure Purification

The development sample data were analyzed with the objectives assessing the quality of measures for each variable and improving (or purifying) measures of environment, marketing strategy, and performance. Measure purification and assessment focused on internal consistency reliability, unidimensionality, convergent validity, and discriminant validity. The data analytic scheme underlying this analysis is Joreskog's analysis of covariance structures (Joreskog 1969), implemented within the LISREL framework. The 33 indicators that satisfied the various measurement criteria are identified in the Appendix.

Measure Assessment

The final stage of data analysis, again implemented within the LISREL framework, provided both an assessment of measures and testing of hypotheses. This analysis used the assessment sample data. Individual indicator reliability, composite reliability, and shared variance values provide strong support for the internal consistency reliability of each set of measures. Only eight of the 33 individual indicator reliabilities are below the generally recommended threshold level of .50, and only three are well below the threshold level. All composite reliability and shared variance values are acceptable (above the minimum recommended levels of .70 and .50, respectively). Only one of the estimated correlations among the eight latent variables is greater than .45, providing support for the discriminant validity (uniqueness) of each set of indicators. All t-values associated with parameter estimates are significant at the .05 level, suggesting that each indicator is associated with its focal latent variable. Standardized parameter estimates are large, ranging from .499 to .922. Thus, there is evidence supporting the unidimensionality and convergent validity of each set of measures.

Reliability values, estimated correlations among latent variables, and parameter estimates provide support for the construct validity of latent variables. Evidence suggests that the sets of measures adequately reflect the intended underlying variables.

RESULTS OF HYPOTHESIS TESTS

Of the seven hypothesized relationships, four are supported, one is nonsignificant ($p > .05$), and two are significant ($p < .05$) but the relationship is opposite from that hypothesized.

H1 suggests that market attractiveness has a positive impact on profitability. The LISREL results support this hypothesis ($t = 3.308$, $p = .001$). This finding is consistent with PIMS studies indicating that operating in profitable, growing markets has a positive impact on business performance. In other words, "The starting point for a winning business strategy is to pick the 'right' markets or industries in which to participate" (Buzzell and Gale 1987, p. 52).

H2 suggests that competitive position positively affects profitability. The LISREL results support this hypothesis ($t = 3.353$, $p < .001$). This finding is consistent with both the PIMS framework and portfolio model frameworks, as well as with Park and Mason's (1990) integrated model of business performance.

H3 suggests that aggressiveness positively affects profitability. The LISREL structural estimate indicates that the relationship between these two variables is significant, but in the opposite direction from that hypothesized ($t = -2.796$, $p = .003$). This finding is counter to both early PIMS studies (e.g., Schoeffler, Buzzell, and Heany (1974) and growth-share matrix prescriptions (Boston Consulting Group 1972). The result also seems in conflict with Hambrick, MacMillan, and Day (1982), who report that market share gains can be achieved without loss of current profitability. However, Capon, Farley, and Hoening (1990, p. 1157) indicate that most of the research examining the impact of market share on business performance simply suggests that "Having high market share is helpful." No clear picture has emerged concerning whether attempts to gain market share (aggressiveness) are worthwhile.

H4 suggests that defensiveness has a positive impact on profitability. The LISREL results support this hypothesis ($t = 4.398$, $p < .001$). This outcome is consistent with numerous conceptual frameworks and research findings presented in the marketing and business policy and strategy literature (e.g., Kotler and Achrol 1981; Miles and Snow 1978; Venkatraman 1989).

H5 suggests that adaptability positively affects profitability. The LISREL structural estimate supports the hypothesis ($t = 1.442$, $p = .075$). This result is consistent with frameworks presented by Alderson (1965) and Miles and Snow (1978) which identify adaptability (new products and new markets) as one route to superior business performance.

