8-19-2008

The Performance Implications of Planning, Implementation, and Evolution of Market-oriented Strategy by Top Management

Jeffrey R. Foreman

Permission to Borrow

In presenting this dissertation as a partial fulfillment of the requirements for an advanced degree from Georgia State University, I agree that the Library of the University shall make it available for inspection and circulation in accordance with its regulations governing materials of this type. I agree that permission to quote from, or to publish this dissertation may be granted by the author or, in his/her absence, the professor under whose direction it was written or, in his absence, by the Dean of the Robinson College of Business. Such quoting, copying, or publishing must be solely for scholarly purposes and does not involve potential financial gain. It is understood that any copying from or publication of this dissertation which involves potential gain will not be allowed without written permission of the author.

____

signature of author

Notice to Borrowers

All dissertations deposited in the Georgia State University Library must be used only in accordance with the stipulations prescribed by the author in the preceding statement.

The author of this dissertation is:

Name Jeffrey R. Foreman
Address 837 Woodland Rd
Statesville, NC 28677

The director of this dissertation is:

His/Her Name: Dr. Naveen Donthu
Department: Marketing
Department Address:

Robinson College of Business
35 Broad St, Suite 1335
Georgia State University, Atlanta, GA 30303

Users of this dissertation not regularly enrolled as students at Georgia State University are required to attest acceptance of the preceding stipulations by signing below. Libraries borrowing this dissertation for the use of their patrons are required to see that each user records here the information requested.

Name of User	Address	Date

The Performance Implications of Planning, Implementation, and Evolution of Market-oriented Strategy by Top Management

BY

Jeffrey Ryan Foreman

A Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree
of
Doctor of Philosophy
in the Robinson College of Business
of
Georgia State University

GEORGIA STATE UNIVERSITY
ROBINSON COLLEGE OF BUSINESS
2008

ACCEPTANCE

This dissertation was prepared under the direction of the candidate's Dissertation Committee. It has been approved and accepted by all members of that committee, and it has been accepted in partial fulfillment of the requirements for the degree of Doctor in Philosophy in Business Administration in the Robinson College of Business of Georgia State University.

H. Fenwick Huss
Dean
Robinson College of Business

Dissertation Committee:

Naveen Donthu
James Boles
Bruce Pilling
Steve Henson

ABSTRACT

The Performance Implications of Planning, Implementation, and Evolution of Market-oriented Strategy by Top Management

By

Jeffrey Ryan Foreman

August 15, 2008

Committee Chair: Dr. Naveen Donthu

Major Department: Marketing

Participating in the growing research stream involving the market orientation-performance relationship, this investigation explores the impact of firms' planning, implementation, and evolution of market orientation on financial performance. A longitudinal approach is used to capture the formation and evolution of market orientation. Evidence of market orientation as depicted in top management's stated strategy is assessed through content analysis of 150 SEC filings (S-1s and 10-Ks) of seventy-five initial public offering (IPO) firms. The sample covers companies that went public in the years 2001-2003, and the study spans a six-year period from 2001-2007. Customer and competitor orientation are independent variables tested to predict stock return. Moderator variables of firm size, top-management-team (TMT) heterogeneity, services or manufacturing industry, and industry competitive intensity are tested in a series of regression analyses.

The study involves a unique combination of features in that: 1) the market orientation of top management is captured; 2) the market orientation formation and evolution is captured; 3) secondary archival data is used in the analysis; 4) objective performance measures are utilized; 5) data from multiple industries is analyzed; 6) factors that moderate the market orientation performance relationship are studied.

Contributions of this study are that it: 1) builds on the work of Gebhardt, Carpenter and Sherry (2006) using longitudinal analysis to capture the dynamic nature of the market orientation; 2) establishes evidence of variation of the market orientation across time; 3) examines the division of market orientation as separate constructs of customer and competition; 4) provides insight about important moderators of the relationship; 5) moves literature towards a foundation for a more general theory of market orientation by providing some further evidence of the construct's relation to financial performance.

Results of regression analysis provide support for customer orientation leading to superior financial performance. Significant moderator variables in this relationship include manufacturing vs. service firms, top-management-team (TMT) heterogeneity, and firm size. Unexpected results are found for competitor orientation and some moderator results are not significant.

ACKNOWLEDGEMENTS

Many thanks to my advisor Dr. Naveen Donthu who persevered with me to make this dissertation possible. Gratitude to Dr. Steve Henson who has been a true mentor and helped me gain the knowledge and confidence needed to pursue a Ph.D. Thanks to Dr. Bruce Pilling and to Dr. James Boles for sharing valuable knowledge and insight along this journey.

I wish to acknowledge the contributions of my fellow doctoral students, especially those in my cohort. I also wish to thank all of my friends who have supported me along the way. Finally I owe deepest gratitude to my family for helping me to endure.

TABLE OF CONTENTS

Chapter 1: Introduction

1.1 Research Overview

The impact of market orientation on firm performance has been the subject of extensive research aimed at quantifying the theoretical relationship between the two. Previous research establishes the need for examining the relationship between market orientation and varying measures of business performance (Jaworski and Kohli 1993; Harris 2001). Following the Marketing Science Institute's call for research exploring marketing's effects on financial performance in 2002, scholars have established research agendas to quantify how marketing activities contribute to shareholder value (Rust et al. 2004a). As the body of knowledge has endeavored to provide a better understanding of the impact of marketing on firm performance in the form of shareholder value, perspectives on, approaches to, and methods of investigating the topic have evolved, yielding varied results.

Two important perspectives on market orientation are behavioral and cultural. A behavioral perspective involves the firm's propensity to generate and respond to market intelligence (e.g., Kohli and Jaworski 1990), while a cultural perspective involves the market-oriented norms and values of the firm (e.g., Narver and Slater 1990). Market orientation may be viewed as a continuum (Narver and Slater 1990; Kohli and Jaworski 1990) on which research has not yet addressed the optimal point for given industries or strategic orientations. Therefore, it is important for academic researchers to further advance this topic in the research setting of strategic marketing.

The recent marketing and strategic management research advances our understanding of firm strategy in terms of market orientation. Rust, Lemon, and Zeithamltrategic (2004) provide a strategic framework for comparing marketing strategies to each other in terms of projected financial return while the literature concerning strategic management furthers a better understanding of how firms are able to formulate strategy according to their given strategic orientation (Slater, Olsen, and Hult 2006).

Several studies set the stage for taking new directions in the related research. Luo and Donthu (2006) link marketing activities in the form of marketing communication productivity to stock price, and Kirca, Jayachandran, and Bearden (2005) conduct a meta-analysis to help summarize the market orientation-performance research. Such research contributes to our understanding of constructs employed as antecedent and outcome variables as well as summarization of results across studies. Additionally, the recent marketing literature establishes market orientation as a dynamic concept that is the outcome of the process of organizational change (Gebhardt, Carpenter, and Sherry 2006).

1.2 The Research Problem

As results have varied in the previous research on this topic, there remains a pressing need for new and innovative studies to help move the body of knowledge towards gaining a more solid perspective. While having a strong market orientation should logically benefit the firm, it is noted here that devotion of the firm to a higher level of market orientation uses up valuable resources and is only appropriate if the costs do not outweigh the benefits (Kohli and Jaworski 1990). Because marketing managers compete with other departments for resources, there is an increasing imperative to show that devoting organizational resources to the goal of becoming more market-oriented will pay off in the form of shareholder value.

An indication that further research is necessary to answer the questions surrounding the relationship between market orientation and financial performance is that results of prior studies have generally varied depending on factors specific to each study including sampling and data collection factors. While numerous studies show a positive relationship between market orientation and performance (e.g., Deshpande, Farley, and Webster 1993; Jaworski and Kohli 1992; Jaworski and Kohli 1993; Narver and Slater 1990; Slater and Narver 1994; Ruekert 1992; and Matsuno and Mentzer 2000) a number of other studies show a negative and or nonsignificant relationship (e.g., Grewal and Tansuhaj 2001; Han, Kim, and Srivastava 1998; and Siguaw and Honeycutt 1995).

1.2.1 Variations Linked to Industry Context

Previous research indicates that the market orientation-performance relationship may vary by industry. For example, Kirca, Jayachandran, and Bearden (2005, p. 1), in review of the literature, point out that certain studies (e.g., Agarwal, Erramilli, and Dev 2003; Bhuian 1997; Sandvik and Sandvik 2003) show "nonsignificant or negative effects" for the association between market orientation and performance. Interestingly, these three cited studies are all the result of sampling from the services industry. The researchers discover that when using cost-based and revenue-based performance measures, market orientation leads to increased performance to a greater extent for manufacturing firms than it does for service firms. As these examples illustrate, the ability to collect data in multiple industries enables clarification of current perspectives of the market orientation performance relationship. Additional research is needed to explore how market orientation affects performance based on the industry context.

1.2.2 Variations Linked to Level of Data Acquisition

Results of studies of the market orientation-performance relationship have also varied based on the level of data acquisition. For example, Kohli and Jaworski (1990) collect market-orientation data primarily from mid level managers while, Homburg and Pflesser (2000) collect this data through content analysis of artifacts from business magazines, field interviews of general managers and functional managers, and finally from questionnaires administered to mid level managers. Other varying levels of data acquisition include Siguaw, Brown, and Widing's (1994) use of a sample consisting of salespeople, Kumar, Subramanian, and Yauger's (1998) administration of questionnaires to hospital chief administrators, and Gebhardt, Carpenter, and Sherry's (2006) interviews of employees ranging from CEOs to low-level employees.

Long established as the locus of the firm's market orientation (Kohli and Jaworski, 1990; Narver and Slater, 1990), top management plays a very important role in the market orientation formation and evolution. Although previous research (e.g., Slater and Narver 1994) collects market orientation data from the top-management team (TMT), none of the current research captures the *evolution* of market orientation from a top-management perspective.

1.2.3 Imbalance in Methods of Data Acquisition

While most previous research in the area of market orientation employs survey-based approaches to learn about an organization's market orientation, a limited number of studies (e.g., Noble, Sinha, and Kumar 2002; Gebhardt, Carpenter and Sherry 2006) utilize qualitative techniques to capture the market orientation of the firm and then process the collected qualitative data with quantitative methods. To our knowledge, no studies of the market orientation-performance relationship utilize data collection and analysis that is entirely qualitative. An area of concern in the current literature is that most research utilizes survey-based studies that suffer from low response rates and methods bias. Incorporating studies utilizing qualitative research techniques provides a more balanced perspective to the body of knowledge.

1.2.4 Problems with Temporality of Data

Although Day (1994) stresses the importance of understanding how managers may strive to make their firms more market-oriented, most previous research in this area employs data-collection techniques that are cross-sectional. Such an approach does not capture the process of the initiation, implementation and evolution of market orientation over time as it develops to become an integral part of firm strategy as outlined by Gebhardt, Carpenter, and Sherry (2006). The longitudinal analysis of market orientation in our study helps to capture the dynamic nature of the construct and serves as a building block in the process of developing a foundation for a more general theory of market orientation related to firm performance (see Kohli and Jaworski 1990).

1.3 Research Objective

Based on the research problem outlined above, there are several questions that warrant exploration. Will the expense of utilizing valuable resources for planning and implementation of market orientation pay off in terms of financial performance over time? How may the answer to the first question vary within the contexts of services or manufacturing industries? How may the answer vary by the data collection approach? In an attempt to answer these questions this study uses a framework grounded in the Resource-Advantage Theory of Competition (Hunt 2002). In the following sections we provide an overview of the study and how it is significant to the current marketing and strategy literature.

1.3.1 Framework for Addressing Research Questions

Because market orientation is considered to be a resource that arguably serves to provide comparative advantage, the framework of the Resource-Advantage Theory of Competition (R-A theory) (Hunt 2002) provides a context for addressing the research questions in the current study. The R-A theory builds on the foundation of the resource-based view (Wernerfelt, 1984) and suggests that establishing comparative advantages in resources leads to competitive advantage and should theoretically lead to the ultimate result of superior financial performance.

1.3.2 Bases of Assessment

The goal of this study is to explore the relationship involving the impact of firms' relative level of market orientation on performance. In our assessment of market orientation, we focus on understanding the overarching strategy that top management chooses to employ in the organization, focusing on the level of market orientation that exists therein. Performance is measured with objective indicators based on stock price. The relationship between market orientation and performance is examined using longitudinal, time-series data obtained from secondary sources.

Assessment in the current study involves the level of market orientation depicted in the stated strategy of top management from the time of the initial public offering and continuing as the firm evolves over time. This allows for the capture of evidence of implementation and evolution of level of market orientation that may occur over time. The combined results contribute to the current body of knowledge about whether superior performance is achieved by firms that demonstrate greater market orientation.

Rust et al. (2004a) suggest that it is possible to prove that marketing increases shareholder value. The current study attempts to materialize this notion to find out if variance exists in the levels of top-management emphasis on market orientation of firms competing in given industries and, if variance is found, to test for a relationship with firm performance using objective performance measures. The analysis is conducted on a longitudinal basis to determine whether top-management emphasis on market orientation leads to increased profits for shareholders. A firm's culture may evolve over time to become more or less market-oriented, or a firm may have a sustained level of market orientation. The current study is unique in that it utilizes a methodology that is capable of capturing this time-sensitive phenomenon.

1.3.3 Significance of the Study

The significance of this study lies in they way in which it addresses the current research problem of whether expending the valuable resources involved with developing and maintaining a market orientation will pay off for the firm in terms of financial performance. We investigate potential systematic variation to clarify the market orientation-performance relationship by considering varying industry contexts of manufacturing and service firms. Further significance of the study is found in its unique longitudinal analysis that is needed to understand the planning, implementation and evolution of the market orientation over time.

While previous research (e.g., Slater and Narver 1994) has collected market orientation data from the top-management team (TMT), none of the current research has captured the *evolution* of market orientation from a top-management perspective. The current research captures the dynamic nature of the market orientation-performance relationship and serves as a building block in the potentially developing process of working toward a foundation for a more general theory of market orientation related to firm performance (see Kohli and Jaworski 1990).

In summary, the study involves the following unique combination of features:

1. It captures the market orientation of top management.
2. It captures market-orientation formation and evolution.
3. It uses secondary archival data in the analysis.
4. It utilizes objective performance measures.

5. It analyzes data from multiple industries.
6. It studies factors that moderate the market orientation–performance relationship.

Chapter 2: Literature Review

2.1 Market Orientation

Peter Drucker's (1954) pioneering assertion that customer satisfaction is most important to the success of the firm is essential to the modern definitions of the marketing concept (see McNamara 1972). Scholars such as Mickitrick (1957), Felton (1959), Barksdale and Darden (1971), who follow Drucker's lead, further lay the foundation for the current conceptualization of market orientation and the "market driven" organization. Eventually, Webster (1992) establishes that the customer should drive organizational goals while the competition derives its importance to the organization from its inherent importance to the discerning customer. This view mandates that the firm should focus on the needs of its customers while keeping the competition in sight so as to stay ahead in commonly competitive markets (Day 1994; Narver et al. 2004). In addition to customer and competitor orientation, Market orientation also encompasses interfunctional coordination (Narver and Slater 1990; Slater and Narver 1994). Customer orientation is conceptualized as understanding and satisfying customers' needs and wants; competitor orientation takes into account understanding rivals' strengths and weaknesses and how they satisfy customers; interfunctional coordination may be simplistically described as utilizing organizational resources to create value (Narver and Slater 1990).

Market orientation has been specifically defined in a variety of ways in the marketing literature. For example, Day (1994) pieces together previous studies conducted by Deshpande, Farley, and Webster (1993), Narver and Slater (1990), and Shapiro (1988), to consolidate the idea that market orientation is a way of understanding and satisfying customers through a combination of putting customers' interests first, utilizing interfunctional resources to create customer value, and generating and using customer and competitor information (Kohli and Jaworski 1990). Deshpandé and Farley (1996, p. 14) define market orientation as the "set of cross-functional processes and activities directed at creating and satisfying customers through continuous needs-assessment." Narver and Slater (1990; 1998) define the marketing concept as being a value creating, long-term, and profit-minded focus combined with behaviors of customer orientation, competitor orientation, and interfunctional coordination of the resources of the firm. Furthermore, they provide empirical evidence that marketing efforts have a substantial effect on profitability. Market orientation as defined by Kohli and Jaworski (1990, p. 6) is "the organizationwide *generation* of market intelligence pertaining to current and future customer needs, *dissemination* of the intelligence across departments, and organizationwide *responsiveness* to it." These researchers further describe the market orientation concept as involving generating, disseminating, and responding not only to market intelligence that is directly linked to customer needs but also to external factors that are indirectly linked to customer needs such as competition and regulation. Furthermore, they consider affects on both current and future customer needs. Based on the above conceptualizations, the marketing orientation may be interpreted as a focus on the customer and competition (Noble, Sinha, and Kumar 2002).

