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The Effect of a Market Orientation on Business Profitability

Marketing academicians and practitioners have been observing for more than three decades that business performance is affected by market orientation, yet to date there has been no valid measure of a market orientation and hence no systematic analysis of its effect on a business's performance. The authors report the development of a valid measure of market orientation and analyze its effect on a business's profitability. Using a sample of 140 business units consisting of commodity products businesses and noncommodity businesses, they find a substantial positive effect of a market orientation on the profitability of both types of businesses.

A business that increases its market orientation will improve its market performance. This proclamation has been issued continuously by both marketing academicians and marketing managers for more than 30 years (see, e.g., Kotler 1984; Kotler and Andreasen 1987; Levitt 1960; Webster 1988). Judged by the attention paid to it by practitioners and academicians in speeches, textbooks, and scholarly papers, market orientation is the very heart of modern marketing management and strategy—yet, to date, no one has developed a valid measure of it or assessed its influence on business performance. As a result, business practitioners seeking to implement a market orientation have had no specific guidance as to what precisely a market orientation is and what its actual effect on business performance may be.

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We report an exploratory study in which we develop a valid measure of market orientation and analyze its effect on business profitability. First we discuss the relationship between sustainable competitive advantage and market orientation, and why a market orientation is the business culture that most effectively and efficiently creates superior value for customers. We then set forth the hypothesized components of a market orientation and describe the tests used to establish the construct validity of the measure of market orientation. Next we discuss the expected relationship between market orientation and business profitability and also the expected relationships between eight control variables and business profitability. We specify an independent-effects model and examine the observed relationships between business profitability and market orientation and the other eight independent variables, comparing each of the observed relationships with the hypothesized relationships. After summarizing the findings, we discuss the limitations of the study and implications for future research.

Market Orientation and Performance: The Conceptual Model

For an organization to achieve consistently above-normal market performance, it must create a sustainable

competitive advantage (SCA) (Aaker 1989, p. 91; Porter 1985, p. xv). That is, it must create sustainable superior value for its customers. The logic of SCA is that for a buyer to purchase offering X, the buyer must perceive that the expected value to him of that offering (i.e., that proposed solution to his need) exceeds the expected value to him of any alternative solution. (For the analytical roots of SCA, see, e.g., Alderson 1957; Chamberlin 1933).

The value of a seller's offering to a buyer is the difference between what the buyer perceives as the offering's expected benefits and what the buyer perceives as its expected total acquisition and use costs (Zeithaml 1988). A seller, any seller, has numerous alternative opportunities for creating additional buyer value through increasing a buyer's benefits and/or decreasing a buyer's total acquisition and use costs (e.g., Forbis and Mehta 1981).

The desire to create superior value for customers and attain SCA drives a business to create and maintain the culture that will produce the necessary behaviors. Market orientation is the organization culture (i.e., culture and climate, Deshpande and Webster 1989) that most effectively and efficiently creates the necessary behaviors for the creation of superior value for buyers and, thus, continuous superior performance for the business (Aaker 1988; Kohli and Jaworski 1990; Kotler 1984; Kotler and Andreasen 1987; Peters and Austin 1985; Peters and Waterman 1982; Shapiro 1988; Webster 1988).

A market-oriented seller understands that, through the numerous means of creating additional benefits for buyers as well as the numerous types of reductions in the buyers' total acquisition and use costs, there are many potential sources of SCA (Aaker 1988; Hall 1980; Porter 1985). Thus, a market-oriented business continuously examines these alternative sources of SCA to see how it can be most effective in creating sustainable superior value for its present and future target buyers. To maximize its long-run performance, the business knows it must build and maintain a long-run, mutually beneficial relationship with its buyers. Accordingly, a market-oriented seller decides how best to share with its buyers the superior value it creates for them (Forbis and Mehta 1981; Hanan 1985; see also Jackson 1985).

We now examine the behavioral characteristics and management policies of the market-oriented business.

On the Content of Market Orientation

To develop a hypothesis of the content of market orientation that could be tested for construct validity, we first reviewed the major conceptual literature on both SCA and market orientation to identify the principal common threads (e.g., Aaker 1988; Anderson 1982; Day 1984; Kotler 1977, 1984; Levitt 1960, 1980; Ohmae 1982; Peters and Waterman 1982; Porter 1980, 1985). We infer from the literature that market orientation consists of three behavioral components—customer orientation, competitor orientation, and interfunctional coordination—and two decision criteria—long-term focus and profitability.

Customer orientation and competitor orientation include all of the activities involved in acquiring information about the buyers and competitors in the target market and disseminating it throughout the business(es). The third hypothesized behavioral component, interfunctional coordination, is based on the customer and competitor information and comprises the business's coordinated efforts, typically involving more than the marketing department, to create superior value for the buyers. In sum, the three hypothesized behavioral components of a market orientation comprehend the activities of market information acquisition and dissemination and the coordinated creation of customer value. Our inferences about the behavioral content of market orientation are consistent with findings of Kohli and Jaworski (1990). They define market orientation as the organizationwide information generation and dissemination and appropriate response related to current and future customer needs and preferences. We now examine more closely the three behavioral components and the two decision criteria in market orientation.

Specifically, *customer orientation* is the sufficient understanding of one's target buyers to be able to create superior value for them continuously (or, per Levitt 1980, to create continuously an "augmented product"). A customer orientation requires that a seller understand a buyer's entire value chain (Day and Wensley 1988), not only as it is today but also as it will evolve over time subject to internal and market dynamics.

A seller creates value for a buyer in only two ways: by increasing benefits to the buyer in relation to the buyer's costs and by decreasing the buyer's costs in relation to the buyer's benefits. A seller must understand not only the cost and revenue dynamics of its immediate target buyer firms, but also the cost and revenue dynamics facing the buyers' buyers, from whose demand the demand in the immediate market is derived. Hence, a seller must understand the economic and political constraints at all levels in the channel. Only with such a comprehensive framework can a seller understand who its potential customers are at present as well as who they may be in the future, what they want now as well as what they may want in the future, and what they perceive now as well as what they may perceive in the future as relevant satisfiers of their wants.

Competitor orientation means that a seller understands the short-term strengths and weaknesses and

long-term capabilities and strategies of both the key current and the key potential competitors (Aaker 1988; Day and Wensley 1988; Porter 1980, 1985). Paralleling customer analysis, the analysis of principal current and potential competitors must include the entire set of technologies capable of satisfying the current and expected needs of the seller's target buyers (Levitt 1960).

The third of the three behavioral components is *interfunctional coordination*—the coordinated utilization of company resources in creating superior value for target customers. Any point in the buyer's value chain affords an opportunity for a seller to create value for the buyer firm. Therefore, any individual in any function in a seller firm can potentially contribute to the creation of value for buyers (Porter 1985). Creating value for buyers is much more than a "marketing function;" rather, a seller's creation of value for buyers is analogous to a symphony orchestra in which the contribution of each subgroup is tailored and integrated by a conductor—with a synergistic effect. A seller must draw upon and integrate effectively, as well as adapt as necessary, its entire human and other capital resources in its continuous effort to create superior value for buyers. Hence, that effort is the proper focus of the entire business and not merely of a single department in it (e.g., Webster 1988).