H6 suggests that specialization has a positive impact on profitability. The LISREL structural estimate suggests that the relationship between these two variables is significant, but in the opposite direction from that hypothesized ($t = -1.456$, $p = .072$). The lack of support for a positive relationship between specialization and profitability is counter to frameworks presented by Alderson (1965) and Hall (1980) which identify creation of a unique and favorable image as one route to superior business performance.

H7 suggests that cooperation has a positive impact on profitability. The LISREL structural estimate does

not support the hypothesis ($t = -0.333$, $p = .371$). This result is counter to a considerable amount of work in the marketing literature (e.g., Childers and Ruekert 1982), suggesting the need for further research examining the performance impact of an emphasis on cooperative strategic relationships.

TABLE I
HYPOTHESIS TESTS RESULTS

Relationship	Parameter Estimate	t-value	Standard Estimate
Market	0.334	3.308	0.235
Attractiveness/Profitability			
Competitive Position/Profitability	0.484	3.353	0.339
Aggressiveness/Profitability	-0.262	-2.796	-0.190
Defensiveness/Profitability	0.473	4.398	0.301
Adaptability/Profitability	0.188	1.442	0.102
Specialization/Profitability	-0.195	-1.456	-0.114
Cooperation/Profitability	-0.022	-0.333	-0.019

CONCLUSION

Table I summarizes results of the hypothesis tests. Of particular interest are the relative magnitudes of effects (shown by the standardized parameter estimates) on profitability. Competitive position and defensiveness have, respectively, about 1.4 and 1.3 times the positive impact of market attractiveness on profitability. Market attractiveness has approximately 1.2 times greater impact on business profitability than does aggressiveness (with the effects being positive and negative, respectively). The impacts of adaptability and specialization (a positive effect and a negative effect, respectively) are relatively less forceful than other significant causal effects.

These tests of relationships among variables contribute to strengthening what Cespedes (1991, p. 79) terms the "relatively thin empirical foundation" of marketing strategy research. While only four of the hypothesized relationships are supported, each hypothesis test result contributes to a better understanding of interrelationships among environmental, marketing strategy, and performance variables. These results may provide the impetus for further testing of various conceptual relationships and strategy prescriptions found in the marketing literature.

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APPENDIX

Market Attractiveness

- Ma3 Average Industry gross margin
- Ma4 Average industry pre-tax profits
- Ma5 Prospects for future profits

Competitive Position

- Cp2 Product assortment
- Cp3 Annual sales
- Cp4 Geographic areas
- Cp5 Range of customer types

Aggressiveness

- Ag1 Take customers from major competitors
- Ag3 Frequently attack major competitors
- Ag5 Marketing strategy aims to increase market share relative to major competitors
- Ag7 Marketing strategy aims to defeat major competitors
- Ag8 Marketing strategy aims to increase power in the marketplace

Defensiveness

- De3 Marketing strategy aims to encourage and simplify repeat purchases

De4 Marketing strategy aims to reduce customer exit and product/brand switching

De5 Marketing strategy aims to minimize customer turnover

De6 Marketing strategy aims to preserve existing markets

De7 Marketing strategy aims to ensure customer satisfaction and maintain markets

Adaptability

Ad3 Enter new product and market areas

Ad5 Marketing strategy aims to stimulate and meet new market opportunities

Ad6 Marketing strategy emphasizes new market opportunities

Ad7 Marketing strategy emphasizes new product/service introductions

Ad8 Marketing strategy aims to respond effectively to new market opportunities

Specialization

Sp4 Marketing strategy emphasizes brand/company identity

Sp5 Marketing strategy aims to establish perceptions of high quality for products

Sp7 Marketing strategy aims to establish a particular image for products/services

Cooperation

Co2 Achieve and/or maintain mutually beneficial relationships with distributors

Co3 Coordinate marketing objectives, plans, and programs with distributors

Co5 Marketing strategy emphasizes partnerships and alliances with distributors

Co6 Marketing strategy emphasizes shared problem solving with distributors

Profitability

Pr1 Return on sales

Pr2 Net profits

Pr3 Return on equity