2.1.1 Behavioral and Cultural Perspectives

In the marketing literature of the early nineties, several perspectives emerge that combine to makeup the modern concept of market orientation. Narver and Slater (1990) and Kohli and Jaworski (1990) lay the groundwork for the two major paths that researchers follow when examining market orientation: the cultural and the behavioral, respectively. The cultural perspective involves the firm's norms and values that contribute to market-oriented behavior such as devotion to meeting customers' needs. This perspective is present in the marketing literature (e.g., Deshpandé, Farley, and Webster 1993; Narver and Slater 1990; Homburg and Pflesser 2000) and the strategy literature (e.g., Sinkula, 1994; Hult, Ketchen and Slater 2005). The behavioral perspective is concerned with how the firm generates, disseminates, and responds to market intelligence about customer needs (e.g., Kohli and Jaworski 1990; Hult, Ketchen and Slater 2005).

In the strategic management literature, Hult, Ketchen and Slater (2005) and Slater, Olson, and Hult (2006) point out that that the market-orientation conceptualization of Kohli and Jaworski (1990) has largely been ignored. In the marketing literature, as Dobni and Luffman (2003, p. 578) point out, it is "broadly accepted that a market orientation is a behavioral culture" that is actionable and that "dictates how an organization's employees think and act." This conceptualization is the same general concept built upon by Sinkula (1994) in the marketing context of information processing and organizational learning.

Several studies consider both the behavioral and cultural perspectives. For example, Dobni and Luffman (2003) argue that since market orientation is essentially an influence on the way employees think and act, market orientation is generally accepted as a behavioral culture that represents behaviors required for implementing the marketing concept (e.g., Day 1990; Kohli and Jaworski 1990).

According to Homburg and Pflesser (2000), the distinct components that make up a market-oriented organizational culture are shared organizational norms and values and behaviors that exhibit market orientation, as well as artifacts of market orientation (e.g., stories, rituals, and language that have symbolic meaning). These authors employ content analysis to uncover common artifacts of market orientation as well as qualitative research and field interviews in their methodology.

2.1.2 Organizational Learning

Organizational learning involves the firm gaining competitive advantage through innovation by learning about and reacting to the environment in which it operates (Sinkula 1994). The market-sensing and customer-linking capabilities outlined in the strategy literature (Day 1994; Hult and Ketchen 2001) are similar to the organizational learning concepts mentioned above. Previous research suggests that organizational learning and innovation are integral parts that help to explain firm performance from a process approach rather than a descriptive approach (Hurley and Hult 1998).

Implementing a comprehensive change program that combines strategy and TQM can move an organization from being less to more market-oriented through monitoring and improving capabilities, structure, positioning, and targeting with the overtone of customer value (Day 1994). This process involves the basic process of learning that is described as the acquisition, dissemination, interpretation, and storage of knowledge (Huber 1991).

Hult, Ketchen, and Slater (2005) express the view that market orientation sparks employees' use of needs-based consumer knowledge. They build on the marketing and organizational learning literature that professes that using knowledge to create learning is necessary for the evolution of market orientation (e.g., Menon and Varadarajan 1992). This evolution involves organizational change that often is carried out through the occurrence of events such as political struggles at the organizational level or learning by trial and error (Gebhardt, Carpenter, and Sherry 2006).

This stream of research from an organizational learning perspective builds on the ideas that marketing researchers should focus on both understanding not just what happens but why things happen (Day 1994), as well as broadening research to include market information processing as opposed to limiting research only to market information use (Sinkula 94; Desphande and Webster 1989). Although it may seem intuitive that organizational learning would act to benefit the firm, this is not always the case, especially if resources are being devoted to the cause of organizational learning that could otherwise be utilized for more productive purposes (Sinkula 1994).

2.1.3 Development Process

In addressing the topic of how the firm may actually achieve and sustain a market orientation, Day (1994) finds that there are programs that may assist companies in this area as market orientation continues to evolve with the organization over time. Several pioneering authors concur that market orientation may be thought of as a long-term strategy such that the external environment does not moderate the relationship with the construct and performance (e.g., Slater and Narver 1994; Jaworski and Kohli 1992). When examined from the cultural perspective, market orientation requires both inertia (Noble, Sinha, and Kumar 2002) and maintenance (Gebhardt, Carpenter, and Sherry 2006) to prevail over time with the possible consequence of increased performance.

Gebhardt, Carpenter, and Sherry (2006) take the cultural perspective of market orientation in a research approach that involves the notion of greater market orientation achieved through a sequential process of organizational change based on cultural values that are shared by market-oriented organizations. A major contribution of this research is that its conclusions further the work of those (e.g., Hurley and Hult 1998) who have built on the foundation of Day (1994) to depict market orientation as an evolving process.

Gebhardt, Carpenter, and Sherry's (2006) research approach encompasses and illuminates the antecedent and consequence approach in the context of organizational change. It sheds light on the dynamic process of organizational change that firms undergo as they become more market-oriented. These researchers point out that previous studies of market-orientation antecedents do not explore what actually initiates the change process of a firm evolving to exhibit the antecedents. Accordingly, our current study considers the possibility that some firms may move from being more to less market-oriented, and that still others may be relatively more market-oriented from the time of inception and sustain that high level of market orientation throughout their lifecycles.

Gebhardt, Carpenter, and Sherry's (2006) results indicate that the organizational change process should be conceptualized as occurring in a sequential fashion. The change process can be conceptualized in a simplified form that is demarcated by initiation, transition, and achievement of a market orientation in which the initiation stage is spurred by stakeholders that are owners and/or senior executives who organize coalitions generally comprised of top management that are dedicated to implementing change in response to a recognized threat.

2.1.4 Assessment Scales

Two scales are utilized as a basis in the literature for the bulk of the market orientation research. Narver and Slater (1990), and Kohli, Jaworski, and Kumar (1993) are credited with developing the MARKOR scale, the premiere market-orientation scale upon which most other scales in this area have been based. The MARKOR scale deals with information generation, dissemination, and responsiveness to customer needs. Narver and Slater's (1990) market-orientation scale (known as MKTOR) has been found to explain more variance in the market orientation-performance relationship (Oczkowski and Farrell, 1998). However, research suggests that neither of these scales should be used without modification due to factors including low reliability of MARKOR (Pelham and Wilson 1996) and a poorly adjusted measurement model of MKTOR (Oczkowski and Farrell 1998).

Accordingly, additional scales, such as Deshpandé and Farley's (1996) 10-item market-orientation scale, evolve from the seminal scales described above. For example, Deshpandé, Farley, and Webster (1993) develop a nine-item customer orientation scale and Pelham and Wilson (1996) construct a scale useful for small business performance. The scale developed by Kohli, Jaworski, and Kumar (1993) is the only one to our knowledge that has been used to measure top-management emphasis and interdepartmental conflict.

2.1.5 Organizational Strategy

Previous strategy research (e.g., Schein 1984) suggests that understanding the culture and strategy of the organization is important to accurately understanding organizational performance due to the relationship between corporate culture, strategy, and performance. Thus, an issue pertinent to this study is how market orientation is conceptualized in terms of strategy.

The reported nature of market orientation in terms of organizational strategy has varied in the literature. Some researchers consider market orientation to be a specific strategic orientation (e.g., Slater and Narver 1993; Noble, Sinha, and Kumar 2002), but others interpret it as a separate entity from competitive strategy (e.g., Morgan and Strong 1998).

When interpreted as separate entities, competitive strategy is positioned as an essential organizing focus for market orientation (Ruekert 1992).

Where market orientation fits in the typology of levels of strategy is an important consideration in this area of research. There are three levels of strategy commonly depicted in the strategic management literature. Corporate-level strategy deals with the industry or industries the firm competes in; business-level strategy involves the how firms compete in each of their SBUs; and functional-level strategy is associated with how each of the organization's functional areas support business and corporate level strategies (Ketchen Jr. 2003). Morgan and Strong (1998) imply that it is probable that the extent of market orientation exhibited by the firm may be a reflection of the strategy pursued.

The three main ways in which researchers examine strategic orientation are the narrative, classificatory, and comparative approaches. The narrative research approach involves qualitative methodologies such as case studies; the classificatory research approach involves taxonomies and typologies of categorization; the comparative research approach utilizes specific traits and dimensions to uncover similarities and differences in strategic orientation (Morgan and Strong 1998).

Previous research examines the possibility of specific strategies influencing the relationship between market orientation and performance (Walker and Ruekert 1987; Matsuno and Mentzer 2000; Dobni and Luffman 2003). This perspective maintains that for strategy to be implemented in an effective manner that leads to firm performance, managers must not ignore interdependencies between strategy type (e.g., diversification) and existing organizational characteristics (e.g., management of strategic human assets) (Kor and Leblebici 2005).

While some studies show how increasing market orientation can directly increase performance (e.g., Matsuno and Mentzer 2000), others find an indirect link between the two. For example, Dobini and Luffman (2003) find that increasing market orientation can enhance strategy deployments that may in turn enhance performance. Their research examines market orientation as a driver of firm strategy noting Jaworski and Kohli's (1993) previous consideration of the idea of market orientation working in tandem or joint moderation with other strategic components to drive performance. This insight, along with other research (e.g., Gebhardt, Carpenter, and Sherry 2006), provides yet another piece to the puzzle of how market orientation may increase performance.

2.2 Top-Management-Team (TMT) Strategy and Performance

The top-management team (TMT) can be conceptualized as those upper echelon executives (see Hambrick and Mason 1984), including CEOs, chairmen, presidents, chief operating officers, executive vice presidents, senior vice presidents, vice presidents, etc., who are involved in making important strategic decisions as well as providing guidance and direction for such decision making (Auh and Menguc 2005). Understanding the cognitions and strategic intentions of top management leads to better understanding of the strategic orientation utilized to achieve superior performance based on strategic businesses decisions made by the firm (Slater, Olsen, and Hult 2006). In the following sections we discuss the marketing and strategy research about the strategic orientation of top management as it pertains to strategy initiation, formation, and implementation.

The mission of the firm is the underlying component of the overall strategic goals of the firm as it helps top management create and maintain unique organizational identity based on defining core values and behaviors (Slater, Olsen, and Hult 2006). Regardless of the mission of the firm, it is the responsibility of top management to formulate a strategic plan that facilitates the building of organizational competence (Prahalad and Hamel 1990) as top management plays a critical role in strategy formation and, in particular, creation of market orientation (Kohli and Jaworski 1990; Narver and Slater 1990; Kirca, Jayachandran, and Bearden 2005).

2.2.1 TMT Strategy Formation, Initiation, and Implementation

Top management plays a role in strategy formation capability (Slater, Olsen, and Hult 2006) by clarifying the firm's mission and goals via environmental scanning and organizational analysis, comprehensively evaluating alternatives, and forming strategy in manners ranging from informal and emergent to formal and deliberate. As the locus of the firm's market orientation, top management's strategic planning and emphasis in the initiation stage creates the existence of or causes an increase in the level of market orientation (Kohli and Jaworski, 1990; Narver and Slater, 1990).

Collectively guiding and managing employee behaviors within the given competitive context is key to successful strategy implementation for top management (Dobni and

Luffman 2003). While no strategy can be effective without proper implementation, it is intuitive that a firm that chooses the right strategy from the start and then works on how to implement it may be in a better position than the otherwise similar firm that does not start with the best overall strategy and therefore misallocates valuable resources towards less effective strategic concerns.

As previously noted, top management plays a role in strategy formation capability (Slater, Olsen, and Hult 2006). If a strategy that is valuable, rare, and difficult to imitate is achieved by the firm enabling it to increase effectiveness or efficiency, the firm may realize competitive advantage. In this case the process of formulating strategy is in itself an asset that is capable of being valuable, rare (pursued by few or no firms), and difficult to imitate due to causal ambiguity and/or social complexity (Barney 1991; Slater, Olsen, and Hult 2006).

Although a subject of debate in the strategy literature is whether strategies are the result of specific formal planning or whether they emerge as organizations learn about their environments and causes of successes and failures (see Ansoff 1991), the literature generally reports positive relationships between mission/goal institutionalization, situation analysis, comprehensiveness, formal planning, and the outcome variable of performance (Slater, Olsen, and Hult 2006).

Marketing strategies must be implemented successfully if they are expected to result in superior financial returns (Bonoma 1984), and successful implementation of a market-driven strategy requires that marketing efforts make an impact on customers. This impact should take into account the purchasing behavior of the customer to strengthen and lengthen the relationship between customer and firm. The customer impact should be measurable by assessing how marketing assets such as marketing communications and promotions can lead to customer behaviors which, in turn, lead to increased shareholder wealth (Rust et al. 2004a). On a more tactical level, a profitable marketing strategy involves implementation of the strategic plan into actions such as advertising or other forms of promotion which help formulate "market assets" such as a base of valuable customers or valuable brand name (Rust et al. 2004a).

Implementation of strategy is a difficult challenge for managers (Vorhies and Morgan 2003) that makes possible increased organizational performance as a result of strategic planning and formulation of marketing strategies. Numerous researchers (e.g., Walker and Ruekert 1987; Bonoma 1984) stress the importance of implementation of strategy as the key to better performance induced by superior strategy. Interestingly, these researchers use strategy implementation examples of low-level task strategies (e.g., Noble and Mokwa 1999) and marketing mix decisions (e.g., Menon et al. 1999). For example, Slater Olsen and Hult (2006) find that strategic orientation moderates the strategy formation capability–performance relationship (strategy formation capability involve the firm's ability to formulate and implement successful strategies). In this case strategic orientation is operationalized with a typology that classifies organizations as being either prospectors, analyzers, differentiated defenders, or low cost defenders based on the Miles and Snow (1978) and Porter (1980) typologies of strategic orientation.

2.2.2 TMT Characteristics and Performance

Although there are numerous difficulties involved when attempting to assess the antecedents of firm performance and findings in this area of research have been equivocal (Murray 1989; Simons 1995; West and Schwenk 1996), several more-recent studies support the theory that top-management factors can lead to firm performance (e.g., Weinzimmer et al. 2003).

As Certo et al. (2006) point out, a theoretical rationale exists that suggests the composition of the TMT is not a substantive factor from which to predict performance in the context of so many extraneous variables including the external environment which theoretically has the predominant influence on performance (e.g., Hannan and Freeman 1977; Aldrich 1979). This view supposes that TMT factors provide a limited influence on performance because they are overwhelmed by a dominant macro-environment. In contrast to these views, the management literature has long suggested there may be a significant and positive link between the nature of the TMT and the outcome of firm performance as well as strategic change (Hambrick and Mason 1984; Eisenhardt and Schoonhoven 1990; Haleblian and Finkelstein 1993; Hambrick, Cho, and Chen 1996; Boeker 1997; Weinzimmer et al. 2003).

Certo et al. (2006) summarize past research and show that TMT heterogeneity is conceptualized by demographic characteristics of functional background, educational background (e.g., science, engineering, business and economics, law, etc.), age, and organizational tenure. Heterogeneity of the TMT is shown to be related positively to performance (e.g., Eisenhardt and Schoonhoven 1990; Hambrick, Cho, and Chen 1996; Smith et al. 1994). In their meta-analysis, Certo et al. (2006) find that the majority of the research points to heterogeneity of the TMT being linked to increased performance.

Although Eisenhardt and Schoonhoven (1990) found that size, shared experience, and heterogeneity in industry experience was consistent with performance in the form of expanding the size of the firm and Haleblian and Finkelstein (1993) found that firms with larger TMTs performed better in turbulent environments, to our knowledge there have been few additional studies that support the notion that TMT size leads to superior performance.