The coordinated integration of the business's resources in creating superior value for buyers obviously is tied closely to both customer and competitor orientation. Given the multidimensional nature of creating superior value for customers, marketing's interdependencies with other business functions must be systematically incorporated in a business's marketing strategy (Wind and Robertson 1983).

When there is no tradition of interfunctional coordination in a business, effective advocacy and leadership are needed to overcome each functional area's isolation from the other functions. Achieving effective interfunctional coordination requires, among other things, an alignment of the functional areas' incentives and the creation of interfunctional dependency so that each area perceives its own advantage in cooperating closely with the others. If a business rewards every functional area for contributing to creating superior value for customers, self-interest will lead each area to participate fully (e.g., Ruekert and Walker 1987a,b; Wind and Robertson 1983). In developing effective interfunctional coordination, marketing or any other advocate department must be extremely sensitive and responsive to the perceptions and needs of all other departments in the business (e.g., Anderson 1982).

The literature suggests that a market orientation has primarily a *long-term focus* both in relation to profits (e.g., Felton 1959) and in implementing each of the three behavioral components of market orientation (e.g., Houston 1986; Kohli and Jaworski 1990). For long-term survival in the presence of competition, a business cannot avoid a long-run perspective. To prevent its competitors from overcoming whatever buyer-value superiority it has created, a business must constantly discover and implement additional value for its customers, which necessitates a range of appropriate tactics and investments. Anderson (1982) stresses that a long-run investment perspective is implicit in a market orientation.

Finally, the literature suggests that for businesses the overriding objective in a market orientation is *profitability* (or economic wealth) (e.g., Felton 1959; McNamara 1972). In their literature review, Kohli and Jaworski (1990) found, as we did, that profits are perceived as a component of market orientation; however, in their field data they found that profitability is viewed as a consequence of market orientation. We take a compromise position and hold that profitability, though conceptually closely related to market orientation, is appropriately perceived as an objective of a business. Thus, we separate both it and long-term focus from what we see to be the three behavioral components of market orientation. For nonprofit organizations the objective analogous to profitability is survival, which means earning revenues sufficient to cover long-run expenses and/or otherwise satisfying all key constituencies in the long run (e.g., Kotler and Andreasen 1987).

We turn now to the development of a valid measure of market orientation. We first hypothesize its content, then discuss the reliability and validity analyses in developing construct validity.

On Developing a Valid Measure of Market Orientation

Hypothesis of the Content of Market Orientation

We hypothesize that market orientation is a one-dimension construct consisting of three behavioral components and two decision criteria—customer orientation, competitor orientation, interfunctional coordination, a long-term focus, and a profit objective—and that each of the five can be measured reliably with a multi-item scale.

We hypothesize a one-dimension construct because the three behavioral components and two decision criteria are conceptually closely related. For a business to maximize its long-run profits, it must continuously create superior value for its target customers. To create continuous superior value for customers, a business must be customer oriented,

competitor oriented, and interfunctionally coordinated. From the literature review, we infer that the three behavioral components are, on average, of equal importance; hence, market orientation is represented in Figure 1 as an equilateral triangle.

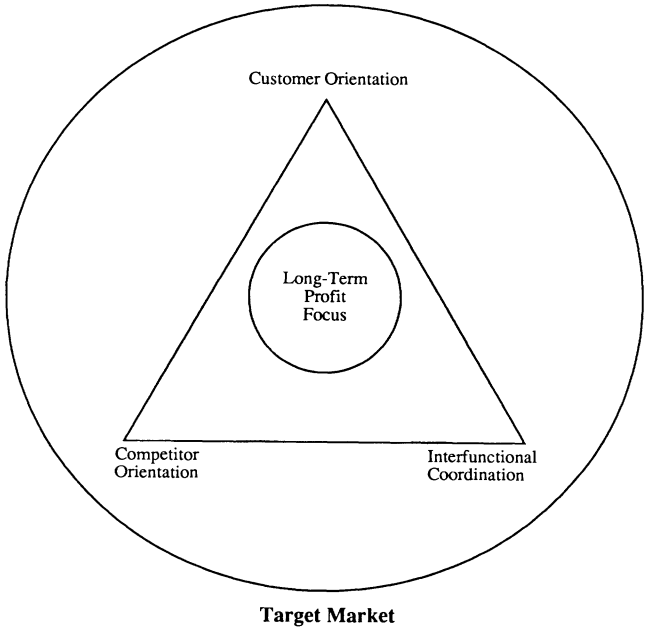
Face Validity

To establish the face validity of the construct, we developed multiple items that characterize the hypothesized five components of market orientation. We then submitted these items to a panel of three academicians who are recognized authorities on strategic marketing. They rated each item for its consistency with market orientation and also recommended additional items for inclusion. We submitted items that received a high rating or were suggested by a first-round panelist to a second panel of three academicians who are similarly recognized as authorities on strategic marketing. The items that the second panel considered to have a high consistency with market orientation were included in the instrument.

Items were phrased to describe both favorable and unfavorable practices to offset any affirmation/negation response bias. Responses were recorded on a 7-point Likert scale with a 1 indicating that the business unit does not engage in the practice at all and a 7 indicating that it engages in it to a very great extent.

The preliminary questionnaire was pretested with six current or former strategic business unit (SBU) managers in the corporation from which our sample would be drawn. In debriefing the six managers, we elicited their perception of the ambiguity and interpretation of selected items and their perception of the likelihood of any statements inducing socially or professionally desirable responses. On the basis of their comments, we refined some items and developed the final instrument.

FIGURE 1
Market Orientation



The Sample

The sampling units in the study are 140 strategic business units (SBUs) of a major western corporation. The SBUs are all in the forest products division of the corporation. An SBU is defined as an organizational unit with a defined business strategy and a manager with sales and profit responsibility (Aaker 1988). Within each SBU, the top management team was identified by the responsible group executive. Each member of the top management team received a questionnaire titled "Business Practices Survey" with questions relating to the competitive practices and strategies, competitive environment, and performance of the SBU in its principal served market. We assured respondents of their anonymity. We also used a coding scheme that precluded both us and the company managers from identifying the response of any specific individual. Heneman (1974) has shown that subjects are more likely to give unbiased responses when their anonymity is assured.

Four hundred forty questionnaires were sent. Three hundred seventy-one usable questionnaires were returned, an 84% response rate. The total of 113 SBUs (81%) with no missing data consisted of 36 commodity businesses, 23 specialty products businesses, 51 distribution businesses, and 3 export businesses. These types of businesses are described as follows.

