



Total Market Orientation, Business Performance, and Innovation

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In the past decade, numerous studies have shown a positive relationship between market orientation and business performance dimensions such as profitability, new-product success, and sales growth. In these studies, the form of market orientation examined has been “reactive” market orientation, in which a business attempts to satisfy customers’ expressed needs, that is, needs of which customers are aware. “Proactive” market orientation, in which a business attempts to discover and satisfy customers’ latent needs (that is, opportunities for satisfaction of which a customer is unaware) has not been systematically discussed and examined to date.

Study and Findings

In this study, authors Narver, Slater, and MacLachlan suggest that reactive, proactive, and total (combining reactive and proactive) market orientation relate positively to business innovativeness, profitability, sales growth, and new-product success. Further, they suggest, the strength of the proactive market orientation relationship to these variables is as large as, if not larger than, that of reactive market orientation, and, thus, proactive market orientation is an important factor in the market success of a business.

Using data from a sample of 41 technologically diverse businesses the authors (1) developed a valid measure of proactive market orientation and refined the measure of reactive market orientation, and (2) statistically examined the relationships between reactive, proactive, and total market orientation and business performance and innovation.

Individually, the two forms of market orientation—reactive and proactive—relate positively to innovation and business profitability. Proactive market orientation also relates positively to sales growth and new-product success.

Managerial Implications

If a business engages only in reactive market orientation, it will miss opportunities to innovate and be a market leader. The power of a proactive market orientation is that the business continuously discovers new opportunities for target-customer benefits. However, if a business engages only in proactive market orientation, it risks alienating its served market by failing to address its expressed needs. For any business the strongest foundation for sustainable competitive advantage is a total

market orientation—reactive market orientation coupled with proactive market orientation.

The challenge for any market-oriented business is to improve continuously its skill in learning more effectively and efficiently about its target customers' expressed and latent needs.

Future Research

Although the units surveyed represented a broad range of industries and technology, they are not a random sample. A much larger random sample would permit more powerful statistical tests. In addition, future studies of the market orientation–performance relationship would benefit from longitudinal research designs.

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Introduction

The marketing concept holds that the key to achieving organizational goals is to be more effective and efficient than competitors in identifying and satisfying the needs of target markets (e.g., Kotler 2000, p. 19). In 1990, Kohli and Jaworski articulated a theory of “market orientation” that they describe as the implementation of the marketing concept. Narver and Slater (1990) followed with the first operational measure of market orientation and with a demonstration of a positive relationship between market orientation and business profitability.

The core meaning of a market orientation is identifying target customers’ needs and then satisfying the needs in a way that creates superior value for the customers and superior performance for the seller. Fundamental to a market orientation is organizational learning—an organization continuously generating knowledge about its target markets and reflecting the knowledge in its market behavior (e.g., Day 1994a; Kohli and Jaworski 1990; Narver and Slater 1990; Slater and Narver 1995).

The work of Kohli and Jaworski (1990) and Narver and Slater (1990) was the first in a substantial stream of research in the 1990s that investigated the antecedents and outcomes of a business increasing its market orientation. The vast majority of the studies suggest that being market oriented is associated with superior performance in one or more of profitability, sales growth, and new-product success (e.g., Atuahene-Gima 1995; Deshpandé, Farley, and Webster 1993; Han, Kim, and Srivastava 1998; Jaworski and Kohli 1993; Li and Calantone 1998; Pelham and Wilson 1996; Slater and Narver 1994).

Some observers, however, have raised questions about the net benefits of market orientation. For example, it is suggested that being market oriented may detract from innovativeness (Berthon, Hulbert, and Pitt 1999), lead to myopic R&D (Frosch 1996), or confuse business processes (Macdonald 1995). Christensen and Bower (1996) hold that “firms lose their position of industry leadership . . . because they listen too carefully to their customers” (p. 198). The common theme in the criticisms is that there is a penalty if an organization listens too closely to its customers.

At its most general level, the question is whether a market orientation adds to or detracts from competitive advantage—that is, the sustainable superior value a firm is able to create for its customers (Porter 1985). According to Barney (1986; see also Hunt and Morgan 1995), for example, any skill, asset, or culture—among which we would include market orientation—is a source of competitive advantage if it produces value for customers and is rare and difficult to imitate. Superior performance follows from a position of competitive advantage (Day and Wensley 1988).

We believe that confusion about the meaning of market orientation has given rise to much of the criticism and that a correct view of market orientation will satisfy the concerns raised by critics. For example, Berthon, Hulbert, and Pitt (1999) contrast a market orientation and an innovation orientation. We hold that this is not a

valid contrast: market orientation, when correctly conceived of and implemented, is a process that *begins* by discovering customers' needs before there is any attempt to create customer benefits to satisfy the needs. This sequence of discovering customer needs before developing products is not only entirely consistent with innovation but is very often a driver of successful innovation (e.g., Slater and Narver 1995, 1998).

In particular, we contend that market orientation exists in two essential and complementary forms. The first is "reactive" market orientation (referred to as customer-led in Slater and Narver [1998] and customer-compelled in Day [1999a]) which is the construct that virtually all research to date has focused on and, therefore, at least in principle, the form of market orientation that has engendered the criticisms. The second form is "proactive" market orientation which, to date, has received little theoretical attention and virtually no empirical analysis by marketing scholars, and, we suggest, has not been considered by critics.

Research Question

The present study presents a conceptual argument for why the construct of market orientation should include proactive as well as reactive behaviors, develops a valid measure of the proactive market orientation construct, and examines the empirical relationship between both forms of market orientation and innovation and business performance. The theory presented and the propositions offered, if supported, point to discriminant validity, convergent validity, and nomological validity of the proactive market orientation construct. Taken in combination, support for these propositions points to construct validity for proactive market orientation. Construct validity for reactive market orientation has already been established. The present study, thus, is the first effort to develop and analyze the construct of a “total market orientation”—a construct that contains *both* reactive and proactive behaviors.

