

CULTURAL ORIENTATIONS, ENVIRONMENTAL DIMENSIONS
AND FIRM PERFORMANCE:
AN INTEGRATED FRAMEWORK AND EMPIRICAL INVESTIGATION

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Thesis Abstract

Mısra Çağla Gül, “Cultural Orientations, Environmental Dimensions and Firm Performance: An Integrated Framework and Empirical Investigation”

The aim of this dissertation is to understand the relationship between cultural orientations and firm performance taking into account other enablers such as innovativeness and marketing effectiveness. In addition, influence of environmental moderators which is likely to be “the missing link” in explaining the diversity of results in cultural orientation - firm performance research is studied. Multiple respondent firm level data are collected through a survey from seventyfour firms operating in a variety of industries, resulting in 296 individual surveys.

Findings indicate that cultural orientation of a firm has a direct positive impact on its innovativeness. Innovativeness of a firm positively impacts both marketing effectiveness and firm performance of a firm. Cultural orientation of a firm impacts its marketing effectiveness through the mediation of innovativeness. In addition to this impact, of the three cultural orientations present in the study, learning orientation also has a direct impact on marketing effectiveness. Also, findings indicate that these relationships are moderated by environmental factors such as dynamism, complexity and munificence.

Tez Özeti

Mısra Çağla Gül, “Kültürel Oryantasyonlar, Çevresel Faktörler ve Şirket Performansı: Bütünleşik Çerçeve ve Empirik Araştırma”

Bu çalışmanın amacı kültürel oryantasyonlar ile şirket performansı arasındaki ilişkiyi yenilikçilik ve pazarlama etkinliği gibi aracı bileşenleri de dikkate alarak anlamaktır. Bu ilişkiye ek olarak, çalışmada, kültürel oryantasyon – şirket performansı ilişkisi konusunda bugüne kadar elde edilmiş sonuçların çeşitliliğini açıklamaktaki “eksik parça” olması muhtemel olan çevresel moderatörlerin etkisine de bakılmaktadır. Çeşitli sektörlerde faaliyet gösteren yetmişdört şirketten 296 anket toplanmıştır.

Bulgular, şirketin kültürel oryantasyonunun yenilikçiliği direkt ve olumlu olarak etkilediği yönündedir. Yenilikçilik ise hem pazarlama etkinliğini hem de şirket performansını etkilemektedir. Kültürel oryantasyonlar, pazarlama etkinliğini yenilikçilik aracılığı ile etkilemektedirler. Ancak bulgulara göre, öğrenme odaklılığın pazarlama etkinliği üzerinde direkt bir etkisi de bulunmaktadır. Ayrıca, bulgulara göre yukarıda sözü edilen tüm ilişkiler çevresel moderatörler tarafından etkilenmektedir.

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ABBREVIATIONS

AVE Average Variance Extracted

BP Business Performance

EO Entrepreneurial Orientation

LO Learning Orientation

ME Marketing Effectiveness

MO Market Orientation

ROA Return on Assets

ROE Return on Equity

ROI Return on Investment

CHAPTER I: INTRODUCTION

Cultural orientation and performance relationship has been a popular stream of research in the marketing and management academia. Many researchers have attempted to address the issue of how certain cultural orientations or a combination of orientations influence different indicators of business performance such as market share, sales growth, marketing effectiveness and ROI (e.g. Narver and Slater 1990, Matsuno, Mentzer, and Ozsomer 2002). Also, the linkages between cultural orientation and performance as well as influences that moderate this relationship have been studied widely in the literature (e.g. Kohli and Jaworski 1993, Narver and Slater 1994).

Many empirical findings from studies of the relationship between orientation and performance have produced results that are complex and, in several cases, unsupportive. Across many contexts, various studies have found no direct relationship between cultural orientation and measures of performance (e.g., Han, Kim, and Srivastava 1998) or found that performance effects vary on the basis of the business context (Narver and Slater 1990).

It appears that the fundamental link between different cultural orientations and performance has yet to be fully explored and supported. Issues of perception, possibly context, and differences in measurement and

methodology may be the reasons for this variation in results. Inconsistencies may also be due to the multidimensional nature of the performance construct (Cameron, 1978; Chakravarthy, 1986). This does not, however, change the fact that this research stream has created a set of findings that is rich and interesting but somewhat lacking in clearly established grounding from which to advance knowledge.

Scope and Significance of the Study

This study aims at explaining the relationship between three significant cultural orientations, namely entrepreneurial orientation, market orientation, and learning orientation, and firm performance. This will be done through the investigation of factors causing/facilitating this relationship. An entrepreneurially oriented firm is one that "engages in product market innovation, undertakes somewhat risky ventures, and is first to come up with 'proactive' innovations, beating competitors to the punch" (Miller 1983). Market orientation has been defined in many ways in the literature, but two major frameworks for this construct exist. Kohli and Jaworski (1993) define market orientation as the generation and dissemination of market intelligence that is composed of information about customers' current and future needs and exogenous factors that influence those needs, and Narver and Slater (1990) view market orientation as consisting of three behavioral components, i.e. customer orientation,

competitor orientation, and interfunctional coordination. Learning orientation is conceptualized as a set of values that influence the degree to which an organization is satisfied with its theories in use (Argyris and Schon 1978), mental models (de Geus 1988), and dominant logics (Bettis and Prahalad 1995), which may or may not have their bases in the marketplace

This study attempts to understand the relationship between these cultural orientations and firm performance taking into account other enablers and moderators involved in this relationship. Innovativeness is a key linkage between cultural orientations in question and firm performance. The impact of these cultural orientations on innovativeness will be studied and the direct and indirect (through marketing effectiveness) effect of innovativeness on firm performance will be researched. Data collected from Turkish companies will be used in this study.

In addition, influence of environmental moderators which is likely to be “the missing link” in explaining the diversity of results in cultural orientation - firm performance research will be studied. Environmental dimensions, dynamism, munificence, and complexity will be measured with respect to their moderating effect on each of the relationships hypothesized in this study.

This research will attempt to explain the reasons behind inconsistent results regarding the cultural orientation – performance relationship using

data from Turkish firms. Innovativeness as the main driver of this relationship in the proposed model will be key in specifying the linkage between the two constructs. The triadic relationship among innovativeness, marketing effectiveness and firm performance will address how the orientation – performance relationship may be working. Finally, environmental moderators will shed light in explaining the workings of each of the relationships in our model.

Next chapter reviews relevant literature upon which the research model of this study is built.

CHAPTER II: LITERATURE REVIEW

This chapter sets the theoretical background for this research.

Literature on cultural orientations, innovativeness, marketing effectiveness, firm performance, environmental dimensions and their inter-relationships is reviewed.

Entrepreneurial Orientation

The early strategy literature equated entrepreneurship with going into business, and the basic "entrepreneurial problem" (Miles & Snow, 1978) was to address the principal question of strategy content, that is, "What business shall we enter?" The answer to this question determined a firm's domain and guided its product-market relationships and resource deployments. Entrepreneurship was originally studied as a market entry problem.

A more recent conceptual domain of entrepreneurship involves entrepreneurial management processes, "the methods, practices, and decision-making styles managers use to act entrepreneurially" (Lumpkin and Dess 1996). Reflecting this extension of the conceptual domain to a generalized management process, the literature reveals several different terms, such as entrepreneurial proclivity (e.g., Pellissier and Van Buer 1996, Matsuno, Mentzer and Ozsomer 2002), entrepreneurial orientation (e.g.,

Lumpkin and Dess 1996), and entrepreneurial management (e.g., Stevenson and Jarillo 1990), that are used interchangeably to describe the equivalent generalized concept. This study uses the term “entrepreneurial orientation (EO)”.

Entrepreneurial Orientation

As the field of strategic management developed, the emphasis shifted to entrepreneurial processes, that is, the methods, practices, and decision-making styles managers use to act entrepreneurially (Lumpkin and Dess 1996). These include such processes as experimenting with promising new technologies, being willing to seize new product-market opportunities, and having a predisposition to undertake risky ventures. The trend has been to use concepts from the strategy-making process literature to model firm-level entrepreneurship (Covin & Slevin, 1989, 1991; Miller, 1983).

An EO refers to the processes, practices, and decision-making activities that lead to new entry into a market. It emerges from a strategic-choice perspective (Child, 1972), which asserts that new-entry opportunities can be successfully undertaken by "purposeful enactment" (Van de Ven & Poole, 1995). Thus, it involves the intentions and actions of key players functioning in a dynamic generative process aimed at new-venture creation. The key dimensions that characterize an EO include a propensity to act autonomously, a willingness to innovate and take risks, and a tendency to be

aggressive toward competitors and proactive relative to marketplace opportunities (Lumpkin and Dess 1996).

Dimensions of Entrepreneurial Orientation

There is a fundamental set of strategy making process dimensions that underlies nearly all entrepreneurial processes. The study of a firm's entrepreneurial orientation is analogous to Stevenson and Jarillo's (1990) concept of entrepreneurial management, in that it reflects the organizational processes, methods, and styles that firms use to act entrepreneurially. With regard to the specific dimensions of EO, Miller (1983) suggested that an entrepreneurial firm is one that "engages in product market innovation, undertakes somewhat risky ventures, and is first to come up with 'proactive' innovations, beating competitors to the punch" (1983). Accordingly, he used the dimensions of "innovativeness," "risk taking," and "proactiveness" to characterize and test entrepreneurship. Numerous researchers have adopted an approach based on Miller's (1983) original conceptualization (e.g., Covin and Slevin, 1989; Morris & Paul, 1987; Naman & Slevin, 1993; Schafer, 1990).

The literature encompasses two other dimensions of an entrepreneurial orientation as important. The first is competitive aggressiveness, which captures the distinct idea of beating competitors to the punch suggested by Miller's (1983) definition of an entrepreneurial firm. It

refers to the type of intensity and head-to-head posturing that new entrants often need to compete with existing rivals.

Another key component of an EO is a tendency toward independent and autonomous action. Start-up firms must exercise intentionality to carry forward the specific actions required to launch new ventures (Bird, 1988; Katz & Gartner, 1988). Layers of bureaucracy and organizational tradition rarely contribute to new-entry activities in existing firms (Kanter, 1983). Instead, it requires the exercise of autonomy by strong leaders, unfettered teams or creative individuals who are disengaged from organizational constraints to lead to new entry. This was the conclusion of Burgelman (1983: 241), who found that, in the case of internal corporate venturing, "the motor of corporate entrepreneurship resides in the autonomous strategic initiative of individuals at the operational levels in the organization."

Having described the five dimensions, it is noteworthy to state that the consensus in the strategic management and entrepreneurship literature offers the first three underlying dimensions of the organizational predisposition to entrepreneurial management processes: innovativeness, risk taking, and proactiveness (Barringer and Bluedorn 1999; Caruana, Morris, and Vella 1998; Covin and Slevin 1989; Jennings and Young 1990; Khandwalla 1977; Miller 1983; Miller and Friesen 1982; Morris, Avila, and Allen 1993). Collectively, the three underlying dimensions of entrepreneurial

orientation (innovativeness, risk taking, and proactiveness) constitute the rationale for firms to renew the organization, destroy the existing order of the market (Schumpeter 1934), and offer an alternative and potentially superior customer value proposition (Deshpande, Farley, and Webster 1993; Slater and Narver 1995). EO is suggested to have a direct impact on how an organization is designed and structured to achieve the desired business performance (Drazin and Howard 1984; Govindarajan 1988). Also, a firm's choice of an aggressive, competitive, risk taking strategy influences innovativeness: proactive firms differentiate themselves from their competitors by changing their production methods and products (Ozsomer, Calantone and Di Bonetto, 1997).

The entrepreneurship literature, in referring to the causes of entrepreneurship, often mentions factors such as managerial style, need for achievement, and other social or motivational factors. These may be important corollaries to an entrepreneurial orientation that help explain a firm's performance. Similarly, environmental dimensions, such as dynamism and munificence, or structural factors, such as the decentralization of decision making, may influence the performance of firms with an entrepreneurial orientation. In their model of entrepreneurship as firm behavior, Covin and Slevin (1991) discussed the relationship of strategy, structure, and environment to the EO dimensions of innovativeness, risk

taking, and proactiveness. This study is attempting to accomplish a similar task. Given the centrality of the EO construct, it is necessary to investigate the role of environmental and organizational variables to further the understanding of how EO contributes to performance outcomes. Through such a perspective, the need to go beyond the investigation of bivariate correlations and examine contingency relationships is recognized. Furthermore, Rosenberg (1968) suggested that the introduction of a third variable into the analysis of a two-variable relationship (e.g., EO-performance) helps reduce the potential for misleading inferences and permits a more precise and specific understanding of the original two-variable relationship.

Market Orientation

Marketing is a management function typically responsible for understanding the consumer and keeping the rest of the organization informed about the customer so that superior value is delivered to the customer. Companies must make long-term commitments to maintain the relationship through quality, service, and innovation. Consequently, market orientation has been assumed as a prerequisite to success and profitability for most firms. Although there are some discrepancy in the use of the terms "market" versus "marketing" orientation, it generally consists of (1) customer orientation and targeting; (2) profit orientation; and (3) integrated marketing

organization, that is, integration of effort by all areas of the organization to satisfy corporate goals by satisfying customer needs and wants (Perreault and McCarthy 2002).

For the past three decades the subject of market orientation in one form or another (e.g., Kotler 1977; Levitt 1980; Shapiro 1988; Webster 1994) has occupied the center stage of the theory and practice of marketing strategy. Only recently, though, have researchers constructed a theory of the antecedents and consequences of market orientation, developed a valid measure of the construct, and tested its effect on business performance.

"Market orientation" is a popular term used by marketing practitioners as an indicator of the extent to which a firm implements the "marketing concept". A market oriented firm is presumed to have superior market-sensing and customer-linking capabilities, and these capabilities are presumed to assure them higher profits in comparison with firms that are less market-oriented (Day, 1994).

A market orientation is valuable because it focuses the organization on (1) continuously collecting information about target-customers' needs and competitors' capabilities and (2) using this information to create continuously superior customer value (Narver and Slater 1995). Comprehensive theories of the nature and consequences of a market orientation have been developed (e.g., Kohli and Jaworski 1990; Narver and Slater 1990; Shapiro 1988) and a

body of research illustrating the relationship between market orientation and performance has emerged (e.g. Deshpande, Farley, and Webster 1993; Jaworski and Kohli 1993; Narver and Slater 1990; Ruekert 1992; Slater and Narver 1994). Market orientation has taken a central role in discussions about marketing management and strategy (Day 1992).

Two closely related frameworks have been the foundation for much of market orientation research. Narver and Slater (1990) view market orientation as consisting of three behavioral components (customer orientation, competitor orientation, and interfunctional coordination) and two decision-making criteria (a long-term focus and a profit focus). Narver and Slater (1990) develop a measure of market orientation and test its effect on business performance. Their measure of market orientation closely parallels Kohli and Jaworski's (1990) definition and consists of three behavioral components (customer orientation, competitor orientation, and interfunctional coordination), each of which involves intelligence generation and dissemination and managerial action. Narver and Slater (1990) emphasize that market orientation refers to a culture that places a high priority on creating buyer value while considering other stakeholders and emphasizing responsiveness to market information.

Kohli and Jaworski (1990) offer a more process-driven model that considers the stages of generating, disseminating, and responding to market

intelligence as the essence of market orientation. Using extensive field interviews with managers and executives, Kohli and Jaworski (1990) describe the content of the construct of market orientation and offer a foundation for a theory of market orientation. They define market orientation as the generation and dissemination of market intelligence that is composed of information about customers' current and future needs and exogenous factors that influence those needs (e.g., competition and government regulation). The value of the information is maximized when it is shared among virtually all functions in an organization. Ultimately, the organization must be prepared to act rapidly on the information. The result (Kohli and Jaworski 1990, p. 13) is that "a market orientation appears to provide a unifying focus for the efforts and projects of individuals and departments within the organization, thereby leading to superior performance."

The two frameworks share many underlying concepts and activities, such as the understanding of customer wants, cross-functional integration within the firm, and the importance of decisive action in response to market opportunities.

Market Orientation and Firm Performance

There are two key research streams in the market orientation research. The first key research stream examines the market orientation-business performance (MO-BP) relationship. From the outset, research conducted in this area has generally supported the proposition that market-oriented organizations achieve better outcomes than do less market-oriented ones (Jaworski and Kohli, 1993; Narver and Slater, 1990; Kumar et al., 1998). This has also been found in an Australian context (Dawes, 2000; Farrell, 2000). A key aspect of this research is that it has examined the strength of this relationship in various environmental conditions (typically varying competitive intensity, technological turbulence and market turbulence) and found some moderating influences (Jaworski and Kohli, 1993; Slater and Narver, 1994; Dawes, 2000).

More recently researchers within this stream have begun to explore the boundary conditions of the MO-BP relationship. Researchers have sought to examine the relationship in economic environments substantially different from the original US-based research (e.g. Subramanian and Gopalakrishna, 2001; Grewal and Tansuhaj, 2001) and in business contexts substantially different from the original commercial setting (e.g. Voss and Voss, 2000). In addition, researchers have sought to examine the MO-BP relationship with more stringent research designs and scaling practices (e.g. Oczkowski and

Farrell, 1998; Slater and Narver, 2000), and also to examine relative and interactive effects on the relationship of other firm characteristics that might be considered as performance enhancing, such as entrepreneurship (e.g. Hult and Ketchen, 2001). With the MO-BP relationship being so central to the standard pedagogy of marketing management, this research stream clearly has fundamental value for the discipline.

Whilst the MO-BP relationship has justifiably attracted much attention, a second stream of research has sought to better identify the characteristics that might distinguish market oriented firms from the norm. The initial Jaworski and Kohli (1993) study identified a number of organizational characteristics (top management emphasis, low interdepartmental conflict and high connectedness, and control systems that reward employees for customer oriented behaviors) that may act as antecedents to a market orientation. Subsequent studies have extended on this work by examining alternative characteristics that may differentiate firms with a high level of market orientation from the average firm. Research in this stream has examined the distinctiveness of market oriented firms in terms of their sales force management (Siguaw et al, 1994; Langerak, 2001), new product development practices and innovation (Han et al., 1998; Lukas and Ferrell, 2000), channel relationships (Siguaw et al., 1998; Langerak, 2001), human resource management and internal customer orientation (Conduit

and Mavondo, 2001), learning orientation (Hurley and Hult, 1998; Farrell, 2000) and organizational culture (Homburg and Pflesser, 2000).

A fundamental benefit of being market oriented is purported to be the creation of superior customer value and "continuous superior performance for the business" (Narver and Slater 1990). This relationship between market orientation and performance has been explored by means of a wide range of methodologies, contexts, and measures of market orientation (Deshpande 1999). Several studies have found support for the fundamental market orientation-- performance relationship. For example, Pelham (2000) shows that market orientation has a positive and significant relationship to a range of performance measures, including marketing effectiveness, sales growth, market share, and profitability. In a two-period study, Narver, Jacobson, and Slater (1999) show that market orientation is significantly related to sales growth but not to corporate return on investment. The range of positive outcomes associated with market orientation has been extensive. Market orientation has been shown to have a positive relationship to return on assets (ROA) (Narver and Slater 1990), sales growth, new product success (Slater and Narver 1994), and relative product quality (Pelham and Wilson 1996).

Issues of judgment and perception have been raised as important considerations in market orientation research. Jaworski and Kohli (1993) find

a significant market orientation-performance link when using a judgmental assessment as the dependent measure but not when using a more objective measure, market share. Pelham and Wilson (1996) also find significant results when using a subjective relative performance assessment, which suggests that a bias can exist, in which firms that view themselves as perceptive regarding customers and competitors may overstate their performance.

The theory of sustainable competitive advantage (Day and Wensley 1983) offers support for the fundamental hypothesized relationship between the elements of market orientation and performance. From this view, a firmly entrenched market orientation creates an advantage that the competition has difficulty matching. As Morgan and Strong (1998) describe, "The ability of the market oriented firm to outperform its less market oriented competitors is based on the premise that the former can create long-term superior value for the firm's customers in comparison with the latter.

In terms of components of market orientation, customer orientation works better in developed countries whereas competitor orientation is more effective in developing countries. At the local market level, customer orientation is more valuable in more munificent markets that have favorable business conditions and possess readily available resources. In contrast, competitor orientation seems more helpful in leaner markets with poorer

local business conditions and lower levels of resource availability (Zeng Zhou et al., 2007).

Learning Orientation

This section reviews the learning orientation literature.

Organizational learning, types of organizational learning, competitive advantages of organizational learning and theoretical foundations of a learning orientation are discussed.

Organizational Learning

Organizational learning is defined as a process enabling the acquisition of, access to and revision of organizational memory, thereby providing direction to organizational action (Huber 1991). As cognitive entities, organizations are capable of observing their own actions, experimenting to discover the effects of alternative actions, and modifying their actions to improve performance (Fiol & Lyles, 1985). The breadth and depth of organizational learning are positively related to its four constructs - knowledge acquisition, information distribution, information interpretation and organizational memory (Huber, 1991). Knowledge acquisition is the process by which knowledge is obtained (Huber, 1991). Information distribution is the process by which knowledge obtained is shared through formal and informal channels (Maltz & Kohli, 1996; Slater & Narver, 1995). Information interpretation is the process by which functional units reach a

consensus with regard to the meaning of information (Daft & Weick, 1984; Slater & Narver, 1995; Tippins & Sohi, 2003) and organizational memory refers to organizations' storing knowledge for future use (Huber, 1991; Walsh & Ungson, 1991).

The literature is replete with a wide variety of definitions of a learning organization. For example "the capacity or processes within an organization to maintain or improve performance based on experience" (Nevis et al., 1995); "the process of improving actions through better knowledge and understanding" (Fiol and Lyles, 1985); "an entity learns if, through its processing of information, the range of its potential behaviors is changed" (Huber, 1991); "organizations are seen as learning by encoding inferences from history into routines that guide behavior" (Levitt and March, 1988); "the detection and correction of error" (Argyris, 1977; Argyris and Schon, 1978); "modifying behavior to reflect new knowledge and insights" (Garvin, 1993).