1. Commodity businesses sell physical products such as dimension lumber, plywood, wood chips, and logs, all of which are essentially identical in quality and performance to those of competitors. In trying to create superior value for buyers, these businesses usually are unable to adapt their "generic product" (Levitt 1980); rather, they must add various customer benefits to the generic product and/or reduce the buyers' nonprice costs. The commodity businesses' customers are the corporation's wholesale distributors as well as outside retailers, both domestic and foreign.
2. Noncommodity businesses are ones that, in trying to create superior value for buyers, can adapt their generic product (or service) somewhat as well as add customer benefits to their generic product and/or reduce the customers' nonprice costs. Two types of noncommodity businesses are in the sample.
   - Specialty products businesses. Examples of products of specialty businesses are hardwood cabinets, laminated doors, oriented strand board, particle board, and roof truss systems. Their customers are national retailers, remanufacturers in the building industries, furniture manufacturers, and the corporation's own wholesale distributors.

- Distribution businesses. These merchant-wholesaler businesses within the corporation buy products primarily from within the corporation and sell them to building-supply retailers, contractors, and exporters.

Reliability Analysis

We randomly split the data into two samples before assessing reliability and validity (Churchill 1979). We conducted reliability analyses on the first sample and replicated those analyses on the second sample, then conducted tests for construct validity on the combined samples.

The scale reliability values (coefficient α) and item-to-total correlations are reported in Table 1. Reliability for the customer orientation, competitor orientation, and interfunctional coordination scales exceeds .7, the threshold Nunnally (1978, p. 245) recommends for exploratory research. However, the long-term orientation and profit objective measures do not meet this criterion, perhaps because the items are insufficient or inappropriate. Because of the low reliability scores, we cannot draw conclusions about the empirical relationship of the two decision criteria with the three behavioral components of market orientation. Whether the two decision criteria in fact are two components of a one-dimension construct, two components of a second dimension, or neither is an important question, but one that we must leave for future research (see "Limitations and Implications for Future Research"). In the following discussion of the tests of construct validity, we examine only the three behavioral components of market orientation—customer orientation, competitor orientation, and interfunctional coordination.

Given the equal conceptual importance of the three components, a business's market orientation score is the simple average of the scores of the three components. The performance variable in our analysis is a business's return on assets (ROA) in its principal served market segment over the past year in relation to the ROAs of all other competitors.

For the three components as well as market orientation and ROA, the interrater reliability is satisfactory. (The interrater reliability is measured by the average standard deviation of each top management team, which indicates the extent of dispersion in responses.) For all businesses in the sample, the average standard deviations of the top management teams (7-

TABLE 1
Reliability Analysis

Item	Sample 1 (N = 190) Cronbach Alpha	Sample 1 (N = 190) Item-to-Total Correlation	Sample 2 (N = 175) Cronbach Alpha
Customer Orientation	.8547		.8675
Customer commitment		.7021	
Create customer value		.6580	
Understand customer needs		.6717	
Customer satisfaction objectives		.6517	
Measure customer satisfaction		.6342	
After-sales service		.5794	
Competitor Orientation	.7164		.7271
Salespeople share competitor information		.5466	
Respond rapidly to competitors' actions		.5908	
Top managers discuss competitors' strategies		.5421	
Target opportunities for competitive advantage		.3612	
Interfunctional Coordination	.7112		.7348
Interfunctional customer calls		.4090	
Information shared among functions		.4775	
Functional integration in strategy		.6618	
All functions contribute to customer value		.5060	
Share resources with other business units		.3171	
Long-Term Horizon	.4775		.4080
Quarterly profits are primary objective		.3382	
Require rapid payback		.3020	
Positive margin in long term		.2613	
Profit Emphasis	.1398		.0038
Profit performance measured market by market		.1021	
Top managers emphasize market performance		.1366	
All products must be profitable		−.3463	

point scale) are customer orientation .360, competitor orientation .402, interfunctional coordination .321, market orientation .280, and ROA .705.

Construct Validity

Evidence of construct validity is present when the pattern of correlations among variables conforms to what is predicted by theory (Cronbach 1970, p. 143; Kerlinger 1973, p. 463). We examined with simple correlation and factor analysis the relationships among the three behavioral core market orientation components and their relationships with three other management policy variables that are conceptually linked to market orientation. The management policy variables are human resources management policy, differentiation-based competitive advantage, and low-cost-based competitive advantage. The items in these scales, and the reliability values and item-to-total correlations for these scales, are reported in Table 2.

We advance three propositions about the theoretical relationships among the variables. The propositions relate respectively to convergent validity, discriminant validity, and concurrent validity. Each proposition is implicit in the preceding theoretical discussion.

TABLE 2
Scale Descriptions for Management Policy Variables

	Total Sample	
Item	**Cronbach Alpha**	**Item-to-Total Correlation**
Human Resources Management	.8122	
Effective personnel policies		.6034
Optimize turnover		.5029
Improve attitudes		.6774
Reward creativity		.5164
Effective grievance procedures		.5366
Stimulate employee education		.6332
Differentiation-Based Competitive Advantage	.8259	
Introduce new products		.7203
Differentiate products		.6665
Offer broad product line		.6022
Utilize marketing research		.6181
Low-Cost-Based Competitive Advantage	.7624	
Lower manufacturing costs		.5636
Modernize manufacturing		.4301
Improve plant layout		.5100
Increase capacity utilization		.6352
Perform raw material value analyses		.4632
Improve raw material access		.4817

P_1: Convergent validity. There is a strong correlation among the three components of market orientation.

A strong correlation among the three components of market orientation indicates that they are converging on a common construct, thereby providing evidence of convergent validity. All of the correlations exceed .67 and are all significant at $p < .001$ (Table 3). Convergent validity is suggested also by the high Cronbach alpha (.8810) attained when the scores on the three scales are combined into one scale and by the one-factor solution in an exploratory factor analysis (eigenvalue = 7.1, 44.8% of the variance explained).

P_2: Discriminant validity. The correlation between interfunctional coordination and human resource management policy is substantially less than the correlations between interfunctional coordination and the other market-orientation components.

To assess discriminant validity, we included in the questionnaire a scale for measuring human resource management policy (Hitt and Ireland 1986). This scale was developed to assess the importance that a business organization attaches to policies and activities for recruiting, motivating, and rewarding employees. Human resource management policy and interfunctional coordination are both "people management" policies. To affirm that customer orientation, competitor orientation, and interfunctional coordination are measuring market orientation instead of some general halo describing good management, the correlation between human resource management policy and interfunctional coordination should be substantially less than the correlation between interfunctional coordination and either customer orientation or competitor orientation.

The results of the test for significant differences between dependent correlations (Cohen and Cohen 1975, p. 53) in Table 4 demonstrate that the correlation between human resource management policy and interfunctional coordination is significantly less than the correlations between interfunctional coordination and the other market orientation components. These results provide support for the discriminant validity of the three-component market orientation construct.