We argue that (1) the two forms of market orientation are empirically differentiable, (2) a business can simultaneously engage in both forms, and (3) for maximum market effectiveness and efficiency, and innovation, a business must engage in both reactive and proactive market orientation behaviors.

The report addresses the following: (1) the theoretical basis for the two forms of market orientation, (2) the expected relationships between proactive market orientation and other key business-level constructs that support our contention for construct validity (Kerlinger 1973), (3) the expected relationships between reactive market orientation and the other key business-level constructs, (4) the expected relationships between total market orientation and the other key business-level constructs, (5) the research design, (6) the empirical evidence, and (7) the implications of the evidence.

Theoretical Basis for the Two Forms of Market Orientation

Expressed and Latent Needs

We first make a distinction between the two forms of customer needs: expressed and latent. (We admit to oversimplification in categorizing a need as either expressed or latent. However, for the purposes of the present argument, the omission of any nuances is not critical.) We define “expressed needs” as the needs of a customer of which the customer is aware and, therefore, can express. Thus, for expressed needs the customer perceives, at least approximately, some sort of desired solution. For example, a consumer’s shopping list consists of solutions to expressed needs.

We define “latent needs” as needs of which the customer is unaware. Latent needs are no less “real” than expressed needs. In general, a latent need comprises a *potential for satisfaction* of which the customer is not aware.

The relationship between latent needs and innovation is obvious and strong. A seller must be creative both in discovering a latent need and in developing or acquiring the customer benefits that will satisfy the need in a manner that creates superior value for both the customer and the seller. Satisfaction of the latent need may be accomplished by adapting existing technology or may require developing an entirely new technology. The role of a seller vis-à-vis a latent need is to discover the need and, at the most effective time, evoke and satisfy the need, using or developing whatever technology is appropriate.

One well-known example of a latent need was the need to update financial spreadsheets quickly and easily. Until the development of VisiCalc, most financial analysts were content to use pencil, paper, and calculator to create and update spreadsheets. As is the case with many innovative solutions, market acceptance took some time due to switching costs (Moore 1995).

There is necessarily a strong relationship between the discovery of latent needs and innovation. A business must, of course, be certain to satisfy its customers’ expressed needs if it is to have a chance for an ongoing relationship with them. However, merely satisfying customers’ expressed needs may not be sufficient for a business to survive, let alone prosper. A business must also continuously discover and satisfy customers’ latent needs if it is successfully to avoid the harsh reality of having today’s superior benefits to customers become tomorrow’s parity benefits to customers. Thus, the pressure to innovate is unrelenting for any business that wishes to avoid having to compete strictly on price.

Latent needs are universal. They exist in every market and can be discovered, sometimes relatively easily, by any seller who engages in focused, disciplined searches (e.g., Hamel and Prahalad 1994). And their solution may be low cost as

well. For example, adding a specific service may satisfy the latent need, and the new service may complement efficiently the seller's extant services. In the contemporary economy, latent needs—either newly discovered opportunities for, or approaches to, customer satisfaction—are especially frequent news topics in such industries as the software industry, various service industries, R&D-intensive industries, and e-commerce.

In customers' shopping behavior both expressed and latent needs are often present. For example, a consumer who is in the market for a new automobile enters the market at the "expected-product" level (Levitt 1980)—that is, with some conscious desires—but may find in the process of search certain unexpected, additional relevant benefits such as, for example, Cadillac's "On-Star System" for roadside assistance.

The Meaning of Reactive and Proactive Market Orientation

A *reactive* market orientation is the attempt to understand and satisfy customers' expressed needs; a *proactive* market orientation is the attempt to understand and satisfy customers' latent needs. As noted above, it is logical and appropriate (see Levitt 1980) that an organization first address its target customers' expressed needs before attempting to satisfy their latent needs.

To date, the theory and construct measurement of market orientation has emphasized "reactive market orientation" (e.g. Kohli and Jaworski 1990; Narver and Slater 1990; Deshpandé, Farley, and Webster 1993; Jaworski and Kohli 1993). The expected relationship between reactive market orientation and one or more dimensions of business performance such as profitability, sales growth, and new-product success has been discussed in these four papers, among others.

Deshpandé and Farley (1998) analyzed the three most widely used measures of market orientation (Narver and Slater 1990; Deshpandé, Farley, and Webster 1993; Jaworski and Kohli 1993) and developed a synthesis measure of reactive market orientation that encompasses general behaviors oriented to understanding customer needs (four items), assessing customer satisfaction (four items), and providing superior quality or service (two items). All of the hypotheses in the present paper relating to reactive market orientation are tested using the measure developed in Deshpandé and Farley (1998) which, as they, we label "MORTN."

To discover and satisfy the latent needs of customers is, by definition, to "lead" them. Leading customers in their satisfaction implies proactivity. Hence, market orientation that leads customers rather than merely responds to them we label "proactive market orientation." This is distinguished from "proactive" as simply being highly energized in attempting to satisfy target customers' expressed needs. Such behaviors do not comprise "proactive market orientation."

We also distinguish between "proactive market orientation" as we are using it and "market-driving behavior" (Jaworski, Kohli, and Sahay 2000). In the latter paper, the authors present various actions that a firm can take to shape market structure and/or market behavior. All of the actions that the authors detail are "proactive," i.e., anticipatory, in which some of the actions relate to creating new customer preferences or changing existing preferences. However, the difference between

proactive market orientation and market-driving behavior is clear and substantial. The focus in proactive market orientation is not on creating or changing customer preferences but rather on discovering and satisfying the existing latent needs of customers. Market-driving behavior is a provocative set of arguments—but a set of arguments distinct from proactive market orientation.