Tenure of the TMT is another factor that may affect firm performance. For example, some strategic management literature shows that TMTs that have long-standing tenure in the organization were found to perform relatively in sync with the overall industry while firms with TMTs that were of shorter tenure tend to vary either much higher or much lower in terms of performance. This is explainable due to escalation of commitment and risk aversion and decreased flow of unrestricted information processing that generally accompanies longer tenure of the TMT (Finkelstein and Hambrick 1990).

The demographic heterogeneity of the TMT can theoretically be linked to increased performance as it affords multiple perspectives, for example, through numerous different peer networks, (Williams and O'Reilly 1998) characterized by increased information when compared to a more homogeneous TMT (Certo et al. 2006; Bantel and Jackson 1989). Increased conflict involved with the strategic decisions of doing business is another characteristic common to the heterogeneous TMT. This phenomenon may actually lead to increased performance as it results in better scrutiny of important decisions (Certo et al. 2006; Pelled, Eisenhardt, and Xin 1999).

Past research demonstrates a link between TMT heterogeneity and firm performance (e.g., Smith et al. 1994). Barsade et al. (2000) find that stock price is positively related to TMT functional heterogeneity and firm stock market returns. Other research studying the airline industry shows that the nature of strategic decisions made by the TMT is affected by their composition in that team heterogeneity (although it reportedly can work for or against the firm) leads to increased performance captured in terms of market share and profits (Hambrick, Cho, and Chen, 1996). Furthermore, in a study sampling the semiconductor industry, Eisenhardt and Schoonhoven (1990) find that TMT size, shared experience, and heterogeneity in industry experience is consistent with performance in the form of expanding the size of the firm. Within the context of high technology entrepreneurial firms, affiliation diversity (meaning the number of previous companies for which the TMT member has worked), as well as functional diversity of prior experiences of top-management teams, may cause one firm to outperform similar firms that have a TMT with fewer company affiliations due to extensive access to information (Beckman, Burton and O'Reilly 2007). However, inconsistent findings in research concerning heterogeneity may suggest that results may not be generalizable across differing samples.

The results of Murray's (1989) examination of the heterogeneity of the TMT in differing contexts of competitive intensity imply partial support for notion that the homogeneity of the TMT would be preferable during times of intense competition due to efficiencies of interaction and that heterogeneity would be preferable during times of environmental instability and change. Heterogeneous TMTs may be considered more likely to attack the competition in a complex manner that involves short time periods (Ferrier 2001). The nature of complexity in this case involves a wide variety of actions involving the marketing mix as opposed to an attack using less variety in its use of marketing tools.

Certo et al. (2006) find that although some research suggests that the disadvantages of heterogeneous TMTs (e.g., interpersonal conflict, Pelled, Eisenhardt, and Xin 1999) outweigh the advantages, and that homogeneous TMTs have advantages of their own such as increased informal communication (e.g., Smith et al. 1994) and efficient coordination (e.g., Carpenter 2002), the majority of the research points to heterogeneity of the TMT linked to increased performance.

2.3 Antecedents of Market Orientation

According to Kirca, Jayachandran, and Bearden (2005) and Jaworski and Kohli (1993), the antecedents of market orientation can be categorized into the general categories of top management factors, interdepartmental factors, and organizational systems. In their research, Jaworski and Kohli (1993) suggest that a market orientation is related to antecedents of top management, interdepartmental, and reward system factors. These antecedents are the basis for the standard three categories of antecedents broadly outlined by Kirca, Jayachandran, and Bearden (2005) as top-management factors, interdepartmental factors, and organizational systems.

2.3.1 Top Management Factors

Top management plays a key role in the prevalence of market orientation in the firm because this influential group of leaders is largely responsible for developing the strategic orientation and founding principles and values of the firm (Webster 1988). Jaworski and Kohli (1993) purport that top management's risk aversion is an antecedent to market orientation while research in the management literature suggests that as the organization practices entrepreneurial tactics, performance may be affected by the level of risk taking of the TMT (Zahra 1996; Simsek 2007). While factors such as risk aversion of the top management and the interaction between departments of the company do play a role in affecting the level of market orientation of the firm, the literature suggests that in order for the firm to develop a market orientation, it is crucial that top management influence the business in such a way as to move toward that goal (Kohli and Jaworski 1990). Consequently, the risk aversion of top management will help define the firm's orientation.

2.3.2 Interdepartmental Factors

Interdepartmental factors of conflict and connectedness are important antecedents to a market orientation involving the level of contact among employees throughout all of the departments in the firm (Jaworski and Kohli 1993). If levels of tension and conflict are low and people in departments are well-connected and able to communicate effectively and efficiently, the firm will be better suited to utilize the strategic orientation that is emphasized by top management (Jaworski and Kohli 1993).

2.3.3 Organizational Systems

Formalization refers to rules and regulatory factors as well as role definitions within the organization and, unlike the previously discussed antecedents, formalization is inversely related to market orientation due to the “red tape” effect that inhibits the free flow of the marketing concepts through the firm (Jaworski and Kohli 1993; Kirca, Jayachandran, and Bearden 2005).

Centralization, which takes into account those persons in the organization who are empowered to make organizational decisions, is also inversely related to market orientation. An inverse relationship arises because if few individuals are able to make decisions dissemination of information throughout the firm may be limited. Consequently, information that would have contributed to increased market orientation may not be transmitted nor utilized. (Matsuno, Mentzer, and Ozsomer 2002; Kirca, Jayachandran, and Bearden 2005).

The remaining category of organizational systems antecedents involves employees in the form of market-based reward systems and market-oriented training (Kirca, Jayachandran, and Bearden 2005).

2.3.4 Top Management's Emphasis on Market Orientation

Top management itself may be considered an important resource for sustaining competitive advantage because without the analysis of the manager, the firm's sustained competitive advantage may not be achieved. Top management factors are an important categorical antecedent of market orientation, because top management will inherently play a role in the nature of interdepartmental relations and organizational systems due to the way in which top-management decisions influence the strategic direction the firm takes.

Top management takes on the responsibility of developing the strategic structure that guides the progression of proficiency in the firm as it grows and develops (Prahalad and Hamel 1990, p. 91). The resource-based view dictates that the firm utilizes sustainable resources that if valuable, rare, imperfectly imitable, and non-substitutable, work to develop sustained competitive advantage. Managers play a very important role in resource utilization because they "are able to understand and describe the economic performance potential of a firm's endowments" (Barney 1990, p. 117). Furthermore, when firms conduct initial public offerings, the top management involved can affect investor perceptions of organizational legitimacy (Higgins and Gulati 2006); therefore, the top management may itself be considered a valuable resource that is difficult to imitate.

2.4 Outcomes of Market Orientation

Common market orientation outcome variables are organizational performance, customer consequences, innovation consequences, and employee consequences (Kirca, Jayachandran, and Bearden 2005). Customer consequences include the perceived quality of the firm's products and or services. Innovation consequences include firms' innovativeness and ability to create and implement new ideas, products, and processes. Employee consequences include organizational commitment, team spirit, customer orientation, role conflict, and job satisfaction (Kirca, Jayachandran, and Bearden 2005; Jaworski and Kohli 1993, 1996).

2.4.1 Performance Outcomes

Performance outcomes in the market-orientation research stream are conceptualized in a variety of ways. For example, Kohli and Jaworski (1990) consider return on income and profits to be business performance indicator outcomes of market orientation and customer and employee responses involving satisfaction and commitment to be customer and employee consequences. In contrast, Narver and Slater (1990) used top management's assessment of return on investment, return on assets, and return on net assets as subjective performance measures relative to competition.

2.4.2 Subjective and Objective Performance Measures

The vast majority of previous literature uses subjective measures of performance when measuring the effect of market orientation or strategy effects on performance (e.g., Pelham and Wilson 1996; Atuahene-Gima and Murray 2004; Gatignon and Xuereb 1997; Gupta and Govindarajan 1982; Matsuno and Mentzher 2000; Narver and Slater 1990;

Noble and Mokwa 1999; Zou and Cavusgil 2002). Additionally, Kirca, Jayachandran, and Bearden (2005) find that the market orientation–performance relationship is stronger for subjective than for objective measures of performance. Interestingly, Jaworski and Kohli (1993) use both subjective and objective performance measures. They find market orientation related to performance when using subjective performance measures but find it unrelated when using the objective measure of market share.

In an effort to find how market orientation contributes to performance, Hult, Ketchen and Slater, (2005) use managers' perceptions of performance in their study and examine market orientation from both cultural and information processing viewpoints. However, several studies in the strategy and marketing literature have used objective performance measures. For example, Harris (2001) and Han, Kim and Srivastava (1998) published studies examining the link between market orientation and objective measures of financial performance. However, neither study's results showed a direct linkage between market orientation and objective performance.

Although managers' perceptions of otherwise objective performance measures, can effectively indicate realized financial performance (Rust et al. 2004a), there is a superiority that exists when utilizing strictly objective measures of performance (Harris 2001; Dess and Robinson Jr. 1984). Furthermore, firms that view themselves as perceptive to customers and competition may tend to be biased and overstate their performance (Noble, Sinha, and Kumar 2002).

Narver and Slater (1990, p. 27) refer to Dess and Robinson (1984), as well as Pearce, Robbins, and Robinson (1987) as examples to support their proposition that previous results show a "strong correlation between subjective assessments and their objective counterparts." This justification is valid, although it can be argued that purely objective measures will address many of the limitations of subjective measures of performance.

Bias may exist in subjective performance measures (Leonidou, Katsikeas, and Samiee 2002). In reference to the study often cited as a justification for this approach, Harris (2001) points out that Dess and Robinson (1984, p. 270) state that their study "should not be interpreted to suggest that subjective measures are convenient substitutes for objective measures of a firm's economic performance." Furthermore, Dess and Robinson (1984) conclude that objective measures of performance are always preferable to subjective performance measures when they are available.

2.4.3 Performance Measures Based on Stock Price

Organizational performance is an outcome variable that is manifest as being cost-based using profit measures such as return-on-assets (e.g., Han, Kim, and Srivastava 1998; Narver and Slater 1990) and revenue-based measures such as sales and market share (e.g., Jaworski and Kohli 1993). These accounting-type measures capture past and present performance but do not show an indication of future performance (Rust et al. 2004a). Additionally, global/overall performance measures such as comparison to company objectives and/or competitors' performance, are also common in the literature (e.g., Jaworski and Kohli 1993; Kirca, Jayachandran, and Bearden 2005).

Measuring return on marketing through the use of stock price based performance measures (e.g.. stock return) is a topic of substantial interest in the current marketing literature (e.g., Luo and Donthu 2006). Marketing managers are increasingly looking toward shareholder value as the predominant measure of performance (Day and Fahey 1988) and are actually under pressure to demonstrate that marketing efforts do in fact add to shareholder value (Doyle 2000; Rust et al. 2004a). Consequently, an important challenge for researchers is to provide evidence linking marketing activities to long-term measures of progress (Jaworski and Kohli 1993; Dekimpe and Hanssens 1995; Rust et al. 2004b).

2.5 Mediators Affecting the Market Orientation-Performance Relationship

The voluminous studies of market orientation and performance use widely varying theoretical rationales to explore a variety of mediators. Morgan and Strong (1998) point out that much of the previous research on the market orientation-business performance relationship does not account for possible mediators (Baron and Kenny 1986) such as competitive strategy (Day 1992; Slater and Narver 1996) which is considered a central organizing focal point for market orientation (Ruekert 1992).

Despite such omissions in some of the literature, several important studies do test for mediators in relationships involving market orientation and performance. For example, Hult Ketchen and Slater (2005) demonstrate that responsiveness is a mediator between market orientation and performance. Hawawini, Subramanian, and Verdin (2003) found that because relatively few firms dominate by adding value over time within an industry, average performers' performance is affected more by industry-wide factors than firm-specific factors. Furthermore, Han, Kim, and Srivastava (1998) produce results that indicate organizational innovativeness as a result of the firm having high level of customer orientation is a mediator in the market orientation-performance relationship, although when they examined competitor orientation and interfunctional coordination separately, they did not find support for these mediating effects.

In the strategy literature, not only a cultural but also an information-processing dimension of market orientation is considered. This research suggests a "confluence" of the three generally accepted antecedents of market orientation that combine to create a "*strategic marketing resource*" (Hult, Ketchen and Slater 2005, p. 1174), and it suggests that market orientation should be researched in the context of other performance antecedents using both cultural and information-processing dimensions. Results of this study indicate that that neither market orientation nor market information-processing has a direct affect on performance but that both affect responsiveness positively, suggesting the mediation of responsiveness on the relationships between market orientation and market information-processing and between market orientation and performance.

Kirca, Jayachandran, and Bearden (2005) conducted a meta-analysis that is part of the main foundation of the current research. This meta-analysis has helped to summarize the various mediators involved in the literature. The numerous variables that could mediate the market orientation–performance relationship include customer loyalty, customer satisfaction, quality, and innovativeness. These researchers found partial mediation of the market orientation–performance relationship using these variables. They also find that market orientation has a direct impact on performance beyond the effects of these mediators.

2.6 Moderators Affecting the Market Orientation-Performance Relationship

There are numerous mixed results in the studies examining environmental moderators of the market orientation-performance relationship. Competitive intensity of the industry is proposed to moderate the relationship between market orientation and performance (e.g., Harris 2001; Slater and Narver 1994), with results suggesting a nonsignificant (e.g., Jaworski and Kohli 1993; Slater and Narver 1994; Kirca, Jayachandran, and Bearden 2005) as well as a significant (e.g., Grewal and Tansujah 2001; Harris 2001) relationship.

Kirca, Jayachandran, and Bearden (2005) examine measurement characteristics (cost-based versus revenue-based, objective versus subjective, and single versus multi-item measures of performance) and sampling characteristics (manufacturing versus service firms and cultural context) as moderators of the market orientation–performance relationship across the sum of the pertinent prior literature. These moderators that are prevalent in the literature may explain additional variance of the market orientation and business performance relationship that can be classified as either contextual measurement or sampling characteristic moderators (Cano, Carrillat, and Jaramillo 2004; Kirca, Jayachandran, and Bearden 2005).

2.6.1 Sampling Characteristic Moderators

Cultural dimensions (i.e., collectivistic versus individualistic cultures) based on profit–versus-not-for-profit categorization and services-versus-manufacturing firm type are considered as possible sample-related moderators of the market orientation performance relationship (Cano, Carrillat, and Jaramillo 2004; Kirca, Jayachandran, and Bearden 2005).

Most studies where a negative or nonsignificant relationship is found sample from the service industry, collect sample data in high-power distance countries, and measure objective performance. Additionally, the market orientation–performance relationship is found to be stronger for manufacturing firms than for service firms (Kirca, Jayachandran, and Bearden 2005). According to previous literature (e.g., Anderson, Fornell, and Rust 1997), service firms tend to target smaller segments, and thus, they generally require greater levels of customization to implement market orientation. This may negatively impact sales and market share outcomes as well as employee costs and production efficiency in comparison to manufacturing firms. As mentioned previously, based on the Miles and Snow (1978) and Porter (1980) typologies of strategic orientation, Slater Olsen and Hult (2006) find that strategic orientation moderates the strategy formation capability-performance relationship.

Kirca, Jayachandran, and Bearden (2005) highlight Hofstede's (2001) national culture dimensions as previously established moderators of the relationship between market orientation and business performance. These moderators include power distance, uncertainty avoidance, individualism, masculinity, and long-term orientation.

The strategic management literature provides support for the idea that that firm-specific factors are more relevant than industry-wide factors for explaining performance (Hawawini, Subramanian, and Verdin 2003; Rumelt 1991) and research often examines the strategy performance relationship when considering the size of a firm with no definite relationship established.

However, several studies in export venture marketing literature (e.g., Aaby and Slater 1989; Donthu and Kim 1993) and management literature (e.g., Carpenter, Sanders, and Gregersen 2001; Finkelstein and Hambrick, 1996) show the positive effects firm size may have on performance. Larger firms may outperform their smaller competitors due to utilization of scarce resources unique to the larger firm (e.g., Narver and Slater 1990).