Types of Organizational Learning

Adaptive learning. Adaptive learning (Senge 1990); also referred to as single-loop learning by Argyris 1977), the most basic form of learning, occurs within a set of recognized and unrecognized constraints (i.e., the learning boundary) that reflect the organization's assumptions about its environment and itself. For example, Prahalad and Bettis (1986) argue that businesses can

be managed effectively using a dominant general management logic that focuses the conceptualization of the business and guides the development of core capabilities. However, an unintended consequence is that, left unquestioned, the dominant logic may allow core capabilities to become "core rigidities" that can inhibit innovation (Leonard-Barton 1992). Furthermore, Hamel and Prahalad (1991) describe the "tyranny of the served market," in which narrow business definitions impede the search for unconventional business opportunities. The previous examples of both dominant logic and served market show how conceiving of the company and its environment from a narrow perspective substantially reduces the range of opportunities that managers might pursue and the manner in which they might pursue them. The resulting learning boundary constrains organizational learning to the adaptive variety, which usually is sequential, incremental, and focused on issues or opportunities that are within the traditional scope of the organization's activities (Narver and Slater, 1995).

Generative learning. Generative learning (Senge 1990; double-loop learning in Argyris 1977) occurs when the organization is willing to question long-held assumptions about its mission, customers, capabilities, or strategy. It requires the development of a new way of looking at the world based on an understanding of the systems and relationships that link key issues and events. Systems thinking disciplines the organization to focus on

interrelationships and dynamic processes of change rather than on linear cause-effect chains (Senge 1990).

Organizational Learning and Competitive Advantage

An organization has a foundation for sustained competitive advantage when it possesses skills or resources that (1) provide superior value to customers, (2) are difficult to imitate, and (3) are capable of multiple applications (Barney 1991; Day 1994b; Day and Wensley 1988). First, an organization provides superior value to customers when its culture and climate foster behaviors that lead to improvements in effectiveness or efficiency, which, in turn, provide additional benefits or lower prices for customers (Day and Wensley 1988). Second, imperfect imitateness might be the product of a socially complex organizational environment that is difficult for competitors to understand and emulate (Barney 1986, 1991). Finally, when an organizational system provides unique insight into opportunities in new or existing markets, it is capable of multiple applications (Hamel and Prahalad 1994).

Organizational learning is valuable to a firm's customers in this context because it focuses on understanding and effectively satisfying their expressed and latent needs through new products, services, and ways of doing business (Day 1994b; Dickson 1992; Sinkula 1994). This should lead directly to superior outcomes, such as greater new product success, superior

customer retention, higher customer-defined quality, and, ultimately, superior growth and/or profitability (Narver and Slater, 1995).

Furthermore, effective organizations are "loosely coupled" (Pfeffer and Salancik 1978; Weick 1979) with their environments because there is a "buffer" between the organization and the environment that enables them to avoid a reactionary response to every event. A learning culture is just such a buffer in three different ways. First, learning, particularly generative learning, is typically forward-looking, which reduces the frequency and magnitude of major shocks (Day 1994a, b; Sinkula 1994). This also helps to reduce the impression of an environmental complexity that could cause strategic paralysis. In other words, the perceived complexity makes it too difficult for decision makers and learners to map their environment (March and Olsen 1975). Second, because learning organizations have close and extensive relationships with customers, suppliers, and other key constituencies, there is a cooperative attitude that facilitates mutual adjustment among them when the unexpected occurs (Webster 1992). Finally, because of its inherent flexibility, the learning organization is able to quickly reconfigure its architecture and reallocate its resources to focus on the emergent opportunity or threat.

Learning Orientation

As Sinkula et al. (1997) argue learning orientation is concerned with the degree to which proactive learning occurs. Three organization values routinely associated with the predisposition of the firm to learn are commitment to learning, open-mindedness and shared vision (Day, 1991, 1994; Senge, 1990, 1992; Tobin, 1993). According to Sinkula et al. (1997, p. 309) "they are core components that reflect the learning orientation construct".

Commitment to learning

If an organization places little value on learning, little learning is likely to occur (Norman, 1985; Sackman, 1991). Similarly, Galer and van der Heijden's (1992, p. 11) belief that a "culture amenable to learning" is a prerequisite to its ability to improve its understanding of its environment over time. According to Shaw and Perkins (1991), learning efficient companies are reflective; they must value the need to understand the causes and effects of their actions.

Open-mindedness

Open mindedness is closely linked to the notion of unlearning (Nystrom and Starbuck, 1984). The ability to unlearn is critical to a learning oriented organization. Without the capacity to actively unlearn existing

knowledge, organizations are in danger of letting core capabilities become core rigidities (Leonard-Barton, 1992; March, 1991), or competency traps (Levitt and March, 1988). In effect, unlearning involves deep introspection that questions both the practices of the organization and the underlying assumptions underpinning such practices. This continual introspection inevitably leads to new means for achieving organizational goals, with past procedures confined to organizational memory. This is referred to as double-loop learning (Argyris and Schon, 1978), or generative learning (Senge, 1990), whereby the organization's underlying norms, policies and objectives are modified.

Shared vision

According to Sinkula et al. (1997) shared learning is crucial for proactive learning because it provides direction - a focus for learning that fosters energy, commitment and purpose among organizational members (Day, 1994). Without commitment to and agreement with the direction the organization is taking, less motivation to learn is likely (McKee, 1992; Norman, 1985; Senge, 1990). Moreover, state Sinkula et al. (1997, p. 309) without a shared vision, individuals are less likely to know what organizational expectations exist, what outcomes to measure, or what theories in use are in operation. In this ambiguous environment, "even if one is motivated to learn, it is difficult to know what to learn" (Sinkula et al.,

1997). Tobin (1993) describes such vision as "visible leadership". Galer and van der Heijden (1992) describe it as goal convergence. Baker and Sinkula (1999, p. 414) argue that the lack of a universally understood organizational focus also lowers the motivation to learn.

Additionally, firms with a learning orientation (LO) - that is, firms that learn from their successes and mistakes through experience - also tend to be more successful (Zahra et al. , 2000; Hult et al. , 1999; Baker and Sinkula, 1999). Several recent conceptual articles have discussed the importance of LO to business ventures (Cope, 2005; Harrison and Leitch, 2005; Poltis, 2005; Lumpkin and Lichtenstein, 2005).

Higher order learning (i.e., generative, double-loop learning) is required for firms to unlearn obsolete market knowledge and norms (Nystrom and Starbuck, 1984) and eradicate the perceptual filters that bias which new information is attended to and acted on (Hedberg, 1981). Such learning will better enable firms to not only accomplish within-paradigm improvements (e.g., continuous improvement) but also paradigm shifts (e.g., breakthrough innovation).

Learning orientation goes beyond a marketplace focus. Learning orientation is conceptualized as a set of values that influence the degree to which an organization is satisfied with its theories in use (Argyris and Schon

1978), mental models (de Geus 1988), and dominant logics (Bettis and Prahalad 1995), which may or may not have their bases in the marketplace. Firms with strong learning orientations encourage, or even require, employees to constantly question the organizational norms that guide their MIP (market information processing) activities and organizational actions (Day 1991; Garvin 1993; Sinkula 1994; Sinkula et al. 1997). In this respect, learning orientation affects the degree to which organizational members are encouraged, even required, to "think outside the box." Hence, it has a direct bearing on the degree to which higher order learning occurs (Slater and Narver 1995).

Innovativeness

Innovativeness reflects a firm's tendency to engage in and support new ideas, novelty, experimentation, and creative processes that may result in new products, services, or technological processes (Kimberly, 1981). Although innovations can vary in their degree of "radicalness" (Hage, 1980), innovativeness represents a basic willingness to depart from existing technologies or practices and venture beyond the current state of the art (Kimberly, 1981). There are numerous methods by which to classify innovations (see Downs & Mohr, 1976), but perhaps the most useful distinction is between product-market innovation and technological innovation. Until recently, most research has focused on technological

innovativeness, which consists primarily of product and process development, engineering, research, and an emphasis on technical expertise and industry knowledge (Cooper, 1971; Maidique & Patch, 1982). Product-market innovativeness suggests an emphasis on product design, market research, and advertising and promotion (Miller & Friesen, 1978; Scherer, 1980). Even this broad categorization may be hard to distinguish; however, because innovativeness frequently represents considerable overlap and blending of product-market and technological innovation, as in the case of technologically sophisticated new products designed to meet specific market demand.

Innovativeness, as being a cultural precursor and providing the social capital to facilitate innovative behavior, is central to understanding how to create innovative and adaptive organizations. Underneath the innovativeness of the organization's culture resides a series of individual and group level properties that are characteristics of individual and group idea generation, learning, creativity, and change. Insight and innovative ideas occur to individuals not organizations, but learning is manifest in the organization only when ideas are shared, actions taken, and common meaning developed at the group and organization level. This suggests that a multilevel analysis is required to accurately model how innovation and business performance are related.

Market orientation and Innovativeness

Han et al. (1998, p. 31) state, "market orientation, as a corporate culture, characterizes an organization's disposition to deliver superior value to its customers continuously." Fritz (1996) found that market orientation is important for corporate success. We argue that in market-oriented organizations, behaving or introducing a process that inhibits a market focus would feel wrong and would most likely result in some censure; that is, it would be "counter cultural." Thus, market orientation is an aspect of culture and is a latent construct whose indicators are values, beliefs, and symbols that demonstrate a concern for markets.

Jaworski and Kohli (1993) have argued that "a market orientation essentially involves doing something new or different in response to market conditions, it may be viewed as a form of innovative behavior."

Innovativeness is an important managerial function because it has been consistently linked to business performance. Slater and Narver (1994b) view innovativeness as one of the core value-creating capabilities that drives the market orientation–performance relationship. Deshpande, Farley, and Webster (1993) speculate on a strong linkage between market orientation and innovativeness for achieving superior business performance outcomes. Also, Henard and Szymanski (2001) highlight empirical work that suggests that market orientation contributes to new product success.

Learning Orientation and Innovativeness

Learning orientation has to do with the development of new knowledge in the organization (Cohen & Sproull, 1996 and Crossan et al., 1999). Two different conceptualizations of learning orientation can be set forth. Huber (1991) defines learning orientation broadly as the development of new knowledge or insights that have the potential to influence behavior through its values and beliefs within the culture of the organization. Slater and Narver (1995) also adopt this definition. The more stringent definition of learning orientation requires that learning results in new behaviors (Argyris & Schon, 1978 and Fiol, 1985). Sinkula (1994) refers to this demonstration or manifestation of learning as augmented knowledge, recognizing that the ability to apply knowledge implies a greater level of learning. Clearly, however, learning and innovativeness are separate constructs that are interrelated. Slater and Narver (1995) suggest that learning orientation is directly related to new product success. Calantone, Cavusgil, and Zhao (2002) also have demonstrated a linkage among learning orientation, innovation, and performance in the firm.

Entrepreneurial Orientation and Innovativeness

Entrepreneurial orientation can be regarded as entailing aspects of new entry and especially how new entry is undertaken (Lumpkin & Dess, 1996). Entrepreneurial orientation is characterized by boldness and tolerance for risk that lead to new market entry (Naman & Slevin, 1993 and Lumpkin & Dess, 1996) but which may not include a concern for market analysis or learning endeavors (Hurley et al., 1998). Building on Lumpkin and Dess (1996) and Naman and Slevin (1993), entrepreneurial orientation can be distinguished from market orientation, innovativeness, and learning orientation in that entrepreneurial orientation embodies strategies and actions that the firm may undertake in order to actualize corporate orientations and goals.

A fundamental entrepreneurial activity is not only to create products ahead of competitors but also to create them ahead of the recognition of an explicit need by customers, by focusing on the customers' latent needs (Brown 1991; Hamel and Prahalad 1991). This is obviously a high risk activity, particularly when product innovations are often copied by competitors within 9 to 15 months (Ghemawat 1986). To minimize the risk and maximize learning, successful innovators frequently work intensively with lead customers (Von Hippel 1986), undertake numerous low-cost market experiments (Hamel and Prahalad 1991; Kanter 1989), or

continuously experiment through ongoing quality or cost-reduction programs (Garvin 1993). To ensure understanding of the causes of success or failure, innovators subject these activities to systematic analysis (Garvin 1993; Hamel and Prahalad 1991).

Marketing Effectiveness

The concept of marketing effectiveness (Kotler, 1977) would be useful in measuring the implementation of different cultural orientations. In order to develop a valid and reliable measurement of marketing effectiveness for service firms, Webster (1995) has refined the framework of marketing effectiveness that was originally developed by Kotler (1977). Webster's framework consists of four dimensions operational efficiency, customer philosophy, adequate marketing information, and strategic orientation. Recently, Leisen, Lilly and Winsor (2002) defined the dimensions of operational efficiency and customer philosophy to be internal and external marketing effectiveness respectively. The dimensions of adequate marketing information and strategic orientation were classified to be a mix of marketing effectiveness both internal and external.

Considerable attention has been given to the need for firms to increase their level of marketing effectiveness (Reisberg, 1990; Webster, 1988). In their search to help pinpoint the determinants of the concept, Norborn et al. (1990) found that those firms which were close to customers,

had a common set of values, and demonstrated an external market orientation were those perceived to have a high degree of marketing effectiveness.

Due to the complexity of what is meant by marketing effectiveness, few attempts have been made to develop a measure of the construct. The most frequently cited and best known measure is the one operationalized by Kotler (1977). According to Kotler, the first requirement of effective marketing is that key managers recognize the primacy of studying the market, distinguishing the many opportunities, selecting the best sections of the market to serve, and gearing up to offer superior value to the chosen customers in terms of their needs and wants. Next, the organization should be staffed so that it will be able to carry out marketing analysis, planning, and implementation, and control. Third, effective marketing calls for managers to have adequate information for planning and allocating resources properly to different markets, products, territories, and marketing tools. Marketing effectiveness depends also on whether management can design a profitable strategy. Lastly, marketing plans do not yield desirable results unless they are efficiently carried out at various levels of the organization. Worthy of note is that marketing effectiveness is not synonymous with profitability (Kotler, 1977).

Firm Performance

In investigating the research questions, it is essential to recognize the multidimensional nature of the performance construct (Cameron, 1978; Chakravarthy, 1986). That is, strategic orientations or processes may, at times, lead to favorable outcomes on one performance dimension and unfavorable outcomes on a different performance dimension. For example, heavy investment in R&D and product innovation may enable a firm to successfully enter new product-market domains and consequently enhance sales growth in the long run. However, the requisite resource commitment may detract from short-run profitability. Thus, research that only considers a single dimension or a narrow range of the performance construct (e.g., multiple indicators of profitability) may result in misleading descriptive and normative theory building (Mentzer and Matsuno, 2000).

An important debate has been one that focused on financial and non-financial measures of firm performance. A shift in the mind-set of marketers is occurring in the direction of expanding the set of measures of the success or failure of marketing activities. Marketers are moving beyond traditional financial measures-such as sales volume, market share, and gross margin-to include additional financial measures, such as the net present value of cash flows and hence shareholder value (Day and Fahey 1988). Indeed, it is interesting to note that as marketers are moving to assess the impact of

marketing activities on shareholder value, accountants and finance professionals are broadening their thinking to include nonfinancial measures of firm performance. By means of measuring marketing effectiveness, this research aims at accounting for the non-financial aspects of firm performance.

In terms of hypothesized relationships with firm performance, there has been previous research that shows firm innovativeness positively affects firm performance; firm learning-orientation positively influences firm innovativeness; firm market-orientation positively impacts firm learning orientation; firm learning-orientation mediates the relationship between firm market-orientation and firm innovativeness; and firm market-orientation indirectly impacts firm performance via firm innovativeness and learning (Keskin, 2006). Also, literature suggests that a customer- and learning-oriented organizational value system is likely to improve firm performance when (1) complemented by appropriate societal–culture factors and (2) supported by a strong organizational culture (Yılmaz, Alpkın and Ergun, 2005).

Environmental Dimensions as Moderators

Organizational environments represent one of the major contingencies faced by a firm (Tosi and Slocum, 1984). An extensive body of research has accumulated in the last forty years that explores environmental influences on organizational strategies, structures, processes, and outcomes. Pelham (2000) conducted a study to determine the extent of the environment's direct and indirect influences on small firm performance. This study utilized both subjective and objective measures of broad industry environment constructs (such as market turbulence and munificence). This study indicated that there were few significant interactions between strategy type and industry conditions (regardless of industry measures), and the addition of these interactions did not add significant explanatory power to the models. Pelham offers a possible explanation for the limited influences of the environment found in his study by suggesting that the small firm's simpler organizational structure, flexibility (Fiegenbaum and Karnani, 1991), and speed (Katz, 1970) may result in greater ability to respond to environment conditions. He further suggests that strong performance requires more than an appropriate match of strategy to the environment, since he found the highest correlation between growth/ differentiation strategy and environmental turbulence in the low profitability group.

In another study, Jaworski and Kohli (1992) report results from a test for the moderating effects of market turbulence, competitive intensity, and technological turbulence on the market orientation-performance relationship and find no evidence of environment affecting the strength of the relationship. However, their measures of business performance (market share, return on equity [ROE], and a subjective measure of "overall performance") weaken this finding. Thus, the important question of whether there are moderators of the market orientation-performance relationship remains open.

A dominant view regarding corporate culture and strategic behavior is that it has to be aligned with the external environment (Hofer, 1975; Bourgeois, 1980; Anderson and Zeithaml, 1984; Prescott, 1986; Chatman and Jehn, 1994). However, this is not always an easy task, and the reasons for this can be manifold. For example, a long stream of empirical studies have pointed that the organizational environment is a multi-dimensional concept (Aldrich, 1979; Dess and Beard, 1984; Keats and Hitt, 1988; McArthur and Nystrom, 1991). Thus, firms may find it difficult to decide the major and most important dimensions of the market that ought to drive their culture and strategy. Similarly, the business-policy literature distinguishes between corporate and strategic business unit strategies, and the organization literature distinguishes between general and task environments. Bourgeois

(1980) has argued that corporate strategies are carried out at the general environmental level, while the task environment is where SBU's strategies are carried out. According to Dill (1958), the latter is composed of customers, competitors, and regulatory groups and approximates the economist's definition of "industry."

Recent empirical studies (e.g. Van Egeren and O'Connor, 1998; Dobni and Luffman, 2000a, b) have provided empirical evidence to support the notion that the task environment impacts the development of market orientation (MO), and that it also influences the strength of the relationship between MO and financial performance. This study focuses on the task environment and its impact on strength of the relationship between MO and financial performance as well as other key cultural orientations, namely, entrepreneurial orientation (EO) and learning orientation (LO).

Following Aldrich (1979), Dess and Beard (1984) argued that an organization's environment can be described in terms of the three underlying dimensions of dynamism, munificence, and complexity all of which are included in our proposed conceptual model.

Dynamism

Environmental dynamism is a widely-explored construct in the organization theory and strategic management literatures. This construct is manifest in the degree of instability or turbulence of such key operating

concerns as market and industry conditions as well as more general technological, economic, social, and political forces (Emery and Trist, 1965; Dess and Beard, 1984; Sharfman and Dean, 1991). Dynamism has been empirically linked to such macro-organizational phenomena as structural form (Burns and Stalker, 1961; Lawrence and Lorsch, 1967), strategic diversification (Keats and Hitt, 1988), the strategy-making process and strategy content (Miles and Snow, 1978), organizational "postures" toward innovation (Zahra and Pearce, 1994), and corporate goal structures (Bourgeois, 1985). These studies and others indicate that the environmental dynamism construct has great potential as an explanatory variable in models and theories of organizational-level phenomena.

Environmental dynamism refers to the extent of unpredictable change in an organization's environment. Although the literature uses a variety of terms such as uncertainty, volatility, and high-velocity, they all capture to some extent the underlying theme of unpredictable change. The moderating role played by environmental dynamism is empirically well documented in the case of a variety of relationships between organizational variables and firm performance. For example, Priem et al. (1995) found that the relationship between decision process rationality and firm performance is moderated by environmental dynamism. Similarly, Gilley and Rasheed (2000) found evidence for the moderating role of environmental dynamism

in the relationship between outsourcing and firm performance. Most of the past research on environments is characterized by focus on a single dimension of the environment, namely, dynamism (Rajagopalan et al., 1993). The plea of Rajagopalan et al. (1993) for attention to other dimensions of the environment as well as simultaneous consideration of multiple dimensions have been answered by recent studies such as Goll and Rasheed (1997) who focused simultaneously on both environmental dynamism and munificence.

Dynamism concerns the variability and unpredictability of environmental components (Dess and Beard, 1984). A variable environment elevates the transaction costs of doing business (Williamson, 1985), the switching and exit costs of investing (Teece, 1983), and the difficulties of establishing organizational control, managerial planning, and global integration (Ghoshal, 1987) as well as influencing other organizational elements, leading to an impact on cultural orientation – performance relationship.

Munificence

Munificence, in general, refers to an environment's ability to support sustained growth of an organization (Aldrich, 1979). Elaborating on the construct of munificence, Castrogiovanni (1991) identifies three distinct kinds of munificence: capacity, growth/decline, and opportunity/threat. Capacity refers to the level of resources available to the firm, growth/decline refers to

the change in capacity, and opportunity/threat refers to the extent of unexploited capacity. Although research on munificence is somewhat limited compared to the central role occupied by environmental dynamism in past organizational research, its impact on organizational strategies (McArthur and Nystrom, 1991; Koberg, 1987), structures (Yasai-Ardekani, 1989), and processes (Miller and Friesen, 1983; Goll and Rasheed, 1997) is well documented. In hostile or non-munificent environments, the scarcity of resources forces firms to pay greater attention to their conservation. Staw and Swajkowski (1975) found that firms in non-munificent environments are more likely to commit illegal acts. On the other hand, when the environment of an industry is munificent, firms are likely to be more inclined to engage in socially responsible behavior. In non-munificent environments, because firms are already short of resources, deployment of any resources away from core product market areas is likely to have no positive effect on performance. In munificent environments, such action further reinforces legitimacy (Staw and Swajkowski, 1975).

Complexity

Complexity refers to the diversity and heterogeneity of environmental components (Keats and Hitt, 1988). A diverse, heterogeneous environment increases the liability of foreignness and poses more difficulties for firms adapting to environmental contingencies (Luo, 1998). This in turn

propels the costs of doing business abroad and expenses of adaptation and innovation. A diverse, heterogeneous environment at the industrial level may reduce economy of scale, promote costs of sourcing, and inflate expenditures on product differentiation. At the national level, it may narrow down a firm's economy of scope, rule out certain business potentials, and increase information costs. Asset specificity also increases (Williamson, 1985), leading to greater transactional costs and contractual uncertainty (Williamson, 1975). When a firm confronts a complex environment, it also faces more difficulties in making strategic decisions (Ghoshal, 1987).