A Critical Distinction: Market Orientation versus an Internal or “Product” Orientation

Market orientation, whether reactive or proactive, is a process that, in principle, *always* begins with identifying/discovering target customers’ needs and only then developing the customer benefits to satisfy the need. An understanding of the customer need preceding the development of the “product” is the essence of a market orientation. (It is, of course, also true that businesses may fail to implement one or more aspects of it properly.) Either form of market orientation is in total contradistinction to an orientation and process that begins with a “product” that a business then attempts to sell (e.g., Kotler 2000, pp. 84-8).

Let us consider, in particular, proactive market orientation. This concept may seem to imply an internal or product orientation. A casual observer might well ask, “If proactive market orientation is the satisfying of a customer’s unconscious needs, how is this different from a business simply conceiving of—or R&D developing—what the organization considers to be a desirable product and then trying to sell it?” The key distinction lies in where the respective processes begin. A proactive market orientation begins in the market with an analysis of customer behavior. As noted in the next section, discovering latent needs is typically a process of inference from observing various customer behaviors in which “gaps” are detected which then become the bases for additional satisfactions for the customer.

In short, proactive market orientation, just as reactive market orientation, is fundamentally about customer-need satisfaction rather than product selling—that is, it is about “finding customer needs and satisfying them” rather than “making or procuring products and selling them.” Discovering customers’ latent needs is not necessarily easy—though many businesses have learned to be very effective at it—but that is precisely why, when done well, it comprises such a strong competitive advantage.

Discovering Customers’ Latent Needs

An organization’s ability to discover and satisfy the latent needs of customers is a source of competitive advantage because it is an ability that takes time and effort to develop, is rare, is difficult to imitate, and is causally ambiguous—an invisible asset—with respect to superior performance (Hunt and Morgan 1995; Barney 1986). Typically, expressed needs of customers are more easily knowable by a seller than are their latent needs. For example, expressed needs more readily lend themselves to discovery by survey research. By contrast, latent needs must be inferred.

There are many means—especially various forms of observation and data-monitoring using primary and secondary evidence—by which a business can draw useful inferences of latent needs. For example, organizations can often draw inferences as

to latent needs by observing closely customers' use of products or services in various contexts (Leonard and Rayport 1997). They can also monitor data on customer complaints, product returns, and warranty claims—all of which may reveal information about customers' knowledge and ease of use and maintenance of the product or service, and thereby comprise a basis for inferences about opportunities for additional ease-of-use services, complementary products, and so on.

Compared to reactive-market-orientation businesses, proactive-market-orientation businesses scan the market more broadly (Day 1994b) and have a longer term focus. They work closely with lead users (Tabrizi and Walleigh 1997), i.e., customers or potential customers who have needs that are advanced compared to other market members and who expect to benefit significantly from a solution to those needs (von Hippel 1986). "To push out the boundaries of current product concepts, it is necessary to put the most advanced technology possible directly into the hands of the world's most sophisticated and demanding users" (Hamel and Prahalad 1994, p. 102). This type of exploration often leads to the discovery of both latent needs and new solutions to them (Leonard-Barton 1995).

Of course, the future can never be fully known in a dynamic and turbulent market. Therefore, to understand latent needs, proactively market-oriented businesses conduct market experiments, learn from the results of those experiments, and modify their offerings based on the new knowledge and insights (Hamel and Prahalad 1994; Slater and Narver 1995). Lynn, Morone, and Paulson (1996; see also Leonard-Barton 1995; Morone 1993) describe how companies such as Motorola, General Electric, and Corning maintain strong market positions by utilizing the "probe and learn process." In this process, the initial product is only the first step in the development process, not its culmination. The initial product is a prototype that becomes the foundation for subsequent, more refined generations that follow.

Since the proactive-market-orientation business takes the long-term view, it is willing to cannibalize sales of existing products by introducing next-generation products (Chandy and Tellis 1998). As Hewlett-Packard's then CEO, Lew Platt, said, "If we don't eat our own lunch, somebody else will" (Moore 1995, p. 85). Other recognized innovators such as Motorola, Monsanto, Corning, General Electric, and Intel follow the same philosophy (Morone 1993).

Thus, a proactive market orientation consists of norms for behavior that guide the business to learn from current and potential customers about their latent needs, and to act in an entrepreneurial manner to create superior customer value. The capabilities arising from a proactive market orientation enable the business to discover customer-need opportunities in unserved markets as well as in its served markets.

P₁ Reactive and proactive market orientation are related but distinct constructs.

Expected Relationships among the Variables

To assess the construct validity of proactive market orientation (see Kerlinger 1973), we examine the relationships between proactive market orientation and key business-level constructs: business innovativeness, organization climate, business profitability, business sales growth, and new-product success. For comparison, we examine the relationships between reactive market orientation and the same business-level constructs. We expect a similar form of relationship to exist between reactive and proactive market orientation and the business-level constructs; however, we expect that the strength of the relationships between proactive market orientation and the constructs will be at least equal to, if not greater than, the relationships between reactive market orientation and the constructs.

Expected Relationships between Proactive and Reactive Market Orientation and Innovativeness

A business must be innovative in (1) its approach to learning about and tracking customer needs, (2) the development of new products or services that address those needs, and (3) the development and implementation of internal processes that enhance customer learning or product development. A market orientation, whether reactive or proactive, is the foundation for a business's innovation efforts. Thus, in general, whatever its value discipline(s)—product leadership, customer intimacy, or operational excellence (Treacy and Wiersema 1993)—a business attains and sustains leadership in its target markets only by superior execution in understanding and meeting customers' needs.