2.6.2 Environmental Moderators

Due to the nature of an unpredictable macroenvironment, even following the best strategy may not lead to superior performance. Several studies test for environmental as well as other moderators in the market orientation-performance relationship. Such research establishes some substantive environmental moderators such as market/environmental turbulence, technological turbulence, and competitive intensity (Harris 2001; Kirca, Jayachandran, and Bearden 2005).

Prior research indicates that competitive hostility moderates the market orientation-performance relationship when using sales growth as an outcome variable (Harris 2001). Luo and Donthu (2006) find that competitive intensity positively enhances the superior performance of firms that effectively convert resources involved with advertising and promotion into marketing performance outputs based on the notion that these firms create greater brand loyalty which holds greater value in more competitive markets where substitutes are inherently plentiful.

However, Kirca, Jayachandran, and Bearden (2005) find insufficient evidence to conclude that market/environmental turbulence, competitive intensity or technological turbulence are significant moderators of the market orientation/performance relationship when examined in the context of a meta-analytical study of past foundational market orientation literature. This result provides very limited support for the role of environmental factors as moderator of the relationship.

Competitive intensity of the industry has been proposed to moderate the relationship between market orientation and performance (e.g., Harris 2001; Slater and Narver 1994), with results suggesting a nonsignificant (e.g., Jaworski and Kohli 1993; Slater and Narver 1994; Kirca, Jayachandran, and Bearden 2005) as well as a significant (e.g., Grewal and Tansujah 2001; Harris 2001) relationship. Therefore the results on this relationship are inconclusive and future research should be conducted in this area.

2.6.3 Measurement Moderators

Cano, Carrillat, and Jaramillo (2004) consider moderators involving the various accepted market orientation measurement scales. Kirca, Jayachandran, and Bearden (2005) examine performance-measurement outcome variables including objective-versus-subjective, cost-versus-revenue, and single-versus-multi-item measurement scales.

Although they are not as prevalent in the literature, additional possible moderators of the market orientation–performance relationship outlined by Morgan and Strong (1998) include market growth, buyer and supplier power, demand uncertainty, extent of barriers to entry (Kirca, Jayachandran, and Bearden 2005), inter-functional rivalry (Fisher, Maltz, and Jaworski 1997), and lack of processes and procedures used to respond to change (Jaworski and Kohli 1993).

Chapter 3: Conceptual Framework and Research Hypotheses

3.1 The Cultural Perspective of Market Orientation as an Overarching Firm Strategy

The literature outlined above serves as the basis for this study's further exploration of the relationship between market orientation and performance. We take the cultural perspective of market orientation as an overarching firm strategy and incorporate the Resource Advantage Theory of Competition to develop our research hypotheses.
We align our research with prior research that conceptualizes market orientation, whether viewed from the cultural or behavioral perspective, as an overarching business philosophy that is present within the firm (Morgan and Strong 1998) such that most

strategies depicted in the literature fall under the umbrella of an overall strategy that is market-oriented (see Vorhies and Morgan 2003). From this standpoint, market orientation is not easily classified into one of three strategy levels (i.e. corporate, business, and functional), but rather it exists in some sense in each level as a strategy that is at a higher level than more specific competitive strategies.

We agree with Hult, Ketchen, and Slater (2005) that market orientation viewed from a cultural perspective cannot directly affect performance. However, based on the literature review, we expect research may result in the main effect of market-oriented culture to performance. Taking the cultural viewpoint of market orientation, the current study utilizes the comparative approach involving specific market orientation traits and dimensions in order to uncover similarities and differences in strategic orientation (Morgan and Strong 1998) and capture relative market orientation levels across firms.

3.2 Illustration of Market Orientation as an Overarching Firm Strategy

Our above-outlined conceptualization is illustrated in an example involving the strategic typology of Miles and Snow (1978). Even though a differentiated defender may seem to be inherently more market-oriented, from this viewpoint it would be possible for a low-cost defender to exhibit a higher level of market orientation compared to the differentiated defender. Our research investigates whether an overall strategy of market orientation will lead to performance implications that are pertinent for firms that exhibit the commonly categorized strategic orientations.

Our conceptualization of market orientation is further illustrated in the example of two competing firms that each employ a low-price pricing strategy or that each employ a cutting edge technological strategy. On the surface these strategies may seem to be non-market-oriented because they do not by nature direct resources toward a focus on the customer and competition. However, one of the two companies may have a greater level of market orientation as part of its fundamental organizational culture such that at the lower level strategy of trying to compete on lowest price, both firms could be similar but they may at the same time differ, for example, in decisions made involving tradeoffs of how to achieve the lowest price. The more market-oriented firm may be more in tune with the customer and therefore be capable of making decisions that result in an offering that is more appealing to customers. Similarly, the more market-oriented firm would theoretically be able to guide technological innovation more effectively based on intelligence about customer needs and competitor's level of technological prowess.

As noted previously, accounting for the implementation of market-oriented strategy collectively guiding and managing employee behaviors within the given competitive context is key to successful strategy implementation for top management (Dobni and Luffman 2003). While no strategy can be effective without proper implementation, it is intuitive that a firm that chooses the right strategy from the start and then works on how to implement it may be in a better position than the otherwise similar firm that does not start with the best overall strategy and therefore misallocates valuable resources towards less effective strategic concerns.

While taking into account that implementation, rather than formulation, of strategy is the key challenge for managers seeking strategy-based performance (Walker and Ruekert 1987; Bonoma 1984; Dobni and Luffman 2003), the current study assesses market orientation by examining the strategy as stated by top management that is subject to change over time.

3.3 R-A Theory and the Market Orientation-Performance Relationship

In the current study, we apply the resource-advantage theory of competition to the relationship between market orientation and performance. This is accomplished when we view the antecedents of market orientation as resources in the context of R-A theory such that a firm with superior organizational resources of this nature may gain comparative advantage over the competition, which can drive performance and market share.

Resources such as market-oriented top management, interdepartmental factors and employee characteristics (antecedents of market orientation) could produce efficiencies and effectiveness that will enable a competitive advantage based on the logic of R-A Theory. For example, Jaworski and Kohli's (1993) study of antecedents of market orientation shows that a market orientation is hypothesized to be related to employee commitment, *esprit de corps*, and business performance. Employee commitment and *esprit de corps* may be classified as human resources under the structure of R-A theory because they add value and competitive advantage to the firm.

In line with R-A theory, the market-oriented firm may gain advantage due to efficiencies associated with organizational change. The firm that struggles to become more market-oriented may experience events such as political struggles at the organizational level or learning by trial and error (Gebhardt, Carpenter, and Sherry 2006). These processes would inevitably cause the less market-oriented firm to devote valuable resources to the change process of becoming more market-oriented. Conversely, the firm that started off with a relatively higher market orientation could allocate resources to more productive uses.

Business performance is classified as financial performance and provides a comparative advantage over the competition under the structure of R-A Theory. Our study attempts to provide evidence of increased business performance as a resource gained by measuring the shareholder wealth linked to levels of strategic market orientation that is rooted in top management's emphasis on the marketing goals of the firm. Based on the above reasoning, the conceptualization of this study fits well within the context of R-A theory.

3.4 Research Hypotheses

Based on the research perspectives discussed above, we propose that the strategic planning of top management, its implementation, and its evolution will make a firm market-oriented and consequently lead to better performance as described in the subsequent sections.

3.4.1 Top Management's Emphasis on Market Orientation Affecting Performance

We base our theoretical framework on that conceptualized by Kirca, Jayachandran, and Bearden (2005) as a culmination of the market orientation antecedents and consequences from previous marketing literature. We test the portion of their model that involves antecedents of top management's emphasis and performance consequences. Top management factors are important antecedents because they will inevitably affect the other two major categories of antecedents.

We examine top management's emphasis on market orientation. Top management's focus is an important element of and "can be considered the locus of market orientation or other strategic orientation" (Noble, Sinha, and Kumar 2002, p. 31). Taking this approach we assess the varying levels of market orientation in the strategy that is initiated and influenced by top management factors across firms over time. We assume here that market orientation would manifest itself as part of the incorporated strategy but we do not test for this relationship.

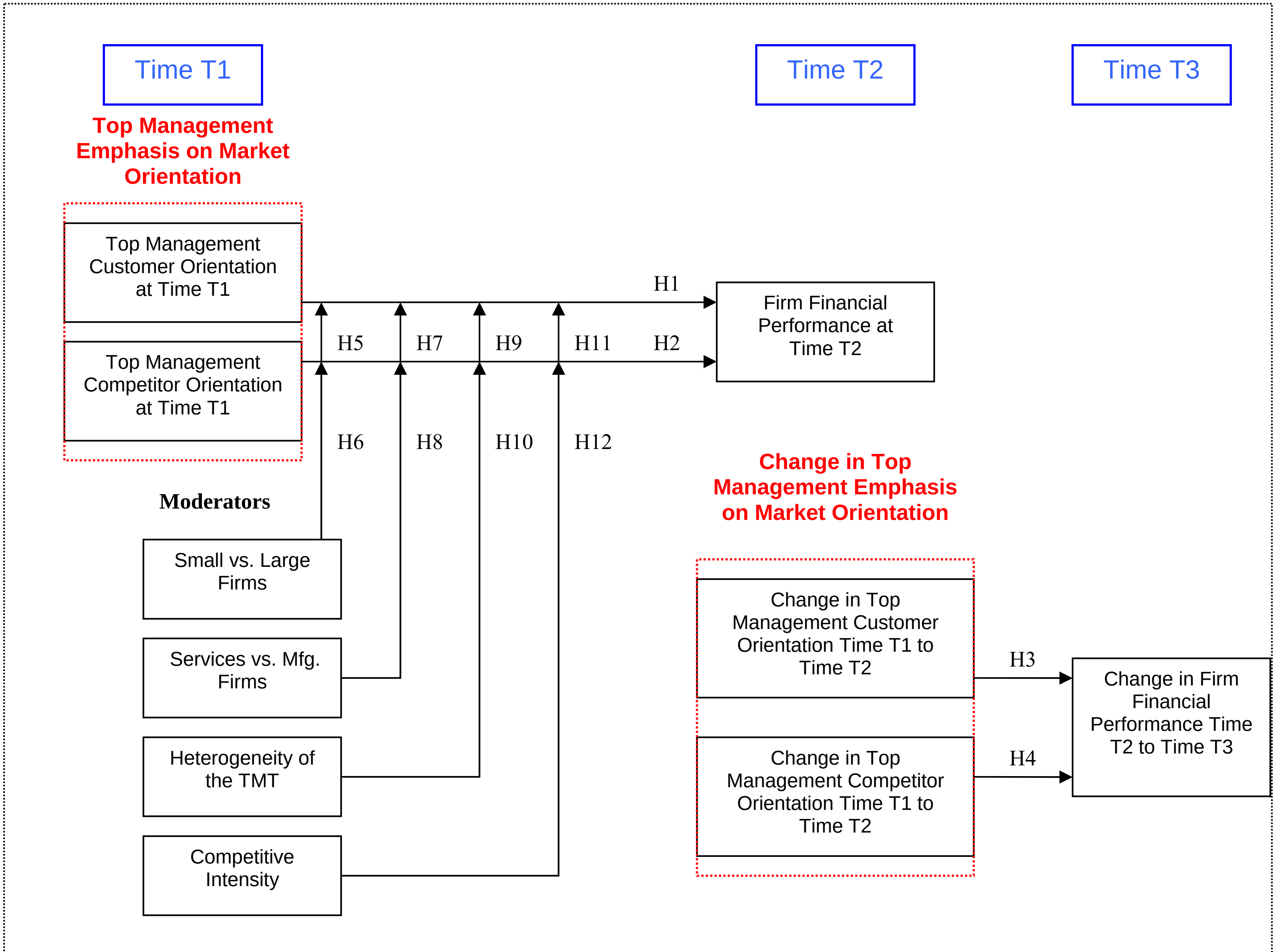
The specific focus of our study is on top management's emphasis on market orientation and how this may be linked to business performance. We apply the Jaworski and Kohli (1993) and Kirca, Jayachandran, and Bearden (2005) model to R-A theory as described in the above sections to build the case for developing and testing our hypotheses:

H_1: Top management's emphasis on customer orientation positively influences firm financial performance.

H_2: Top management's emphasis on competitor orientation positively influences firm financial performance.

The above and subsequent hypotheses are modeled in our conceptual framework shown in Figure 1 below. The following sections explain the rationale behind the development of subsequent hypotheses.

Figure 1: Conceptual Framework



3.4.2 The Process of Firms Becoming More Market-Oriented

Prior research that focuses on the process of becoming more market-oriented (e.g., Gebhardt, Carpenter, and Sherry 2006) does not directly state that some firms may be extremely market-oriented from the time the firm came into existence. We point out that it is possible for a firm to possess the antecedents throughout its lifecycle without going through the initiation and transition stages of becoming more market-oriented because they had a strong market orientation as part of their initial and continuing fundamental organizational culture.

Another form of initiation may exist at the time of the firm's inception where top management would be involved in the initiation of market orientation but not necessarily as a response to stakeholders' intentions regarding the emergence of threats, but rather, as an initial strategic orientation laid out to minimize potential threats before the firm has actually come into existence. From this standpoint, a market-oriented culture of the organization could develop that may eventually lead to behaviors that are fundamentally market-oriented in nature.

The current study employs a methodology that assesses market orientation over time to account for these possibly different scenarios involved with the firm level of market orientation that may change with the passage of time. We conceptualize our research approach from the cultural perspective of the process of a firm becoming market-oriented having it's origins in the initiation phase that is induced by top management.

In other words, we recognize that the market orientation change process may or may not occur and we attempt to account for this in our methodology. The current study does not actually explore the change process and how it may happen, but recognizes that it may exist by capturing market orientation cross-sectionally at multiple time intervals, which will inform us as to whether or not change in the level of market orientation has occurred.

Based on the above discussion we concur that a dynamic organizational change process (see Gebhardt, Carpenter, and Sherry 2006) may result in emergence of antecedents of market orientation (see Kohli and Jaworski 1990) that could then be captured in multiple cross-sectional and static models that would differ accordingly from time one to time two. An interesting concept that emerges from taking this perspective is that of whether firms that possess a relatively greater market orientation in the strategic planning and firm inception stage may benefit from efficiencies not realized by firms that must change strategic goals to fit the more market-oriented conceptualization. If our hypothesized relationships are significant, it follows that the relationship may be significant over time.

Thus:

H_3: The level of change in top management's emphasis on customer orientation over time will be directly related to the change in firm financial performance over time.

H_4: The level of change in top management's emphasis on competitor orientation over time will be directly related to the change in firm financial performance over time.

3.4.3 Moderators

We examine moderators of the relationship between top management's emphasis on customer orientation and financial performance involving firm characteristics of size, (assessed as total number of employees) and classification of industry (assessed as either manufacturing or service). TMT composition is another important moderator included in our study in which we examine the heterogeneity of firms' TMT members.

3.4.3.1 Firm Size

As mentioned above, results vary when considering the size of the firm related to performance with some studies from the management literature resulting in no definite relationship established (Hawawini, Subramanian, and Verdin 2003; Rumelt 1991) while others (e.g., Carpenter, Sanders, and Gregersen 2001; Finkelstein and Hambrick 1996) have shown the positive effects firm size may have on performance. Studies from the export venture marketing literature (e.g., Aaby and Slater 1989; Donthu and Kim 1993) have also shown a positive relationship between firm size and performance.

Our view is in line with the resource-based perspective (Wernerfelt 1984) in that larger firms may outperform their smaller competitors due to utilization of scarce resources unique to the larger firm (e.g., Narver and Slater 1990). Implementation of market orientation requires that resources be utilized while the cost of using these resources is expected to be outweighed by the benefits inherent in the realization of market orientation (Kirca, Jayachandran, and Bearden 2005). Based on this logic, larger firms would be more adequately equipped with the resources needed to implement and realize the financial benefits of a strategic market orientation while smaller firms may not have enough resources to stand the impact of the initial implementation well enough to realize increased performance.

Thus:

H_5: The relationship between top management's emphasis on customer orientation and financial performance is stronger for larger firms than for smaller firms.

H_6: The relationship between top management's emphasis on competitor orientation and financial performance is stronger for larger firms than for smaller firms.