Role of Environmental Dimensions in Firm Management

There is a continuing debate in both strategic management and organization theory about the role of managerial choice (Astley and Van de Ven, 1983). While one school of thought holds the belief that environmental and inertial factors rather than managerial choices determine organizational outcomes (Hannan and Freeman, 1977), another school takes the exact opposite perspective (Child, 1972). The evolving dialectic between these two schools of thought has led researchers, in recent years, to attempt a synthesis between these two competing theories (Hrebiniak and Joyce, 1985; Zammuto, 1988). Hrebiniak and Joyce (1985) suggested that choice and determinism are independent characteristics of the environment rather than opposite ends of a continuum. According to this view, some environments

allow managers a high degree of choice while others do not. Similarly, Hambrick and Finkelstein's (1987) concept of managerial discretion suggests that organizational environments vary in the extent of managerial discretion they permit. It has also been found that top management team tenure is more strongly related to strategies and performance in high discretion industries than in low discretion industries. The results of Eisenhardt and Schoonhoven's (1990) study of organizational growth in the semi conductor industry also suggest that in environments that are simultaneously munificent and dynamic, managerial decisions and actions have the most impact. Tushman and Anderson (1986) found that technological breakthroughs are more likely to occur in environments characterized by high levels of uncertainty and munificence. Goll and Rasheed (1997) found that decision process rationality is strongly associated with performance in high discretion environments. Thus, environment may be an important moderator of the relationship between various organizational factors and outcomes. High discretion environments are characterized by, among other factors, high demand growth and demand instability (Finkelstein and Hambrick, 1990). As pointed out by Goll and Rasheed (1997), a high demand growth rate corresponds to a high degree of environmental munificence and demand instability suggests environmental dynamism. They operationalized high discretion environments as environments characterized by high degrees

of munificence and dynamism. In such environments, the performance implications of managerial decisions tend to be very pronounced.

Next chapter describes the research model and the hypothesized relationships of this study.

CHAPTER III: RESEARCH MODEL AND HYPOTHESIS DEVELOPMENT

Based on the literature review, a conceptual model (Figure 1) is proposed and a set of hypotheses is developed. Each of the constructs in the proposed model and their dimensions are discussed in detail in respective sections of Chapter 2, Literature Review. A total of forty-six hypotheses are developed for further analysis based on literature review and exploratory factor analysis of the data.

Main Effects

This section reports the hypothesized relationships among main constructs of the model.

Entrepreneurial Orientation and Innovativeness

Hypothesis 1a: There exists a positive relationship between entrepreneurial orientation and innovativeness.

Hypothesis 1b: There exists a positive relationship between proactivity and innovativeness.

Hypothesis 1c: There exists a positive relationship between risk-taking and innovativeness.

Market Orientation and Innovativeness

Hypothesis 2a: There exists a positive relationship between market orientation and innovativeness.

Hypothesis 2b: There exists a positive relationship between customer orientation and innovativeness.

Hypothesis 2c: There exists a positive relationship between competitor orientation and innovativeness.

Hypothesis 2d: There exists a positive relationship between interfunctional coordination and innovativeness.

Learning Orientation and Innovativeness

Hypothesis 3a: There exists a positive relationship between learning orientation and innovativeness.

Hypothesis 3b: There exists a positive relationship between commitment to learning and innovativeness.

Hypothesis 3c: There exists a positive relationship between shared vision and innovativeness.

Hypothesis 3d: There exists a positive relationship between open mindedness and innovativeness.

Innovativeness, Marketing Effectiveness, and Performance Relationship

Hypothesis 4a: There exists a positive relationship between innovativeness and marketing effectiveness.

Hypothesis 4b: There exists a positive relationship between innovativeness and operational efficiency.

Hypothesis 4c: There exists a positive relationship between innovativeness and marketing system effectiveness.

Hypothesis 4d: There exists a positive relationship between innovativeness and firm performance.

Hypothesis 4e: There exists a positive relationship between marketing effectiveness and firm performance.

Hypothesis 4f: There exists a positive relationship between operational efficiency and firm performance.

Hypothesis 4g: There exists a positive relationship between marketing system effectiveness and firm performance.

Implied Hypotheses regarding Innovativeness as the Mediator between Cultural Orientations and Marketing Effectiveness

Hypothesis 5a: Innovativeness mediates the relationship between entrepreneurial orientation and marketing effectiveness.

Hypothesis 5b: Innovativeness mediates the relationship between market orientation and marketing effectiveness.

Hypothesis 5c: Innovativeness mediates the relationship between learning orientation and marketing effectiveness.

Moderating Effects

This section states the hypotheses regarding the moderation effect of environmental dimensions on the main constructs of the model.

Environmental Dimensions Moderating the Entrepreneurial Orientation - Innovativeness Relationship

Hypothesis 6a: Environmental dimensions moderate the entrepreneurial orientation – innovativeness relationship.

Hypothesis 6b: Environmental dynamism moderates the entrepreneurial orientation – innovativeness relationship.

Hypothesis 6c: Environmental munificence moderates the entrepreneurial orientation – innovativeness relationship.

Hypothesis 6d: Environmental complexity moderates the entrepreneurial orientation – innovativeness relationship.

Environmental Dimensions Moderating the Market Orientation -
Innovativeness Relationship

Hypothesis 7a: Environmental dimensions moderate the market orientation – innovativeness relationship.

Hypothesis 7b: Environmental dynamism moderates the market orientation – innovativeness relationship.

Hypothesis 7c: Environmental munificence moderates the market orientation – innovativeness relationship.

Hypothesis 7d: Environmental complexity moderates the market orientation – innovativeness relationship.

Environmental Dimensions Moderating the Learning Orientation -
Innovativeness Relationship

Hypothesis 8a: Environmental dimensions moderate the learning orientation – innovativeness relationship.

Hypothesis 8b: Environmental dynamism moderates the learning orientation – innovativeness relationship.

Hypothesis 8c: Environmental munificence moderates the learning orientation – innovativeness relationship.

Hypothesis 8d: Environmental complexity moderates the learning orientation – innovativeness relationship.

Environmental Dimensions Moderating the Innovativeness - Marketing Effectiveness Relationship

Hypothesis 9a: Environmental dimensions moderate the innovativeness – marketing effectiveness relationship.

Hypothesis 9b: Environmental dynamism moderates the innovativeness – marketing effectiveness relationship.

Hypothesis 9c: Environmental munificence moderates the innovativeness – marketing effectiveness relationship.

Hypothesis 9d: Environmental complexity moderates the innovativeness – marketing effectiveness relationship.

Environmental Dimensions Moderating the Innovativeness – Firm Performance Relationship

Hypothesis 10a: Environmental dimensions moderate the innovativeness – firm performance relationship.

Hypothesis 10b: Environmental dynamism moderates the innovativeness – firm performance relationship.

Hypothesis 10c: Environmental munificence moderates the innovativeness – firm performance relationship.

Hypothesis 10d: Environmental complexity moderates the innovativeness – firm performance relationship.

Environmental Dimensions Moderating the Marketing Effectiveness – Firm Performance Relationship

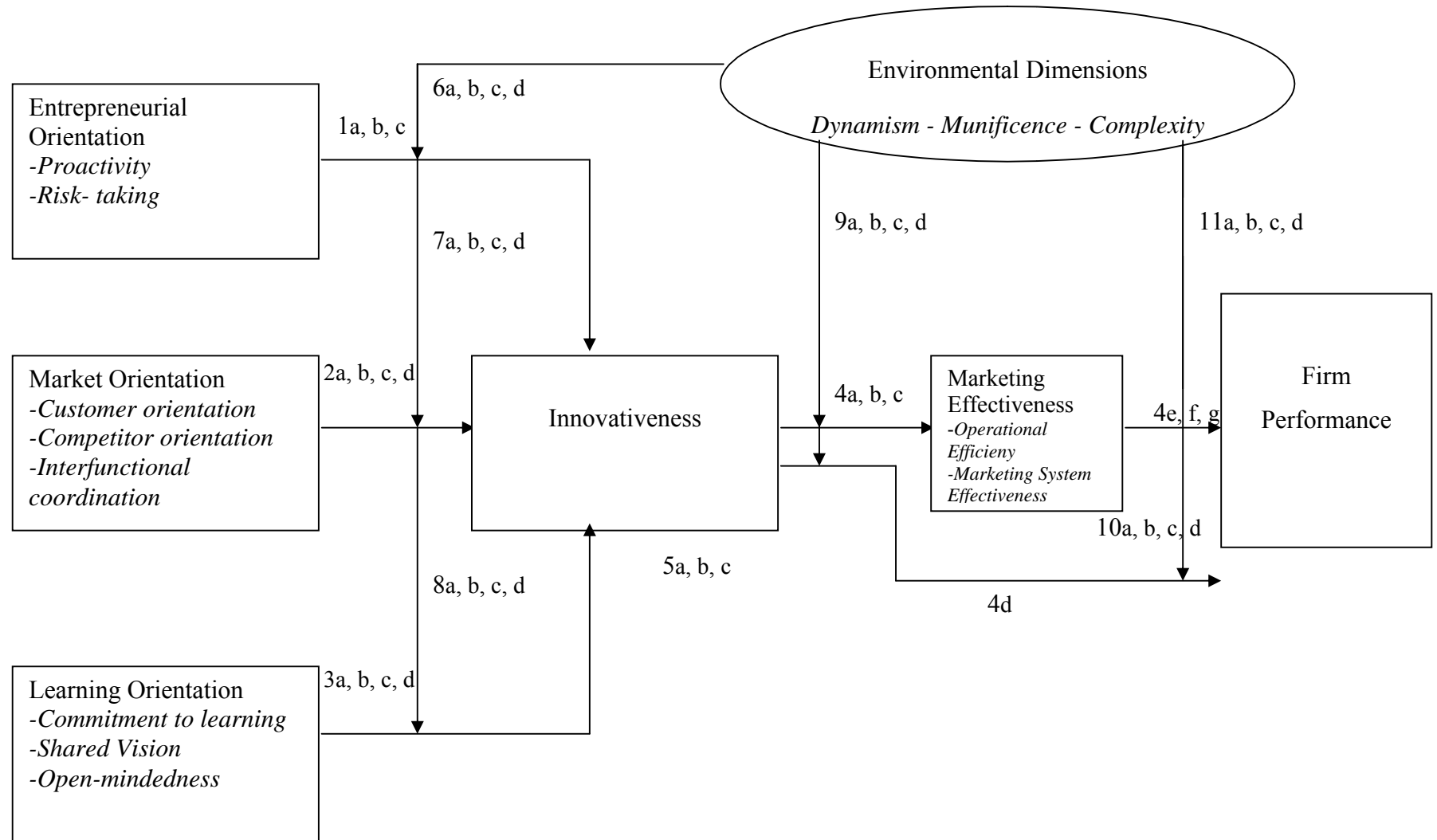
Hypothesis 11a: Environmental dimensions moderate the marketing effectiveness – firm performance relationship.

Hypothesis 11b: Environmental dynamism moderates the marketing effectiveness – firm performance relationship.

Hypothesis 11c: Environmental munificence moderates the marketing effectiveness – firm performance relationship.

Hypothesis 11d: Environmental complexity moderates the marketing effectiveness – firm performance relationship.

Figure 1. Hypothesized Conceptual Model



CHAPTER IV: RESEARCH METHODOLOGY

Research methodology is discussed in this chapter including research objectives, research design, sampling procedure and data collection and analysis methods used in the study.

Research Objectives

This study attempts to understand the relationship between these cultural orientations and firm performance taking into account other enablers and moderators involved in this relationship. Innovativeness is a key linkage between cultural orientations in question and firm performance. The impact of these cultural orientations on innovativeness will be studied and the direct and indirect (through marketing effectiveness) effect of innovativeness on firm performance will be researched. Data collected from Turkish companies will be used in this study.

The research is expected to answer the following questions:

1. What is the relationship between the cultural orientation and performance of a firm?
2. How does the cultural orientation of a firm relate to its innovativeness?
3. How does the innovativeness of a firm impact its marketing effectiveness?

4. Does innovativeness of a firm have a direct effect on its performance?
5. What is the relationship between marketing effectiveness of a firm and its performance?
6. What sort of moderating effects does the environment have on these relationships?

Methodology

This section describes in detail the methodology of the research.

Type of investigation, data collection instrument development, data collection and sampling procedures are discussed.

Type of Research Design

Type of research design for this study is both exploratory and descriptive. This study utilizes literature survey for exploratory research purposes. Literature surveys are used to develop hypotheses based on the relevant literature (Churchill and Iacobucci, 2005), as has been done in this research. The descriptive portion of this research encompasses a cross-sectional study of the research sample to explain the phenomena in question.

Setting for this study is a noncontrived setting in which respondents function normally. The respondents filled the questionnaires in their offices, during office hours.

Data Collection

Type of data collected in this study is “primary data”. A structured survey has been used in the study. However, extensive literature review has been conducted as well which provided the study with information from secondary sources.

Data collection was done through direct mail survey administration. Most of the scales used in the questionnaire are adaptations and addition and/or eliminations of scale items were done with serious consideration on the part of both the dissertation advisor and the researcher. Questionnaires were pretested after the questionnaire items are translated into Turkish (Churchill and Iacobucci, 2005). Five marketing executives were used for the pretest, who later became actual respondents for the questionnaires.

Electronic and regular mail methods were used to send the instrument to desired prospective respondents. A cover letter was included along with the questionnaires. The cover letter and the questionnaire can be found in Appendix B.

The questionnaire consists of eighty-two items in seven sections. In addition to these sections, there is a section on demographic information and an open-ended question section asking the respondent to state any additional comments they may have about the research topic. This part, however, is empty in almost all of the questionnaires. This may be due to the fact that

the survey administered is very comprehensive and long, covering a great variety of aspects of all the constructs involved in the model.

Sampling

The study was carried across multiple industries. It includes firms of varying sizes with minimum size of thirty employees. Data has been collected from multiple informants with different responsibilities for each firm.

Sampling Method

The unit of analysis in this research is the individual firm. Selection of this unit of analysis is consistent with earlier research done on similar constructs.

A purposive (judgmental) sampling procedure was applied in which sample elements are handpicked because it is expected that they can serve the purpose of the research (Churchill and Iacobucci, 2005). The population elements of the research were purposively selected among managers and director and other level employees who can assess the constructs in question. The criteria for selecting sample elements were 1. being for-profit with at least one product/service, and 2. having thirty or more employees with varying responsibilities. Consistent with past market orientation research, both marketing (including sales) managers and other managers were included in the sample (Baker and Sinkula, 1999).

Snow ball effect (Churchill and Iacobucci, 2005) has been used to increase the sample size in which an initial set of respondents with desirable characteristics was contacted and asked to identify others that meet the research criteria. Key informants were contacted through networking for each firm and they were given the cover letter that explains how and by how many people and what levels and functions the questionnaires need to be filled. These key informants then contacted the employees in the company that meet the criteria for this research. E-mail and telephone follow-ups were done by the researcher. 120 firms were purposively selected and contacted. Of these, seventy-four firms filled the questionnaires with multiple respondents with a firm level response rate of 62.5 %. This high level of response rate in a multiple respondent study which generally results in lower response rates is due to the selection of purposive sampling method, successful selection of key informants within a firm, and close follow-up by the researcher.

Sample Size

The number respondents for each firm was determined with respect to the following schedule developed by the dissertation advisor and the researcher with utmost consideration based on previous experience on similar constructs. This is consistent with the historical evidence approach

where the researcher sets the sample size similar to other comparable studies in the past (Churchill and Iacobucci, 2005):

| | | Filled by |
|-------------------------|-------------------|-----------|
| 30 to 50 employees | 3 questionnaires | 32 firms |
| 51 to 100 employees | 5 questionnaires | 10 firms |
| 101 to 500 employees | 7 questionnaires | 16 firms |
| More than 500 employees | 10 questionnaires | 16 firms |

Most of the firm respondents met the schedule above. However, firms which did not return enough questionnaires were still included in the study if the number of questionnaires returned was perceived acceptable by the researcher.

A total of 296 surveys were received from seventy-four companies resulting in an average of 4 surveys per company. Firms in the sample have 752 employees on the average. The sample includes old and established firms as well as new companies. On the average, the firms in the sample are 25 years old. Respondents are in their early thirties on the average and 92 % have some kind of college level degree. 29% have graduate degrees which also shows that the sample has a very high educational level. Also, 62% of all respondents have middle to upper management positions. Table 1 shows respondent characteristic. Firm names and industry information can be found in Appendix A.

Table 1. Respondent Characteristics

| Gender | Average Age | Education Level | Position | Average Employment Period with the Firm |
|-----------------------------|-------------|---------------------------------------|--|---|
| 42.6 % female 57.4% male | 34 | 1% primary/middle school | 8% Company owner/partner | 5.7 years |
| | | 6 % high school | 40% middle management | |
| | | 15.6% 2 -year college | 21.8% upper management | |
| | | 48.6% 4-year college bachelors degree | 29% other including specialists, analysts, consultants, etc. | |
| | | 29% graduate degree | | |

Data Analysis

Data were analyzed using SPSS 16.0 and AMOS 5.0. Descriptive statistics, both exploratory and confirmatory factor analyses, and multiple regression, hierarchical regression were used to analyze data, test the hypotheses and scale reliability and validity of constructs.

Operationalization of Model Variables

Scales and specific scale items measuring different constructs of our model have been chosen and adapted from a variety relevant scales in the literature, based on the context and scope of this study (Churchill and Iacobucci, 2005). Market orientation, learning orientation, environmental dimensions, marketing effectiveness, and innovativeness are all measured by 5 point Likert type scale where 1 = Strongly disagree and 5 = Strongly agree. Of the two remaining sections, entrepreneurial orientation is measured by a semantic differential scale and performance is measured by a 7 point Likert type scale where 1 = Significant decrease and 7 = Significant increase. The questionnaire in Turkish and English, and the cover letter are available in Appendix B.

Entrepreneurial Orientation

Research addressing the extent to which the three sub-dimensions of the entrepreneurial orientation measure co-varied with one another reveals that the three sub-dimensions of EO are able to vary independently of one another in many situations. Also, strong support for the cross-cultural validity of the Covin and Slevin entrepreneurial orientation scale is provided in the literature (Kreiser, Marina and Weaver, 2002). Therefore, this scale, also shown in Table 2, is adapted to be utilized in this study.

Table 2. Entrepreneurial Orientation Scale

| Items | | | Source |
|--|-----------|--|-------------------------|
| In dealing with its competitors, my business unit ... | | | |
| Proactivity | | | |
| 1. Typically responds to actions which competitors initiate. | 1 2 3 4 5 | Typically initiates actions to which competitors then respond. | Covin and Slevin (1989) |
| 2. Is very seldom the first business to introduce new products and services, administrative techniques, operating technologies, etc. | 1 2 3 4 5 | Is very often the first business to introduce new products and services, administrative techniques, operating technologies, etc. | Covin and Slevin (1989) |
| Risk-taking | | | |
| 3. Typically seeks to avoid competitive clashes, preferring a "live-and-let-live" posture. | 1 2 3 4 5 | Typically adopts a very competitive, undo-the-competitors posture. | Covin and Slevin (1989) |
| In general, the top managers of my business unit have ... | | | |
| 4. A strong proclivity for low risk projects (with normal and certain rates of return). | 1 2 3 4 5 | A strong proclivity for high risk projects (with chances of very high return). | Khandwalla (1977) |
| When confronted with decision making situations involving uncertainty, my business unit ... | | | |
| 5. Typically adopts a cautious "wait and see" posture in order to minimize the probability of making costly decisions. | 1 2 3 4 5 | Typically adopts a bold, aggressive posture in order to maximize the probability of exploiting potential opportunities. | Covin and Slevin (1989) |

Market Orientation

Two closely related frameworks have been the foundation for much of market orientation research. Narver and Slater (1990) develop a measure of market orientation and test its effect on business performance. Their measure of market orientation closely parallels Kohli and Jaworski's (1990) definition and consists of three behavioral components (customer orientation, competitor orientation, and interfunctional coordination). Acknowledging the commonalities in two frameworks presented, this study chooses to use the Narver and Slater 15-item scale due its behavioral rather than process-based orientation as seen in Table 3.

Table 3. Market Orientation Scale

| Items | Dimension | Scale |
|---|------------------------------|---|
| 1. In our organization, our salespeople share information about competitors. | Interfunctional Coordination | “strongly agree” (1), “strongly disagree” (5) |
| 2. Our business objectives are driven by customer satisfaction. | Customer Orientation | “strongly agree” (1), “strongly disagree” (5) |
| 3. We respond rapidly to competitive actions. | Competitor Orientation | “strongly agree” (1), “strongly disagree” (5) |
| 4. We closely monitor and assess our level of commitment in serving customers’ needs. | Customer Orientation | “strongly agree” (1), “strongly disagree” (5) |
| 5. Our top managers from each business function regularly visit customers. | Interfunctional Coordination | “strongly agree” (1), “strongly disagree” (5) |
| *6. Information about customers is freely communicated throughout our organization. | Interfunctional Coordination | “strongly agree” (1), “strongly disagree” (5) |
| 7. Our competitive advantage is based on understanding customers’ needs. | Customer Orientation | “strongly agree” (1), “strongly disagree” (5) |
| 8. Business functions within are integrated to serve the target market needs | Interfunctional Coordination | “strongly agree” (1), “strongly disagree” (5) |
| 9. Business strategies are driven by the goal of increasing customer value | Customer Orientation | “strongly agree” (1), “strongly disagree” (5) |
| 10. We frequently measure customer satisfaction | Customer Orientation | “strongly agree” (1), “strongly disagree” (5) |
| 11. We pay close attention to after-sale service | Customer Orientation | “strongly agree” (1), “strongly disagree” (5) |

| | | |
|---|------------------------------|---|
| 12. Top management regularly discuss competitors' strengths and weaknesses | Competitor Orientation | "strongly agree" (1), "strongly disagree" (5) |
| *13. Our managers understand how employees contribute to value of customers | Interfunctional Coordination | "strongly agree" (1), "strongly disagree" (5) |
| *14. Customers are targeted when we have an opportunity for competitive advantage | Competitor Orientation | "strongly agree" (1), "strongly disagree" (5) |
| 15. We share resources with other business units | Interfunctional Coordination | "strongly agree" (1), "strongly disagree" (5) |

Source: Narver and Slater (1990)

* Removed from the scale after reliability and factor analyses are conducted.