Hurley and Hult (1998) and Han, Kim, and Srivastava (1998) argue that there is a complementarity between market orientation and innovation. With respect to reactive market orientation there are numerous examples of businesses being very innovative in their efforts to satisfy customers' expressed needs. One obvious example is Wal-Mart which, as it seeks to create superior value for customers primarily interested in low prices, continuously innovates to be ever more efficient in its physical handling and distribution processes. Wal-Mart is acknowledged by many observers to be the most efficient logistics company in the world.

A proactive market orientation provides even deeper insight into customer needs. This insight leads to the development of innovative products and services that address these latent needs in ways that create customer value (e.g., Hammer 1997).

Thus, we expect a positive relationship between both forms of market orientation and innovativeness. We also expect the relationship between proactive market orientation and innovativeness to be equal to, if not greater than, that of reactive market orientation and innovativeness.

- P_{2a} There is a positive relationship between a business's proactive market orientation and innovativeness.
- P_{2b} There is a positive relationship between a business's reactive market orientation and innovativeness.

Expected Relationships between Proactive and Reactive Market Orientation and Organizational Climate

Burns and Stalker (1961) first suggested that high-performing firms, competing in complex and dynamic industries, adopt an "organic form," an organizational architecture that is decentralized, with extensive lateral communication processes. The necessity of effective information sharing demands that systematic or structural constraints on information flows be dismantled (Woodman, Sawyer, and Griffin 1993). Mintzberg (1991, p. 732) suggested creating an organic climate to encourage mutual adjustment within and between the teams. Standardization and bureaucratic routines are precluded as coordinating mechanisms because they inhibit communication and innovation.

Of the two forms of market orientation, proactive market orientation especially requires an organic organizational climate. Hence, we expect the strength of the negative relationship between proactive market orientation and a mechanistic organizational climate to be equal to, if not greater than, that of the relationship between reactive market orientation and mechanistic organizational climate.

- P_{3a} There is a negative relationship between a business's proactive market orientation and a mechanistic organizational climate.
- P_{3b} There is a negative relationship between a business's reactive market orientation and a mechanistic organizational climate.

Expected Relationships between Proactive and Reactive Market Orientation and Business Performance

The theory of market orientation vis-à-vis business performance explains why a business would improve its performance in its target market relative to its competitors. The general expected relationship is intuitively obvious—the more the "voice" of the target customer is brought into the organization and acted upon, the better the performance of a business (e.g., Day 1994b).

Other things equal, a business that is more market oriented than its competitors in its target markets will outperform them. The reasons are intuitively clear. The knowledge about the business's customers and competitors that is derived from being market oriented should lead to more effective market targeting, and product development and positioning (Hunt and Morgan 1995). The customers, in perceiving more value from the subject seller than from any alternative satisfier, will more easily be attracted to it, will manifest more loyalty to it, and will find its new products and services of greater value than those of the competitors.

When the benefits a seller offers vis-à-vis customers' needs exceed those that its competitors offer, the seller can charge, to some extent, a premium price—and yet

still create superior value for both the customers and itself (e.g., Smith and Nagle 1995). The limit to a company's superiority in either reactive or proactive market orientation is the speed with which competitors match or exceed the customer benefits that the leader creates. Because it is easier for competitors to match or exceed customer benefits created from expressed needs than from latent needs, there will be greater competitive pressure on a first-mover company that relies more on reactive market orientation than on proactive market orientation.

In a recent review of the scholarly research on market orientation, Jaworski and Kohli (1996) state that responding to customers' expressed needs is no longer sufficient for the creation of competitive advantage. They see the need for proactive behaviors as well. The importance of exceeding customers' expectations is stressed by Edwards Deming who stated, "It will not suffice to have customers that are merely satisfied" (1986, p. 141). (See also Hamel and Prahalad 1994; Day 1999a; Rust and Oliver 2000.)

The positive relationship between reactive market orientation and one or more dimensions of business performance such as profitability, sales growth, and new product success has been demonstrated in, for example, Narver and Slater (1990); Deshpandé, Farley, and Webster (1993); Jaworski and Kohli (1993); and Slater and Narver (1994).

From the preceding discussions in this paper we would expect proactive market orientation to be positively related to performance. Because a proactive market orientation is difficult for competitors to imitate (Slater and Narver 1998), we would also expect that, on average, the strength of the proactive market orientation–performance relationship would be at least equal to that of the reactive market orientation–performance relationship. The propositions:

- P_{4a-1} There is a positive relationship between a business's proactive market orientation and profitability.
- P_{4a-2} There is a positive relationship between a business's reactive market orientation and profitability.
- P_{4b-1} There is a positive relationship between a business's proactive market orientation and sales growth.
- P_{4b-2} There is a positive relationship between a business's reactive market orientation and sales growth.
- P_{4c-1} There is a positive relationship between a business's proactive market orientation and new-product success.
- P_{4c-2} There is a positive relationship between a business's reactive market orientation and new-product success.

Research Design

This study is intended to develop a valid measure of the proactive market orientation construct. Construct validity is concerned “with theory, theoretical constructs, and scientific empirical inquiry involving the testing of hypothesized relationships” (Kerlinger 1973, pp. 461-2). As noted earlier, the theory presented and the propositions offered, if supported, point to discriminant validity, convergent validity, and nomological validity. Taken in combination, support for these propositions points to construct validity.

Development of Question Items

In keeping with standard approaches to development of scales (e.g., Churchill 1979), a large set of potential question items was developed. These items were created to span the domain of the construct and were worded as much as possible to be understandable to the respondents. All items were structured to be asked in conjunction with Likert-type 6-point (labeled category) scales. To reduce response-set bias, occasional reversals of valence were included among questionnaire items, although care was taken to avoid awkward wording or respondent confusion. The statements were pretested with five research experts to weed out those items least connected to the constructs and to improve sentence wording. The result was 34 items as candidates for the proactive market orientation (MOPRO) scale. All 34 were included in the survey questionnaires, along with other questions to measure reactive market orientation (MORTN), innovativeness (INNOV, adapted from Deshpandé, Farley, and Webster 1993), mechanistic climate (MECH, adapted from Burns and Stalker 1961), business unit profitability (PROFIT), sales growth (SALESGRO), and new-product success (NEWPROD). These last dimensions used question items that have been analyzed for reliability in previous studies (e.g., Deshpandé and Farley 1998; Han, Kim, and Srivastava 1998).