3.4.3.2 Service Firms versus Manufacturing Firms

Kirca, Jayachandran, and Bearden (2005, p. 1) point out that certain studies (e.g., Agarwal, Erramilli, and Dev 2003; Bhuian 1997; Sandvik and Sandvik 2003) show "nonsignificant or negative effects" for the association between market orientation and performance. In these cases, the studies referenced all used samples of firms in the services industry. Additionally, Kirca, Jayachandran, and Bearden (2005) also find that when using cost-based and revenue-based performance measures, the market orientation–performance relationship is stronger in manufacturing firms than it is in service firms. Their meta-analysis shows that results vary according to the measure characteristic each study uses such that results vary for manufacturing versus service firms.

We take the view of previous research (e.g., Kirca, Jayachandran, and Bearden 2005; Anderson, Fornell, and Rust 1997), that proposes that because services are more perishable, as well as unified and less separated in terms of production and consumption, than are manufactured goods (Parasuraman, Zeithaml, and Berry 1985), service firms must exhibit greater levels of customization and target more specific customer segments. This generally requires greater levels of customization to implement market orientation as compared to manufacturing firms. Therefore, resulting sales and market share outcomes as well as employee costs and production efficiency may be more negatively impacted with service firms than manufacturing firms.

Thus:

H_7: The relationship between top management's emphasis on customer orientation and firm financial performance is stronger for manufacturing firms than it is for service firms.

H_8: The relationship between top management's emphasis on competitor orientation and firm financial performance is stronger for manufacturing firms than it is for service firms.

3.4.3.3 Top Management's Composition

The management literature has long suggested there may be a link between the nature of the TMT and the outcome of firm performance (Hambrick and Mason 1984; Hambrick, Cho, and Chen, 1996; Haleblian and Finkelstein 1993, Eisenhardt and Schoonhoven 1990; Weinzimmer et al. 2003). Our antecedent sample involves the TMT which can vary in the heterogeneity of its composition based on factors of age, tenure, education and function. We test for moderation of the market orientation performance relationship based on TMT heterogeneity that is an index of the aforementioned heterogeneity factors.

3.4.3.4 TMT Heterogeneity

TMT functional background heterogeneity (e.g., Carpenter 2002) has been positively associated with stock-based performance measures (Barsade et al. 2000) as functional diversity will tend to stimulate group discussion and disagreement, which can lead to better innovation and higher quality solutions (Ghiselli and Lodahl 1958; Huffman and Maier 1961; Hambrick and Mason 1996).

Gebhardt, Carpenter, and Sherry (2006) find that sharing and collectiveness among departments within the organization lays the foundation for a market-oriented culture. The cross-functional, organization-wide nature of sharing and collectiveness creates an environment with shared meaning for existence across departments. This meaning for existence in the case of market orientation is the common purpose of serving the firm's market. We use this logic in relation to the concept of a TMT with a functionally diverse background.

A TMT with a diverse functional background would likely be able to implement a market orientation across all firm departments because the diverse background of the team would facilitate implementation among the various functions of the assorted departments throughout the firm. Therefore, we expect that a more functionally diverse TMT will facilitate this and make the market orientation performance relationship stronger.

Thus:

H_9: The relationship between top management's emphasis on customer orientation and firm financial performance is stronger for firms that exhibit greater TMT heterogeneity.

H_{10}: The relationship between top management's emphasis on competitor orientation and firm financial performance is stronger for firms that exhibit greater TMT heterogeneity.

3.4.3.5 Competitive Intensity of the Industry

Competitive intensity of the industry has been proposed to moderate the relationship between market orientation and performance (e.g., Harris 2001; Slater and Narver 1994) with mixed results. It is the most commonly studied moderator involved with the link between market orientation and performance (Kirca, Jayachandran, and Bearden 2005).

Some researchers claim that a highly competitive environment necessitates that firms focus more on the competition (Han, Kim, and Srivastava 1998), while others proclaim this environment makes competitive monitoring less important (Narver and Slater 1994). Although some results suggest a nonsignificant relationship (e.g., Jaworski and Kohli 1993; Kirca, Jayachandran, and Bearden 2005), we provide theoretical rationale that supports the notion of competitive intensity of the industry as a moderator in the relationship (see Harris 2001; Slater and Narver 1994).

Narver and Slater (1994) point out that the performance measures (market share, return on equity, and a subjective measure) used by Jaworski and Kohli (1992; 1993) weaken insight gleaned from findings not only due to subjective performance measures but also because market share may not be a relevant goal of every firm, and ROE involves capital structure that should not be affected by market orientation. Kirca, Jayachandran, and Bearden (2005) predict that competitive intensity would enhance the positive effect of market orientation on performance due to increased effectiveness of market responsiveness in times of increasingly numerous and aggressive competitors. Their nonsignificant findings about the moderation of the competitive environment are based on results from previous studies, which may be affected by measurement and construct problems common in previous studies of the relationship such as subjective or inappropriate performance measures. Therefore, further research is needed to gain a better understanding of the relationship.

Luo and Donthu (2006) find that competitive intensity positively enhances the superior performance of firms that more effectively convert resources involved with advertising and promotion into marketing performance outputs. This finding is based on the notion that these firms are able to create greater brand loyalty through effective advertising and promotion which holds greater value in more competitive markets where substitutes are inherently plentiful.

Based on this logic and that of the resource-based view as depicted by Slater and Narver (1994), we expect that the market orientation performance relationship would behave similarly. In competitive markets the more market-oriented firm would utilize and capitalize on the intangible informational resources of customer and competitor focus that less market-oriented firms would be unable to replicate. Thus, the market-oriented firm would be able to differentiate in a time where customers may choose from a larger number of competing substitutes. In a highly competitive environment, understanding the competition would likely better equip the firm for survival. Without this understanding the firm in the highly competitive environment may be negatively affected by innovations and intangible resources of more market-oriented competition in an environment where substitutes are not only plentiful, but may fast exhibit superior differentiated value if not closely monitored. Based on this logic, we propose that the competitive environment will have a significant positive effect on the market orientation performance relationship.

Thus:

H_{11}: The relationship between top management's emphasis on customer orientation and firm financial performance is stronger for firms that operate in industries characterized by higher competitive intensity.

H_{12}: The relationship between top management's emphasis on competitor orientation and firm financial performance is stronger for firms that operate in industries characterized by higher competitive intensity.

Chapter 4: Research Design

4.1 Measuring Market Orientation and Performance

The current study utilized an archival data sample including firms that had undergone an initial public offering (IPO) during the years from 2001 to 2003. This covered a range of industries in a longitudinal design that allowed for the capture of evolutionary aspects of the relationships examined. We used content analysis to assess market orientation of the TMT. Performance was assessed with objective measures based on stock price. A series of regression analyses was employed for the method of longitudinal data analysis.

4.2 Data Collection

With the chosen method of data collection, we sought to avoid possibly exaggerated findings attributed to the common method variance that is often present when self-reported data is collected from a common source for subjective dependent and independent variables (Voss and Voss 2000; Doty and Glick 1998). We employed content analysis of secondary archival data, a technique used in combination with objective performance measures based on stock return. We used independent variables involving top management's focus, which "can be considered the locus of market orientation or other strategic orientation" (Jaworski and Kohli 1993; Noble, Sinha, and Kumar 2002).

Much of the previous research on this topic employs surveys and depth interviews of managers for data collection (e.g., Jaworski and Kohli 1993; Pelham and Wilson 1996). Manager surveys typically suffer from low response rates as well as problems involved with inaccuracy of memory recall over time periods spanning several years. Depth interviews are subjective and are usually characterized by a small sample size. Although subject to complications associated with using secondary data, our study is valuable in that it escapes common pitfalls of many previous studies involving manager surveys.

4.3 Sample

Our sample consists of all U.S. firms listed on the New York, American, and NASDAQ stock exchanges that underwent an initial public offering (IPO) from the years 2001 to 2003. This original sample of 988 companies derived from the SDC Platinum database. We included in our sample only "new" companies based on information found in the S-1 as well as in Compustat. In particular, we used 10 years as a general rule regarding what was considered as a "new" company. This restrictor narrowed the list from 988 to 153 companies. The sample was further reduced to 75 companies when we narrowed the search criteria to companies that were still in existence in 2007 and to those that had not undergone mergers or acquisitions that would change the company structure. This criterion was followed because, otherwise, it would be impossible to track performance from a longitudinal perspective.

We note that this method affects our results because firms that have gone to zero market value due to company failure (e.g., bankruptcy) are not accounted for. However, this limitation is necessary due to the longitudinal nature of our study, which requires relatively complete information for each of the firms in the sample. The sample size of 75 is comparable to previous studies in the area (see Noble, Sinha, and Kumar 2002; Barr, Stimpert, and Huff 1992; Bowman 1978). The average age of the companies in our sample is four years old (at the time of IPO) based on the date the company was founded.

We separated the sample into goods and services based companies according to SIC code by including SIC divisions A through D (agriculture, forestry, and fishing, mining, construction, manufacturing) and F through G (wholesale and retail trade) as "manufacturing" or goods-based firms. SIC divisions E (transportation, communications, electric, gas, and sanitary services), H through J (finance, insurance, and real estate services, and public administration) were considered as "services." Overall, 38 companies were classified as manufacturing and 37 were classified as services. Details of the variables used in our longitudinal analysis are displayed in Table 1.

TABLE 1

Measures and Data Sources

Measure	Operationalization	Data Sources
Top Management's Emphasis on Customer	Total number of characters in sentences depicting customer orientation as a percentage of total for each company. (Noble, Sinha, and Kumar 2002)	Derived from SEC filings sections associated with business issues
Top Management's Emphasis on Competition	Total number of characters in sentences depicting competitor orientation as a percentage of total for each company (Noble, Sinha, and Kumar 2002)	Derived from SEC filings sections associated with business issues
Forward-looking Performance of Stock Return	The result of (current year's share price × number of common shares outstanding + dividends – previous year's share price × number of common shares outstanding/[previous year's share price × number of common stock outstanding]) (Luo and Donthu 2006)	Derived from Compustat
Industry Competitive Intensity	Herfindahl concentration index (derived from lagged sales for all the firms in the same two-digit SIC code for each firm year observation) (Luo and Donthu 2006)	Derived from Compustat
Service versus Manufacturing Firms	Categorical variable based on two-digit SIC code (Manufacturing = 01-39; 50-59. Services = 40-49; 60-99).	Hoover's
Firm Size	Number of employees	Compustat
TMT Educational Background Heterogeneity	Categorical variable based on coding TMT member as predominately: arts, sciences, engineering, business and economics, or law. Degree of heterogeneity calculated with the Blau index (1977): 1- the squared sum of percentage of individuals in each category (Wiersema and Bantel 1992)	Derived from Mergent and Hoover's
TMT Functional Background Heterogeneity	Categorical variable based on coding TMT member as predominately: marketing, distribution, sales, R and D, production, engineering, finance and accounting, law, or general. Degree of heterogeneity calculated with the Blau index (1977): 1- the squared sum of percentage of individuals in each category (Wiersema and Bantel 1992)	Derived from Mergent and Hoover's
TMT Firm Tenure Heterogeneity	Calculated using the coefficient of variation of a TMT's firm tenure: standard deviation divided by the mean (Carpenter 2002)	Derived from Mergent and Hoover's
TMT Age Heterogeneity	Calculated with the Blau index (1977): 1- the squared sum of percentage of individuals in each category (Certo et al. 2006; Wiersema and Bantel 1992)	Derived from Mergent and Hoover's

4.4 Longitudinal Design

With few exceptions (e.g., Narver, Jacobson, and Slater 1999; Noble, Sinha, and Kumar 2002), market orientation has been found to lead to superior firm performance (Kirca, Jayachandran, and Bearden 2005) based primarily on studies that have utilized a cross-sectional data collection procedure (e.g., Homburg and Pflesser 2000; Kohli and Jaworski 1990; Kohli, Jaworski, and Kumar 1993) that does not capture the evolutionary process of market orientation as outlined by Gebhardt, Carpenter, and Sherry (2006).

The current study helps provide richer understanding of the topic at hand by utilizing a longitudinal design capable of capturing the evolutionary process of market orientation. We collected data over three time periods starting with time one as the time of IPO for each firm that had an IPO across the years 2001-2003. Therefore, time one (T1) establishes a rolling three year span to allow for data collection across five years. Accordingly, time one is 2001 for companies with a 2001 IPO and time one is 2002 and 2003 respectively for firms that had and IPO in those respective years. Time two (T2) covers two years and starts in 2003, 2004, or 2005, to assess the firms that had an IPO in 2001, 2002, or 2003. Based on the same logic, time three starts two years after time 2 and (T3) begins in 2005, 2006, or 2007 depending on the year of IPO for each company in the sample.

4.5 Conceptual Framework

Our study incorporates current approaches from the marketing and management literature into a research design that explores market orientation viewed as a high-level strategy originating with the vision, strategic goals and planning of top management. Top management implements strategy that guides the firm's strategic direction and helps to maintain the strategy as it evolves throughout the organization to eventually become sustained over time resulting in superior performance relative to less market-oriented competition.

We test the portion of Kirca, Jayachandran, and Bearden's (2005) market orientation model that includes top management factors as antecedents of market orientation with performance as an outcome variable assessed stock return.

4.6 Methodology

We build upon previous antecedent and consequence research while using a longitudinal approach and taking into account that the process of organizational change occurs over time and varies from one firm to another. In accordance with the change process outlined by Gebhardt, Carpenter, and Sherry (2006), we integrate a methodology based on that employed by Noble, Sinha, and Kumar (2002) that is effective in assessing managerial insight and how it may change over time.

4.6.1 Content Analysis of Top management's Emphasis on Market Orientation

Content analysis has been used in marketing research to explain organizational performance for the past few decades. Bowman (1976) uses content analysis to find differentiating factors among more and less successful food processing companies. Kassarjian (1977) notes that content analysis should be objective, systematic, and quantitative. Investigative assessment of our independent variables was performed by using content analysis of SEC (Security Exchange Commission) filings with the goal of interpreting evidence of top management's focus on the customer and competition as these are the two fundamentals of market orientation (Noble, Sinha, and Kumar 2002).

As Higgins and Gulati (2003) suggest, firms may desire to offer symbols of quality of the firm going public in attempts to gain legitimacy in terms of efficacy of products, competitive position, and marketing capabilities. Therefore we must be aware that when companies prepare the documents for SEC filing, they are inclined to be market-oriented by the nature of the endeavor they are undertaking.

Replication of the cognitive mapping techniques used by Noble, Sinha, and Kumar (2002) that are based on techniques described by Huff (1990) were utilized to convert text into quantitative data. Four undergraduates were hired to work as multiple reviewers examining public documents filed with the SEC.

Content analysis of registration statement (S-1) documents and annual report (10-K) documents filed in accordance with SEC guidelines was conducted for all firms in our sample. S-1 filings include stock prospectuses and are filed with the SEC prior to all initial public offerings to explain the details of the offering. Annual reports are similar documents that report to stockholders on a yearly basis about the company's operations and management, etc. Annual reports have been examined in past studies in the marketing literature to assess firm strategy and reasoning (Bowman 1978; Bettman and Weitz 1983) as well as to assess market orientation (Nobel, Sinha, and Kumar 2002; Judd and Tims 1991).

4.6.2 Performance Assessment Based on Stock Price

Stock price is a measure of performance that is important for any public organization as it must comply with shareholders' intentions. Following the methodology of Luo and Donthu (2006) that is based on the previous research of Aaker and Jacobson (1994, 2001) and Mizik and Jacobson (2003), we employed the objective and forward-looking performance outcome variable stock return. Data was obtained from CRSP (Center for Research in Security Prices) and Compustat.

Stock return is a performance measure that is comparable across industries and is calculated as the result of (current year's share price × number of common stock outstanding + dividends – previous year's share price × number of common stock outstanding/[previous year's share price × number of common stock outstanding]).

4.6.3 Measurement of Moderator Variables

We examined moderators of firm size, industry in which firm operates (service or manufacturing), TMT heterogeneity, and competitive intensity of the industry in which firm operates. Firm size was assessed based on the number of employees as found in the Compustat database while the industry in which the firm operates was assessed according to our sample consisting of either service or manufacturing (goods-based) firms based on two-digit SIC codes as previously described.