Learning Orientation

Learning orientation scale in Table 4 is adapted from Baker and Sinkula (1997). As discussed in the literature review section of this document, three organization values routinely associated with the predisposition of the firm to learn are commitment to learning, open-mindedness and shared vision (Day, 1991,1994; Senge, 1990, 1992; Tobin, 1993). According to Sinkula et al. (1997, p. 309) "they are core components that reflect the learning orientation construct". This scale has been used extensively in the literature and is utilized in this study. The items are measured on a five-point Likert type scale from strongly agree (1) to strongly disagree (5).

Table 4. Learning Orientation Scale

| Item |
|---|
| Commitment to learning |
| 1. Managers basically agree that our business unit's ability to learn is the key to our competitive |
| 2. The basic values of this business unit include learning as key to improvement. |
| 3. The sense around here is that employee learning is an investment, not an expense. |
| 4. Learning in my organization is seen as a key commodity necessary to guarantee organizational |
| *5. Our culture is one that does not make employee learning a top priority. |
| 6. The collective wisdom in this enterprise is that once we quit learning, we endanger our future. |
| Shared vision |
| 7. There is a well-expressed concept of who we are and where we are going as a business unit. |
| 8. There is a total agreement on our business unit vision across all levels, functions, and |
| 9. All employees are committed to the goals of this business unit. |
| 10. Employees view themselves as partners in changing the direction of the business unit. |
| 11. Top leadership believes in sharing its vision for the business unit with the lower levels. |
| *12. We do not have a well-defined vision for the entire business unit. |
| Open-mindedness |
| *13. We are not afraid to reflect critically on the shared assumptions we have about the way we |
| 14. Managers in this business unit do not want their "view of the world" to be questioned. |
| 15. Our business unit places a high value on open-mindedness. |
| 16. Managers encourage employees to "think outside of the box". |
| 17. An emphasis on constant innovation is not a part of our corporate culture. |
| 18. Original ideas are highly valued in this organization. |

Source: Baker and Sinkula, 1999

*Removed from the scale after reliability and factor analyses are conducted.

Innovativeness

Hurley and Hult (1998) distinguish between “innovativeness”, which is a cultural readiness and appreciation for innovation, from “innovative capacity”, which is the degree of innovations actually produced or adopted by the organization. The Hurley and Hult formulation more closely resembles our understanding and research concerning how innovation actually occurs, and therefore their scale has been adapted in this study. This scale is presented in Table 5. The items are measured on a five-point Likert type scale from strongly agree (1) to strongly disagree (5).

Table 5. Innovativeness Scale

| Item |
|--|
| 1. Technical innovation based on research results is readily accepted. |
| 2. Management actively seeks innovative ideas. |
| 3. Innovation is readily accepted in program/project management. |
| *4. People are penalized for ideas that don't work. |
| 5. Innovation in company is perceived as too risky and is resisted. |

Source: Hurley and Hult (1998)

* Removed from the scale after reliability and factor analyses are conducted.

Marketing Effectiveness

This study utilizes an adaptation of Webster's (1995) marketing effectiveness scale. This scale is very comprehensive, taking into account a number of dimensions such as operational efficiency, customer philosophy, adequate marketing information, and cultural orientation. Marketing effectiveness also provides a means of assessing nonfinancial measures of firm performance. The items are measured on a five-point Likert type scale from strongly agree (1) to strongly disagree (5). Table 6 shows the original marketing effectiveness scale of Webster(1995).

Table 6. Marketing Effectiveness Scale

| |
|---|
| <p>Operational Efficiency</p> <ol style="list-style-type: none">1. Marketing thinking is at the top is communicated and implemented down the line.2. Governing board shows good capacity to react quickly and effectively to on-the-spot developments.3. Governing board is committed to marketing excellence.4. Government board is doing an effective job with the marketing resources.5. Marketing director is working well with other functional directors.*6. Government board's focus on the organization is to be a good community neighbor. <p>Customer Philosophy</p> <ol style="list-style-type: none">7. The company recognizes the importance of designing the organization to serve the needs and wants of chosen markets.*8. The company has different offerings and marketing plans for different segments of the market.9. Customer satisfaction is monitored.*10. Word-of-mouth communication is stimulated and monitored.11. There exists a whole marketing system view in planning business. <p>Adequate Marketing Information</p> <ol style="list-style-type: none">12. There exist efforts expended to measure cost-effectiveness of different marketing expenditures.13. Regular marketing research of customers, buying influences, etc is conducted.*14. Governing board knows the sales potential and profitability of different market segments, customers, etc.15. Formal market planning exists. <p>Strategic Orientation</p> <ol style="list-style-type: none">*16. Governing board defines and communicates business objectives.*17. There is a focus on long-term growth.18. A high quality marketing strategy exists. |
|---|

Source: Webster, 1995.

*Removed from the scale after reliability and factor analyses are conducted.

As a result of the exploratory factor analysis, the extracted factors in the resulting two-factor solution were named “Operational Efficiency” and “Marketing System Effectiveness”. Table 7 depicts the revised scale that was used for further analysis in the study.

Table 7. Revised Marketing Effectiveness Scale

| |
|---|
| <p>Operational Efficiency</p> <ol style="list-style-type: none">1. Marketing thinking is at the top is communicated and implemented down the line.2. Governing board shows good capacity to react quickly and effectively to on-the-spot developments.3. Governing board is committed to marketing excellence.4. Government board is doing an effective job with the marketing resources.5. Marketing director is working well with other functional directors.7. The company recognizes the importance of designing the organization to serve the needs and wants of chosen markets.9. Customer satisfaction is monitored. <p>Marketing System Effectiveness</p> <ol style="list-style-type: none">11. There exists a whole marketing system view in planning business.12. There exist efforts expended to measure cost-effectiveness of different marketing expenditures.13. Regular marketing research of customers, buying influences, etc is conducted.15. Formal market planning exists.18. A high quality marketing strategy exists. |
|---|

Firm Performance

In this study, a subjective measure of performance is chosen over objective data for several reasons. First, firms are often very reluctant to provide "hard" financial data (Fiorito and LaForge, 1986). It is, therefore, felt that more complete financial information could be obtained with a subjective measure. Second, objective financial data on the sampled firms may not be publicly available, making it impossible to check the accuracy of any reported financial performance figures. Third, assuming that accurate financial data were reported, such data for some firms may be difficult to interpret (Cooper, 1979). Finally, absolute scores on financial performance criteria are affected by industry-related factors (Sapienza, Smith, and Cannon, 1988). Given the multi-industry nature of this study, directly comparing objective financial data could be misleading. Firm performance scale can be seen in Table 8.

Table 8. Firm Performance Scale

| Items | Scale | Source |
|--|--|----------------------------|
| 1. For your business unit's principal served market segment over the past 3 years, change in market share relative to your largest competitor: | 7-point scale, 7 = significantly increased and 1 = significant decreased | Day (1977) |
| 2. Your business unit's sales growth relative to major competitors over the past 3 years | 7-point scale, 7 = significantly increased and 1 = significant decreased | Matsuno and Mentzer (2000) |
| 3. Your business unit's ROI relative to major competitors over the past 3 years | 7-point scale, 7 = significantly increased and 1 = significant decreased | Matsuno and Mentzer (2000) |
| 4. Percentage of sales generated by new products over the past 3 years relative to major competitors | 7-point scale, 7 = significantly increased and 1 = significant decreased | Matsuno and Mentzer (2000) |
| 5. Relative to competition, overall performance in your business unit over the past 3 years | 7-point scale, 7 = significantly increased and 1 = significant decreased | Jaworski and Kohli (1993) |

Environmental Dimensions

Environmental dimensions scale consists of three parts:

environmental dynamism scale, environmental munificence scale, and environmental complexity scale. Dynamism concerns the variability and unpredictability of environmental components (Dess and Beard, 1984).

Munificence, in general, refers to an environment's ability to support sustained growth of an organization (Aldrich, 1979). Complexity refers to the diversity and heterogeneity of environmental components (Keats and Hitt, 1988).

Perceptual environmental measures are used in this study. The distinction between objective and perceived environmental attributes is important. A long stream of strategic-management research has argued that it is only through managerial perceptions that the environment becomes known to the organization (Downey et al., 1975; Starbuck, 1976). In fact, the argument has reached the point whereby researchers such as Hambrick and Snow (1977) claim that the objective reality of environmental attributes is "less important" than the perceived environment. This concept of environmental attributes is based on the view of environmental elements as stimuli which lack inherent meaning or information value until structured by an individual receiver (Weick, 1969).

Previous studies have found a strong correlation between subjective assessments and objective assessments of the environment (Dess and Robinson, 1984; Keats and Hitt, 1988; Pearce et al., 1987). It has been suggested that those studies of firm actions, such as executive information search, would benefit most from use of perceptual measures. Table 9 presents the environmental dimensions scale used in this research.

Table 9. Environmental Dimensions Scale

| Item |
|--|
| <p>Environmental Dynamism Source: Miller and Friesen (1982)</p> <p>*1. Our firm rarely changes marketing practices to keep up with the market and competitors.</p> <p>*2. The rate at which products/services become obsolete is very high.</p> <p>3. Actions of competitors are easy to predict.</p> <p>4. Demand and consumer tastes are easy to forecast.</p> <p>*5. Our production technology changes very little.</p> |
| <p>Environmental Munificence Source: Sutcliffe (1994)</p> <p>6. Demand for the products/services of your principal industry is growing and will continue to grow.</p> <p>*7. The investment or marketing opportunities for firms in your principal industry are very favorable at the present time.</p> <p>*8. The opportunities for firms in your industry to expand the scope of their products/markets are extremely limited.</p> <p>*9. Resources for growth and expansions are easily accessible in your industry.</p> <p>10. Sales have been growing and are likely to grow in your industry.</p> <p>*11. Capital expenditures in your industry are growing and will continue to grow.</p> |
| <p>Environmental Complexity Source: Lee and Grover (1999)</p> <p>*12. We have a large number of competitors.</p> <p>13. There is a variety in competition including some from other industries in the form of substitute products.</p> |

14. We deal with a large number of customers.

15. Our customers are quite diverse in their needs/requirements.

*16. We have a large number of suppliers of material, parts, or equipment.

17. Our suppliers are quite similar to one another in their products and services.

* Removed from the scale after reliability and factor analyses are conducted.

Next section reports the findings of this research including the reliability and validity analyses of the scales, descriptive statistics, and findings on relational hypotheses.

CHAPTER V: FINDINGS

This chapter reports the findings of the study. First, the findings from reliability analysis and exploratory factor analysis performed for scale refinement are reported. Then, scale validity is tested using confirmatory factor analysis. Findings from descriptive statistics and correlation analysis are also included in this chapter followed by findings on relational hypotheses of the research model.

Reliability Analysis

Reliability analysis is performed by reviewing Cronbach's alpha values for each construct in the model. Lower limit of .60 is used for Cronbach's alpha (Hair, Anderson, Tatham and Black, 1998) and scale is revised according to analysis results and conceptual considerations.

Entrepreneurial Orientation

As seen in Table 10 , both of the scales that make up the entrepreneurial orientation scale have satisfactory Cronbach's alpha levels.

Table 10. EO Scale Reliability

| SCALE | Cronbach's α |
|-------------|---------------------|
| Proactivity | .681 |
| Risk-taking | .682 |

Market Orientation

As presented in Table 11, the only scale that was below the threshold reliability level of .60 was the inter-functional coordination scale. Cronbach's alpha when item deleted statistics were reviewed to see if deletion of any of the items improved reliability of this scale. Reliability increases if item 6 is deleted. This item is "Information about customers is freely communicated throughout our organization." This item was deleted since items 1, "In our organization, our salespeople share information about competitors." and 15, "We share resources with other business units." in the scale measure similar concepts.

Table 11 shows the final output of the analysis.

Table 11. MO Scale Reliability

| SCALE | Original Cronbach's α | Items Deleted | Revised Cronbach's α |
|----------------------------------|---------------------------------|---------------|--------------------------------|
| Customer Orientation | .830 | N/A | .830 |
| Competitor Orientation | .601 | N/A | .601 |
| Inter-functional Coordination | .586 | # 6 | .630 |

Learning Orientation

Learning orientation scale is reliable as seen in Table 12 with Cronbach's alpha values $>.60$.

Table 12. LO Scale Reliability

| SCALE | Cronbach's α |
|------------------------|---------------------|
| Commitment to Learning | .873 |
| Shared Vision | .821 |
| Open-mindedness | .810 |

Innovativeness

Innovativeness scale has a Cronbach's α of 0.756, so the scale was not changed.

Marketing Effectiveness

Reliability analysis was performed for all of the theorized dimensions of the marketing effectiveness construct. The results are shown in Table 13. However, based on the exploratory factor analysis and literature review, this research extracted and utilized two dimensions for the marketing effectiveness scale. Exploratory factor analysis section of this dissertation explains this procedure. The new dimensions and reliability levels after the factor analysis are also presented in the exploratory factor analysis section (see Tables 20 and 23).

Table 13. ME Scale Reliability

| SCALE | Cronbach's α |
|-----------------------------|---------------------|
| Operational Efficiency | .842 |
| Customer Philosophy | .801 |
| Adequate Market Information | .767 |
| Strategic Orientation | .659 |

Firm Performance

Firm performance scale has a Cronbach's α of .901, so the scale was not changed.

Environmental Dimensions

Environmental dimensions measure used in this research has three parts, dynamism, munificence, and complexity. Reliability analysis on these three scales were performed and scales with poor reliabilities were revised. Cronbach's Alpha > .60 was considered acceptable.

Environmental munificence scale had a satisfactory Cronbach's alpha value of .618.

Environmental complexity and dynamism, however, showed poor reliability levels. Therefore, Cronbach's α if item deleted statistics were reviewed and items required to be removed from the scale were eliminated to bring reliability of the scales to an acceptable level. The results are shown in Table 14.

Table 14. Environmental Dimensions Scale Reliability

| SCALE | Original Cronbach's α | Items Deleted | Final Cronbach's α |
|---------------------------|------------------------------|---------------|---------------------------|
| Environmental Dynamism | .305 | # 1, 2, 5 | .588 |
| Environmental Munificence | .613 | N/A | .613 |
| Environmental Complexity | .330 | # 12, 16 | .575 |

Even though, .588 and .575 are still under the .60 threshold, these reliability levels were considered close enough to the threshold value and further analysis was conducted using the revised scales. The researcher came to this decision after the review of Cronbach's alpha when item deleted statistics to see if deletion of any of the remaining items improved reliability of this scale. This was not the case for these two scales. Additional revisions, however, were done on these scales according to the results of the exploratory factor analysis. These revisions are discussed in the exploratory factor analysis section of this dissertation.

Table 15 summarizes the results of the reliability analysis:

Table 15. Reliability Analysis Summary

| SCALE | Cronbach's α |
|-------------------------------|--|
| ENTREPRENEURIAL ORIENTATION | |
| Proactivity | .681 |
| Risk-taking | .682 |
| MARKET ORIENTATION | |
| Customer Orientation | .830 |
| Competitor Orientation | .601 |
| Inter-functional Coordination | .586 improved to .630 (item 6 removed) |
| LEARNING ORIENTATION | |
| Commitment to Learning | .873 |
| Shared Vision | .821 |
| Open-mindedness | .810 |
| INNOVATIVENESS | .756 |
| MARKETING EFFECTIVENESS | |
| Operational Efficiency | .842 |
| Customer Philosophy | .801 |
| Adequate Market Information | .767 |
| Strategic Orientation | .659 |
| FIRM PERFORMANCE | .901 |
| ENVIRONMENTAL DIMENSIONS | |
| Environmental Dynamism | .305 improved to .588 (items 1, 2 and 5 removed) |
| Environmental Munificence | .613 |
| Environmental Complexity | .330 improved to .575 (items 12 and 16 removed) |

Exploratory Factor Analysis

Exploratory factor analysis was performed for further scale refinement and specification of construct dimensions.

Factor Analysis on Entrepreneurial Orientation

The first step is to see whether or not the data is suitable for factor analysis. Bartlett's test of Sphericity shows significant results (chi-square of 26.917 significant at .000 level), meaning there is correlation among variables. KMO-MSA is .682 which is greater than the threshold level of .50 (Hair, Anderson, Tatham and Black, 1998). These two measures indicate that the data is suitable for exploratory factor analysis. Next, sampling adequacy for individual variables are reviewed by examining the anti-image matrix. All are above the threshold level of .50 ((Hair, Anderson, Tatham and Black, 1998).

Communalities, sampling adequacy levels for individual variables and factor loadings are all above their respective threshold levels. Two factors are extracted explaining 67.2 % of total variance which is above the threshold value of 60 % (Hair, Anderson, Tatham and Black, 1998). All of the original items remain in the scale. This result is consistent with the literature. We will call factor 1 "proactivity" and factor 2 "risk-taking". Table 16 summarizes the results.

Table 16. EO Exploratory Factor Analysis Results

| Factor Name | Loadings | % of Variance Explained | Cronbach's Alpha |
|--|---|-------------------------|------------------|
| Factor 1: Proactivity | | 22.3 % | .681 |
| In dealing with its competitors, my business unit | | | |
| 1. Typically responds to actions which competitors initiate. | .870 | | |
| 2. Is very seldom the first business to introduce new products and services, administrative techniques, operating technologies, etc. | .834 | | |
| Factor 2: Risk-taking | | 44.9 % | .682 |
| 3. Typically seeks to avoid competitive clashes, preferring a "live-and-let-live" posture. | .700 | | |
| In general, the top managers of my business unit have | | | |
| 4. A strong proclivity for low risk projects (with normal and certain rates of return). | .820 | | |
| When confronted with decision making situations involving uncertainty, my business unit | | | |
| 5. Typically adopts a cautious "wait and see" posture in order to minimize the probability of making costly decisions. | .779 | | |
| Total Variance Explained | | 67.2 % | |
| KMO Measure | .682 | | |
| Bartlett's Test | Approx. chi square 26.917(10 df, .000 Significance) | | |

Factor Analysis on Market Orientation

The original market orientation scale had fifteen items. After the reliability analysis, item 6 was removed. Therefore, factor analysis was performed on the remaining fourteen items.

The first step is to see whether or not the data is suitable for factor analysis. Bartlett's test of Sphericity shows significant results (chi-square of 1367.053 significant at .000 level), meaning there is correlation among variables. KMO-MSA is .899 which is greater than the threshold level of .5. These two measures indicate that the data is suitable for exploratory factor analysis.

Next, sampling adequacy for individual variables are reviewed by examining the anti-image matrix. All are above the threshold level of .5.

The factor analysis yielded a two factor solution with very low loadings on item 14. Therefore, the analysis was re-run without this item. This time, a three factor solution was forced using a priori criterion consistent with theory (Narver and Slater, 1990).

Communalities improved except for item 13, and % of total variance explained was below the accepted level. Item 13 was removed and analysis was run once again. Communalities, % of total variance explained, sampling adequacy measures came out to be above the threshold levels. All of the items had factor loadings greater than .50 (Hair, Anderson, Tatham and Black, 1998). Three factors were extracted. However, item 5 fell under a

different factor from what was theoretically expected. Reliability statistics when this item is deleted is reviewed. Since reliability does not improve (cronbach's alpha $.840 < .845$ before elimination) with the elimination of this item, item 5 is kept in the analysis.

% of total variance explained is 62.5 %. Bartlett's test of Sphericity shows significant results (chi-square of 1128.219 significant at .000 level), meaning there is correlation among variables. KMO-MSA is .877. We name these factors, "competitor orientation", "customer orientation", and "inter-functional coordination", consistent with theory. Table 17 presents the results of the factor analysis.

Table 17. MO Exploratory Factor Analysis Results

| Factor Name | Loadings | % of Variance Explained | Cronbach's Alpha |
|--|----------|-------------------------|------------------|
| Factor 1: Customer Orientation | | 41.2 % | .838 |
| 2. Our business objectives are driven by customer satisfaction | .680 | | |
| 4. We closely monitor and assess our level of commitment in serving customers' needs | .747 | | |
| 7. Our competitive advantage is based on understanding customers' needs | .639 | | |
| 9. Business strategies are driven by the goal of increasing customer value | .811 | | |

| | | | |
|--|---|--------|------|
| 10. We frequently measure customer satisfaction | .774 | | |
| 11. We pay close attention to after-sale service | .653 | | |
| Factor 2: Competitor Orientation | | 12.4 % | .599 |
| 3. We respond rapidly to competitive actions | .789 | | |
| 12. Top management regularly discuss competitors' strengths and weaknesses | .773 | | |
| Factor 3: Interfunctional Coordination | | 8.9 % | .679 |
| 1. In our organization, our salespeople share information about competitors. | .832 | | |
| 5. Our top managers from each business function regularly visits customers | .528 | | |
| 8. Business functions within are integrated to serve the target market needs | .511 | | |
| 15. We share resources with other business units | .598 | | |
| Total Variance Explained | | 62.5 % | |
| KMO Measure | .877 | | |
| Bartlett's Test | Approx. chi square 1128.219(66 df, .000 Significance) | | |

Factor Analysis on Learning Orientation

The first step is to see whether or not the data is suitable for factor analysis. Bartlett's test of Sphericity shows significant results (chi-square of 2234.473 significant at .000 level), meaning there is correlation among variables. KMO-MSA is .917 which is greater than the threshold level of .5. These two measures indicate that the data is suitable for exploratory factor analysis.

Next, sampling adequacy for individual variables are reviewed by examining the anti-image matrix. All are above the threshold level of .5. In terms of communalities, items 5, 12, and 13 fall below the threshold value of .5. When we study these items to decide whether or not the removal of these items harms the scale conceptually, we see that item 5 (Our culture is one that does not make employee learning a top priority) can be captured in items 4 and 6; item 12 (We do not have a well-defined vision for the entire business unit) is similar in content to item 7; and item 13 (We are not afraid to reflect critically on the shared assumptions we have about the way we do business) can be captured in item 14. Therefore, it was decided that removing these items from the scale would not significantly hurt the conceptual model.

These items are eliminated and factor analysis is re-run. This time, communalities for all items, sampling adequacy levels for individual variables and factor loadings are all above their respective threshold levels.

Three factors are extracted explaining 63.4 % of total variance which is above the threshold value of 60 %. The new KMO-MSA is .912 which is well above the threshold level. Bartlett’s test of Sphericity also shows significant results (chi-square of 2096.117 significant at .000 level). The distribution of scale items to the factors are consistent with the literature. We will call the three factors, “commitment to learning”, “shared vision”, and “open-mindedness”, respectively. Table 18 summarizes the results.