P_3: Concurrent validity. The correlations between the market orientation components and differentiation strategy exceed their correlations with low-cost strategy.

Porter (1980) characterizes the sources of competitive advantage as low cost or differentiation. In practice, at any time, businesses may emphasize either or both (Hall 1980). In the Porter conception (1980,

TABLE 3
Correlation Analysis: Market Orientation, Management Policy, and ROA Scales

	CUSTO	COMPO	COORD	MKTOR	HRM	DIFF	LOCOST	ROA
CUSTO	—							
COMPO	.7353[a]	—						
COORD	.7210[a]	.6564[a]	—					
MKTOR	.9120[a]	.9047[a]	.8699[a]	—				
HRM	.4366[a]	.2686[b]	.5308[a]	.4561[a]	—			
DIFF	.4424[a]	.4482[a]	.3261[a]	.4540[a]	.1630[c]	—		
LOCOST	.2676[b]	.1766[c]	.3243[a]	.2767[b]	.5704[a]	.2276[b]	—	
ROA	.3029[a]	.3892[a]	.2287[b]	.3454[a]	.0321	.1677[c]	.0856	—

[a]$p < .001$.
[b]$p < .01$.
[c]$p < .05$.

TABLE 4
t-Test of Significance of Differences Between Dependent Correlation Coefficients

Variable	r	t[a]	p (one-tailed)
HRM-COORD	.5308	−1.749 (n = 126)	<.05
COMPO-COORD HRM-COORD	.6564 .5308	−3.045 (n = 125)	<.005
CUSTO-COORD DIFF-MKTOR	.7210 .4540	1.790 (n = 123)	<.05
LOCOST-MKTOR	.2767		

[a]The t-statistic is computed according to a formula given by Cohen and Cohen (1975, p. 53).

p. 37), approaches to differentiation (which we interpret to be additional "product" benefits) can take many forms, including brand image, product features, customer service, dealer network, and technology. These differentiation effects are essentially external—that is, each is an attempt to shift a business's demand curve upward. In contrast, a low cost advantage, which is internal efficiencies that can be passed on to buyers as lower acquisition and use costs, relies on economies of scale, volume, and scope that result in cost reductions in such activities as R&D, production, service, salesforce, and advertising.

It seems reasonable that a differentiation strategy, being an external emphasis, is more likely to be pursued by an SBU with a strong market orientation than a low cost strategy, which is not necessarily an external emphasis. A higher correlation between the three market orientation components and differentiation strategy than between those components and low cost strategy would provide support for the concurrent validity of the market orientation construct.

Previous studies have identified activities associated with differentiation and low cost strategies (Dess and Davis 1984; Galbraith and Schendel 1983). On the basis of activities identified in these studies, we developed scales to measure the extent to which these two strategies are used. Respondents were asked to rate the importance of competitive activities on a 7-point Likert scale. Reliability values for the scales exceed .75 and their intercorrelation is .304 ($p < .001$). The correlation of market orientation with differentiation strategy is .45 and with low cost strategy is .28. The difference between the correlations is significant at $p < .05$ (Table 4). The results support the concurrent validity of the three-component market orientation construct.

In summary, we find evidence of convergent validity, discriminant validity, and concurrent validity, and thus we find support for the construct validity of the three-component model of market orientation. We now examine the relationship of the three-component market orientation construct to business performance.

The Effect of Market Orientation on Business Performance

Measurement of Market Orientation and Business Profitability

As the theory of market orientation suggests that the three behavioral components are equally important, we assume equal weights for the three components. Accordingly, we compute an SBU's score for market orientation as the simple average of the sums of scores of the responses of its top management team on the three components: customer orientation, competitor orientation, and interfunctional coordination.

An SBU's profitability is measured as the top managers' assessment of the SBU's return on assets (ROA) in relation to that of all other competitors in the SBU's principal served market over the past year. Respondents were asked to consider return on investment, return on assets, and return on net assets as equivalent, for the respondents were to compare their SBU's profitability with that of their competitors in their principal served market. Relative performance

was used to control for performance differences among the SBUs' served markets. Subjective measures of performance commonly are used in research on private companies and on business units of large companies. Previous studies have found a strong correlation between subjective assessments and their objective counterparts (e.g., Dess and Robinson 1984; Pearce, Robbins, and Robinson 1987).

Expected Relationships Between Market Orientation and Profitability

We hypothesize that the greater a business's market orientation, the greater the business's profitability will be, other things being equal. In particular, we expect to find a general positive relationship between market orientation and business profitability within all three types of businesses in the sample (commodity, distribution, and specialty businesses). We do not expect to find the same *form* of the relationship among the three types of businesses.

As we discuss subsequently, a monotonically increasing relationship between market orientation and business profitability is most likely for the distribution and specialty businesses and least likely for the commodity businesses. In general, it is easier for the former to implement the three components of market orientation. We therefore expect distribution and specialty businesses to be able to implement a market orientation as a continuous process, thus achieving approximately proportionate gains in ROA.

In the forest products industry, sellers of commodity products such as dimension lumber and plywood traditionally have created value for buyers by offering lower prices for a given quality of product, and the retail dealers and other commercial buyers have shopped actively among the various sellers for the best price-driven value. Today, to some degree, virtually all forest products companies understand that they *can* create superior value for buyers of commodities on a basis other than price. Nevertheless, they differ greatly in their success in implementing non-price-based buyer-value strategies.

A commodity business, especially in a tradition-bound industry such as forest products, may maintain an internally oriented perspective of itself, including a "price-auction" marketing strategy. A forest products company with an internal orientation sees itself to be in "the business of selling lumber," rather than in "the business of identifying and satisfying buyers' needs." Certain business policies may reinforce an internal orientation and the concomitant price-based strategies.

To market their products, some forest products companies rely primarily on field salesforces to call on the retail dealers and other prospective customers, whereas other companies rely more heavily on a sales-center approach. In a sales-center approach, most of the contact with prospective and current customers is by telephone.

Clearly, a seller in any industry must maintain a current and thorough understanding of a buyer's business if the seller is to continue to create superior value for the buyer—that is, to continue to discover and implement profit-improvement programs for the buyer (e.g., Hanan 1985). The most effective way for a seller to discover opportunities to increase buyer value is to visit a buyer's business and the buyer's customers frequently.

In a commodity business it is more difficult to create superior value for buyers through a telemarketing approach than through a field salesforce approach. There are two principal reasons. First, over the telephone a seller has more difficulty identifying value-increasing opportunities that the buyer has *not* already thought of. A seller who learns of the buyer's needs only when the buyer identifies them operates more in a reactive mode and hence necessarily in a more buyer-price-driven mode. The second reason is that a telephone approach to selling may increase the price sensitivity of buyers. In a telephone approach the seller has more difficulty conveying fully the buyer's total benefits from the seller, the buyer's total transaction costs, and hence the seller's total value to the buyer. A buyer who loses sight of the seller's total value tends to place excessive attention on tag price—that is, to compare sellers' tag prices and not sellers' total value to the buyer.