TMT heterogeneity was assessed based on the approach utilized by Carpenter and Fredrickson (2001) that replicates the methods of Wiersema and Bantel (1992) and derives TMT heterogeneity based on team members' educational and functional backgrounds, firm tenure, and age. Educational background and functional background were categorical variables with educational backgrounds being in the arts, sciences, engineering, business and economics, or law.

Functional background categories are marketing, distribution, sales, research and development, production, engineering, finance and accounting, law, or general (Carpenter and Fredrickson 2001; Wiersema and Bantel, 1992). Data for these variables was derived from the Mergent and Hoover's databases.

The competitive intensity of the industry in which firm operates was assessed based on the methods used by Luo and Donthu (2006) which employ the Herfindahl concentration index derived from Compustat by using the lagged sales for all the companies in the same two-digit SIC code for each firm year observation. In this case a low degree of concentration indicates a fragmented marketplace such that competitive intensity is high.

The above four TMT items were adapted and combined using factor analysis creating the overarching construct that is a measure of TMT heterogeneity. The results of the factor analysis are shown in Table 2.

TABLE 2

Principal component extraction CFA for TMT heterogeneity:

Construct	Factor Loading
TMT Education	.730
TMT Work	.663
TMT Age	.790
TMT Tenure	.696

4.6.4 Data Coding

Four undergraduate coders supervised by the principal researcher interpreted market orientation from the business section of SEC filings using AtlasTi qualitative research software. The business section was chosen because it provides a general overview of the business and strategic focus. The business section contains the sections that are devoted to the customers and competitors of the firms. Coders were educated as to the basic definitions of customer and competitor dimensions of market orientation. Therefore, proficiency in coding involved not only learning how to use the software, but also learning about statements that show management's focus on customer and competition.

Coders searched for statements that "represent a clear and specific act reflective of" (Noble, Sinha, and Kumar 2002, p. 32) customer or competitor focus. The principle researcher guided coders to a consensus about how statements would be coded based on excerpts from the research of Noble, Sinha, and Kumar (2002). Examples were provided of text considered representative of customer and competitor orientation. Such text should "represent a clear and specific act reflective of the dimension being considered," (Noble, Sinha, and Kumar 2002) which we hereafter refer to as "action statements." Coders were informed that not all statements that simply mention a concept should be considered as action statements.

For example a statement such as "we continue to strive to maximize customer satisfaction" (Noble, Sinha, and Kumar 2002) would not be considered a true "action statement" when taken in isolation while a statement such as "We send out over 36,000 customer satisfaction survey cards each month covering all deliveries and service calls," would be considered a true "action statement" because it actually shows proof or evidence of a customer focus. Some statements that focus on the competition but are not direct "action statements" were pointed out to the coders as examples of text about customer and competitor focus that were not considered "action statements."

"The healthcare staffing industry is highly competitive. We compete with both national firms and local and regional firms. We compete with these firms to attract nurses and other healthcare professionals as travelers and to attract hospital and healthcare facility clients."

Examples like this were contrasted with ones that show something specific the company is doing that is active and conscious of the competition.

"We believe our same day or next day delivery option, which is not offered by most of our competitors, is one of the keys to our success,"

Following the practice of Noble, Sinha, and Kumar (2002), coders and the principal researcher conducted a line-by-line review of the coded output from the software in the training sample. The principle researcher showed coders how to identify key words, phrases, and sentences that would be analyzed and coded according to whether or not the predetermined criteria were met. Training was conducted by showing the coding researchers examples of documents from companies from a sample of companies from one year prior to the actual period examined in the study.

Once the principle researcher determined that the undergraduates were proficient in the coding technique, a trial run was conducted using five additional companies not included in the actual sample. In this case all four coders coded the same 10 documents. This involved a stepwise process of coding the first company, discussing the results, and then proceeding to the next until by the fifth company a consensus was reached that coding was being done in a similar fashion by all coders. Results were discussed, and differences in the coding of the researchers were analyzed with the guidance of the primary researcher who did not actually participate in the coding. The entire coding process was supervised by the principal researcher while the actual coding in the sample was performed by the undergraduate coders. Finally, there was approximately 95% confirmation that the coders were coding in a similar way before the actual sample was coded and analyzed.

To ensure the accuracy of the coding in the actual sample, teams of two coders coded each filing and periodically reviewed each other's results to check for major differences in coding. The sample was split between the two pairs of coders based on alphabetical listing. Any filing that did not have approximately 95% consensus as to coding was revisited until a consensus was reached. Coders tallied the total percentage of text in each document depicting market orientation as a percentage of total for each company to help control for varying lengths of business sections in the S1s.

Chapter 5: Analysis, Results, and Discussion

5.1 Regression Analyses

Implementation and evolution of market orientation was captured through analysis of SEC fillings. We employed a form of annual report coding methodology based on the technique demonstrated by Noble, Sinha, and Kumar (2002) for mapping of letters to shareholders. Results were assessed in multiple time periods to quantify whether firms moved towards or away from market orientation over time.

After the data was collected, we used a series of regressions to analyze the coded results and test our hypotheses for conclusions to provide insight to the market orientation-performance relationship.

We tested the outcome variable of final performance in a regression model using moderator regression analysis in accordance with methods established by Aiken and West (1991) and utilized in other studies (e.g., Ramani and Kumar 2008). The independent variables were mean-centered to reduce multicollinearity. We ran main effects regression using independent variables of customer orientation and competitor orientation to test H_1 and H_2.

A separate main effects regression using independent variables of change in customer orientation and change in competitor orientation was conducted to test H_3 and H_4. We then ran the same regression analysis that was used to rest H_1 and H_2 with the addition of each product term to test the interaction effects for H_5 through H_{12}. The overall regression model took the following form:

$Y_{it} = \beta_0 + \sum \beta_k X_{kit} + \beta_k[X_{kit} \text{ x } Z_{kit}]\varepsilon_{it}$, i = 1,…,I (i denotes the firms), t = 1,…,T (t denotes time periods), where Y_{it} indicates stock return and X_{ki} indicates the k^{th} measure of customer and orientation or competitor orientation. Z_{kit} denotes the k^{th} measure of interaction terms (i.e., larger vs. smaller firms, manufacturing vs. service firms, TMT heterogeneity, and competitive intensity).

5.2 Results of Regression Analyses

Table 3 shows the results for the dependent variable of stock return. In the first regression the predictor variables of customer and competitor orientation were entered alone in the estimation model. In the subsequent regressions the moderators were tested for significance by running separate regressions for each interaction. Indications of support for each hypothesis, including the regression results (coefficient, t-value, and significance) are shown in Table 4.

TABLE 3

Results of Regression Analyses

Variable	Stock Return Time 2 β	Stock Return Time 2 *t*-value	Δ Stock Return Time 3 β	Δ Stock Return Time 3 *t*-value
Main effects models:				
Customer Focus [a]	1.144	3.329		
Competition Focus [a]	-.859	-2.498		
Δ Customer Focus [b]			.429	3.900
Δ Competition Focus			*n.s.*	*n.s.*
Moderator interaction model				
Customer focus x Firm size [c]	.274	2.261		
Customer focus x Service vs. Manufacturing [d]	1.101	2.634		
Customer focus x TMT heterogeneity [e]	.398	4.250		
Customer focus x Competitive intensity	*n.s.*	*n.s.*		

[a] Main effects model $F = 7.80$, $p < .001$, $R^2 = 0.180$; [b] Main effects model $F = 7.74$, $p < .001$, $R^2 = 0.179$.
[c] Interaction model $F = 15.98$, $p < .05$, $R^2 = 0.453$; [d] Interaction model $F = 25.46$, $p < .001$, $R^2 = .655$.
[e] Interaction model $F = 43.82$, $p < .001$, $R^2 = 0.653$.

TABLE 4

Results for hypothesized model

Hypothesis	Relationship	β	*t*-value	Supported
H_1	Customer orientation → Financial performance	1.144	3.329[a]	*yes*
H_2	Competitor orientation → Financial performance	-.859*	2.498[a]	*no*
H_3	Change in customer orientation → Change in financial performance	.429	3.900[a]	*yes*
H_4	Change in Competitor orientation → Change in financial performance	*n.s.*	*n.s.*	*no*
H_5	Customer orientation x larger vs. smaller firms → Financial performance	.274	2.261[b]	*yes*
H_6	Competitor orientation x larger vs. smaller firms → Financial performance	*n.s.*	*n.s.*	*no*
H_7	Customer orientation x manufacturing vs. service firms → Financial performance	1.101	2.634[a]	*yes*
H_8	Competitor orientation x manufacturing vs. service firms → Financial performance	*n.s.*	*n.s.*	*no*
H_9	Customer orientation x greater TMT heterogeneity → Financial performance	.398	4.250[a]	*yes*
H_{10}	Competitor orientation x greater TMT heterogeneity → Financial performance	*n.s.*	*n.s.*	*no*
H_{11}	Customer orientation x higher competitive intensity → Financial performance	*n.s.*	*n.s.*	*no*
H_{12}	Competitor orientation x higher competitive intensity → Financial performance	*n.s.*	*n.s.*	*no*

[a] $p < .001$
[b] $p < .05$
** Significant result opposite of hypothesized relationship*

5.2.1 Main Effects Results

H_1 was a test of the main effect of customer orientation on financial performance in the form of stock return. As hypothesized, a significant relationship was confirmed (β = 1.144, $p < .001$). Similarly, as predicted, our assessment of the evolution of market orientation related to financial performance (H_3) produced a positive and significant result for the predictor of change in customer orientation ($\beta = .429$, $p < .001$).

However, to our surprise, support was not confirmed for the test of the main effect of competitor orientation on financial performance of stock return (H_2). In fact, we found a significant result in the opposite direction of the predicted relationship ($\beta = -.859$, $p < .001$). Similarly, support was not confirmed for the test of the main effect of change in competitor orientation on financial performance of stock return (H_4). We found a nonsignificant result for this relationship. Insight to this result of lack of support for our main effects hypotheses involving focus on the competition may be explained by the nature of the descriptions of competition in the business sections of the SEC filings examined, severe multicollinearity between customer orientation and competitor orientation, and potential casual relationship between customer orientation and change in competitor orientation.

The coders observed that the competition sections of the SEC filings were similar among SEC filings in that they mainly involved mentioning the firms in competition with the firm rather than asserting the specific "action statements" that the coders sought as evidence of strategic focus on the competition. Also, there was greater overall focus on the customer than on the competition. However, because competitor orientation had a significant negative effect on stock performance, further exploration is needed.

Customer orientation and competitor orientation were significantly correlated suggesting that multicollinearity issues were affecting the regression results. It is possible that customer orientation was over estimating stock performance and, in conjunction with a negative adjustment by competitor orientation overall, this over estimation improved prediction of stock performance.

Also, we found that customer orientation was correlated with change in competitor orientation ($r=.15$, $p=.10$). This result suggests that companies that have high consumer orientation reduced their focus on competitor orientation over time. Accordingly, this issue needs future research because most past research has simply combined customer and competitor orientation and called it market orientation.

5.2.2 Interaction Results

Testing H_5 through H_{12} involved moderated regression as a test of the interaction terms of larger vs. smaller firms, manufacturing vs. service firms, TMT heterogeneity, and competitive intensity interacting with the main predictor variables of customer and competitor orientation. While (similar to the main effects test) significant results were obtained for all but one of the customer orientation moderations, no significant results were found for the interactions involving competitor orientation.

As predicted, our results showed that financial performance was positively associated with the interactions of customer orientation x larger vs. smaller firms (H_5: $\beta = .274$, $p < .05$), customer orientation x manufacturing vs. service firms (H_7: $\beta = 1.101$, $p < .001$), and customer orientation x greater TMT heterogeneity (H_9: $\beta = .398$, $p < .001$).

However, there was no significant result for the interaction of customer orientation x higher competitive intensity resulting in increased financial performance (H_{11}). Competitive intensity of the industry is the most commonly studied moderator of the relationship between market orientation and performance (Kirca, Jayachandran, and Bearden 2005) and, as stated previously, numerous results for this moderation suggest a nonsignificant (e.g., Jaworski and Kohli 1993; Slater and Narver 1994) relationship. Our results are contrary to our prediction but consistent with those of Jaworski and Kohli (1993) and Slater and Narver (1994). According to our findings, the competitive environment may not have a significant effect on the market orientation-performance relationship.

Therefore, it may not be an effective strategy for firms to try to regulate levels of market orientation in accordance with varying levels of competitive intensity of the industry in which the firm operates (Slater and Narver 1994). This notion is supported by the idea that a significant amount of resources are required for the firm to become and evolve as market-oriented and in that case the phenomenon is one that would not be easily regulated on a short term basis. Therefore future research should continue to explore this moderation.

The insignificant result for change in competitor orientation moderated by large versus smaller firms (H_6) may be explained in part by the previous explanation of the lack of support for H_2. Additionally using the performance measure of stock return may negate some of the effects so that although a larger firm may have more resources and grow more in terms of dollar amount, when using market value a small firm may have more room to grow and subsequently may be able to increase exponentially. For example, if a startup firm with relatively no stock value grows from zero (or very little) market value to having any value at all the increase in stock price could be as much as a 100%. In contrast, a larger firm that has a higher IPO could be customer focused and experience tremendous growth, yet firm may not show such spectacular results in terms of percentage increase of market value.

We did not find support for moderator hypotheses H_8, H_{10}, or H_{12}. Again, this result may be explained in part by the previous explanation of the lack of support for H_2. Based on the assessment of the coders and examination of the sparse nature of the raw data, we feel there is not enough evidence for sufficient analysis of either the main effects or moderated effects involving the predictor variable of competitor orientation. Therefore, subsequent studies should determine a more rich technique to assess whether our results correctly lead to a conclusion that competitor orientation does not affect financial performance or whether further analysis would prove otherwise.

5.2 Discussion of Results

We examine our results in light of studies that provided the foundation for our research (i.e. Noble, Sinha, and Kumar 2002, Kirca, Jayachandran, and Bearden 2005, Gebhardt, Carpenter and Sherry 2006). The results of our study help provide unique support to the growing body of knowledge that a market-oriented strategic plan, implementation and evolution leads to superior firm performance.

5.3.1 Discussion of Predicted Main Effects

We have responded to calls for research exploring marketing's effects on financial performance (Rust et al. 2004) with a unique methodology to quantify how market orientation contributes to shareholder value. We found that customer orientation is related to superior performance, a result that has obvious managerial implications and adds support to previous studies that supported the relationship (e.g., Deshpande, Farley, and Webster 1993; Jaworski and Kohli 1993; Slater and Narver 1994). That said, only the customer orientation dimension was predicted by our theoretical model. This is in opposition to prior research of Noble, Sinha, and Kumar (2002) that finds the customer orientation variable does not relate to the performance construct and that the competitor orientation variable does relate to the performance construct.

However, our results also provide further support for the change process outlined by Gebhardt, Carpenter, and Sherry (2006), due to the variance assessed over time periods T1 and T2; our study shows that managerial emphasis on customer and competitor orientation does change over time. Furthermore, our main effects show that this evolution of market orientation, when viewed from a customer orientation standpoint, can lead to superior financial performance in the important outcome variable of stock return.

Gebhardt, Carpenter, and Sherry (2006) shed light on the market orientation-performance relationship involving organizational learning and the four-stage process of cultural transformation: (1) initiation, (2) reconstitution, (3) institutionalization, and (4) maintenance. We provide evidence that not only does customer orientation enhance the market orientation-performance relationship, but also that the relationship between the constructs is a dynamic one that has a longitudinal effect.

5.3.2 Discussion of Main Effects not Predicted

Our results are opposite of what we predicted and that may be attributed to our assessment that competitor orientation does not seem to play a prominent role in the SEC filings we examined. However, some previous research does support our finding (e.g., Grewal and Tansuhaj 2001; Han, Kim, and Srivastava 1998). Han, Kim, and Srivastava (1998) suggest that, in competitive environments, firms may become institutionalized in their competitive strategies to the point that competitor orientation may actually have negative effects on performance due to hindered innovation that accompanies excessive imitation of competition.