Sample

The sample consisted of 41 business units from 25 companies. Though not a random sample, the business units were chosen to comprise a broad spectrum of industries and technology. The sampling units were drawn from MSI member companies, executive MBA students' companies, and companies of various business contacts of the authors. There were 120 respondents in total, for an average of approximately three per business unit. We use a multiple-respondent design because multiple informants can increase the reliability of business-level measures by offsetting the biases of other informants or by reducing errors through averaging responses (Huber and Power 1985). The business units ranged in size from approximately \$1 million annual sales revenue to approximately \$2.013 billion annual sales revenue, with the mean size of \$180.2 million.

The business units selected for the sample comprise a substantial cross-section of industries and technology. A rough approximation of the general classification of the “businesses” of the 41 business units is as follows:

- 16 – technology-based products/services (sold primarily to businesses)
- 10 – pulp, paper, lumber, and other commodities (basic and fabricated products)
- 6 – financial and related services (consumer and business services)
- 4 – transportation services (airlines, ocean shipping)
- 4 – other manufacturing (consumer and business products)
- 1 – public utility (natural gas)

How uniform is the technological orientation of the businesses in the sample? The respondents completed, on a 6-point Likert-type scale, a question in the survey about their technology leadership, “We are recognized for being at the leading edge of technological innovation.” The respondents’ perceptions imply that the 41 strategic business units are widely distributed in terms of perceived technology leadership. That is, after averaging responses within each SBU, the responses to this question had a mean of 3.606, a standard deviation of 1.057, a median of 3.5, a range of 4.3, an interquartile range of 1.5, and a skewness of -0.034. Thus, the sample does not appear to be skewed to either perceived “technology-leading” or perceived “technology-following” businesses.

The response rate was virtually 100 percent, for rather than sending out a survey to a mailing list, we inquired among MSI member companies, executive MBA students’ companies, and business contacts as to their interest in participating in such a research project. Although the resulting sample does evidence a strong cross-section of industries, level of technology, and size of business, because of the small and convenience nature of the sample, we must consider our study exploratory with potentially limited generalizability.

Survey Instructions

The respondents of the survey are members of the top management team of strategic business units (SBUs). An SBU is a profit center responsible for performance in one or more markets with the authority to influence the choice of the business’s competitive strategy in its target markets. Each respondent was well acquainted with the strategies, general processes, and performance of the SBU.

The respondents were told simply that the survey (titled “Business Practices Survey”) is designed to study practices at a business-unit level. There is no mention of market orientation at any place in the survey. The questionnaire used a 6-point scale for respondents to indicate the extent (from “Not at All” to “To a Very Substantial Extent”) to which they agreed with the statements in the questionnaire.

In each SBU the senior manager in the top management team informed the respondents as to specifically which “principal served market segment” of the SBU they were to focus on in responding to the questions. The respondents were told to answer all questions independently and in all cases to use their actual perception of the situation, not what they might desire it to be. The respondents were assured of complete anonymity in their responses.

Preliminary Empirical Analyses

In order to purify the MOPRO and MORTN measures, responses from all 120 respondents were used as independent units of analysis. This is justified, since various respondents from the same SBUs, while likely to respond similarly on average to the different scale items, would exhibit *correlations* across items independently.

MOPRO

The first step was exploratory factor analyses of the MOPRO scale items. Principal component analysis followed by varimax rotation resulted in a first factor, accounting for 40.0 percent of the variation in the complete set of items. We subsequently did additional factor analyses using principal components followed by quartimax rotation and principal-axis factor analysis followed by varimax rotation. Examining the variables loading on the first factor in each of these analyses, and considering the face validity of each item, we reduced the original set of 34 items to 11 which apparently constituted a univariate summed scale with Cronbach's alpha of .892, indicating high reliability for the measure.

The next step was to do a confirmatory factor analysis of the 11 items, using LISREL 7.0. The complete set of items selected in the exploratory factor analysis did not fit a single-dimensional confirmatory factor analysis model (chi-square = 123.4, df = 44, $p = 0.0$; GFI = .857, AGFI = .786, R-square = .719). Using procedures suggested by Steenkamp and van Trijp (1991) and Gerbing and Anderson (1988), the set of items was reduced further to the final eight items shown in the appendix. A confirmatory factor analysis model using LISREL 7.0 with these items fit well as a unidimensional measure (chi-square = 30.8, df = 20, $p = .058$; GFI = .942, AGFI = .896, R-square = .838). Cronbach's alpha at the SBU level was .884.

MORTN

The 10-item MORTN scale (Deshpandé and Farley 1998) was incorporated in the study. It was found that a summated index combining the original 10 items resulted in a Cronbach's alpha of .885. However, a confirmatory factor analysis using LISREL 7.0 indicated that the 10-item scale was not unidimensional (chi-square = 127.7, df = 35, $p = .0$; GFI = .822, AGFI = .720, R-square = .831).

Using the same procedure as with MOPRO, we reduced the full set of 10 items to 7 which provided good fit as a unidimensional scale (chi-square = 20.2, df = 14, $p = .123$; GFI = .956, AGFI = .912, R-square = .885). These items are shown in the appendix, along with the Cronbach's alpha at the SBU level.