Commodity businesses that use a telemarketing approach can, through a carefully integrated team effort, create superior value for buyers. However, telemarketing is simply a more difficult approach with which to accomplish it.

The commodity businesses of the subject company use a sales-center/telemarketing approach proportionately more than any of the company's major competitors. Hence, from the preceding argument and other things being equal, the commodity businesses are at a disadvantage in relation to their competitors in creating superior value for buyers. Within the company itself, the commodity businesses are less effective than the specialty and distribution businesses (neither of which uses a sales-center/telemarketing approach) in creating superior value for buyers, other things being equal. Therefore, given the commodity businesses' remoteness from buyers and their necessarily more price-oriented marketing strategy, we expect the commodity businesses in the subject company to have a lower mean score on market orientation as well as a lower mean score on each of the three components of market orientation than either the specialty or distribution businesses. We also expect the commodity

businesses to have a lower average relative profitability than either the specialty or distribution businesses. The data in Table 5 are consistent with these expectations.

Among the commodity businesses, we expect those having the lowest mean market orientation scores to include many of the largest businesses, because they may perceive that increasing their market orientation could be substantially costly and thus unattractive, at least in the short run. To increase its market orientation, a commodity (or any) business must be consistent and pervasive in adapting all of its systems to be customer and competitor oriented and effective in coordinating interfunctional efforts to create customer value. Because of their traditional internal orientation, some of the commodity businesses are likely to be "stuck in the middle." That is, they will be tentative in adopting a market orientation. They will initiate some of the appropriate steps, but will not undertake them in sufficient magnitude or with sufficient persistence or quality to create a truly different culture. Consequently they will give mixed messages both internally and externally.

The implication is that for commodity businesses the relationship between market orientation and profitability may well be U-shaped, with the low and high market orientation businesses showing a higher profitability than the businesses in the midrange of market orientation. In particular, we expect the business with the highest market orientation to have the highest profitability and those with the lowest market orientation to have the second highest profitability. The explanation for this apparent paradox is that the businesses lowest in market orientation, that is, the most internally oriented businesses, may be very consistent and efficient in what they do. As a result, they may be able, through a low cost strategy, to achieve some profit success, though not the profit success of the businesses that have the highest market orientation. To isolate the effect of market orientation on business profitability, one must control for the other major factors that may affect businesses' profitability, which we now consider.

Controlling for Other Influences on Business Profitability

Industrial organization and marketing strategy literatures place considerable emphasis on eight situational variables that may affect a business's profitability (see, e.g., Aaker 1988; Bain 1959; Day 1984; Scherer 1980). These situational variables must be controlled in analyzing the effect of a market orientation on a business's profitability.

The relationships among the primary elements in the theory of market orientation—the components of market orientation, the business-level and market-level variables, and performance—are shown in the independent effects model (Boal and Bryson 1987) in Figure 2. The first control variable is buyer power (Porter 1980; Scherer 1980). Buyer power is the degree to which a buyer can negotiate lower prices or, in general, a higher value from a seller. The traditional point of view is that buyers and sellers are "opponents," and each attempts to extract from the other a maximum contribution to its own profit. Hence, adopting the traditional perspective and with other things being equal, we hypothesize a negative relation between buyer power and a business's profitability.

Supplier power (Porter 1980; Scherer 1980) is the second control variable. It is the degree to which a supplier can negotiate higher prices or, in general, a higher value from a buyer. Taking the traditional perspective that buyers and sellers are opponents and that every seller wants to extract from every buyer the maximum possible contribution to the seller's profits, we hypothesize a negative relation betwen the power of a supplier and a business's profitability.

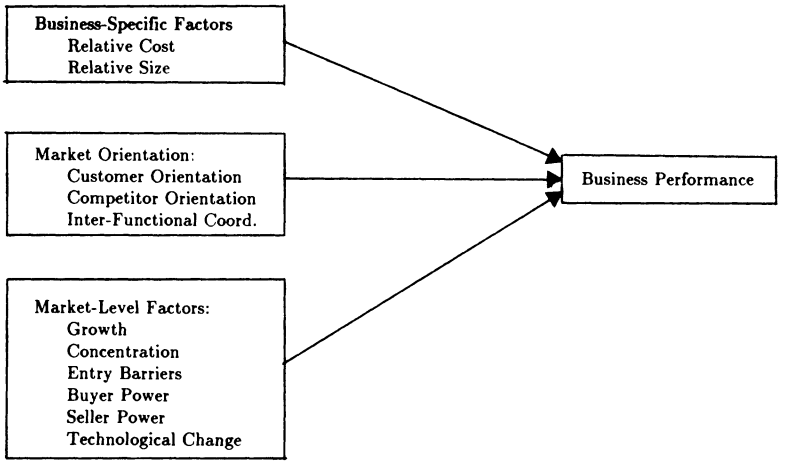
The third control variable is seller concentration (Bain 1959; Scherer 1980). Seller concentration, conventionally, is the degree to which sales in a market are accounted for by the four or eight firms with the largest sales. Two unrelated reasons are advanced for

TABLE 5
Means and Ranges by Type of Business (1–7 scale)

	Type of Business			Noncommodity Business Means[a]
	Commodity	Specialty	Distribution	
CUSTO	4.53 (2.8–5.8)	5.05 (3.7–6.0)	4.99 (3.4–6.1)	5.01[b]
COMPO	4.06 (2.8–5.3)	5.71 (3.3–5.8)	4.92 (3.4–6.6)	4.85[b]
COORD	4.25 (2.6–5.4)	4.53 (3.2–5.7)	4.38 (3.3–5.8)	4.43[c]
MKTOR	4.28 (2.7–5.4)	4.77 (3.4–5.7)	4.76 (3.4–6.0)	4.76[b]
ROA	4.00 (1–6.5)	4.65 (1–7)	4.71 (1–7)	4.69[b]

[a]Specialty and distribution businesses combined. P value is based on t-test of differences in means between commodity and noncommodity businesses.
[b]$p < .01$.
[c]$p < .10$.

FIGURE 2
Independent Effects Model of Relationships Between Market Orientation, Business-Specific Factors, Market-Level Factors, and Performance



why seller concentration, especially at high levels, may be associated with high profitability. One is that a high concentration of sellers may encourage tacit or explicit joint-maximizing monopoly behavior. A business that is not among the four largest sellers can benefit from the "profit umbrella" that is created if the four largest firms behave in accordance with this first explanation (Demsetz 1974). The other reason is that high seller concentration may be a proxy for the firms with the largest sales capturing substantial scale and volume economies. In this perspective, seller concentration implies benefits to a business only if the business is among the four largest sellers (an accurate assumption for the businesses in our sample.) Implying either or both of these explanations, we hypothesize a positive relation between seller concentration and a business's profitability.