Table 18. LO Exploratory Factor Analysis Results

| Factor Name | Loadings | % of Variance Explained | Cronbach’s Alpha |
|--|----------|-------------------------|------------------|
| Factor 1: Commitment to Learning | | 44.9 % | .894 |
| 1. The collective wisdom in this enterprise is that once we quit learning, we endanger our future. | .732 | | |
| 2. Managers basically agree that our business unit’s ability to learn is the key to our competitive advantage. | .784 | | |
| 3. The basic values of this business unit include learning as key to improvement. | .744 | | |
| 4. The sense around here is that employee learning is an investment, not an expense. | .854 | | |
| 6. Learning in my organization is seen as a key commodity necessary to guarantee organizational survival. | .783 | | |

| | | | |
|--|--|--------|------|
| Factor 2: Shared Vision | | 1.8 % | .807 |
| 7. There is a well-expressed concept of who we are and where we are going as a business unit. | .699 | | |
| 8. There is a total agreement on our business unit vision across all levels, functions, and divisions. | .792 | | |
| 9. All employees are committed to the goals of this business unit. | .763 | | |
| 10. Employees view themselves as partners in changing the direction of the business unit. | .705 | | |
| 11. Top leadership believes in sharing its vision for the business unit with the lower levels. | .575 | | |
| Factor 3: Open-mindedness | | 7.7 % | .812 |
| 14. Managers in this business unit do not want their "view of the world" to be questioned. | .648 | | |
| 15. Our business unit places a high value on open-mindedness. | .626 | | |
| 16. Managers encourage employees to "think outside of the box". | .580 | | |
| 17. An emphasis on constant innovation is not a part of our corporate culture. | .743 | | |
| 18. Original ideas are highly valued in this organization. | .601 | | |
| Total Variance Explained | | 63.4 % | |
| KMO Measure | .912 | | |
| Bartlett's Test | Approx. chi square 2096.117(105 df, .000 Significance) | | |

Factor Analysis on Innovativeness

The first step is to see whether or not the data is suitable for factor analysis. Bartlett's test of Sphericity shows significant results (chi-square of 416.117 significant at .000 level), meaning there is correlation among variables. KMO-MSA is .786 which is greater than the threshold level of .5. These two measures indicate that the data is suitable for exploratory factor analysis.

Next, sampling adequacy for individual variables are reviewed by examining the anti-image matrix. All are above the threshold level of .51.

One factor is extracted explaining 52.4 % of total variance which is below the threshold value of 60 %. Also, item 4 (People are penalized for ideas that don't work) has a communality of .110 which is well below the threshold of .5. With such a low communality level, this item is not kept in the analysis. Also, it is captured by item 5 in the scale to some extent.

Therefore, this item is eliminated and factor analysis is re-run. One factor explaining 64.3 % of total variance is extracted. Communalities, sampling adequacy levels for individual variables and factor loadings are above their respective threshold levels. The new KMO-MSA is .791 which is well above the threshold level. Bartlett's test of Sphericity also shows significant results (chi-square of 395.181 significant at .000 level). This result is

consistent with the literature. We will call this factor “innovativeness”. Table 19 presents these results.

Table 19. Innovativeness Exploratory Factor Analysis Results

| Factor Name | Loadings | Cronbach's Alpha |
|--|--|------------------|
| Factor 1: Innovativeness | | .810 |
| 1. Technical innovation based on research results is readily accepted. | .831 | |
| 2. Management actively seeks innovative ideas | .809 | |
| 3. Innovation is readily accepted in program/project management | .858 | |
| 5. Innovation in company is perceived as too risky and is resisted | .702 | |
| Total Variance Explained | | 64.3 % |
| KMO Measure | .791 | |
| Bartlett's Test | Approx. chi square 395.181 (6 df, .000 Significance) | |

Factor Analysis on Marketing Effectiveness

The first step is to see whether or not the data is suitable for factor analysis. Bartlett's test of Sphericity shows significant results (chi-square of 2586.793 significant at .000 level), meaning there is correlation among variables. KMO-MSA is .930 which is greater than the threshold level of .5. These two measures indicate that the data is suitable for exploratory factor analysis.

Next, sampling adequacy for individual variables are reviewed by examining the anti-image matrix. All are above the threshold level of .5.

In terms of communalities, there are two items (6 and 10) which fall below the threshold value of .5. Item 6 is on being a good community neighbor and is not related to operational efficiency and this may be the reason for this result. Item 10 is on "word of mouth" communication, and there may have been some confusion as to what it means on the part of the respondents. These two items are deleted and factor analysis is re-run. Even though communalities, % of total variance explained, sampling adequacy measures are above the threshold levels, there is one item (item 8) with a factor loading less than the acceptable .50 level. Item 8 is mostly captured in item 7 in terms of content. Therefore, item 8 is eliminated and factor analysis is performed for the third time. This time, all of the indicators are acceptable except for item 14, which has a communality below the threshold. Item 14 is about the government board being knowledgeable on the profitability and

sales potential of segments, and it may be possible to remove this item from the scale since items 12 and 13 remaining in the scale compensate for item 14.

Factor analysis is performed for the fourth time after the elimination of item 14. Communalities, % of total variance explained, sampling adequacy measures are all above the threshold levels. All of the items have factor loadings greater than .5. However, we see that items 16 and 17 are the only items that fall under factor three. Reliability statistics when these two items are deleted are reviewed. Since reliability improves (cronbach's alpha .891 after elimination > .875 before elimination) with the elimination of these items, factor analysis is run for the fifth time without these items. At this point, 12 items remain in the scale.

Communalities, % of total variance explained, sampling adequacy measures are all above the threshold levels. All of the items have factor loadings greater than .5. Two factors are extracted with greater than threshold factor loadings. % of total variance explained is 64.8 %. Bartlett's test of Sphericity shows significant results (chi-square of 189.732 significant at .000 level), meaning there is correlation among variables. KMO-MSA is .923. The distribution of items to the two factors are reasonable and in line with what is expected theoretically (Webster, 1995).

Therefore, these two factors will be used in hypotheses testing. We will name these factors, "operational efficiency" and "marketing system effectiveness". Table 20 presents the results of the factor analysis.

Table 20. ME Exploratory Factor Analysis Results

| Factor Name | Loadings | % of Variance Explained | Cronbach's Alpha |
|---|----------|-------------------------|------------------|
| Factor 1: Operational Efficiency | | 12.1 % | .864 |
| 1. Marketing thinking is at the top is communicated and implemented down the line. | .752 | | |
| 2. Governing board shows good capacity to react quickly and effectively to on-the-spot developments. | .594 | | |
| 3. Governing board is committed to marketing excellence | .701 | | |
| 4. Government board is doing an effective job with the marketing resources | .685 | | |
| 5. Marketing director is working well with other functional directors | .768 | | |
| 7. The company recognizes the importance of designing the organization to serve the needs and wants of chosen markets | .760 | | |
| Factor 2: Marketing System Effectiveness | | 52.7 % | .891 |
| 9. Customer satisfaction is monitored | .762 | | |
| 11. There exists a whole marketing system view in planning business. | .778 | | |
| 12. There exist efforts expended to measure cost-effectiveness of different marketing expenditures. | .747 | | |

| | | |
|---|--|--------|
| 13. Regular marketing research of customers, buying influences, etc is conducted. | .787 | |
| 15. Formal market planning exists. | .832 | |
| 18. A high quality marketing strategy exists. | .817 | |
| Total Variance Explained | | 64.8 % |
| KMO Measure | .923 | |
| Bartlett's Test | Approx. chi square 189.732(66 df, .000 Significance) | |

Factor Analysis on Firm Performance

The first step is to see whether or not the data is suitable for factor analysis. Bartlett's test of Sphericity shows significant results (chi-square of 1024.941 significant at .000 level), meaning there is correlation among variables. KMO-MSA is .868 which is greater than the threshold level of .5. These two measures indicate that the data is suitable for exploratory factor analysis.

Next, sampling adequacy for individual variables are reviewed by examining the anti-image matrix. All are above the threshold level of .5.

Communalities, sampling adequacy levels for individual variables and factor loadings are all above their respective threshold levels. One factor is extracted explaining 76.0 % of total variance which is above the threshold value of 60 %. All of the original items remain in the scale. This result is consistent with the literature. We will call this factor “performance”. Table 21 summarizes the results.

Table 21. Firm Performance Exploratory Factor Analysis Results

| Factor Name | Loadings | Cronbach's Alpha |
|---|---|------------------|
| Factor 1: Performance | | .901 |
| 1. For your business unit's principal served market segment over the past year, change in market share relative to your largest competitor: | .889 | |
| 2. Your business unit's sales growth relative to major competitors last year: | .922 | |
| 3. Your business unit's ROI relative to major competitors last year: | .874 | |
| 4. Percentage of sales generated by new products last year relative to major competitors: | .795 | |
| 5. Relative to competition, overall performance in your business unit last year was: | .875 | |
| Total Variance Explained | | 76.7% |
| KMO Measure | .868 | |
| Bartlett's Test | Approx. chi square 1024.941(10 df, .000 Significance) | |

Factor Analysis on Environmental Dimensions

The environmental dimensions scale was originally a 16-item scale. After the reliability analysis discussed in the section above, five items were deleted from the scale. The remaining 11 items were used in the factor analysis.

The first step is to see whether or not the data is suitable for factor analysis. Bartlett's test of Sphericity shows significant results (chi-square of 388.132 significant at .000 level), meaning there is correlation among variables. KMO-MSA is .662 which is greater than the threshold level of .5. These two measures indicate that the data is suitable for factor analysis.

Next, sampling adequacy for individual variables are reviewed by examining the anti-image matrix. All are above the threshold level of .5.

In terms of communalities, there are two items (7 and 11) which fall below the threshold value of .5. There are four factors with eigenvalues above 1 explaining 57.4 % of total variance which is below the threshold value of 60 %. These two items are deleted and factor analysis is re-run. Even though, communalities, % of total variance explained, sampling adequacy measures are above the threshold levels, there is one item with a factor loading less than the acceptable .50 level. Therefore, item 8 is eliminated and factor analysis is performed for the third time. The new KMO-MSA is .566 which is above the threshold level. Bartlett's test of

Sphericity also shows significant results (chi-square of 218.671 significant at .000 level). Sampling adequacy for individual variables are all above the threshold level, as well. The rotated component matrix presents a four factor solution. When the matrix is reviewed, it can be seen that item 9 falls as a single item under factor four. Other items load to the remaining three factors as theoretically expected. Reliability statistics for item 9 is reviewed and it is observed that Cronbach's alpha increases from .613 to .648 for the environmental munificence scale when item 9 is deleted. In light of this information and taking into account theoretical foundations i. e. a priori criterion (Hair, Anderson, Tatham and Black, 1998) , item 9 is also eliminated.

Factor analysis is performed for the fourth time on the remaining 7 items of the environmental dimensions scale. Communalities, % of total variance explained, sampling adequacy measures are all above the threshold levels. The new KMO-MSA is .574 which is above the threshold level. Bartlett's test of Sphericity also shows significant results (chi-square of 203.997 significant at .000 level). Three factors explaining % 63.5 of total variance are extracted. All of the items have factor loadings greater than .5. The distribution of items to the three factors are in line with what is expected theoretically. The factor names are, environmental dynamism, environmental munificence, and environmental complexity. Table 22 presents the results of the factor analysis.

Table 22. Environmental Dimensions Exploratory Factor Analysis Results

| Factor Names | Loadings | % of Variance Explained | Cronbach's Alpha |
|--|---|-------------------------|------------------|
| Factor 1: Environmental Dynamism | | 17.5 % | .588 |
| 3. Actions of competitors are easy to predict. | .814 | | |
| 4. Demand and consumer tastes are easy to forecast. | .838 | | |
| Factor 2: Environmental Munificence | | 26.7 % | .648 |
| 6. Demand for the products/services of your principal industry is growing and will continue to grow. | .870 | | |
| 1. Sales have been growing and are likely to grow in your industry. | .858 | | |
| Factor 3: Environmental Complexity | | 19.3 % | .575 |
| 13. We deal with a large number of customers. | .703 | | |
| 14. Our customers are quite diverse in their needs/requirements. | .724 | | |
| 15. We have a large number of suppliers of material, parts, or equipment. | .688 | | |
| Total Variance Explained | | 63.5 % | |
| KMO Measure | .574 | | |
| Bartlett's Test | Approx. chi square 203.997 (21 df, .000 Significance) | | |

After exploratory factor analysis, the new dimensions of the constructs and revised Cronbach's alpha values are given in Table 23.

Table 23. Revised Cronbach's alpha after Exploratory Factor Analysis

| SCALE | Revised Cronbach's α |
|--------------------------------|-----------------------------|
| ENTREPRENEURIAL ORIENTATION | |
| Proactivity | .681 |
| Risk-taking | .682 |
| MARKET ORIENTATION | |
| Customer Orientation | .838 |
| Competitor Orientation | .599 |
| Inter-functional Coordination | .679 |
| LEARNING ORIENTATION | |
| Commitment to Learning | .894 |
| Shared Vision | .807 |
| Open-mindedness | .812 |
| INNOVATIVENESS | .810 |
| MARKETING EFFECTIVENESS | |
| Operational Efficiency | .875 |
| Marketing System Effectiveness | .822 |
| FIRM PERFORMANCE | .901 |
| ENVIRONMENTAL DIMENSIONS | |
| Environmental Dynamism | .588 |
| Environmental Munificence | .648 |
| Environmental Complexity | .575 |

Confirmatory Factor Analysis for Scale Validation

The procedures used in this research to validate the measures are assessments of convergent and discriminant validity. In light of the exploratory factor analysis results of the previous section, measurement quality and validity was assessed using confirmatory factor analyses. Proposed factor solutions extracted in exploratory factor analyses were tested for goodness-of-fit. AMOS 4.0 was used in the estimation of the confirmatory measurement model. Findings of the analyses are summarized in Table 24.

Confirmatory factor analysis was performed for all of the proposed factors in the exploratory factor analysis phase. Confirmatory factor analysis was also conducted for cultural orientations and their dimensions to see how well these dimensions represent their respective constructs.

When the overall model fit of each of the construct dimensions is reviewed, it can be seen that the items specified for each dimension represent that dimension reasonably well with above the threshold levels for Chi sq ($>.90$), chi sq/df (< 3), CFI ($>.90$), and RMSEA($< .08$) (Hair, Anderson, Tatham and Black, 1998). This is also true for dimensions of the cultural orientation constructs. Each of entrepreneurial orientation, market orientation and learning orientation constructs is represented well by its respective dimensions. In addition, all items loaded significantly on their respective constructs (with the lowest t-value being 1.68, still significant at $p<.10$),

providing support for convergent validity. The two nonsignificant items at $p < .05$ are listed in italic in Table 24.

For each of the factors, average variance extracted (AVE) was computed to check for discriminant validity. AVE was greater than the threshold value of .50 (Fornell and Larcker, 1981) for all of the factors (see Table 24). Consequently, discriminant validity was obtained for the measure.

After scale purification and validation by performing reliability analysis, exploratory and confirmatory factor analyses, the refined scale was used for testing hypothesized relationships among model constructs.

Table 24. Confirmatory Factor Analysis for Model Constructs

| | Factor | Item t-value | Average Variance Extracted (AVE) | Model Fit |
|-------|----------------------------------|-----------------|----------------------------------|--|
| EO | Proactivity | 3.89 | .669 | Chi Sqr 8.617 df 4 |
| | | 4.72 | | |
| | Risk-taking | 3.89 | .636 | Chi Sqr/df 2.154 CFI .983 RMSEA .063 |
| | | 6.86 | | |
| | | 6.81 | | |
| MO | Customer Orientation | 5.26 | .487 | Chi Sqr 143.491 df 51 |
| | | 6.02 | | |
| | | 5.82 | | |
| | | 4.67 | | |
| | | 5.31 | | |
| | Competitor Orientation | 6.46 | .512 | Chi Sqr/df 2.814 CFI .919 RMSEA .078 |
| | | 5.40 | | |
| | | 4.71 | | |
| | Inter-functional Coordination | 2.15 | .491 | |
| | | 1.72 | | |
| 1.68 | | | | |
| LO | Commitment to Learning | 9.96 | .603 | Chi Sqr 201.479 df 87 |
| | | 10.82 | | |
| | | 8.84 | | |
| | | 10.84 | | |
| | Shared Vision | 8.78 | .627 | Chi Sqr/df 2.316 CFI .946 RMSEA .067 |
| | | 6.48 | | |
| | | 7.49 | | |
| | | 6.70 | | |
| | | 6.26 | | |
| | Open-mindedness | 5.10 | .665 | |
| | | 2.32 | | |
| -4.02 | | | | |
| -3.78 | | | | |
| | | 3.17 | | |
| | Innovativeness | 6.10 | .452 | Chi Sqr .726 |

| | | | | |
|------------------|--------------------------------|-------|------------------|------------------|
| | | 5.30 | | |
| | | 6.34 | | |
| | | -4.61 | | |
| ME | Operational Efficiency | 5.10 | | |
| | | 4.14 | | |
| | | 5.01 | .492 | |
| | | 5.36 | | Chi Sqr 204.252 |
| | | 5.14 | | df 68 |
| | 4.65 | | Chi Sqr/df 3.003 | |
| | 8.67 | | CFI .920 | |
| | 5.65 | | RMSEA .0810 | |
| | Marketing System Effectiveness | 7.40 | .467 | |
| | | 6.44 | | |
| | 5.49 | | | |
| | 6.62 | | | |
| Firm Performance | | 11.22 | | Chi Sqr 22.198 |
| | | 11.62 | | df 8 |
| | | 8.96 | .688 | Chi Sqr/df 2.774 |
| | | 7.08 | | CFI .978 |
| | | 9.46 | | RMSEA .083 |
| Environment | Dynamism | 2.97 | .520 | |
| | | 2.69 | | Chi Sqr 5.591 |
| | 2.97 | | df 11 | |
| | Munificence | 3.19 | .512 | Chi Sqr/df .508 |
| | | 4.41 | | CFI 1.000 |
| | Complexity | 3.65 | .634 | RMSEA 0.000 |
| | 3.63 | | | |
| EO | EO | 3.85 | .724 | |
| | | 2.66 | | Chi Sqr 41.132 |
| | | 5.52 | | df 17 |
| | MO | 4.88 | .766 | Chi Sqr/df 2.420 |
| | | 5.12 | | CFI .958 |
| | LO | 5.53 | | RMSEA .069 |
| | | 4.21 | .718 | |
| 3.90 | | | | |

Main and Moderating Construct Correlations

Table 25 depicts correlations among model constructs. When these correlations are reviewed, it is observed that all of the constructs are significantly correlated at the .01 level. Highest correlation exists between market orientation and innovativeness, followed by learning orientation and innovativeness. Marketing effectiveness and learning orientation constructs are also very highly correlated.

Lowest correlation exists between marketing effectiveness and firm performance among main constructs of the model. Entrepreneurial orientation and marketing effectiveness correlation is the second lowest among the main constructs. The only correlations significant at the .05 level are present between environmental dimensions and entrepreneurial orientation, and between environmental dimensions and innovativeness.

Table 25. Pearson's Correlations among Constructs

| | Entrepreneurial Orientation | Market Orientation | Learning Orientation | Innovative ness | Marketing Effectiveness | Firm Performance | Environmental Dimensions |
|--------------------------------|--------------------------------|-----------------------|-------------------------|--------------------|----------------------------|---------------------|-----------------------------|
| Entrepreneurial Orientation | 1.000 | | | | | | |
| Market Orientation | .603** | 1.000 | | | | | |
| Learning Orientation | .447** | .648** | 1.000 | | | | |
| Innovativeness | .507** | .787** | .726** | 1.000 | | | |
| Marketing Effectiveness | .368** | .577** | .713** | .612** | 1.000 | | |
| Firm Performance | .433** | .487** | .413** | .399** | .366** | 1.000 | |
| Environmental Dimensions | .278* | .334** | .318** | .271* | .324** | .358** | 1.000 |

** p < .01 level (2-tailed). * p < .05 level (2-tailed).

Findings from Descriptive Statistics

Entrepreneurial Orientation

Table 26 shows that the overall mean of the entrepreneurial orientation scale is 3.41. This means that, at the firm level, respondents feel that their respective firms have entrepreneurial tendencies, prone to taking risks and leading their competitors at some level.

Proactivity variable has a mean of 3.76. This suggests that firms responding to this questionnaire on the average consider themselves more proactive than not, generally taking on a leading role rather than being the follower.

On the other hand, risk-taking dimension has a mean of 3.07. This suggests that firms responding to this questionnaire are somewhat neutral about their risk-proneness, sometimes taking on high-risk endeavors and being safe at other times.

Table 26. EO Descriptive Statistics

| | N | Min | Max | Mean | Std. Deviation |
|-------------|----|------|------|------|----------------|
| Proactivity | 74 | 1.67 | 5.00 | 3.76 | .73 |
| Risk-taking | 74 | 1.33 | 4.67 | 3.07 | .69 |
| EO | 74 | 1.69 | 4.67 | 3.41 | .57 |

Market Orientation

All of the market orientation dimensions have relatively high means ranging from 3.79 to 4.03 (Table 27). This suggests that, at the firm level, on the average, respondents “agree” that their firms are customer and competitor oriented as well as having good inter-functional coordination.

Managers of responding firms believe that their approach is market-oriented. Customer needs are important, customer value is understood, competitors and their actions are closely studied, and responded to when necessary, and communication and information-sharing among different functions within a firm is healthy and encouraged.

Table 27. MO Descriptive Statistics

| | N | Min | Max | Mean | Std. Deviation |
|-------------------------------|----|------|------|------|----------------|
| Customer Orientation | 74 | 2.47 | 5.00 | 4.03 | .45 |
| Competitor Orientation | 74 | 2.67 | 5.00 | 3.79 | .53 |
| Inter-functional Coordination | 74 | 1.38 | 4.83 | 3.80 | .56 |
| MO | 74 | 2.47 | 4.83 | 3.87 | .38 |

Learning Orientation

Like market orientation, all of the learning orientation dimensions have relatively high means ranging from 3.69 to 3.83. This suggests that, at the firm level, on the average, respondents are closer to “agreeing” that their firms are committed to learning, open-minded, and share a vision.

Commitment to learning has a mean of 3.83. This means that the firm level participants agree to statements such as learning is viewed as a competitive advantage in their firm, learning is seen as an investment not a cost in their firm, and learning is a priority in their firm.

Similarly, having a close-to-four mean for shared vision and open-mindedness (3.80 and 3.69, respectively), means that, on the average, managers of responding firms believe that firm objectives are successfully communicated within their firm and there is a shared vision for the firm, as well as an approach that encourages creative thinking and questioning of current methods for doing business for improvement. Table 28 presents the descriptive statistics for the learning orientation construct.