MOPRO and MORTN

We conducted exploratory factor analysis of the 15 items comprising the two scales using principal components extraction followed by oblique rotation (oblimin with Kaiser normalization). The resulting two-factor solution (structure matrix) had all high loadings appropriately separated between the two constructs and small load-

ings on the opposite factors, indicating both convergent and divergent validity of the two measures. The correlation between the factors ($n = 109$) was .458.

We did a further confirmatory factor analysis to demonstrate that MOPRO and MORTN were separate but correlated constructs. Two-factor confirmatory factor analysis using LISREL 7.0 was done on the items comprising these two scales, allowing for correlation between the factors ($n = 109$ complete responses for the 15 variables). The result demonstrates the discriminant validity of the two constructs. (chi-square = 120.5, $df = 89$, $p = .015$; GFI = .882, AGFI = .841, R-square = .941). As suggested by Anderson and Gerbing (1988), where a confidence interval for the estimate of the inter-factor correlation does not include one, discriminant validity is demonstrated. The estimate of phi, the correlation between MORTN and MOPRO from this analysis is .599, with standard error .075. Thus, the upper bound on a 95 percent confidence interval for the phi coefficient is .746, which does not include one. We have therefore demonstrated discriminant validity of the two scales and thus, support for the proposition (P_1) that reactive market orientation and proactive market orientation are related but distinct constructs.

Tests of the Relationships between Proactive and Reactive Market Orientation and Theoretically Related Variables

Table 1 shows the Cronbach's alphas and the correlation coefficients for the relationships between MORTN and MOPRO and each of the theoretically related variables at the business-unit level. (Scale items for each of these measured variables are shown in the appendix.) Of particular interest is that each of the relationships between MOPRO and the variables is significant at the $p < .05$ criterion. Although these empirical relationships are based on a small sample, they appear meaningful, for the results indicate that the relationship is strong enough to detect even with low statistical power (Sawyer and Peter 1983).

Table 1. Correlation Coefficients and Cronbach's Alphas (N = 41)

	MORTN	MOPRO	MOTOTAL	INNOV	MECH	PROFIT	SALESGRO	NEWPROD
Alpha	.855	.884	.904	.835	.820	.768	.705	.466
MORTN	---	.579***	.903***	.483***	-.334**	.286**	.147	.133
MOPRO	---	---	.873***	.542***	-.409***	.354**	.267**	.513***
MOTOTAL	---	---	---	.581***	-.416***	.357**	.232	.356**

One-tailed tests of significance
 *** $p < .01$; ** $p < .05$; * $p < .10$

Tests of the Relationships between Proactive and Reactive Market Orientation and Business Performance

The central market orientation–performance question in this research is whether the addition of MOPRO increases the explanatory power of market orientation beyond that attained by MORTN alone. We performed two sets of regression analyses to address this question. The first set (Table 2) examines market orientation and the three dimensions of business performance. The second set (Table 3) examines market orientation and business innovation. In both sets of equations MORTN, MOPRO, and MOTOTAL (a variable combining MORTN and MOPRO) are in separate equations. We assess the differential explanatory power of MOPRO by comparing the MOTOTAL regressions results to models containing MORTN alone.

MOTOTAL is constructed as a simple average of MORTN and MOPRO. Since we are proposing that both proactive and reactive market orientation, in concert, should lead to business unit success, it makes sense to create a composite variable that is a weighted average of the two components. As we have no *a priori* reason to suspect that one component is more influential than the other, we applied equal weights in the construction of MOTOTAL.

Table 2 shows the results from three regression analyses that use the three performance measures as dependent variables and MOPRO, MORTN, MOTOTAL, and three control variables as independent variables. Following Narver and Slater (1990), we include as control variables measures of cost position, ease of entry into the market, and buyers' ability to negotiate prices. These variables are recognized as potentially important influences on firm performance (e.g., Porter 1980) and thus should be controlled for.

Table 2. Regression Analyses of Business Performance Using MORTN, MOPRO, or MOTOTAL (Regression Coefficient/Standard Error)

	Profit			Sales Growth			New-Product Success		
MORTN	.352**/.167	--	--	.176/.181	--	--	.177/.228	--	--
MOPRO	--	.523***/.181	--	--	.414**/.188	--	--	.771**/.215	--
MOTOTAL	--	--	.545***/.192	--	--	.374*/.210	--	--	.588**/.257
Cost Disadvantage	-.130/.115	-.174/.110	-.145/.110	-.158/.116	-.184/.110	-.162/.112	.028/.148	-.003/.126	.034/.138
Difficulty of Entry	-.144/.116	-.172/.112	-.172/.112	-.157/.118	-.194/.113	-.188/.116	-.004/.149	-.097/.128	-.068/.141
Buyer Power	-.132/.119	-.104/.113	-.126/.113	.065/.125	.072/.116	.054/.121	-.012/.158	-.021/.133	-.044/.147
Adjusted R²	.106	.184	.179	.019	.115	.076	.000	.190	.033
F-statistic	2.18	3.25	3.18	1.18	2.27	1.80	1.10	3.24	1.32
p-value	.091	.023	.025	.335	.082	.151	.957	.024	.281

One-tailed tests of significance

***p < .01; **p < .05; *p < .10

The results show that with respect to each of the three dimensions of business performance—profitability, sales growth, and new-product success—the regression coefficients and statistical significance of MOPRO and MOTOTAL are larger than those of MORTN. None of the control variables is significant ($p < .05$) in any of the equations. These findings support the theoretical expectations (Propositions 4a – 4c) that MOPRO is as or more strongly related to performance than MORTN. Thus, these findings suggest that MOPRO increases the explanatory power of market orientation beyond that attained by MORTN alone.

Tests of the Relationships between Proactive and Reactive Market Orientation and Innovation

With respect to market orientation and innovation, the central question is whether the addition of MOPRO increases the explanatory power of market orientation beyond that of MORTN alone. Table 3 presents the results of the three regression equations: The relationship between innovation and (1) MORTN plus control variables, (2) MOPRO plus control variables, and (3) MOTOTAL plus control variables.