Ease of entry of new competitors (new sellers) into the market is the fourth control variable (Bain 1959; Porter 1980; Scherer 1980). Ease of entry is defined as the unique incremental costs required of a firm to enter and become competitively viable in the market. The greater the ease of entry, the greater is the competitive pressure from both current competitors and potential entrants. We hypothesize a negative relation between ease of entry and a business's profitability.

Rate of market growth is the fifth control variable (Scherer 1980). In principle, when market demand is growing, it is easier for all sellers to acquire and retain customers and earn profits. However, there are four reasons why a business may not profit from short-run demand growth. The first is that some of the short-term demand change is unexpected and a business may be unprepared to respond. The second is that a considerable amount of a business's production and marketing capacity in the short term may be fixed in quantity and quality, and therefore adjustments to demand changes are slow. The third is that if there is easy entry by new sellers, when market demand increases new competitors will easily enter, capture some of the profits, and drive profitability to a negative level. If exit barriers are low as well, the new competitors depart when the market demand decreases, only to enter again upon the next increase in market demand. The fourth reason is that a business may choose to "capture" its gains from short-run demand increases in the form of increased sales at current prices, thus increasing short-run ROA less than it could by raising prices in the face of a demand increase. Clearly the relationship between short-run market growth and ROA is conjectural. However, we follow convention and hypothesize a positive relationship between market growth and a business's profitability.

Rate of technological change is the sixth control variable (Scherer 1980). The greater the technological change in a market, the more diverse will be the opportunities to create value for buyers. However, the investment required for successful R&D and implementation of a new technology may be substantial and in the short term may produce negative profits. We expect the latter factor to outweigh the former in the short run, and therefore hypothesize a negative relation between short-term technological change and profitability.

The seventh control variable is the size of a business in relation to its largest competitor in a market (Scherer 1980). This variable implies the advantages associated with a large relative market share. The relative size variable potentially captures some revenue as well as some cost effects. We hypothesize a positive relation between a business's relative size advantage and its profitability.

The average total operating cost of a business in relation to that of its largest competitor is the eighth control variable (Scherer 1980). In contrast to the relative size variable, the relative cost variable captures only cost advantage effects. The variable measures the difference in the average of all operating costs. We hypothesize a positive relation between a cost advantage for a business and the business's profitability.

Empirical Model

Each of the variables was measured with a 7- or 8-point Likert scale and each is defined as follows.

Dependent variable

Relative return on investment (ROA). An SBU's ROA in its principal served market segment over the past year in relation to the ROAs of all other competitors.

Independent variables

1. Market orientation (MKTOR). The simple average of an SBU's scores on customer orientation, competitor orientation, and interfunctional coordination. Expected sign: positive (+).
2. Square of market orientation (SQMKTOR). The square of an SBU's market orientation score. To test for nonlinearity in the market orientation–ROA relationship among commodity businesses. Expected sign: positive (+).
3. Buyer power (BPOW). The extent to which the customers of an SBU are able to negotiate lower prices from it. Expected sign: negative (−).
4. Supplier power (SPOW). The extent to which an SBU is able to negotiate lower prices from its suppliers. Expected sign: positive (+).
5. Seller concentration (CONC). In an SBU's principal served market segment, the percentage of total sales accounted for by the four competitors with the largest sales (including the SBU if appropriate). Expected sign: positive (+).
6. Ease of entry (ENTRY). The likelihood of a new competitor being able to earn satisfactory profits in an SBU's principal served market segment within three years after entry. Expected sign: negative (−).
7. Market growth (MGRO). Over the past three years, the average annual growth rate of total sales in an SBU's principal served market segment. Expected sign: positive (+).
8. Technological change (TCHG). The extent to which production/service technology in an SBU's principal served market segment has changed over the past three years. Expected sign: negative (−).
9. Relative size (RSIZE). The size of an SBU's sales revenues in its principal served market segment in relation to those of its largest competitor. Expected sign: positive (+).
10. Relative costs (RCOST). An SBU's average total operating costs (administrative, production, marketing/sales, etc.) in relation to those of its largest competitor in its principal served market segment. Expected sign: negative (−).

Empirical Results

Ordinary least squares regression analysis was used to test the hypothesis that market orientation and performance are associated positively.[1] The sample of 110 SBUs used in the regression analysis consists of 36 commodity businesses, 23 specialty products businesses, and 51 distribution businesses. The specialty products and distribution businesses are combined into one category, noncommodity businesses. Dummy variables are used to control for differences between the commodity and noncommodity businesses. We use dummy variables in a single regression because of the small sample size of the commodity businesses. Table 6 presents the regression results.

In Table 6, where there is a statistically significant difference between the regression coefficients for the two types of businesses, both regression coefficients are shown. The coefficient of market orientation is significant for the noncommodity businesses ($p \leq .05$), supporting the hypothesized monotonically increasing relationship between market orientation and ROA. We did not include a squared market orientation term for noncommodity businesses because we hypothesized a monotonically increasing relationship between market orientation and ROA. The coefficient of the square of market orientation is significant for the commodity businesses ($p \leq .05$), which, as hypothesized, suggests a nonlinear relationship between market orientation and ROA. The nonlinear relationship is consistent with the expectation that commodity businesses with a medium market orientation will earn a lower ROA than commodity businesses that have either the least or the most market orientation. We return to this point shortly.

Five of the eight control variables' coefficients are significant at $p \leq .05$. (We calculated the variance inflation factor, which indicated no multicollinearity problem among the nine independent variables.) The signs on the coefficients of market growth and buyer power are opposite the hypothesized signs. The negative sign on the coefficient of market growth sug-

[1]The distribution of the regression residuals is similar to the distribution of the individual variables, that is, it has no "tails" and is more centered than a normal distribution. Also, the error terms are more likely to be skewed to the left than to the right. However, the deviation from the shape of the normal distribution does not suggest any clear form of trnsformation that would be an improvement. Many of the variables of interest are continuous data. However, the respondents reported the data in ordinal scales (7-point) or in truncated interval scales instead of in their actual values, the effect being to narrow the distribution of the data. As is well known, with truncated data ordinary least squares (OLS) regression analysis may approximate the relationship more precisely over the middle range of values than at the extremities of the data. The other usual caveats about OLS apply.

TABLE 6
Effect of Market Orientation on ROA (separate coefficients are shown when there is a significant difference between them; standard errors in parentheses)

	MKTOR	SQMKTOR	RSIZE	ENTRY	RCOST	CONC	MGRO	SPOW	BPOW	TCHG	CONSTANT	N	$\bar{R}^2$
Expected sign	+	+	+	−	−	+	+	+	−	−			
Commodity businesses	−7.632[b] (3.390)	.856[b] (.393)							1.245[a] (.273)		19.266[a] (7.251)		
Combined sample			.192[b] (.082)	−.035 (.132)	−.583[a] (.114)	.030 (.119)	−.305[a] (.086)	.110 (.149)		−.280[b] (.127)		110	.410
Noncommodity businesses	.501[b] (.223)	—							−.104 (.206)		6.056[a] (1.808)		

[a] $p \leq .01$.
[b] $p \leq .05$.

gests that the SBUs in the sample, for one or more of the four reasons advanced before, earned lower profits than their competitors with respect to the three-year market growth rate in their principal served market.