Table 28. LO Descriptive Statistics

| | N | Min | Max | Mean | Std. Deviation |
|------------------------|----|------|------|------|----------------|
| Commitment to Learning | 74 | 2.40 | 5.00 | 3.83 | .58 |
| Shared Vision | 74 | 2.53 | 5.00 | 3.80 | .44 |
| Open-mindedness | 74 | 2.00 | 4.60 | 3.69 | .55 |
| LO | 74 | 2.69 | 4.87 | 3.77 | .45 |

Innovativeness

Innovativeness has a firm level mean of 3.84 (see Table 29). This suggests that, at the firm level, respondents agree that innovativeness is encouraged and well-accepted in their workplace.

Table 29. Innovativeness Descriptive Statistics

| | N | Min | Max | Mean | Std. Deviation |
|----------------|----|------|------|------|----------------|
| Innovativeness | 74 | 1.65 | 5.00 | 3.84 | .53 |

Marketing Effectiveness

A mean of 3.54 for overall marketing effectiveness at the firm level means that responding firms feel that the effectiveness of their marketing activities can be considered “acceptable”. Any score for mean above 3 suggests that the respondents are closer to “agreeing” that marketing in their firms is “effective” than “not agreeing”.

Operational efficiency has a mean of 3.79 which suggests that the managers of responding firms believe that they have efficient operations in marketing.

Marketing system effectiveness mean, however, is closer to neutral and has a higher standard deviation. This means that the firms responding to this questionnaire are not sure about whether or not an effective

marketing system is existent within their firm. These results can be found in Table 30.

Table 30. ME Descriptive Statistics

| | N | Min | Max | Mean | Std. Deviation |
|--------------------------------|----|------|------|------|----------------|
| Operational Efficiency | 74 | 1.54 | 5.00 | 3.79 | .49 |
| Marketing System Effectiveness | 74 | 1.33 | 5.00 | 3.30 | .70 |
| ME | 74 | 1.55 | 4.86 | 3.54 | .54 |

Firm Performance

Firm performance variable operationalization ranges from level 1 to 7; 1 being significant decrease and 7 being significant increase/improvement. Therefore, a mean of 4.98 suggests that, on the average, firms perceive themselves as being more successful than their competitors in the past three years, in terms of market share, sales growth, ROI, new product sales, and overall performance (see Table 31). A standard deviation 0.94 suggests that there exist firms that feel neutral about their success with respect to their competitors, as well as firms that feel very strongly about their superiority over their competitors in terms of the performance indicators mentioned above.

Table 31. Firm Performance Descriptive Statistics

| | N | Min | Max | Mean | Std. Deviation |
|------------------|----|------|------|------|----------------|
| Firm Performance | 74 | 2.00 | 6.67 | 4.98 | .94 |

Environmental Dimensions

Environmental dimensions all have relatively high means as can be seen in Table 32. Environmental dynamism having a mean of 3.46 means that, on the average, at the firm level, respondents believe that the environment is not very dynamic. This conclusion is based on the fact that the items included in the environmental dynamism scale are actually reverse statements e.g. "Our firm rarely changes marketing practices to keep up with the market and competitors". If a respondent answers 5 to this statement, meaning, strongly agree, this means that the respondent does not actually perceive the environment as being dynamic. Therefore, a mean value of 3.46 suggests perceived environmental dynamism is low.

Environmental munificence has a mean of 3.99 which is also very high. This means, at the firm level, respondents believe that the environment is munificent, i. e. there is room for growth, sales are growing, capital expenditures are increasing, and it is easy to access resources to expand and grow.

Environmental complexity also has a high mean of 3.94 which means, at the firm level, respondents perceive their environment as being complex. Customers are variant in terms of expectations, there is a variety of suppliers, etc.

The standard deviations for all of these dimensions are relatively low indicating that there is a consensus in opinion among responding firms.

Table 32. Environmental Dimensions Descriptive Statistics

| | N | Min | Max | Mean | Std. Deviation |
|---|----|------|------|------|----------------|
| Dynamism | 74 | 2.33 | 4.50 | 3.46 | .53 |
| Munificence | 74 | 1.50 | 5.00 | 3.99 | .62 |
| Complexity | 74 | 2.56 | 5.00 | 3.94 | .51 |
| Environmental Dimensions Combined | 74 | 2.87 | 4.52 | 3.80 | .35 |

Findings from relational hypotheses are reported in the next section.

Findings on Relational Hypotheses

Multiple regression analysis was used for hypothesis testing in this research to analyze main and moderating effects. To analyze the moderating variables, hierarchical regression analysis was performed.

Main Effects

Findings on hypotheses regarding the main relationships among the constructs of the model are reported in this section of the report.

Cultural Orientations and Innovativeness Relationship

In this section, the influence of entrepreneurial orientation, market orientation, and learning orientation and their dimensions on innovativeness is analyzed.

Table 33 looks at the overall impact of cultural orientations on innovativeness. Adjusted R square is .687 and F statistic is significant (54.445, $p < .05$). When coefficients are reviewed, it can be seen that market orientation and learning orientation positively and significantly influence innovativeness with beta coefficients values .536 and .370, respectively.

Analysis suggests that entrepreneurial orientation does not have a significant impact on innovativeness. Therefore, hypothesis 1a is rejected and hypotheses 2a and 3a are supported.

Table 33. Cultural Orientations and Innovativeness Regression Results

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
|-----------------------------|-----------------------------|------------|---------------------------|--------|------|-------------------------|-------|
| | B | Std. Error | Beta | | | Tolerance | VIF |
| (Constant) | -.736 | .363 | | -2.028 | .023 | | |
| Entrepreneurial orientation | .017 | .077 | .019 | .113 | .410 | .631 | 1.586 |
| Market orientation | .743 | .134 | .536 | 5.537 | .000 | .458 | 2.185 |
| Learning orientation | .434 | .101 | .370 | 4.292 | .000 | .575 | 1.738 |
| R square | | | .700 | | | | |
| Adjusted R square | | | .687 | | | | |
| F 54.445 df 3 | | | | | | | |
| p < .05 | | | | | | | |

When we compare individual dimensional impacts of cultural orientations, we see a model with significant explanatory power (adjusted R square .700 and F 22.267 at $p < .05$). In terms of dimensions of entrepreneurial orientation, neither proactivity nor risk-taking has a statistically significant impact on innovativeness, rejecting hypotheses 1b and 1c. Of the learning orientation dimensions, commitment to learning and open-mindedness have the hypothesized positive impact on innovativeness whereas the impact of shared vision is statistically insignificant. Therefore, hypotheses 3b and 3d are supported whereas hypothesis 3c is rejected. All of the market orientation dimensions have a strongly significant positive influence on innovativeness. Consequently, hypotheses 2b, 2c, and 2d are supported.

When tolerance and VIF statistics are reviewed, it can be seen that multi-collinearity is not a major problem with tolerance $> .10$ (Hair, Anderson, Tatham and Black, 1998).

These findings are summarized in Table 34 . Implications and possible explanations for these results will be discussed in the conclusion section of this dissertation.

Table 34. Cultural Orientations Individual Dimensions and Innovativeness
Regression Results

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
|----------------------------------|-----------------------------|------------|---------------------------|--------|------|-------------------------|-------|
| | B | Std. Error | Beta | | | Tolerance | VIF |
| (Constant) | -.703 | .373 | | -1.887 | .032 | | |
| EO Proactivity | .054 | .055 | .074 | .982 | .165 | .725 | 1.380 |
| EO Risk-taking | -.017 | .058 | -.022 | -.293 | .335 | .721 | 1.388 |
| MO Customer Orientation | .384 | .103 | .324 | 3.724 | .000 | .542 | 1.845 |
| MO Competitor Orientation | .228 | .078 | .229 | 2.922 | .003 | .672 | 1.488 |
| MO Inter-functional Coordination | .217 | .082 | .227 | 2.646 | .005 | .559 | 1.790 |
| LO Commitment to Learning | .219 | .088 | .240 | 2.488 | .008 | .440 | 2.271 |
| LO Shared Vision | -.077 | .114 | -.064 | -.681 | .250 | .470 | 2.129 |
| LO Open-mindedness | .165 | .095 | .171 | 1.745 | .043 | .429 | 2.329 |
| R square | | | .733 | | | | |
| Adjusted R square | | | .700 | | | | |
| F 22.267 df 8 | | | | | | | |
| p< .05 | | | | | | | |

Innovativeness, Marketing Effectiveness, and Performance Relationship

In this part of the analysis, the impact of innovativeness on firm performance and the impact of marketing effectiveness and its dimensions on firm performance are analyzed.

Innovativeness and Performance

The findings suggest that innovativeness has a direct positive impact on firm performance. R square is .147, meaning 14.7 % of the variance in firm performance is accounted for by innovativeness. F value (13.606) and t value (3.689) are significant at $p < .05$. The tolerance value is 1.000 which suggests that there is no multicollinearity among variables. The standardized coefficient for innovativeness (β) is 0.399. Hypothesis 4d is supported. These findings are summarized in Table 35.

Table 35. Innovativeness and Firm Performance Regression Results

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
|-------------------|-----------------------------|------------|---------------------------|-------|------|-------------------------|-------|
| | B | Std. Error | Beta | | | Tolerance | VIF |
| (Constant) | 2,281 | ,738 | | 3,093 | ,003 | | |
| innovativeness | ,702 | ,190 | ,399 | 3,689 | ,000 | 1,000 | 1,000 |
| R square | | | .159 | | | | |
| Adjusted R square | | | .147 | | | | |
| F 13.606 df 1 | | | | | | | |
| p < .05 | | | | | | | |

Innovativeness and Marketing Effectiveness

In this section, the impact of innovativeness on marketing effectiveness and its dimensions are studied. Adjusted R square is .366 which means 36.6 % of variation in marketing effectiveness can be explained by innovativeness. F (43.052) and t values are significant at $p < .05$, and multicollinearity assumption is satisfied (tolerance = 1). β is 0.612 which, combined with the other values mentioned above, suggests that innovativeness positively influences marketing effectiveness (Table 36).

Table 36. Innovativeness and Marketing Effectiveness Regression Analysis

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
|-------------------|-----------------------------|------------|---------------------------|-------|------|-------------------------|-------|
| | B | Std. Error | Beta | | | Tolerance | VIF |
| (Constant) | 1.150 | .368 | | 3.126 | .003 | | |
| innovativeness | .577 | .095 | .612 | 6.561 | .000 | 1.000 | 1.000 |
| R square | | | .374 | | | | |
| Adjusted R square | | | .366 | | | | |
| F 43.052 df 1 | | | | | | | |
| p < .05 | | | | | | | |

Likewise, operational efficiency and marketing system effectiveness were regressed against innovativeness, and a positive and statistically significant relationship was found. Adjusted R square for innovativeness operational efficiency relationship is especially high indicating that 51.2 % of all variance in operational efficiency can be explained by innovativeness. Coefficients are positive and F is significant at $p < .05$. Hypotheses 4a, 4b, and 4c are supported. Table 37 summarizes these findings.

Table 37. Innovativeness and Marketing Effectiveness Dimensions
Regression Analysis

| Operational Efficiency | | | | | | | |
|--------------------------------|-----------------------------|------------|---------------------------|-------|------|-------------------------|-------|
| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
| | B | Std. Error | Beta | | | Tolerance | VIF |
| (Constant) | 1.222 | .294 | | 4.153 | .025 | | |
| innovativeness | .668 | .076 | .720 | 8.800 | .000 | 1.000 | 1.000 |
| R square | | | .518 | | | | |
| Adjusted R square | | | .512 | | | | |
| F 77.443 df 1 p < .05 | | | | | | | |
| Marketing System Effectiveness | | | | | | | |
| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
| | B | Std. Error | Beta | | | Tolerance | VIF |
| (Constant) | 1.078 | .541 | | 1.991 | .025 | | |
| innovativeness | .577 | .140 | .438 | 4.136 | .000 | 1.000 | 1.000 |
| R square | | | .192 | | | | |
| Adjusted R square | | | .181 | | | | |
| F 17.105 df 1 p < .05 | | | | | | | |

Marketing Effectiveness and Firm Performance

Data analysis suggests that marketing effectiveness positively influences firm performance. Adjusted R square is .122 and F (11.139) is significant. t value is also significant at $p < .05$ and standardized coefficient β is positive implying that there is a positive relationship between marketing effectiveness and firm performance. Therefore, hypothesis 4e is supported.

Hypothesis 4f regarding the impact of operational efficiency on firm performance is also supported with statistically significant F (9.083) and adjusted R square (.181) values for the overall model and a positive coefficient β . However, the impact of marketing system effectiveness on firm performance is not statistically significant as can be seen in Table 38 and therefore hypothesis 4g is not supported. Tolerance and VIF levels are at perfectly desirable levels which suggest that multi-collinearity is not a problem. Table 38 summarizes these findings.

Table 38. Marketing Effectiveness and Firm Performance Regression Results

| Model | Unstandardized Coefficients | | Standardized Coefficients | | Sig. | Collinearity Statistics | |
|---|-----------------------------|------------|---------------------------|-------|------|-------------------------|-------|
| | B | Std. Error | Beta | t | | Tolerance | VIF |
| (Constant) | 2.735 | .679 | | 4.025 | .000 | | |
| marketing effectiveness | .633 | .190 | .366 | 3.338 | .001 | 1.000 | 1.000 |
| R square | | | .134 | | | | |
| Adjusted R square | | | .122 | | | | |
| F 11.139 df 1 p < .05 | | | | | | | |
| Marketing Effectiveness Dimensions and Firm Performance Regression Analysis | | | | | | | |
| Model | Unstandardized Coefficients | | Standardized Coefficients | | Sig. | Collinearity Statistics | |
| | B | Std. Error | Beta | t | | Tolerance | VIF |
| (Constant) | 1.741 | .768 | | 2.269 | .013 | | |
| operational efficiency | .922 | .259 | .486 | 3.553 | .001 | .600 | 1.667 |
| marketing system effectiveness | -.078 | .183 | -.058 | -.424 | .352 | .600 | 1.667 |
| R square | | | .204 | | | | |
| Adjusted R square | | | .181 | | | | |
| F 9.083 df 2 p < .05 | | | | | | | |

Innovativeness as the Mediator between Cultural Orientations and Marketing Effectiveness

In this section, mediating effect of innovativeness on the cultural orientation marketing effectiveness relationship is analyzed. We have already found that innovativeness has a significant positive impact on marketing effectiveness. We have also found that market orientation and learning orientation have a significant positive impact on innovativeness. These two findings suggest that the implied mediation of innovativeness already exists, supporting hypotheses 5b and 5c. Hypothesis 5a is not supported because we have already found that entrepreneurial orientation is not significantly related to innovativeness (Hypothesis 1a).

To fine-tune these findings, when multiple regression analysis is performed with innovativeness, entrepreneurial orientation, marketing orientation, and learning orientation as independent variables and marketing effectiveness as the dependent variable, the results reveal a significant model with an adjusted R square value of .508 and a significant F value (19.873, $p < .05$).

However, when individual coefficients are reviewed, it can be seen that only learning orientation impact is significant. This suggests that the impact of innovativeness is overshadowed by learning orientation in this model. Table 39 summarizes these results.

Consequently, we conclude that learning orientation has a positive direct impact on marketing effectiveness in addition to the indirect relationship through innovativeness. This indirect relationship was already proven by showing that hypotheses 3 a and 4 a are supported in the previous sections.

Table 39. Cultural Orientations, Innovativeness and Marketing Effectiveness Regression Results

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
|-----------------------------|-----------------------------|------------|---------------------------|-------|------|-------------------------|-------|
| | B | Std. Error | Beta | | | Tolerance | VIF |
| (Constant) | -.102 | .476 | | -.214 | .415 | | |
| Entrepreneurial Orientation | -.021 | .098 | -.022 | -.216 | .414 | .630 | 1.587 |
| Marketing Orientation | .217 | .205 | .153 | 1.054 | .145 | .318 | 3.142 |
| Learning Orientation | .653 | .145 | .548 | 4.510 | .000 | .456 | 2.195 |
| innovativeness | .106 | .153 | .104 | .697 | .244 | .300 | 3.333 |
| R square | | | .535 | | | | |
| Adjusted R square | | | .508 | | | | |
| F 19.873 df 4 | | | | | | | |
| p < .05 | | | | | | | |

To understand this set of relationships better, the last analysis was rerun with firm performance as the dependent variable instead of marketing effectiveness. The findings are in Table 40. The analysis yielded a statistically significant model with an adjusted R square of .240. When significance of the coefficients are reviewed, it is observed that entrepreneurial orientation and marketing orientation has a significant direct positive impact on firm performance, learning orientation does not have a significant impact on firm performance. Innovativeness impact is nonsignificant suggesting that the influence of innovativeness is overshadowed by the influences of entrepreneurial orientation and market orientation on firm performance.

Table 40. Cultural Orientations, Innovativeness and Firm Performance Regression Results

| Model | Unstandardized Coefficients | | Standardized Coefficients | | | Collinearity Statistics | |
|-----------------------------|-----------------------------|------------|---------------------------|-------|------|-------------------------|-------|
| | B | Std. Error | Beta | t | Sig. | Tolerance | VIF |
| (Constant) | .50 | 1.024 | | .049 | .961 | | |
| Entrepreneurial Orientation | .341 | .211 | .207 | 1.613 | .100 | .630 | 1.587 |
| Marketing Orientation | .751 | .442 | .308 | 1.701 | .093 | .318 | 3.142 |
| Learning Orientation | .363 | .312 | .176 | 1.166 | .248 | .456 | 2.195 |
| innovativeness | -.135 | .328 | -.077 | -.411 | .682 | .300 | 3.333 |
| R square | | | .282 | | | | |
| Adjusted R square | | | .240 | | | | |
| F | 6.763 | df 4 | | | | | |
| p < .05 | | | | | | | |

Moderating Effects

Moderated relationships are analyzed using hierarchical (moderated) regression following Frazier, Tix and Barron (2004). In this analysis, the dependent variable is regressed on the predictor, moderator, and their interaction. Predictors, moderators, and their interactions are entered into the model as separate blocks, and R square change, F change, and the significance of the standardized coefficient (β) of the interaction term is reviewed to test the moderating effect (Frazier, Tix and Barron, 2004).

When the analysis was conducted, for all moderating relationships, a serious multi-collinearity problem was detected for the interaction variable. This created the necessity to develop mean-centric versions of the variables used in this analysis and compute the interaction terms using these mean-centric variables. Consequently, the multicollinearity problem was eliminated. The following sections discuss the findings from individual moderating effects.

Environmental Dimensions Moderating the Cultural Orientations and Innovativeness Relationship

With the addition of environmental dimensions, R square of the model changes from .687 in model 1 to .691 in model 3, the model including the interaction terms, and F change is insignificant . When β coefficients for the interaction terms are reviewed, however, it can be seen that the

entrepreneurial orientation and market orientation interactions with environmental dimensions are significant (Table 41).

These results suggest that environmental dimensions as a whole moderate the entrepreneurial orientation and innovativeness relationship as well as the market orientation and innovativeness relationship. Therefore, hypotheses 6a and 7a are supported. However, such an impact does not exist for the learning orientation and innovativeness relationship. Therefore, hypothesis 8a is rejected. When standardized coefficients are reviewed, it can be concluded that the environmental dimensions as a whole have a positive impact on the EO and Innovativeness relationship, but a negative impact on the MO and Innovativeness relationship. Table 41 summarizes these findings.

Table 41. Hierarchical Regression Analysis on Environment, Cultural Orientations and Innovativeness

| | Model 1 | | | Model 2 | | | Model 3 | | |
|----------------------------|---------|------|---------|---------|------|---------|---------|------|---------|
| Variables Entered | B | SE B | β | B | SE B | β | B | SE B | β |
| EO | .017 | .077 | .019 | .021 | .078 | .022 | .051 | .079 | .055 |
| MO | .743 | .134 | .536** | .752 | .136 | .542** | .705 | .137 | .508** |
| LO | .434 | .101 | .370** | .441 | .102 | .376** | .488 | .106 | .417** |
| Environmental Dimensions | | | | -.056 | .110 | -.036 | -.100 | .115 | -.064 |
| EO – Env. Dim. Interaction | | | | | | | .425 | .250 | .154** |
| MO – Env. Dim. Interaction | | | | | | | -.814 | .477 | -.188** |
| LO – Env. Dim. Interaction | | | | | | | .262 | .270 | .096 |
| Adjusted Rsquare | .687 | | | | | | .691 | | |
| Δ in Rsquare | | | | .090 | | | .019 | | |
| Δ F | | | | .258 | | | 1.510 | | |
| * p< .10 | | | | | | | | | |
| **p<.05 | | | | | | | | | |

When individual dimensions of environmental effects are analyzed for their moderating effect, it is observed that the R square of the model changes from .687 in model 1 to .712 in model 3 and F change was significant at .10 level . Also, when β coefficients for the interaction terms are reviewed, the entrepreneurial orientation interaction with munificence is significant and positive, supporting hypothesis 6c. Dynamism and complexity moderation effects, however, are insignificant. Therefore, hypothesis 6a and 6b are rejected.

β coefficients for market orientation interaction with environmental munificence is significant and negative, supporting hypothesis 7c. Environmental munificence moderates market orientation and innovativeness relationship, but negatively. However, β coefficient for market orientation interaction with environmental dynamism and complexity are not significant, rejecting hypotheses 7b and 7d. This finding suggests that marketing orientation and innovativeness relationship is not moderated by environmental dynamism or complexity.

In addition, β coefficients for learning orientation interactions with each of the environmental dimensions are insignificant, rejecting hypotheses 8b, 8c and 8d. This finding suggests that learning orientation and innovativeness relationship is not moderated by any of the environmental dimension, namely, environmental dynamism, munificence or complexity.

Table 42 summarizes these results.