Another logical explanation for our results is that, as researchers have suggested, the customer dimension of market orientation may dominate the competitor dimension and diminish its importance (see Han, Kim, and Srivastava 1998; Noble, Sinha and Kumar

2002). This may be explained by the fact that most studies combine the performance correlations of the aggregate market orientation constructs when assessing the market orientation relationship with performance and only report aggregated market orientation-performance relationship results (see Lukas and Ferrell 2000; Noble, Sinha, and Kumar 2002).

5.3.3 Discussion of Moderator Analysis

Moderators play an important role in our study. Several studies (e.g., Agarwal, Erramilli, and Dev 2003; Bhuian 1997; Sandvik and Sandvik 2003) find nonsignificant or negative effects results for the association between market orientation and performance when sampling service firms. Our results help to shed light on these previous results because we show that when using customer orientation as a predictor, the relationship leads to increased performance more so for manufacturing firms than services firms.

Some previous research concludes that the link between customer orientation and financial performance may not be very strong (e.g., Balakrishnan 1996; Voss and Voss 2000). However, as suggested by Zhu and Nakata (2007), and in line with the recommendations of Singh and Ranchhod (2004) and Voss and Voss (2000), we show that the relationship is indeed strong once significant moderators are accounted for.

Our research adds to current research (e.g., Kirca, Jayachandran, and Bearden 2005; Gebhardt, Carpenter and Sherry 2006) concerning implementation and evolution of market orientation both in service and manufacturing firms varying in size, TMT heterogeneity, and competitive intensity of the industry. Although only from a customer-oriented aspect rather than a customer and competitor market-oriented standpoint, our results help confirm prior research stipulating that financial performance is positively associated with the interactions of customer orientation in larger vs. smaller firms as well as in manufacturing vs. service firms, and in firms with greater TMT heterogeneity.

Chapter 6: Limitations, Future Research, and Implications

6.1 Limitations

Our study is subject to several limitations involving our sample and constructs. Our sample has certain limitations inherent to the nature of our study: Our research setting spans many types of industries and firms and several of these firms may cease to exist during the time period that data was captured. In the following sections we also discuss important topics for future research as well as our research implications.

6.1.1 Sample-Related Limitations

One limitation may arise if firms are biased in their stated strategy as depicted in SEC filings. Firms may seek to gain legitimacy in terms of efficacy of products, competitive position, quality, and marketing capabilities (Higgins and Gulati 2003) when going public, and this could result in exaggerations made in SEC filings. Although this is a potential limitation, we did find a significant amount of variance in our data results.

Another limitation may arise from sampling firms from a wide variety of industries that may have dissimilar benchmarked performance levels. In such cases, performance based on stock returns may be non-comparable (Luo and Homburg 2008). This limitation is necessary due to the longitudinal nature of our study involving "new" IPOs as the number of such firms per year is extremely limited when assessed from a single industry.

Our method of eliminating firms from our sample firms that have gone to zero market value based on company failure (e.g., bankruptcy) could also place limitations on our study. Furthermore, we were unable to capture continued performance measures for mergers and acquisitions so this further compromised our sample.

6.1.2 Construct-Related Limitations

The constructs utilized for independent and depend variables are also subject to limitations. While previous research has suggested examining the relationship between market orientation and varying measures of business performance (Jaworski and Kohli 1993; Harris 2001), our study has contributed by using stock return. This could be a limitation because generally managers look to different varieties of objective performance measures to assess strategic effectiveness,

6.2 Future Research

Future research should address the sampling limitations of this study by conducting similar studies using varied samples (e.g., analysis of individual industries over longer time periods with a larger sample size). Another interesting topic for further research would be to examine other types of statements involving the customer and competition in addition to the "action statements" used for the current study.

As previously mentioned, our sample was limited due to companies that had merged or had ceased to exist. Future research should attempt to assess these firms as "successful" or "unsuccessful" due to mergers and acquisitions or ceasing to exist. For example firms may be typically successful when merging or unsuccessful when ceasing to exist (going bankrupt) or a successful firm may decide to "go private" or an unsuccessful firm may be victim of a hostile takeover etc.

Additional research is needed to further examine the antecedents of market orientation (see Kirca, Jayachandran, and Bearden 2005) as separate predictors rather than in an aggregated fashion (see Lukas and Ferrell 2000). This would shed light on the previously discussed negative relationship we found with competitor orientation related to financial performance.

Construct-related limitations may also be addressed by conducting analyses with other objective performance measures such as ROA, as well as subjective measures such as customer value and satisfaction. Future research could also help determine which aspects of market orientation are most important. This may result in the establishment of weightings that could give managers information about how to best allocate resources toward market orientation. Another topic of interest for future research would be to add the dynamic of measuring the cost of formulating and implementing a market-oriented strategy. Valuable insight may be gained as far as determining the optimum level of market orientation before diminishing returns are realized. Future studies should also examine the legitimacy of stated strategy in SEC filings.

6.3 Implications

Using longitudinal analysis to capture the dynamic nature of the market orientation formation and evolution, our results shows variation across time. This may help move research towards a foundation for a more general theory of market orientation related to firm performance. Our study advances the literature by combining secondary archival data from multiple industries and assessing the market orientation of top management as related to objective financial performance measures.

Our results support the notion that the expense of utilizing valuable resources for planning and implementation of market orientation pays off in terms of financial performance over time. However, this relationship is in need of further explanation through continued research involving multiple industries and methods of data collection about the actual costs of market orientation. Therefore, we have established a solid foundation for, but have not fully provided answers to our initial research questions.

Gebhardt, Carpenter, and Sherry (2006) provide managers with valuable research implications about creating and maintaining an evolving market orientation through cultural change involving organizational learning and intraorganizational power. Our results contribute insight about additional areas of concern for managers involved in the dynamic process of market orientation throughout the firm. Specifically, managers of service firms should be aware that devoting resources such as time and money to creating and maintaining an evolving market orientation may provide diminished returns relative to those that may be realized by managers of manufacturing firms. Likewise, the same logic would be pertinent to managers of smaller firms than for larger firms, respectively.

Furthermore, top management's strategy selection for implementing and maintaining an evolving market orientation should be mindful of the heterogeneity of the TMT during the hiring and promotion process. In line with other studies that support the main effect of TMT heterogeneity on performance (e.g., Barsade et al. 2000), our results provide evidence that TMT heterogeneity enhances the market orientation-performance relationship.

Our research suggests that failure to implement and evolve a market-oriented strategy may cause the firm to be less profitable and more vulnerable to competition. Therefore, a unique implication of our study is not only that firms should be conscious of market orientation at any given time, but also that they should use a strong customer orientation in their initial strategy as they prepare for an IPO.

Although a seemingly endless number of variables go into the outcome of stock price, it is good for managers to know that a strong customer orientation may well be worth the added expense in time and resources. Managers may utilize our results to build a case for devoting resources to market orientation while considering moderators such as what size and type of firm they are operating as well the composition of their TMT. Managers should continue to be aware of how their customer oriented strategy evolves while paying attention to the amount of resources being devoted to strategic concerns. We have provided managers with another source of evidence that may be useful in the boardroom when budgets are allocated.

References:

Aaby, Nils-Erik and Stanley F. Slater (1989), "Management Influences on Export Performance: A Review of the Empirical Literature 1978-88," *International Marketing Review*, 6 (4), 726.

Aaker, David and Robert Jacobson (1994), "The Financial Information Content of Perceived Quality," *Journal of Marketing Research*, 31 (May), 191–201.

Agarwal, Sanjeev, Krishna M. Erramilli, and Chekitan D. Dev (2003), "Market Orientation and Performance in Service Firms: Role of Innovation," *Journal of Services Marketing*, 17 (1), 68–82.

Aiken, Leona S. and Stephen G. West (1991), *Multiple Regression: Testing and Interpreting Interactions*. Newbury Park, CA: Sage Publications.

Aldrich, H. E. (1979), *Organizations and Environments*. Englewood Cliffs, NJ: Prentice-Hall.

Anderson, Eugene W., Claes Fornell, and Sanal K. Mazvancheryl (2004), "Customer Satisfaction and Shareholder Value," *Journal of Marketing*, 68 (4), 172–85.

Annual report. (n.d.). *Dictionary.com Unabridged* (v 1.1). Retrieved July 15, 2008, from Dictionary.com website: http://dictionary.reference.com/browse/Annual report

Ansoff HI. (1991), "Critique of Henry Mintzberg's 'The design school: reconsidering the basic premises of strategic management'," *Strategic Management Journal,* 12 (6): 449–461.

Atuahene-Gima, Kwaku and Janet Y. Murray (2004), "Antecedents and Outcomes of Marketing Strategy Comprehensiveness," *Journal of Marketing*, 68 (4), 33-46.

Auh, S. and B. Menguc (2005), "The Influence of Top Management Team Functional Diversity on Strategic Orientations: The Moderating Role of Environmental Turbulence and Inter-Functional Coordination," *International Journal of Research in Marketing,* 22 (3), 333-350.

Balakrishnan, Subra (1996), "Benefits of Customer and Competitive Orientations in Industrial Markets," *Industrial Marketing Management*, 25 (4), 257-269.

Bantel K. A. and Jackson S. E. (1989), "Top Management and Innovations in Banking: Does The Composition of The Top Team Make a Difference?" *Strategic Management Journal*, 10, Special Issue, 107–24.

Baron, R.M. and Kenny, D.A. (1986), "The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic and Statistical Considerations," *Journal of Personality and Social Psychology*, 51. (6) 1173-82.

Barsade, S. G., Ward, A. J., Turner, J. D. F. and Sonnenfeld, J. A. (2000), “To Your Heart’s Content: A Model of Affective Diversity in Top Management Teams.” *Administrative Science Quarterly*, 45, 802–36.

Bettman, J. R. and B. A. Weitz (1983), "Attributions in the Board Room: Causal Reasoning in Corporate Annual Reports," *Administrative Science Quarterly,* 28 (2), 165.

Barney JB. (1986), The Strategic Factor Markets: Expectations, Luck And Business Strategy. *Management Science,* 32 (10): 1231–1241.

Barney JB. (1991), Firm Resources and Sustained Competitive Advantage. *Journal of Management,* 17 (1): 99–120

Beckman, Christine M, M Diane Burton, and Charles O'Reilly (2007), "Early Teams: The Impact of Team Demography on VC Financing and Going Public," *Journal of Business Venturing,* 22 (2): 147-173.

Bettman, James R. and Barton A. Weitz (1983), "Attributions in the Board Room: Causal Reasoning in Corporate Annual Reports," *Administrative Science Quarterly*, 28 (2), 165-83.

Bhuian, Shahid N. (1997), “Exploring Market Orientation i.n Banks: An Empirical Examination in Saudi Arabia,” *The Journal of Services Marketing*, 11 (5), 317–28.

Blau, P.M. (1977), Inequality and Heterogeneity. New York: The Free Press.

Boeker, Warren. (1997), “Strategic change: The Influence of Managerial Characteristics and Organizational Growth,” *Academy of Management Journal*, 40 (1), 152.

Bowman. Edward H. (1976), “Strategy and the Weather,” *Sloan Management Review*, Winter (2), 49.

Carpenter, M. A. (2002), “The Implications of Strategy and Social Context for the Relationship Between Top Management Team Heterogeneity and Firm Performance,” *Strategic Management Journal*, 23, 275–84.

Carpenter, M. A. and Fredrickson, J. W. (2001), “Top Management Teams, Global Strategic Posture, and the Moderating Role of Uncertainty,” *Academy of Management Journal*, 44, 533–45.

Carpenter, M. A., Sanders, W. G. and Gregersen, H. B. (2001), “Bundling Human Capital with Organizational Context: The Impact of International Assignment Experience on Multinational Firm Performance and CEO Pay,” *Academy of Management Journal*, 44, 495–511.

Cano, Cynthia R., Francois A. Carrillat, and Fernando Jaramillo (2004), “A Meta-Analysis of the Relationship Between Market Orientation and Business Performance: Evidence from Five Continents,” *International Journal of Research in Marketing*, 21 (June), 179–200.

Certo, S. Trevis, Richard H. Lester, Catherine M. Dalton and Dan R. Dalton (2006), “Top Management Teams, Strategy and Financial Performance: A Meta-Analytic Examination,” *Journal of Management Studies,* 43:4 June.

Chauvin, Keith W. and Mark Hirschey (1993), “Advertising, R&D Expenditures, and the Market Value of the Firm,” Financial Management, 22 (4), 128–40.Day, George S. (1994), “The Capabilities of Market-Driven Organizations,” *Journal of Marketing*, 58 (4), 37–52.

Day, George S. (1994), “The Capabilities of Market-Driven Organizations,” *Journal of Marketing*, 58 (4), 37–52.

Day, George and Liam Fahey (1988), "Valuing Market Strategies," *Journal of Marketing*, 52 (3), 45.

Day, George F. and Robin Wensley (1988), "Assessing Advantage: A Framework for Diagnosing Competitive Superiority," *Journal of Marketing*, 52 (April), 1-20.

Dekimpe, Marnik G. and Dominique M. Hanssens (1995), "The Persistence of Marketing Effects on Sales," *Management Science,* 14 (1), 1-21.

Deshpandé, R., J. U. Farley, and Webster Jr. (1993), "Corporate Culture Customer Orientation and Innovativeness in Japanese Firms: A Quadrad Analysis," *Journal of Marketing,* 57 (1), 23.
---- (1996), "Understanding Market Orientation: A Prospectively Designed Meta-Analysis of Three Market Orientation Scales," *Marketing Science Institute*.
---- (1989), “Organizational Culture And Marketing: Defining The Research.” *Journal of Marketing*, 53, (1), 3.

Dess, Gregory G. and Richard B. Robinson Jr. (1984), "Measuring Organizational Performance in the Absence of Objective Measures: The Case of the Privately-held Firm and Conglomerate Business Unit," *Strategic Management Journal*, 5 (3), 265.

Dobni, C. B. and G. Luffman (2003), "Determining the Scope And Impact Of Market Orientation Profiles On Strategy Implementation And Performance," *Strategic Management Journal,* 24 (6): 577.

Donthu, N, and Kim, H.S. (1993), "Implications of Firm Controllable Factors on Export Growth", *Journal of Global Marketing*, 7, (1), 47-63.

Doty, Harold D. and William H. Glick (1998), “Common Method Bias: Does Common Methods Variance Really Bias Results?” *Organizational Research Methods*, 1 (4), 374–406.

Doyle, Peter (2000), *Value-Based Marketing*. New York: John Wiley & Sons.

Dutta, Shantanu, Om Narasimhan, and Surendra Rajiv (1999), "Success in High-Technology Markets: Is Marketing Capability Critical?" *Marketing Science*, 18 (4), 547–68.

Eisenhardt, K. M., and Schoonhoven, C. B. (1990), "Organizational Growth: Linking Founding Team, Strategy, Environment, and Growth Among U.S. Semiconductor Ventures, 1978–1988. *Administrative Science Quarterly*," 35: 504–529.

Ellis, P. (2006). "Market Orientation and Performance: A Meta-Analysis and Cross-National Comparisons." *Journal of Management Studies*, 43 (5), 1089–1107.

Ferrier, W. J. (2001), Navigating the Competitive Landscape: The Drivers and Consequences of Competitive Aggressiveness. *Academy of Management Journal*, 44: 858–877.

Finkelstein, S. and D. C. Hambrick (1990), "Top-Management-Team Tenure and Organizational Outcomes: The Moderating Role of Managerial Discretion." *Administrative Science Quarterly,* 35(3): 484-503.

Fisher, R.J., Maltz, E. and Jaworski, B.J. (1997), "Enhancing communication between marketing and engineering: the moderating role of relative functional identification", *Journal of Marketing,* 61, (3), 54-70.

Gatignon, Hubert and Jean-Marc Xuereb (1997), "Strategic Orientation of The Firm and New Product Performance," *Journal of Marketing Research*, 34 (1), 77.

Gebhardt, G. F., G. S. Carpenter, et al. (2006), "Creating a Market Orientation: A Longitudinal, Multifirm, Grounded Analysis of Cultural Transformation," *Journal of Marketing* 70 (4): 37-55.