For commodity businesses, buyer power has a large and significant ($p \leq .01$) positive coefficient. This result is inconsistent with the conventional assumption of the industrial organization literature (but not that of the marketing literature) that buyers and sellers are "opponents." It is not difficult to explain how buyer power could add to the ROA of commodity SBUs. Many commodity businesses, even those that are internally oriented, are attentive to buyers' needs when powerful buyers command their attention. The result is a profitable partnership between efficient commodity businesses and powerful buyers. This explanation is consistent with Barrett's (1986) finding that buyer concentration is an important determinant of a seller's close attention to buyers' needs.

To provide more insight into the nonlinear relation between market orientation and ROA among the commodity businesses, we divided the commodity businesses into three groups based on their market orientation scores: low (N = 15), medium (N = 14), and high (N = 16). The sample size in each group is too small for a multiple regression analysis. We tried an oblique-rotation factor analysis of the independent variables to reduce the set, but did not get covergence. We therefore ranked the means of the independent and dependent variables for the three groups of commodity businesses and tested for significant differences. The results are reported in Table 7.

Among the three groups of commodity businesses, the differences in both the mean overall scores for market orientation and the scores of the three components are significant. As expected, the high market orientation group has the highest ROA, and it is significantly different from that of the medium group. The difference in ROA between the low and medium groups is significant as well. We also examined the relationship of market orientation to another dependent variable, customer retention rate. This variable measures the success of an SBU in retaining its customers in relation to the customer-retention success of its principal competitors in its principal served markets. An SBU's score on customer retention rate is the average of its top managers' responses on this item. Not surprisingly, the businesses with the highest market orientation have the highest customer retention rate, a rate significantly higher than that of either the medium or low market orientation businesses. The businesses with the lowest market orientation have the lowest customer retention rate.

The data in Table 7 imply that the high market orientation group has created barriers to entry. The data also suggest that this group of businesses is excellently managed. They have the highest score on both

TABLE 7
Rankings of Means[a] and t-Test of Differences in Means for Commodity Businesses (low, medium, and high MKTOR)

Variable	Low MKTOR (N = 15)	Medium MKTOR (N = 14)	High MKTOR (N = 16)
ROA	2[c] (vs. med.)	3[c] (vs. high)	1
MKTOR	3[b]	2[b]	1[b] (vs. low)
CUSTO	3[b]	2[b]	1[b]
COMPO	3[b]	2[b]	1[b]
COORD	3[b]	2[b]	1[b]
Absolute size	1[d]	3	2[c]
Ease of entry	1[c]	2	3[d]
4-firm concentration	3	2[(.12)]	1[d]
Power over supplier	1[c]	3	2
HRM	3	2[c]	1[c]
SD MKTOR (TMT consensus)	2	3[(.15)]	1
Customer retention rate	3	2[c]	1[b]
TMT average years in SBU	1	2	3[c]

[a] 1 = top ranking.
[b] $p \leq .01$.
[c] $p \leq .05$.
[d] $p \leq .10$.

human resource management and top management team consensus (the standard deviation of the top management team members' scores on market orientation). Moreoever, the top management teams of the high market orientation businesses have the shortest longevity. One therefore can infer that they are perhaps the most able and willing to adapt, especially to undertake the pervasive changes required in substantially increasing a market orientation.

The "stuck in the middle" medium group occupies the middle ranking in almost all cases. One notable exception is their bottom ranking on top management team consensus on market orientation. The difference between the medium group's score on this variable and that of the high group, though significant at only the .15 level, offers an important possible explanation for the medium group's low market orientation and, thus, performance. Also, the medium group appears to consist of the smallest businesses and to have the least power over suppliers.

We mentioned that large businesses may be the most reluctant or the least able to adopt a market orientation. Consistent with that expectation, commodity businesses in the low group are the largest in absolute size. Their lack of market orientation also may be due in part to a greater management longevity. The top management teams in the low group have the highest average number of years in their SBUs. In addition, the low group ranks lowest on human relations management, with a score significantly different from that of the high group. The low human resource management score coupled with the low score on interfunctional coordination (and on the other two dimensions of market orientation) suggests that the human resource management skills in the low group may be inferior to those of the high group. The low group faces the easiest entry of new competitors, a condition that may be due in large part to the low market orientation of the low group businesses.

These findings complement the findings of the regression analysis, namely that among both commodity businesses and noncommodity businesses, market orientation is strongly related to profitability. The data imply that the commodity businesses with the greatest market orientation have substantial control over their markets, for example, success in retaining customers and raising entry barriers. The findings also suggest that commodity businesses of varying degrees of market orientation work with strong buyers to form noncoercive, mutually profitable partnerships. The general implication is that the commodity businesses with the highest degree of market orientation successfully pursue both differentiation and low cost strategies. This implication holds equally for the noncommodity businesses.

Discussion

The findings support our hypothesis that for both the commodity and noncommodity businesses, market orientation is an important determinant of profitability. Among the noncommodity businesses, the positive relationship between market orientation and a business's profitability appears to be monotonic, whereas among the commodity businesses a positive market orientation/profitability relationship is found only among businesses that are above the median in market orientation.

For both commodity and noncommodity businesses, relative costs appear also to be an important determinant of profitability. Thus, on average, both types of businesses can pursue either or both differentiation and low cost strategies.

The results suggest that market growth is an important determinant of profitability for both types of businesses, but the relationships differ. For noncommodity businesses, short-term market growth presents a profitable opportunity, whereas for commodity businesses, which in general are less adaptable than the noncommodity businesses, short-term market growth appears to reduce profitability.

One can infer that the commodity businesses that are substantially market oriented are able to initiate value-increasing programs with powerful buyers to effect a mutually profitable outcome. Indeed, the commodity businesses that are best able to create superior customer value may even create an economic dependency on the part of otherwise strong buyers.

The more basic issue is how common among all types of businesses is the nonlinear relationship between market orientation and profitability that we observe among the commodity businesses. We suspect that it may be rather common. The forest products industry is by no means unique in comprising a product/technology-oriented culture. Business units within organizations that reflect such a culture will increase their market orientation only haltingly and unevenly. We therefore might expect numerous industries—especially basic industries as well as long-established technology-driven industries—to have some form of the U-shaped market orientation/profitability relationship. The likelihood is even greater if the businesses in these industries rely heavily on a sales center/telemarketing approach. The key question is how willing and able companies are to move effectively and efficiently through the stages of culture change to the high profitability of a fully implemented market orientation.