Table 42. Hierarchical Regression Analysis on Individual Environmental Dimensions, Cultural Orientations and Innovativeness

| | Model 1 | | | Model 2 | | | Model 3 | | |
|------------------------------|---------|------|---------|---------|------|---------|---------|------|---------|
| Variables Entered | B | SE B | β | B | SE B | β | B | SE B | β |
| EO | .017 | .077 | .019 | .022 | .079 | .024 | .045 | .080 | .049 |
| MO | .743 | .134 | .536** | .697 | .144 | .502** | .658 | .144 | .475** |
| LO | .434 | .101 | .370** | .428 | .109 | .364** | .498 | .109 | .426** |
| Dynamism | | | | .006 | .076 | .006 | .028 | .079 | .027 |
| Munificence | | | | .029 | .065 | .034 | -.023 | .076 | -.027 |
| Complexity | | | | -.100 | .071 | -.096 | -.114 | .070 | -.109* |
| EO – Dynamism Interaction | | | | | | | .109 | .201 | .058 |
| EO – Munificence Interaction | | | | | | | .553 | .208 | .366** |
| EO – Complexity Interaction | | | | | | | -.238 | .192 | -.126 |
| MO – Dynamism Interaction | | | | | | | -.478 | .312 | -.158 |
| MO–Munificence Interaction | | | | | | | -.738 | .286 | -.375** |

| | | | | |
|-----------------------------|------|-------|--------|-------|
| MO – Complexity Interaction | | .289 | .318 | .115 |
| LO – Dynamism Interaction | | .217 | .192 | .098 |
| LO–Munificence Interaction | | .064 | .168 | .047 |
| LO – Complexity Interaction | | -.081 | .198 | -.045 |
| Adjusted Rsquare .687 | | .712 | | |
| Δ in Rsquare | .009 | | .062 | |
| Δ F | .693 | | 1.743* | |
| * p< .10 | | | | |
| **p<.05 | | | | |

Environmental Dimensions Moderating Innovativeness – Marketing

Effectiveness Relationship

With the addition of environmental dimensions, R square of the model changes from .366 in model 1 to .394 in model 3, and F change is insignificant . Also, when β coefficients for the interaction terms are reviewed, it can be seen that innovativeness interactions with environmental dimensions are insignificant, rejecting hypothesis 9a. Table 43 includes these results.

Table 43. Hierarchical Regression Analysis on Environment, Innovativeness and Marketing Effectiveness

| | Model 1 | | | Model 2 | | | Model 3 | | |
|--|---------|------|---------|---------|------|---------|---------|------|---------|
| Variables Entered | B | SE B | β | B | SE B | β | B | SE B | β |
| Innovativeness | .623 | .095 | .612 | .576 | .097 | .565 | .577 | .098 | .567 |
| Environmental Dimensions | | | | .150 | .171 | .150 | .287 | .153 | .182 |
| Innovativeness – Env. Dim. Interaction | | | | | | | .181 | .281 | .061 |
| Adjusted Rsquare | .366 | | | | | | .394 | | |
| Δ in Rsquare | | | | .027 | | | .004 | | |
| Δ F | | | | 3.202 | | | .417 | | |
| * p< .10 | | | | | | | | | |
| **p<.05 | | | | | | | | | |

When individual environmental dimensions are checked for their moderating effect on marketing effectiveness, it is observed that no environmental dimension has a significant moderating effect on the innovativeness and marketing effectiveness relationship. Therefore, hypotheses 9b, 9c and 9d are rejected.

Table 44 summarizes these findings.

Table 44. Hierarchical Regression Analysis on Individual Environmental Dimensions, Innovativeness and Marketing Effectiveness

| | Model 1 | | | Model 2 | | | Model 3 | | |
|--|---------|------|---------|---------|------|---------|---------|------|---------|
| Variables Entered | B | SE B | β | B | SE B | β | B | SE B | β |
| Innovativeness | .623 | .095 | .612 | .596 | .107 | .586 | .581 | .108 | .570 |
| Dynamism | .596 | .107 | .586 | -.795 | .098 | -.072 | -.063 | .100 | -.061 |
| Munificence | | | | .172 | .088 | .196 | .152 | .101 | .173 |
| Complexity | | | | .143 | .100 | .134 | .157 | .102 | .147 |
| Innovativeness-Dynamism Interaction | | | | | | | .136 | .164 | .079 |
| Innovativeness-Munificence Interaction | | | | | | | .248 | .211 | .115 |
| Innovativeness-Complexity Interaction | | | | | | | -.056 | .163 | -.040 |
| Adjusted Rsquare | .366 | | | | | | .394 | | |
| Δ in Rsquare | | | | .058 | | | .020 | | |
| Δ F | | | | 2.336* | | | .806 | | |
| * p< .10 | | | | | | | | | |
| **p<.05 | | | | | | | | | |

Environmental Dimensions Moderating Innovativeness – Firm Performance

Relationship

When environmental dimensions as a whole are analyzed for their moderating effect, R square of the model changes from .147 in model 1 to .194 in model 3, and F change is insignificant (Table 45) . Also, when β coefficient for the interaction terms is reviewed, it can be seen that the moderation of environmental dimensions on the innovativeness and firm performance relationship is insignificant, rejecting hypothesis 10a.

Table 45. Hierarchical Regression Analysis on Environment, Innovativeness and Firm Performance

| | Model 1 | | | Model 2 | | | Model 3 | | |
|--|---------|------|---------|---------|------|---------|---------|------|---------|
| Variables Entered | B | SE B | β | B | SE B | β | B | SE B | β |
| Innovativeness | .702 | .190 | .399 | .573 | .191 | .326 | .574 | .192 | .326 |
| Environmental Dimensions | | | | .734 | .295 | .270 | .749 | .302 | .275 |
| Innovativeness – Env. Dim. Interaction | | | | | | | .145 | .554 | .028 |
| Adjusted Rsquare | .147 | | | | | | .170 | | |
| Δ in Rsquare | | | | .067 | | | .001 | | |
| Δ F | | | | 6.185** | | | .069 | | |
| * p< .10 | | | | | | | | | |
| **p<.05 | | | | | | | | | |

When individual dimensions of environmental dimensions are analyzed for their moderating effect, R square of the model changes from .147 in model 1 to .170 in model 3, and F change is insignificant . Also, when β coefficients for the interaction terms are reviewed, it can be seen that the moderation effect of each of the three dimensions of environmental dimensions is insignificant, rejecting hypotheses 10b, 10c and 10d.

Therefore, the following can be concluded: Environmental dynamism does not moderate the innovativeness and firm performance relationship. Environmental munificence does not moderate the innovativeness and firm performance relationship. Environmental complexity does not moderate the innovativeness and firm performance relationship. Table 46 depicts these findings.

Table 46. Hierarchical Regression Analysis on Individual Environmental Dimensions, Innovativeness and Firm Performance

| | Model 1 | | | Model 2 | | | Model 3 | | |
|--|---------|------|---------|---------|------|---------|---------|------|---------|
| Variables Entered | B | SE B | β | B | SE B | β | B | SE B | β |
| Innovativeness | .702 | .190 | .399 | .539 | .215 | .307 | .539 | .219 | .306 |
| Dynamism | | | | .318 | .198 | .178 | .271 | .203 | .152 |
| Munificence | | | | .241 | .177 | .159 | .341 | .205 | .225 |
| Complexity | | | | .177 | .202 | .096 | .166 | .206 | .09 |
| Innovativeness-Dynamism Interaction | | | | | | | -.017 | .427 | -.004 |
| Innovativeness-Munificence Interaction | | | | | | | .293 | .329 | .12 |
| Innovativeness-Complexity Interaction | | | | | | | -.231 | .333 | -.078 |
| Adjusted Rsquare | .147 | | | | | | .170 | | |
| Δ in Rsquare | | | | .070 | | | .021 | | |
| Δ F | | | | 2.092* | | | .608 | | |
| * p< .10 | | | | | | | | | |
| **p<.05 | | | | | | | | | |

Environmental Dimensions Moderating Marketing Effectiveness and Firm Performance Relationship

When environmental dimensions as a whole are analyzed for their moderating effect on the marketing effectiveness and firm performance relationship, R square of the model changes from .122 in model 1 to .157 in model 3, F change is insignificant. Also, when β coefficient for the interaction terms is reviewed, it can be seen that the moderation of environmental dimensions on the marketing effectiveness and firm performance relationship is insignificant, rejecting hypothesis 11a. Table 47 presents these findings.

Table 47. Hierarchical Regression Analysis on Environment, Marketing Effectiveness and Firm Performance

| | Model 1 | | | Model 2 | | | Model 3 | | |
|----------------------------|---------|------|---------|---------|------|---------|---------|------|---------|
| Variables Entered | B | SE B | β | B | SE B | β | B | SE B | β |
| ME | .633 | .190 | .366 | .483 | .194 | .279 | .484 | .195 | .280 |
| Environmental Dimensions | | | | .728 | .306 | .267 | .709 | .309 | .260 |
| ME – Env. Dim. Interaction | | | | | | | -.278 | .444 | -.067 |
| Adjusted Rsquare | .122* | | | | | | .157 | | |
| Δ in Rsquare | | | | .064 | | | .004 | | |
| Δ F | | | | 5.666** | | | .393 | | |
| * p< .10 | | | | | | | | | |
| ** p<.05 | | | | | | | | | |

When individual dimensions of environmental dimensions are analyzed for their moderating effect, R square of the model changes from .122 in model 1 to .157 in model 3, and F change is insignificant . When β coefficients for the interaction terms are reviewed, it can be seen that the only moderation effect that is significant is that of environmental munificence. The coefficient of this interaction term is negative. As a result of these findings, hypotheses 11b and 11d are rejected, but 11c is supported. Therefore, the following can be concluded: Environmental dynamism does not moderate the marketing effectiveness and firm performance relationship. Environmental complexity does not moderate the marketing effectiveness and firm performance relationship. Environmental munificence does, however, moderate the marketing effectiveness and firm performance relationship. Table 48 summarizes these findings.

Table 48. Hierarchical Regression Analysis on Individual Environmental Dimensions, Marketing Effectiveness and Firm Performance

| | Model 1 | | | Model 2 | | | Model 3 | | |
|------------------------------|---------|------|---------|---------|------|---------|---------|------|---------|
| Variables Entered | B | SE B | β | B | SE B | β | B | SE B | β |
| ME | .633 | .190 | .366 | .465 | .203 | .269 | .505 | .212 | .292 |
| Dynamism | | | | .407 | .195 | .228 | .410 | .202 | .230 |
| Munificence | | | | .242 | .181 | .160 | .238 | .193 | .157 |
| Complexity | | | | .047 | .196 | .025 | .008 | .201 | .004** |
| ME - Dynamism Interaction | | | | | | | .057 | .385 | .017 |
| ME - Munificence Interaction | | | | | | | -.008 | .266 | -.004** |
| ME - Complexity Interaction | | | | | | | -.389 | .299 | -.144 |
| Adjusted Rsquare | .122 | | | | | | .157 | | |
| Δ in Rsquare | | | | .084 | | | .020 | | |
| Δ F | | | | 2.480* | | | .572 | | |
| * p< .10 | | | | | | | | | |
| **p<.05 | | | | | | | | | |

Next chapter is the conclusion chapter of this dissertation report. It includes a recap of the research in addition to managerial and theoretical implications, as well as limitations and directions for further research.

CHAPTER VI: CONCLUSION

This chapter reviews the research of dissertation, discusses its findings and theoretical contributions. lists limitations and directions for future research, and state implications for managers and marketers.

DISCUSSION

This section includes the discussion of research findings starting with main construct relationships following the order presented in this dissertation.

Cultural Orientations and Innovativeness

As hypothesized in our model, innovativeness of a firm is positively influenced by its market orientation. This finding suggests that the more a firm is market-oriented, the higher its tendency towards innovativeness will be. This is consistent with prior research (Han et al., 1998; Fritz, 1996), and also our expectations. This is an important finding because if managers desire their firms to become more innovative, they should strive to make their firm more market oriented.

Innovativeness is also positively influenced by each of the market orientation dimensions; customer orientation, competitor orientation, and inter-functional coordination. This finding is also consistent with the

literature (Fritz, 1996). If firms want to become innovative, they have to focus on all of the three dimensions of market orientation.

Likewise, innovativeness in a firm is positively influenced by the learning orientation culture of a firm. This finding is logical, not only because it is consistent with the literature (Huber, 1991; Crossan et al., 1999), but also because, to come up with new ideas and innovations, firms need to emphasize learning. Of the learning orientation dimensions, open-mindedness and commitment to learning have a positive direct impact on innovativeness. Shared vision, however, does not have a significant impact. This finding may not be unreasonable although it is not consistent with prior research. The reasons for this finding may be related to the Turkish context or issues related to the sample size and selection. On the other hand, logically, a shared vision may not be necessary to increase the creativity and innovative capacity of a firm. Consequently, managers should direct their effort on learning if they aim to increase innovativeness, focusing mainly on being open-minded and committed to learning.

Results regarding the entrepreneurial orientation and innovativeness relationship show that an entrepreneurial orientation or its individual dimensions do not have a significant effect on innovativeness. Proactivity and risk-taking do not impact innovativeness. This finding suggests that firms which tend to take risks and act quickly are not necessarily innovative. This contradicts with our hypothesized model, but this finding also makes

sense. Innovativeness requires research, time, and creative thinking and proactiveness and risk-taking require quickness and spontaneity. Therefore, our data and research may be reflecting this logical discrepancy. In conclusion, according to the findings of this research, firms with an entrepreneurial orientation should also adopt a more market oriented or learning oriented approach if they want to improve their innovativeness.

Cultural Orientations, Innovativeness and Marketing Effectiveness

Our findings suggest that marketing effectiveness is positively influenced by innovativeness which is consistent with our hypothesized model. This is also true for the individual dimensions of marketing effectiveness, namely, operational efficiency and marketing system effectiveness. Firms need to focus on innovativeness if they would like to improve the effectiveness of their marketing operations and marketing system. New programs and projects may help with the efficiency of the marketing operations or improvement of the marketing approach and system altogether.

Also, findings of this research suggest that innovativeness positively mediates the relationship between market orientation and marketing effectiveness and its dimensions. In addition, innovativeness positively mediates the relationship between learning orientation and marketing

effectiveness and its dimensions. Since innovativeness is not impacted by entrepreneurial orientation as discussed in earlier part of this chapter, it does not mediate the relationship between entrepreneurial orientation and marketing effectiveness.

In addition to the hypothesized relationships, our findings show that there exists a direct positive relationship between learning orientation and marketing effectiveness. This is an interesting finding. This finding suggests that in addition to an indirect influence through innovativeness, learning orientation directly and positively impacts marketing effectiveness. We can conclude having a learning orientation improves marketing effectiveness. Managers who would like to improve marketing effectiveness of their firm should focus on learning as well as innovativeness. This finding also means that a firm that is learning oriented does not need to be innovative in order to improve its marketing effectiveness.

Faced with such an interesting finding, further analysis was conducted to see what happens to the mediation effect of innovativeness when the observed variable is firm performance instead of marketing effectiveness. As a result of this analysis, it is found that entrepreneurial orientation and market orientation have a significant, positive impact on firm performance whereas the direct impact of learning orientation is nonsignificant. Also, the influence of innovativeness on firm performance was nonsignificant in this analysis meaning it was overshadowed by the

influence of entrepreneurial orientation and market orientation on firm performance. These results suggest that entrepreneurial orientation and market orientation have direct effects on firm performance. Literature generally views innovativeness as the link between cultural orientations and firm performance, especially market orientation (Slater and Narver, 1994b; Deshpande, Farley, and Webster, 1993). Since market orientation can be said to “essentially involve doing something new in response to market conditions” as Jaworski and Kohli (1993) argue, our finding on the direct relationship between market orientation and firm performance is reasonable. Interestingly, however, it was found that there was no significant relationship between entrepreneurial orientation and innovativeness. This suggests that entrepreneurial orientation impacts firm performance only in a direct manner. We can conclude that having an entrepreneurial orientation improves the performance of a firm.

Firm Performance

Our findings suggest that firm performance is positively influenced by marketing effectiveness. In addition, firm performance is positively influenced by innovativeness (Jaworski and Kohli, 1993). This is consistent with the literature and our conceptual model. Operational efficiency dimension of marketing effectiveness also positively influences firm

performance according to our findings. This is logical since operational efficiency of marketing functions of a firm would improve its performance. Marketing system effectiveness dimension, however, does not seem to have a significant impact on firm performance. This contradicts our expectations. This could be due to the fact that having a structured marketing approach or a systemized approach to marketing is a relatively new concept in Turkey. Some respondent firms added this comment in the additional comments section of the questionnaire. Having a well-organized marketing plan and strategy falls under this dimension, and many firms still lack that in Turkey. We can conclude that even if a firm does not have a structured system or plan for its marketing activities, finding ways to make its marketing operations more efficient will improve its performance.

Environmental Dimensions

Findings of this study suggest that environmental dimensions moderate the entrepreneurial orientation and innovativeness relationship. Also, environmental munificence has a significant positive moderating effect on this relationship whereas the moderating effects of dynamism and complexity are insignificant. These results, combined with results regarding the main relationship between entrepreneurial orientation and innovativeness, reveal that even though a significant impact of entrepreneurial orientation was not present on innovativeness, this

insignificance may be due environmental dimensions as a whole or environmental munificence. This finding suggests that the relationship between entrepreneurial orientation may become significant for some levels of environmental dimensions as a whole or environmental munificence. Managers should be aware that as environmental conditions in general or growth opportunities change, the relationship between the entrepreneurial orientation of a firm and its innovativeness is impacted. Since the moderation effect is positive, it can be concluded that the more munificent an environment becomes, the stronger the relationship between entrepreneurial orientation and innovativeness will be. Munificence of the environment is related to the growth opportunities, increased investment opportunities, etc. in a firm's environment. Therefore, if such conditions increase in frequency or strength, having an entrepreneurial orientation will be more important and necessary to become innovative.

In addition, results of this study suggest that environmental dimensions moderate the market orientation - innovativeness relationship. This effect has a negative direction. This means that when environmental conditions get tougher, the market orientation - innovation link becomes stronger. In other words, being market oriented more strongly impacts a firm's ability to innovate when the environmental conditions are undesirable. This finding is reasonable. When the environmental conditions worsen, firms will not have enough resources for innovative activities.

Under such conditions, a market-oriented firm will be resourceful since it already has its customer and competitor information and inter-functional coordination set-up. Being market oriented in essence means being alert to the needs and conditions of the market at all times. In other words, a market orientation can be viewed as having the capacity to innovate as discussed earlier. This capacity becomes more and more important when innovative capacity from other resources weakens due to bad environmental conditions. Environmental munificence has a similar negative moderation effect on the market orientation - innovativeness relationship. This finding is also consistent with our current discussion. As munificence in a firm's environment increases, the impact level of market orientation on innovativeness decreases (β is negative). This finding is logical since if growth opportunities and capital expenditures increase in the environment of a firm, more resources for innovativeness become present, potentially weakening a firm's need to be market-oriented in order to become more innovative. Therefore, more munificent environments weaken the need to be market-oriented for innovativeness. Decision-makers should consider these issues when they are strategizing.

On the other hand, learning orientation – innovativeness relationship is not moderated by environmental dimensions. This could be because innovativeness would be equally influenced by learning orientation regardless of a firm's environment. This finding may make sense since open-

mindedness, commitment to learning and a learning orientation in general is necessary for new programs, projects and ideas. Whatever environment the firm is in, learning orientation would be necessary for creativity, new ideas, and innovativeness in general.

Finally, findings of this study suggest that environmental munificence moderates the marketing effectiveness – firm performance relationship. This is a negative moderation, meaning for higher levels of munificence, marketing effectiveness impact on firm performance is reduced. This result is reasonable since, as the munificence of the environment increases, changes in firm performance can be accounted for by the effectiveness of internal marketing activities by a smaller extent. An increased level of munificence means more resources, more opportunities for investment, a desirable environment for business. If performance of a firm increases in such an environment, it will have less to do with the effectiveness of its marketing operations and activities, than it would have if the environment was deteriorating in terms of resources. Since resources would become depleted in nonmunificent environment, effectiveness of operations and systems would be very important for saving money and cost-cutting.

According to our findings, other environmental dimensions do not moderate the marketing effectiveness – firm performance relationship.

In addition, it is an interesting observation that the only environmental dimension with significant impact on the main relationships of our model is munificence. The remaining dimensions, dynamism and complexity, do not have a significant moderation effect on our constructs according to our analyses.

All of the findings from relational hypotheses of this research are summarized in Table 47. Negative coefficients are denoted with a minus sign next to the hypothesis. Table 47 shows that fifteen of the twenty-one hypotheses developed on main relationships are accepted. Only five of the twenty-four hypothesized moderating relationships were accepted. In the following two sections of this chapter, some of the limitations of this research are discussed and directions for future research are suggested.

Table 49. Summary of Findings on Relational Hypotheses

| | Fail to Reject/Reject |
|--|-----------------------|
| Main Effects | |
| Hypothesis 1a: There exists a positive relationship between entrepreneurial orientation and innovativeness. | Reject |
| Hypothesis 1b: There exists a positive relationship between proactivity and innovativeness. | Reject |
| Hypothesis 1c: There exists a positive relationship between risk-taking and innovativeness. | Reject |
| Hypothesis 2a: There exists a positive relationship between market orientation and innovativeness. | Fail to Reject |
| Hypothesis 2b: There exists a positive relationship between customer orientation and innovativeness. | Fail to Reject |
| Hypothesis 2c: There exists a positive relationship between competitor orientation and innovativeness. | Fail to Reject |
| Hypothesis 2d: There exists a positive relationship between interfunctional coordination and innovativeness. | Fail to Reject |
| Hypothesis 3a: There exists a positive relationship between learning orientation and innovativeness. | Fail to Reject |
| Hypothesis 3b: There exists a positive relationship between commitment to learning | Fail to Reject |

and innovativeness.