Grewal, R. and Tansuhaj, (2001), "Building Organizational Capabilities for Managing Economic Crisis: The Role of Market Orientation and Strategic Flexibility," *Journal of Marketing,* 65 2, pp. 67–80.

Grinstein, Amir, (2008), The Effect of Market Orientation and Its Components on Innovation Consequences: A Meta-Analysis," *Journal of the Academy of Marketing Science*, 36 2, 166-173

Gupta, Anil K. and V. Govindarajan (1982), "An Empirical Examination of Linkages Between Strategy, Managerial Characteristics, and Performance," *Academy of Management Proceedings*, 31.

Haleblian, J., and Finkelstein, S. (1993), "Top-management Team Size, CEO Dominance, and Firm Performance: The Moderating Roles of Environmental Turbulence and Discretion," *Academy of Management Journal*, 36: 844–863.

Hambrick DC, Cho TS, Chen MJ. (1996), “The Influence of Top Management Team Heterogeneity on Firms’ Competitive Moves,” *Administrative Science Quarterly,* 41: 659–684.

Hambrick, Donald C. and Phyllis A Mason (1984), “Upper Echelons: The Organization as a Reflection of its Top Managers,” *Academy of Management Review,* 9 (2), 193-207.

Han, Jin K., Namwoon Kim, and Rajendra K. Srivastava (1998), “Market Orientation and Organizational Performance: Is Innovation a Missing Link?” *Journal of Marketing*, 62 (4), 30–45.

Hannan, M. and Freeman, J. (1977), “The Population Ecology of Organizations,” *American Journal of Sociology*, 82, 929–64.

Harris, Lloyd C. (2001), "Market Orientation and Performance: Objective and Subjective Empirical Evidence From Uk Companies," *Journal of Management Studies*, 38 (1), 17.

Hawawini G, Subramanian V, Verdin P. (2003), “Is Performance Driven by Industry- or Firm-Specific Factors? A New Look At The Evidence,” *Strategic Management Journal,* 24 (1): 1–16.

Higgins, M., C. and R. Gulati (2006), "Stacking the Deck: The Effects of Top Management Backgrounds on Investor Decisions," *Strategic Management Journal,* 27 (1): 1.

Higgins MC, Gulati R. (2003), “Getting Off To A Good Start: The Effects Of Upper Echelon Affiliations on Underwriter Prestige,” *Organization Science,* 14 (3): 244–263.

Homburg, C. and C. Pflesser (2000), "A Multiple-Layer Model of Market-Oriented Organizational Culture: Measurement Issues and Performance Outcomes," *Journal of Marketing Research,* 37 (4): 449-462.

Huber, George P. (1991), “Organizational Learning: The Contributing Processes and the Literatures,” *Organizational Science,* 2 (February): 88-115.

Huff, Anne S., ed. (1990), *Mapping Strategic Thought*, New York: John Wiley & Sons

Hult, Tomas G. and David J. Ketchen (2001), “Does Market Orientation Matter? A Test of the Relationship Between Positional Advantage and Performance,” *Strategic Management Journal*, 22 (September), 899–906.

Hult, Tomas G., Ketchen, David J. and Stanley F. Slater (2005), “Market Orientation And Performance: An Integration of Disparate Approaches,” *Strategic Management Journal,* 26: 1173–1181.

Hunt, S.D (2002), *Foundations of Marketing Theory*: Toward a general theory of marketing: M.E. Sharpe, New York.

Hunt, Shelby D. and Dennis B. Arnett (2003), "Resource-Advantage Theory And Embeddedness: Explaining R-A Theory's Explanatory Success," *Journal of Marketing Theory & Practice*, 11 (1), 1.

Hunt, Shelby D. and Robert M. Morgan (1995), "The Comparative Advantage Theory of Competition," *Journal of Marketing*, 59 (2), 1.

Hunt, Shelby D. and Caroline Derozier (2004), "The Normative Imperatives of Business and Marketing Strategy: Grounding Strategy in Resource-Advantage Theory.," *Journal of Business & Industrial Marketing*, 19 (1), 5-22.

Hurley, Robert F. and Tomas G. Hult (1998), “Innovation, Market Orientation, and Organizational Learning: An Integration and Empirical Examination,” *Journal of Marketing*, 62 (July), 42–54.

Im, Subin and John P. Workman (2004), “Market Orientation, Creativity, and New Product Performance in High-Technology Firms,” *Journal of Marketing*, 68 (April), 114–32.

Jaworski, Bernard and Ajay K. Kohli (1992), "Market Orientation: Antecedents and Consequences," working paper of the Marketing Science Institute, Report #92-104.
——— and ——— (1993), “Market Orientation: Antecedents and Consequences,” *Journal of Marketing*, 57 (July), 53–70.
——— and ——— (1996), “Market Orientation: Review, Refinement, and Roadmap,” *Journal of Market-Focused Management*, 1 (2), 119–35.

Kassarjian, Harold H. (1977), "Content Analysis in Consumer Research," *Journal of Consumer Research,* 4 (June), 8-1.

Kennedy, Karen N., Jerry R. Goolsby, and Eric J. Arnould (2003), “Implementing a Customer Orientation: Extension of Theory and Application,” *Journal of Marketing*, 67 (October), 67–81.

Ketchen Jr., David Jr. (2003), “Introduction: Raymond E. Miles and Charles C. Snow's Organizational Strategy, Structure, and Process,” *Academy of Management Executive,* 17 (4): 95-96.

Kirca, A., Jayachandran, S., & Bearden, W. (2005), “Market Orientation: A Meta-Analytic Review and Assessment of Its Antecedents and Impact on Performance. Journal of Marketing,” *Journal of Marketing,* 69 (2): 24-41.

Kohli, A. K. and B. J. Jaworski (1990), "Market Orientation: The Construct, Research Propositions, and Managerial Implications," *Journal of Marketing,* 54 (2): 1-18.

Kohli, A. K., B. J. Jaworski, and and A. Kumar (1993), "MARKOR: A Measure of Market Orientation," *Journal of Marketing Research*, 30 (4): 467.

Kor, Yasemin Y. and Huseyin Leblebici (2005), "How do Interdependencies among Human-Capital Deployment, Development, and Diversification Strategies Affect Firms' Financial Performance?" *Strategic Management Journal,* 26 (10): 967-985.

Kumar, Kamalesh, Ram Subramanian, and Charles Yauger (1998), "Examining the Market Orientation-Performance Relationship: A Context-Specific Study," *Journal of Management,* 24 (2): 201.

Lafferty, Barbara A. and Tomas G. Hult (2001), "A Synthesis of Contemporary Market Orientation Perspective," *European Journal of Marketing*, 35 (1/2), 92–109.

Leonidou, Leonidas C., Constantine S. Katsikeas, and Saeed Samiee (2002), "Marketing Strategy Determinants Of Export Performance: A Meta-Analysis," *Journal of Business Research*, 55 (1), 51-67.

Lukas, Bryan A. and Ferrell, O. C. (2000), "The Effect of Market Orientation on Product Innovation." *Journal of the Academy of Marketing Science*, 28 (2): 239 – 247.

Luo, X. and N. Donthu (2006), "Marketing's Credibility: A Longitudinal Investigation of Marketing Communication Productivity and Shareholder Value," *Journal of Marketing* 70(4): 70-91.

Marketing Science Institute (2002), "2002-2004 Research Priorities - A Guide to MSI Research Programs and Procedures," Cambridge, MA: *Marketing Science Institute.*

McNamara, Carlton P. (1972), "The Present Status of the Marketing Concept," *Journal of Marketing*, 36 (January), 50-57.

Matsuno, Ken and John T. Mentzer (2000), "The Effects of Strategy Type on the Market Orientation-Performance Relationship," *Journal of Marketing*, 64 (4), 1.

Matsuno, Ken, John T. Mentzer, and Aysegul Ozsomer (2002), "The Effects of Entrepreneurial Proclivity and Market Orientation on Business Performance," *Journal of Marketing*, 66 (July), 18–32.

Menon, A., S. G. Bharadwaj, et al. (1999), "Antecedents and Consequences of Marketing Strategy Making: A Model and a Test." *Journal of Marketing* (2): 18-40.

Menon, A. and Varadarajan, P.J. (1992), "A model of marketing knowledge use within firms", *Journal of Marketing,* Vol. 56, October, pp. 53-71.

Miles R, Snow C. (1984), Fit, Failure, and the Hall of Fame. *California Management Review,* 26 (3): 10–28.

Mizik, Natalie and Robert Jacobson (2003), “Trading Off Between Value Creation and Value Appropriation: The Financial Implications of Shifts in Strategic Emphasis,” *Journal of Marketing*, 67 (1), 63–76.

Morgan, Robert E. and Carolyn A. Strong (1998), "Market Orientation and Dimensions of Strategic Orientation," *European Journal of Marketing,* 32 (11/12), 1051-73.

Murray, Alan I (1989), “Top Management Group Heterogeneity and Firm Performance,” *Strategic Management Journal*, 10: 125-141.

Narver, J. C. and S. F. Slater (1990), "The Effect of a Market Orientation on Business Profitability," *Journal of Marketing,* 54 (4): 20.

Narver, J. C., S. F. Slater, et al. (2004), "Responsive and Proactive Market Orientation and New-Product Success," *Journal of Product Innovation Management,* 21 (5): 334-347.

Noble, C. H. and M. P. Mokwa (1999), "Implementing Marketing Strategies: Developing and Testing a Managerial Theory," *Journal of Marketing,* 63 (4): 57.

Noble, C. H., R. K. Sinha, et al. (2002), "Market Orientation and Alternative Strategic Orientations: A Longitudinal Assessment of Performance Implications." *Journal of Marketing,* 66 (4): 25.

Oczkowski, E. and Farrell, M.A., (1998), Discriminating between measurement scales using non-nested tests and two-stage least squares estimators: The case of market orientation. *International Journal of Research in Marketing,* 15 4, pp. 349–366.

Pearce, J. A., D. K. Robbins, and R. B. Robinson (1987), "The Impact of Grand Strategy and Planning Formality on Financial Performance," *Strategic Management Journal*, 8 (March-April), 125-34.

Pelham, Alfred M. and David T. Wilson (1996), "A Longitudinal Study of the Impact of Market Structure, Firm Structure, Strategy, and Market Orientation Culture on Dimensions of Small-Firm Performance," *Journal of the Academy of Marketing Science*, 24 (1), 27.

Pelled, L. H., Eisenhardt, K. M. and Xin, K. R. (1999), “Exploring the Black Box: An Analysis of Work Group Diversity, Conflict and Performance” *Administrative Science Quarterly*, 44, 1–28.

Prahalad, C. K. and G. Hamel (1990), "The Core Competence of the Corporation," *Harvard Business Review,* 68 (3): 79-91.

Porter, M.E. (1980), "*Competitive Strategy,*" The Free Press, New York, 1980.

Ramani, Girish, and V. Kumar (2008), "Interaction Orientation and Firm Performance," *Journal of Marketing*, 72 (1), 27-45.

Ruekert, Robert W. (1992), "Developing a Market Orientation: An Organizational Strategy Perspective," *International Journal of Research in Marketing*, 9 (August), 225–46.

Rumelt RP. (1991), "How Much Does Industry Matter?" S*trategic Management Journal,* 12 (3): 167–185.

Rust, Roland, Tim Ambler, Gregory Carpenter, V. Kumar, and Rajendra K. Srivastava (2004), "Measuring Marketing Productivity: Current Knowledge and Future Directions," *Journal of Marketing*, 68 (4), 76–89.

Rust, Roland T., Katherine N. Lemon, and Valarie A. Zeithaml (2004), "Return on Marketing: Using Customer Equity to Focus Marketing Strategy," *Journal of Marketing*, 68 (1), 109-27.

Sandvik, Izabela L. and Kare Sandvik (2003), "The Impact of Market Orientation on Product Innovativeness and Business Performance," *International Journal of Research in Marketing*, 20 (4), 355–76.

Schein EH. (1984), Coming to a New Awareness of Organizational Culture. *Sloan Management Review,* Winter: 3–16.

Shapiro, Benson P. (1988), "What the Hell is 'Market Orientated?" *Harvard Business Review*, 66 (November/December), 119-25.

Siguaw, Judy A., Gene Brown, and Robert E Widing II (1994). "The Influence of The Market Orientation of The Firm on Sales Force Behavior and Attitudes," *Journal of Marketing Research,* 31 (1): 106.

Siguaw, J.A. and Honeycutt Jr., E.D. (1995), "An Examination of Gender Differences in Selling Behaviors and Job Attitudes," *Industrial Marketing Management,* 24 1, pp. 45–52.

Simons, T. (1995), "Top Management Team Consensus, Heterogeneity, and Debate as Contingent Predictors of Company Performance: The Complementarity of Group Structure and Process," *Academy of Management Journal*, 62.

Simsek, Zeki (2007), "CEO Tenure and Organizational Performance: An Intervening Model." *Strategic Management Journal,* 28 (6), 653.

Sinkula JM. (1994), Market Information Processing and Organizational Learning. *Journal of Marketing,* 58 (January): 35–45.

Slater, Stanley F. and John C. Narver (1994), "Does Competitive Environment Moderate the Market Orientation–Performance Relationship?" *Journal of Marketing*, 58 (1), 46–55.

Slater , Stanley F., Olson, Eric M., and G. Tomas M. Hult (2006), "The Moderating Influence of Strategic Orientation on the Strategy Formation Capability-Performance Relationship." *Strategic Management Journal,* 27 (12): 1221.

Smith K. G., Smith, K. A., Olian, J. D., Sims, H. P., O'Bannon, D. P. and Scully, J. A. (1994), "Top Management Team Demography and Process: The Role of Social Integration and Communication," *Administrative Science Quarterly*, 39, 412–38.

Szymanski, David M., Sundar G. Bharadwaj, and Rajan P. Varadarajan (1993), "Standardization versus Adaptation of International Marketing Strategy," *Journal of Marketing*, 57 (4), 17–33.

Vorhies, D. W. and N. A. Morgan (2003), "A Configuration Theory Assessment of Marketing Organization Fit with Business Strategy and Its Relationship with Marketing Performance," *Journal of Marketing,* 67(1): 100.

Voss, G. B. and Z. G. Voss (2000), "Strategic Orientation and Firm Performance in an Artistic Environment," *Journal of Marketing*, 64 (1), 67-83.

Walker, O. C. Jr. and R. W. Ruekert (1987), "Marketing's Role in the Implementation of Business Strategies: A Critical Review and Conceptual Framework," *Journal of Marketing,* 51 (3): 15.

Webster Webster, Frederick E., Jr. (1992), "The Changing Role of Marketing in the Corporation," *Journal of Marketing*, 56 (October), 1-17.

Weinzimmer, L. G., E. U. Bond Iii, et al. (2003), "Relating Marketing Expertise on the Top Management Team and Strategic Market Aggressiveness to Financial Performance and Shareholder Value," *Journal of Strategic Marketing,* 11 (2): 133.

Wernerfelt B. (1984), "A Resource-Based View of the Firm," *Strategic Management Journal,* 5 (2): 171–180.

West, C. T., Jr. and C. R. Schwenk (1996), "Top Management Team Strategic Consensus, Demographic Homogeneity and Firm Performance: A Report of Resounding Nonfindings," *Strategic Management Journal,* 17 (7): 571.

Williams, K. Y. and O'Reilly, C. A. (1998), "Demography and Diversity in Organizations: A Review of 40 Years of Research," *Research in Organizational Behavior*, 20, 77–140.

Wiersema, M. F. and Bantel, K. A. (1992), "Top Management Team Demography and Corporate Strategic Change," *Academy of Management Journal*, 35, 91–121.

Zahra SA. (1996), “Governance, Ownership, and Corporate Entrepreneurship: The Moderating Impact of Technological Opportunities,” *Academy of Management Journal,* 39 (6): 1713-1735.

Zhu, Zhen and Cheryl Nakata (2007), “Reexamining the Link between Customer Orientation and Business Performance: The Role of Information Systems,” *Journal of Marketing Theory and Practice,* 15 (3) 187-204.

Zou, Shaoming and S. Tamer Cavusgil (2002), "The GMS: A Broad Conceptualization of Global Marketing Strategy and Its Effect on Firm Performance," *Journal of Marketing*, 66 (4), 40.