We stress that market orientation comprises a continuum (see also Kohli and Jaworski 1990). We observe in our research that the businesses having the

highest degree of market orientation are associated with the highest profitability. However, none of these businesses has attained the maximum possible market orientation score. Are these businesses now in equilibrium or are they continuing to increase their market orientation? A basic law of economics applies: for every business, at some point the incremental costs to increase its market orientation will exceed the incremental benefits. Is that point at or near the maximum possible market orientation, or is it well short of it? Are there some market environments in which businesses, on average, will move toward a high degree of market orientation and others in which, on average, they will stop at a much lower degree of market orientation? If so, what are the characteristics of the respective environments? We return to these issues in discussing important questions for future research.

From the theory of market orientation and the implications of our research, we hold that market orientation is relevant in every market environment. We thus take issue with Miles and Snow (1978), for example, who imply that a market orientation in some environments is simply uneconomic. The appropriate question is not market orientation *per se*, but rather what a business perceives to be its optimal degree of market orientation within its current and expected market environment.

Limitations and Implications for Future Research

Restricting our study to one large corporation confers both advantages and limitations. One advantage is that with the uniformly strong support we received from the corporation's managers, we had easy access to multiple, knowledgeable respondents in the SBUs. We also obtained a very high response rate, which would have been more difficult had we examined the same number of stand-alone businesses.

The most important potential limitation in using SBUs from one corporation is that a pervasive corporate orientation could overwhelm differences in individual SBU orientations. However, this potential problem apparently did not occur in our study, for we found a considerable variation in responses. On the 7-point scale, the range of responses was from 2.8 to 6.1 for customer orientation, from 2.8 to 6.6 for competitor orientation, and from 2.6 to 5.8 for interfunctional coordination (see Table 5 for details). The variation in responses indicates that, for the three hypothesized components of market orientation, no pervasive corporate culture constrained perceptions.

The logic of market orientation implies that the behaviors implicit in the three components include a sensitivity and responsiveness to all societal marketing aspects that may affect a business's long-run performance. However, the scales for customer orientation, competitor orientation, and interfunctional coordination developed here do not include items representing societal marketing (e.g., Kotler 1984).

In our exploratory study, internal validity considerations often took precedence over external validity and the results, though strong, are necessarily limited in their generalizability. Future studies will increase the understanding of the construct by adopting the following three research design suggestions.

1. *Multiple corporations as the sampling frame*. Though the access to the top management teams of the respondent SBUs and the high response rate were very desirable in terms of reliability, future studies might focus on a larger sample of organizations to assess the robustness of the market orientation/performance relationships found in our study.
2. *Expanded sample of industries*. A wide variety of market structures characterize the operating environments of the SBUs in our study, but the SBUs all compete in the same broadly defined industry. Future studies might examine whether the relationships we found are present in high technology industries, service industries, and the international environment.
3. *Longitudinal research design*. The cross-sectional nature of the data in our study restricts conclusions to those of association, not causation. The development of a time-series database and testing of the market orientation/performance relationship in a longitudinal framework would provide more insight into probable causation.

In addition to the preceding suggestions for modifying the research design, future research might also address the following six comprehensive issues pertaining to market orientation.

Measurement of profit orientation and long-range focus. Our attempt to develop a valid measure of profit orientation and long-range focus as part of a one-dimension construct of market orientation was unsuccessful. Future studies might address this issue by including additional items that represent these constructs and testing their relationship with the three-component model of market orientation and with a business's performance.

Other performance measures. It would be useful to test the relationship of market orientation to additional performance measures that may affect long-term profitability. For example, what is the relationship of market orientation to customer retention, new product success, and sales growth?

Balance among the components of a market orientation. In addition to further examining the effect of the magnitude of market orientation on business performance, future studies should examine the effect of the proportions of the components within a given

magnitude of market orientation. Some authors (e.g., Peters and Austin 1985; Peters and Waterman 1982) suggest that customer orientation is the most important component of a market orientation. The implication is that a given magnitude of market orientation highly skewed to a customer orientation would outperform one in which the three components are more nearly equal. An important research question is whether for a given magnitude of market orientation an approximate equality of the components produces, on average, superior profitability over a substantial inequality of the components, other things being equal.

Day and Wensley (1988) suggest that the relative emphasis on customer orientation versus competitor orientation depends on features of the competitive environment. This also is an important issue for study.

Societal marketing dimensions. The implication of a given magnitude of market orientation is that a business is, to that extent, sensitive and responsive to any stakeholder or issue that may affect its long-run performance. In addition to explicit constraints on its performance (such as antitrust regulation and consumer advocacy) to which a market-oriented business would tend to respond, a business is guided by its ethical value system and its perception of social responsibility.

Three societal marketing issues warrant examination. First, it would be interesting to include in the scales comprising customer orientation, competitor orientation, and interfunctional coordination items representing societal marketing dimensions to see whether they correlate highly with the other items in the scale. Second, the relationship between the degree of a business's market orientation and the extent of its "social responsibility" behavior could be examined. One might expect that in being externally oriented, as is the general implication of market orientation, a business would not only be sensitive to external publics but even anticipatory of their concerns. Thus, in general, is there a relationship between market orientation and "good citizenship?" Third, a parallel expectation holds with respect to internal publics. As we see in the analysis of the commodity businesses, the data suggest a positive relationship between market orientation and the quality of human resource management. There may well be a strong relationship between a business's degree of market orientation and the general quality of its management. This possibility should be examined further.

Determinants of market orientation. What are the market-level and business-level factors that most affect an increase in market orientation? What specific market and internal environments are associated with the highest average market orientation of businesses, and what ones are associated with the lowest average market orientation? Managers need to know the factors that limit or enhance the development of market orientation, as well as the factors that affect its optimal level, if they are to develop effective and efficient strategies to increase their market orientation.

Strategies to increase a market orientation. With the development of a valid measure of market orientation and the demonstration of its significant effect on performance, the most important question to practitioners becomes, "How does one increase and sustain a market orientation?" Building on an understanding of the determinants of market orientation, researchers should examine the relative effectiveness of alternative strategies for increasing and sustaining a market orientation in various market environments.

Conclusion

Our study is an important first step in validating the market orientation/performance relationship. For scholars, the implications of the study are clear. The research must be replicated in diverse environments and over time to increase confidence in the nature and power of the theory. For managers, the implications of the study are less clear. Because of the exploratory nature of the research, the generalizability of the findings is limited. The findings do suggest that after controlling for important market-level and business-level influences, market orientation and performance are strongly related. These findings are entirely consistent with the intuition and expectations of both scholars and practitioners over the past three decades about the nature and effects of a market orientation. The findings give marketing scholars and practitioners a basis beyond mere intuition for recommending the superiority of a market orientation.

If the findings in replications of our research support our findings, the message to managers is clear. A substantial market orientation must be the foundation for a business's competitive advantage strategy.

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Reprint No. JM544102