Table 3. Regression Analyses of INNOV Using MORTN, MOPRO, or MOTOTAL (Regression Coefficient/Standard Error)

MORTN	.489***/.155	---	---
MOPRO	---	.641***/.158	---
MOTOTAL	---	---	.733***/.169
Cost Disadvantage	-.111/.010	-.170**/.092	-.131*/.090
Difficulty of Entry	-.009/.100	-.034/.095	-.048/.093
Buyer Power	-.031/.107	.014/.098	-.030/.097
Adjusted R²	.186	.289	.319
F-statistic	3.22	4.95	5.57
p-value	.024	.003	.001

One-tailed tests of significance

***p < .01; **p < .05; *p < .10

MOPRO appears to add to the explanatory power of MORTN. The regression coefficient, the adjusted R², and the F-statistic of MOPRO and MOTOTAL are all substantially larger than those of MORTN, and the p-value of the regression equations containing MOPRO and MOTOTAL is substantially smaller than that of MORTN. Thus, the findings suggest that a business's innovation benefits from an emphasis on both reactive and proactive market orientation. Of the three control variables, only cost disadvantage is significant (p < .05), and it is only in the MOPRO equation that it is significant. The results support the theoretical expect-

tations (Propositions 2a and 2b) that MOPRO is as or more related to business innovation than is MORTN.

As noted above, given the small sample size, the power of the statistical tests is weak. However, despite the low power of the tests, the two sets of regression analyses (tables 2 and 3) are strongly suggestive that proactive market orientation is an important addition to reactive market orientation in affecting a business's market performance and innovativeness.

Conclusions and Implications

The wisdom that has been offered to the business community for over four decades is this: For a business to maximize its economic value the business must be totally oriented to “finding needs and filling them” rather than “making products and selling them.” Thus, a business must be totally market oriented.

Only in the last decade has the relationship between a business’s “market orientation” and performance been formally tested. The form of market orientation that has been examined in all empirical studies to date is “reactive market orientation,” that is, a business attempting to satisfy customers’ expressed needs. In the past decade numerous studies have shown a positive relationship between reactive market orientation and performance dimensions such as business profitability, new-product success, and sales growth.

In this paper we present the conceptual case for the construct of “total market orientation,” a construct that we believe must include both proactive and reactive behaviors. Proactive market orientation refers to a business attempting to discover and satisfy customers’ latent needs—opportunities for satisfaction of which a customer is unaware. Our theoretical expectation is that the inclusion of proactive market orientation will substantially add to the explanatory power of market orientation. Moreover, market orientation that is understood only as “reactive market orientation” invites confusion and even criticism with respect to the relationships among market orientation, innovation, and business performance.

The present study develops a construct of proactive market orientation that meets the tests of construct validity. The study also refines the Deshpandé and Farley (1998) construct of reactive market orientation. A major outcome of the study is a demonstration that the two forms of market orientation, reactive and proactive, are statistically related but are separate constructs.

Our theoretical expectation was that *both* proactive and reactive market orientation would relate positively to business innovativeness, profitability, sales growth, and new-product success, and negatively to a mechanistic organizational climate. The study finds empirical support for all five of the hypothesized relationships with respect to proactive market orientation and support for three of the five with respect to reactive market orientation.

In addition, we expected that the strength of the proactive market orientation relationships to business profitability, sales growth, new-product success, and innovation would be at least as large as, if not larger than, that of reactive market orientation. The results support this expectation. Specifically, in Table 2, comparing the regression statistics associated with total market orientation to those of reactive market orientation, the implication is very strong that proactive market orientation adds considerable explanatory power to that of reactive market orientation with respect to business performance.

The findings in Table 3 contradict the assertion of some observers that market orientation and innovation are tradeoffs rather than complements. First of all, the results show that both forms of market orientation are positively related to innovativeness. This is not surprising. Reactive market orientation requires continuous creativity in identifying and tracking target customers' expressed needs and developing and delivering superior value to them. Proactive market orientation requires continuous creativity in discovering target customers' latent needs and developing and delivering at superior value what the customers would consider to be substantive benefits.

Secondly, in Table 3, comparing the regression results of total market orientation to those of reactive market orientation suggests that proactive market orientation is more highly related to innovation than is reactive market orientation. This finding supports the theoretical expectation that because proactive market orientation requires deeper probing than does reactive market orientation, proactive market orientation would be the form of market orientation most highly related to business innovativeness.

A market orientation is a source of competitive advantage only when it is rare among competitors. Over the past decade, the value of being market oriented has received widespread attention and many businesses have invested heavily in efforts to become market oriented. Thus, although market-oriented attitudes and practices may be difficult to imitate, they ultimately can and will be imitated. Just as superior customer benefits become parity benefits over time, reactive market orientation will become much more common over time. Thus, to create and maintain sustainable competitive advantage, the need for proactive market orientation will continuously increase. Clearly, the challenge for an intendedly market-oriented business is to improve continuously its skill in learning more effectively and efficiently about its target customers' expressed and latent needs.

The theory and empirical results of this study suggest that proactive market orientation is a very important addition to the construct of market orientation. The major implication of the study is that for any business the strongest foundation for superior business performance, innovation, and sustainable competitive advantage is a total market orientation—reactive market orientation coupled with proactive market orientation.

Suggestions for Future Research

The present study is the first step in making a case for the construct of a "total market orientation." Future research will want to avoid certain limitations of the present study that restrict the strength of the conclusions. First, although the units surveyed in the present study represent a broad range of industries and technology, they do not constitute a random sample. Our sampling approach used a convenience sample with the objective of increasing internal validity by having multiple respondents from most of the businesses surveyed, albeit at the expense of external validity. Because of the relatively small sample size, the regression analyses in this study had only low statistical power. A much larger random sample would permit more powerful tests. However, one must also recognize the costly nature of this

kind of research. It was due in part to the strong support of MSI leadership that we were able to obtain the participation of some of the business units in the sample, and considerable effort was involved in generating completed questionnaires from all 120 senior executive respondents.

Second, the present study also uses a cross-sectional research design. While this is the dominant research design to date for market orientation studies, one must be cautious about reaching conclusions of causation based on the data. As has been pointed out on numerous occasions, studies of the market orientation–performance relationship would benefit from longitudinal designs with particular reference to the relationships among reactive market orientation, proactive market orientation, innovation, and performance.

Third, the reliability of one of our measures, new-product success, is lower than the criterion suggested by Nunnally in 1978 but is close to his 1967 criterion of .5. It is at the low end of the range of scale reliabilities commonly reported in leading psychology and marketing journals (Peterson 1994).

The findings of the present study suggest several important areas for future research. Does a proactive market orientation lead to the development of profoundly new products? Many scholars and practitioners have argued that a market orientation leads to the development of incremental or trivial new products (e.g., Berthon, Hulbert, and Pitt 1999; Christensen and Bower 1996). This is perhaps more likely the case with reactive market orientation; we suggest that a proactive market orientation will lead more probably to the development of substantially new products.

Does the successful implementation of a business's value discipline (Treacy and Wiersema 1993) require a specific form of market orientation? Each value discipline has a unique, primary objective: product leadership—best product; customer intimacy—best service; and operational excellence—best price. All three require a deep understanding of the needs of customers in their target markets. It is possible that one of the two forms of market orientation may take precedence for different value disciplines. For example, a business that chooses a discipline of product leadership may need especially to emphasize a proactive market orientation whereas a business whose principal discipline is operational excellence—Wal-Mart as an example—may be better served by a reactive market orientation in which it focuses on customers' expressed needs and increasing the efficiency of its processes. Businesses choosing customer intimacy may succeed best with a balance between the two forms of market orientation. (The preceding are merely possibilities for relative emphasis rather than an argument for the exclusive use of one or the other form.)

Is a business more likely to develop a proactive market orientation if marketing plays the lead role on the top management team than if R&D plays the lead role? Miles and Snow (1978) suggest that the composition of the top management team influences the direction of a firm's strategic orientation (i.e., its value discipline). The composition of the top management team could also influence the likelihood of a firm developing a primarily reactive market orientation or a primarily proactive market orientation.

What roles do market and technological turbulence play in the development of a proactive market orientation? Market and technological turbulence increase uncertainty and promote the development of a market orientation (Day 1999b). A proactive market orientation provides greater insight into the nature of changing customer and technological requirements than does a reactive market orientation. Thus, contexts of increasing market and technological turbulence may well lead to increased levels of proactive market orientation. An informal survey in an executive MBA class comprising a broad range of “technological turbulence” among the businesses represented suggested a positive relationship between a business’s technological turbulence and the business’s ratio of proactive to reactive market orientation.

Appendix. Questionnaire Items Retained for Analysis

MOPRO (alpha = .884)

- | | |
|----|--|
| X1 | We help our customers anticipate developments in their markets. |
| X2 | We continuously try to discover additional needs of our customers of which they are unaware. |
| X3 | We incorporate solutions to unarticulated customer needs in our new products and services. |
| X4 | We brainstorm on how customers use our products and services. |
| X5 | We innovate even at the risk of making our own products obsolete. |
| X6 | We search for opportunities in areas where customers have a difficult time expressing their needs. |
| X7 | We work closely with lead users who try to recognize customer needs months or even years before the majority of the market may recognize them. |
| X8 | We extrapolate key trends to gain insight into what users in a current market will need in the future. |

MORTN (alpha = .855)

- | | |
|-----|---|
| X9 | We constantly monitor our level of commitment and orientation to serving customer needs. |
| X10 | We freely communicate information about our successful and unsuccessful customer experiences across all business functions. |
| X11 | Our strategy for competitive advantage is based on our understanding of customers' needs. |
| X12 | We measure customer satisfaction systematically and frequently. |
| X13 | We are more customer-focused than our competitors. |
| X14 | I believe this business exists primarily to serve customers. |
| X15 | Data on customer satisfaction are disseminated at all levels in this business unit on a regular basis. |

INNOV (alpha = .835)

- | | |
|-----|--|
| X16 | Competitors in this market recognize us as innovation leaders. |
| X17 | We are recognized for being at the leading edge of technological innovation. |
| X18 | We are first to market with new products or services. |

MECH (alpha = .820)

- | | |
|-----|--|
| X19 | When employees have a problem, they are supposed to go to the same person for an answer. |
| X20 | There is little action taken until a superior approves the decision. |
| X21 | Employees are discouraged from independent decision making. |
| X22 | Going through proper communication channels is constantly stressed. |

- X23 Employees have to ask their boss before they do almost anything.
- X24 Any decision that employees make has to have their boss's approval.
- X25 (R) There is no specific manual detailing what employees should do.
- X26 In this organization, everyone has a specific job to do.

PROFIT (alpha = .768)

- X27 (R) Profitability compared to our major competitor is poor.
- X28 Profitability compared to business unit objectives is good.

SALESGRO (alpha = .705)

- X29 Sales growth compared to our major competitor is good.
- X30 (R) Sales growth compared to business unit objectives is poor.

NEWPROD (alpha = .466)

- X31 New-product success compared to our major competitor is good.
- X32 (R) New-product success compared to business unit objectives is poor.

Buying Power

- X33 Buyers in this market are able to negotiate favorable prices.

Difficulty of Entry

- X34 It is difficult for a new competitor to enter this market.

Cost of Disadvantage

- X35 We are at a cost disadvantage compared to our major competitors.

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