Hypothesis 3c: There exists a positive relationship between shared vision and innovativeness. Reject

Hypothesis 3d: There exists a positive relationship between open mindedness and innovativeness. Fail to Reject

Hypothesis 4a: There exists a positive relationship between innovativeness and marketing effectiveness. Fail to Reject

Hypothesis 4b: There exists a positive relationship between innovativeness and operational efficiency. Fail to Reject

Hypothesis 4c: There exists a positive relationship between innovativeness and marketing system effectiveness. Fail to Reject

Hypothesis 4d: There exists a positive relationship between innovativeness and firm performance. Fail to Reject

Hypothesis 4e: There exists a positive relationship between marketing effectiveness and firm performance. Fail to Reject

Hypothesis 4f: There exists a positive relationship between operational efficiency and firm performance. Fail to Reject

Hypothesis 4g: There exists a positive relationship between marketing system effectiveness and firm performance. Reject

Hypothesis 5a: Innovativeness mediates the relationship between entrepreneurial orientation and marketing effectiveness. Reject

| | |
|---|--------------------|
| Hypothesis 5b: Innovativeness mediates the relationship between market orientation and marketing effectiveness. | Fail to Reject |
| Hypothesis 5c: Innovativeness mediates the relationship between learning orientation and marketing effectiveness. | Fail to Reject |
| Moderating Effects | |
| Hypothesis 6a: Environmental dimensions moderate the entrepreneurial orientation – innovativeness relationship. | Fail to Reject |
| Hypothesis 6b: Environmental dynamism moderates the entrepreneurial orientation – innovativeness relationship. | Reject |
| Hypothesis 6c: Environmental munificence moderates the entrepreneurial orientation – innovativeness relationship. | Fail to Reject |
| Hypothesis 6d: Environmental complexity moderates the entrepreneurial orientation – innovativeness relationship. | Reject |
| Hypothesis 7a: Environmental dimensions moderate the market orientation – innovativeness relationship. | Fail to Reject |
| Hypothesis 7b: Environmental dynamism moderates the market orientation – innovativeness relationship. | Reject |
| Hypothesis 7c: Environmental munificence moderates the market orientation – innovativeness relationship. | Fail to Reject (-) |
| Hypothesis 7d: Environmental complexity moderates the market orientation – innovativeness relationship. | Reject |

| | |
|---|--------|
| Hypothesis 8a: Environmental dimensions moderate the learning orientation – innovativeness relationship. | Reject |
| Hypothesis 8b: Environmental dynamism moderates the learning orientation – innovativeness relationship. | Reject |
| Hypothesis 8c: Environmental munificence moderates the learning orientation – innovativeness relationship. | Reject |
| Hypothesis 8d: Environmental complexity moderates the learning orientation – innovativeness relationship. | Reject |
| Hypothesis 9a: Environmental dimensions moderate the innovativeness – marketing effectiveness relationship. | Reject |
| Hypothesis 9b: Environmental dynamism moderates the innovativeness – marketing effectiveness relationship. | Reject |
| Hypothesis 9c: Environmental munificence moderates the innovativeness – marketing effectiveness relationship. | Reject |
| Hypothesis 9d: Environmental complexity moderates the innovativeness – marketing effectiveness relationship. | Reject |
| Hypothesis 10a: Environmental dimensions moderate the innovativeness – firm performance relationship. | Reject |
| Hypothesis 10b: Environmental dynamism moderates the innovativeness – firm performance relationship. | Reject |

| | |
|--|--------------------|
| Hypothesis 10c: Environmental munificence moderates the innovativeness – firm performance relationship. | Reject |
| Hypothesis 10d: Environmental complexity moderates the innovativeness – firm performance relationship. | Reject |
| Hypothesis 11a: Environmental dimensions moderate the marketing effectiveness – firm performance relationship. | Reject |
| Hypothesis 11b: Environmental dynamism moderates the marketing effectiveness – firm performance relationship. | Reject |
| Hypothesis 11c: Environmental munificence moderates the marketing effectiveness – firm performance relationship. | Fail to Reject (-) |
| Hypothesis 11d: Environmental complexity moderates the marketing effectiveness – firm performance relationship. | Reject |

Limitations of the Study

There are a few limitations of this study besides its contributions. Cultural orientations studied in this model are theoretically conceptualized in well-developed countries. Therefore, their applicability to the Turkish context may be questionable. In Turkey, firms have a less established sense of “cultural orientation” to which they adhere, and even when they do, this adherence is more in principle than in application.

Sample size at the firm level can also be considered a limitation to this study. Even though the statistical criteria are met in terms of sample size at the individual respondent level, at the firm level, for the multiple regression analysis method used, the 15-20 observations for each independent variable entering the model criterion (Hair, Anderson, Tatham and Black, 1998) was not met for all of the regressions that were run. Findings that were regarded as “unexpected” in the discussion section may be a result of this limitation.

Sampling procedure used in this study is of a judgmental, purposive nature. Since this is multi-industry sample, industry-specific influences are assumed to be at limited levels. Firms included in the sample are listed in Appendix B. Even though this method of sampling is a valid and acceptable means of sampling for this type of research, absence of a probability sampling procedure could be considered a limitation.

Another limitation may be the cross-sectional nature of this study. A longitudinal study would bring out time-dependent, lagged effects for the constructs studied in this model and would result in a more powerful and comprehensive explanation of the relationships among the constructs.

This study views environmental dimensions as reflective rather than formative since there is not a consensus in the literature as to whether environmental dimensions scale is formative or reflective. This may be potential limitation since scale purification and validation analyses were performed on this measure as well resulting in the elimination of some items from this measure.

Also, this study relies on perceptions of the respondents about the behavior of their respective firms. Perceptions are never exact. Especially, in terms of firm performance data, perceptions may be misleading. However, due to confidentiality concerns, firms are not willing to provide actual firm performance data.

Future Directions for Research

One of the most important contributions of this study is its findings on the moderating effects of environmental dimensions. This study bases its model on dynamism, munificence and complexity as environmental dimensions. There are other conceptualizations of environmental dimensions in the literature and future research may be directed towards these different dimensions and their moderating effects.

Another venue for future research can be a longitudinal look at the constructs of this model and their relationships. The cross-sectional nature of this study has been listed as a limitation in the previous section and future research may look into potential lagged effects and time-dimensional relationships.

This research may also be developed further as a cross-cultural study comparing two or more different countries/economies. This would be an interesting comparison since environmental dimensions are an important part of this research. Sectoral or cross-industrial comparison of the model relationships could be performed, as well. This would help strengthen the generalizability of the study findings.

Further research may also be directed towards studying more objective measures of key constructs that are used in this study such as actual firm performance indicators. In addition, in this age of information, the

moderating impact of technology on each of the main relationships would be another area for research. Also, technological orientation may be added to the model as a cultural orientation and its direct and indirect effects on firm performance could be studied.

Conclusion

This research analyzed the impact of entrepreneurial orientation, market orientation and learning orientation on firm performance through innovativeness and marketing effectiveness, accounting for the moderation effect of the environment of the firm. Data was collected from 296 respondents in 74 firms operating in Turkey.

Findings suggest that significant relationships are present between market orientation and innovativeness, learning orientation and innovativeness, and learning orientation and marketing effectiveness. Also, the innovativeness and firm performance relationship and marketing effectiveness and firm performance relationship are significant.

Environmental dimensions and their moderating effect were also analyzed. It is found that environmental dimensions, namely, dynamism, munificence, and complexity moderate some of the main relationships included in this study. This finding is a significant contribution of this study to the field of marketing.

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APPENDICES

Appendix A Firms in the Sample

FIRMS IN THE SAMPLE

| | Name | Industry | Number of Surveys |
|-----|-----------------------------|----------------------------|-------------------|
| 1. | KOZMETIKA | Kozmetik | 3 |
| 2. | Marmara Kagit | Ambalaj | 6 |
| 3. | Anil Turizm | Turizm | 2 |
| 4. | AVEA İletisim Hizmetleri | Telekomunikasyon | 11 |
| 5. | Bahadır Kuyumculuk | Mücevherat | 3 |
| 6. | Seval Tekstil | Tekstil | 3 |
| 7. | Armega Ltd. | Aydinlatma Elektrik | 3 |
| 8. | Lutfi Kirdar | Turizm | 4 |
| 9. | Rebul Kozmetik San | Kozmetik | 3 |
| 10. | Formul Ltd. | Kozmetik | 3 |
| 11. | Karis Kozmetik | Kozmetik | 3 |
| 12. | Transay | Ulasim | 5 |
| 13. | Cagdas Acilim | Kapi penc. aks. | 3 |
| 14. | Erdem Kiramer | Kuaför | 7 |
| 15. | Borsa Lokantaları | Gida | 1 |
| 16. | Meridian Turizm | Turizm | 3 |
| 17. | Altinyildiz | Tekstil | 10 |
| 18. | Beymen | Magazacilik | 10 |
| 19. | Dundas Unlu Menkul Degerler | Finans/Yatirim Bankaciligi | 3 |
| 20. | Benetton | Tekstil | 7 |
| 21. | Ekinciler Yatirim Menk.Deg. | Finans | 3 |
| 22. | TEB Portfoy Yonetimi | Finans | 3 |
| 23. | ABH | Bilisim | 5 |
| 24. | Bilge Adam | Bilisim | 3 |

| | | | |
|-----|--------------------------------|----------------------------|----|
| 25. | BTS Saęlık | Saęlık Bilisimi | 5 |
| 26. | BT Akademi | Yazılım Eđitim Danismanlık | 2 |
| 27. | Bilimer | Eđitim | 3 |
| 28. | i-con | Bilisim | 2 |
| 29. | Netron Teknolođi | Bilisim | 3 |
| 30. | Vogel Yayıncılık | Basın | 3 |
| 31. | Eczacıbaşı | Kozmetik | 2 |
| 32. | johnson Wax | Home Care | 1 |
| 33. | Unal Kardes Elektrik | Elektrik | 3 |
| 34. | Tribal Satis | Satis Pazarlama | 3 |
| 35. | Roma Plastik | Plastik | 7 |
| 36. | Ernst Young Kurumsal Finansman | Danismanlık | 3 |
| 37. | Pal Plastik | Ambalaj | 3 |
| 38. | Oracle | Bilisim | 5 |
| 39. | Gurmak Amortisör | Otomotiv yan sanayi | 3 |
| 40. | Kampus Reklam | Reklam | 2 |
| 41. | Boyrner | Magazacılık | 10 |
| 42. | Argos İletisim | Saęlık İletisimi | 3 |
| 43. | Bayer Health Care | İlac | 10 |
| 44. | Alice BBDO | Reklam | 5 |
| 45. | Manajans | Reklam | 3 |
| 46. | Unilever | FMCG | 1 |
| 47. | Uđur Dersaneleri | Eđitim | 7 |
| 48. | Anadolu Efes Pilsen | İcecek | 9 |
| 49. | Directcom | Pazarlama Danismanlığı | 4 |
| 50. | Coca Cola Pazarlama | İcecek | 5 |

| | | | |
|-----|------------------------------|---------------------------|-----|
| 51. | EFG Menkul Degerler | Finans | 1 |
| 52. | JP Morgan Chase | Finans | 3 |
| 53. | Eczacibasi Baxter | İlac | 11 |
| 54. | Unimar Uluslararası Nakliyat | Nakliye | 2 |
| 55. | Oge Pipsan A.S | Plastik | 2 |
| 56. | Bravo Organizasyon | Hizmet Sektoru | 3 |
| 57. | Ceva Lojistik | Lojistik | 3 |
| 58. | DM Limited | Hurda ve Oyuncak Tic. | 2 |
| 59. | Finansbank A.S | Finans | 4 |
| 60. | Frances Dis Tic. | Stand ve Display Design | 3 |
| 61. | Garanti Bankasi | Finans | 10 |
| 62. | Goktas Yassi Madde Mamulleri | Dikili Celik Boru Uretimi | 6 |
| 63. | HSBC Portföy Yönetimi | Finans | 1 |
| 64. | Limak | Insaat | 1 |
| 65. | Megaplex | Sinema | 3 |
| 66. | Nazar Tekstil | Tekstil | 3 |
| 67. | Omya Madencilik | Mineral Uretimi | 3 |
| 68. | Ozkoseoglu Isisan ve Tic. | Ekmek ve Pasta makinalari | 2 |
| 69. | Pamuk Factoring | Finans | 1 |
| 70. | Peppers&Rogers Groups | Yonetim Danismanligi | 3 |
| 71. | Seba Insaat AS | Insaat | 3 |
| 72. | Sutas A.S | Gida | 8 |
| 73. | Yapi Kredi | Bankacilik | 1 |
| 74. | Yesil Kundura | Magazacilik | 4 |
| | Total | | 296 |

Appendix B Cover Letter, Survey in Turkish, and Survey in English

Önemli Bilgi:

Anketi herbir firmadan doldurması gereken kişi sayısı, firma çalışan sayısına göre, aşağıdaki gibi değişiyor:

Çalışan sayısı 30-50 kişi arasında ise 3 kişi,
Çalışan sayısı 50-100 kişi arasında ise 5 kişi,
Çalışan sayısı 100-500 kişi arasında ise 7 kişi,
Çalışan sayısı 500 kişiden fazla ise 10 kişi doldurmalı.

Eğer söz konusu olan bir şirketler grubu ise gruptaki herbir firma ayrı olarak ele alınıyor. Örneğin XYZ Holding veya şirketler grubunun altında XYZ Tekstil, XYZ Gıda ve XYZ Yapı adında 3 şirket mevcut ise ve çalışan sayıları sırasıyla 35, 63, ve 350 ise; anketi tekstil şirketinden 3 kişi, gıda şirketinden 5 kişi ve yapı şirketinden 7 kişi doldurmalı. Herbir firmadan anketi dolduracak kişilerin farklı fonksiyon/kademelerde çalışıyor olması araştırma açısından çok çok önemli. Mesela, XYZ Gıda firmasından anketi dolduracak 5 kişi; Genel Müdür, Finans Müdürü, Pazarlama Direktörü, Satış Elemanı, Muhasebe Çalışanı şeklinde olabilir. Tabii ki bu yalnızca bir örnek.

Şimdiden değerli vaktiniz için çok teşekkürler!

Mısra Çağla Gül
Proje Sorumlusu



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Bu anket formu, Boğaziçi Üniversitesi İktisadi ve İdari Bilimler Fakültesi'nde yürütülen doktora tezi araştırması ile ilgilidir. Anketi yanıtlamak şüphesiz çok kıymetli vaktinizi alacaktır. Ancak, bu çalışma üniversite ile iş hayatı arasındaki ilişkileri güçlendirecek ve elde edilen genel bulgular anketimizi cevaplayan firmalara, istenildiği takdirde, bildirilecektir. Gönderilecek cevaplarda firmanız ile ilgili bilgiler kesinlikle gizli tutulacak olup elde edilecek sonuçlar firma adı belirtilmeksizin genel ve ortalama şeklinde bildirilecektir. İlginiz için teşekkürlerimizi sunar, işlerinizde başarılar dileriz. Saygılarımızla,

Proje Sorumlusu: Mısra Çağla GÜL
Cengiz YILMAZ

Proje Danışmanı: Doç. Dr.

Lütfen aşağıdaki cümlelere ne ölçüde katıldığınızı seçtiğiniz kutuya çarpı (x) koymak suretiyle belirtiniz:

| Çevresel/Sektörel Faktörler | Kesinlikle Katılmıyorum | Katılmıyorum | Kararsızım | Katılıyorum | Kesinlikle Katılıyorum |
|---|-------------------------|--------------|------------|-------------|------------------------|
| Şirketimizde pazarlama uygulamaları pazar ve rakip firmaların aksiyonlarına göre <u>nadiren</u> değiştirilir. | | | | | |
| Servislerimizin/ürünlerimizin modasının geçme hızı oldukça yüksektir. | | | | | |
| Rakiplerimizin aksiyonları kolaylıkla öngörülebilir. | | | | | |
| Talep ve tüketici tercihleri kolaylıkla tahmin edilebilir. | | | | | |
| Üretim teknolojimiz az değişkenlik gösterir. | | | | | |
| Faaliyet gösterdiğimiz ana sektördeki ürünlere/servislere olan talep artmaktadır ve artmaya devam edecektir. | | | | | |
| Faaliyet gösterdiğimiz ana sektördeki firmalar için yatırım ve pazarlama fırsatları şu anda oldukça iyidir. | | | | | |
| Sektörümüzdeki şirketler için ürünlerini/pazarlarını genişletme imkanı son derece kısıtlıdır. | | | | | |
| Sektörümüzde büyümek ve genişlemek için gereken kaynaklara ulaşmak kolaydır. | | | | | |
| Sektörümüzde satışlar büyümektedir ve büyümeye devam etme olasılığı yüksektir. | | | | | |

| | | | | | |
|---|--------------------------------|---------------------|-------------------|--------------------|-------------------------------|
| Sektörümüzdeki sermaye harcamaları büyümektedir ve büyümeye devam edecektir. | | | | | |
| Rekabet ettiğimiz çok sayıda şirket var. | | | | | |
| Çok sayıda müşteri ile alakadar oluyoruz. | | | | | |
| Müşterilerimiz beklenti ve gereksinim açısından oldukça cesitlidir. | | | | | |
| Malzeme, parçalar ve hizmetler için çok sayıda tedarikçi ile çalışıyoruz. | | | | | |
| Tedarikçilerimiz ürün ve servis bakımından birbirine benzemektedir. | | | | | |
| <u>YENİLİKÇİLİK</u> | Kesinlikle Katılmıyorum | Katılmıyorum | Kararsızım | Katılıyorum | Kesinlikle Katılıyorum |
| Şirketimizde araştırma sonuçları neticesinde yapılan teknik yenilikler kolaylıkla kabul edilir. | | | | | |
| Şirket yönetimi aktif olarak yenilikçi fikirler arayışındadır. | | | | | |
| Şirketimizde, program/proje yönetiminde yenilikler kolaylıkla kabul edilir. | | | | | |
| Şirketimizde iyi işlemeyen fikirler için fikir sahipleri cezalandırılır. | | | | | |
| Şirketimizde yenilikler çok riskli olarak görülür ve zor kabul edilir. | | | | | |
| <u>PAZAR ODAKLILIK</u> | Kesinlikle Katılmıyorum | Katılmıyorum | Kararsızım | Katılıyorum | Kesinlikle Katılıyorum |
| Şirketimizde satış elemanları rakiplerimizle ilgili bilgileri paylaşırlar. | | | | | |
| İş hedeflerimizin temelini müşteri tatmini oluşturur. | | | | | |
| Rakiplerimizin aksiyonlarına hızla cevap veririz. | | | | | |
| Müşteri ihtiyaçlarına cevap vermeye olan bağlılık derecemizi yakinen takip ederiz ve sıkça değerlendiririz. | | | | | |
| Şirketimizin değişik fonksiyonlarındaki üst düzey yöneticilerimiz müşterilerimizi düzenli olarak ziyaret ederler. | | | | | |
| Müşterilerimizle ilgili bilgiler şirketimiz içerisinde serbestçe paylaşılır. | | | | | |
| Rekabet avantajımızın temelini müşteri ihtiyaçlarını anlayabilmemiz oluşturur. | | | | | |

| | | | | | |
|--|--|--|--|--|--|
| Şirketimizin değişik fonksiyonları hedef kitlenin ihtiyaçlarına hizmet için entegre (bütünleşik) bir biçimde çalışırlar. | | | | | |
| İş stratejilerimiz müşteriye sağlanan değeri artırma amacıyla güdümlenir. | | | | | |
| Müşteri memnuniyetini sıklıkla ölçeriz. | | | | | |
| Satış sonrası servise özellikle önem veririz. | | | | | |
| Üst yönetim rakiplerimizin güçlü ve zayıf yanlarını düzenli olarak tartışır. | | | | | |
| Yöneticilerimiz çalışanların müşteri değerine olan katkısının farkındadır. | | | | | |
| Şirketimizde, rekabet avantajı sağlıyorsa hedef müşteri kitleleri belirlenir. | | | | | |
| Şirketimiz içinde fonksiyonlar arası kaynak paylaşımı yapılır. | | | | | |

| ÖĞRENME ODAKLILIK | Kesinlikle Katılmıyorum | Katılmıyorum | Kararsızım | Katılıyorum | Kesinlikle Katılıyorum |
|---|--------------------------------|---------------------|-------------------|--------------------|-------------------------------|
| Yöneticilerimiz şirketimizin öğrenme yeteneğinin rekabet avantajımızın temelini oluşturduğu konusunda hemfikirdirler. | | | | | |
| Bu şirketin temel değerleri arasında öğrenme, gelişimin ana unsuru olarak bulunmaktadır. | | | | | |
| Burada, çalışanın eğitilmesi ve öğrenmesi masraftan ziyade yatırım olarak görülür. | | | | | |
| Organizasyonumuzda öğrenme, ayakta kalmayı garantilemek için en önemli ihtiyaçlardan biri olarak görülür. | | | | | |
| Şirket kültürümüz çalışan öğrenmesini önemli öncelik yapan bir kültür değildir. | | | | | |
| Şirketimizdeki genel inanış öğrenmeyi bıraktığımızda geleceğimizi tehlikeye attığımız yönündedir. | | | | | |
| Kim olduğumuz ve şirket olarak nereye gittiğimiz iyi ifade edilmiş ve belirlenmiş bir kavramdır. | | | | | |
| Şirket vizyonumuz konusunda bütün kademeler ve fonksiyonlar arasında bir uzlaşma mevcuttur. | | | | | |
| Bütün çalışanlar şirketin hedeflerine bağlılık gösterirler. | | | | | |
| Çalışanlar kendilerini şirketin rotasını | | | | | |

| | | | | | |
|---|--|--|--|--|--|
| etkilemede aktif katılımcılar olarak görürler. | | | | | |
| Üst yönetim şirket vizyonunun daha alt kademelerle paylaşılması gerektiği inancındadır. | | | | | |
| Şirketimizin bütünü için iyi tanımlanmış bir vizyonumuz yoktur. | | | | | |
| Şirketimizde iş yapış şeklimiz konusundaki ortak varsayımları eleştirmekten korkmayız. | | | | | |
| Yöneticilerimiz onların bakış açılarının sorgulanmasını istemezler. | | | | | |
| Şirketimiz açık fikirliliğe çok değer verir. | | | | | |
| Yöneticiler yaratıcı ve sıradışı düşünmeyi teşvik ederler. | | | | | |
| Sürekli yeniliğe ağırlık vermek şirket kültürümüzün bir parçası değildir. | | | | | |
| Bu şirkette değişik ve orjinal fikirlere çok değer verilir. | | | | | |

ŞİRKET PERFORMANS GÖSTERGELERİ

Lütfen size yakın gelen rakama denk gelen boşluğa çarpı (x) koyunuz:

Şirketimizde geçtiğimiz 3 yılda rakiplerimize kıyasla aşağıda belirtilen değişkenlerde:

| | Önemli oranda gerileme olmuştur. | | | Önemli oranda ilerleme olmuştur. | | | |
|--|---|----------|----------|---|----------|----------|----------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Pazar payında | | | | | | | |
| Satışlarımızın büyüme hızında | | | | | | | |
| Yatırımların geri dönüş oranlarında | | | | | | | |
| Yeni ürün/servis satışlarının tüm satışlara oranında | | | | | | | |
| Genel performansta | | | | | | | |

Lütfen aşağıdaki cümlelere ne ölçüde katıldığınızı seçtiğiniz kutuya çarpı (x) koymak suretiyle belirtiniz:

| <u>PAZARLAMA SİSTEMİ</u> | Kesinlikle Katılmıyorum | Katılmıyorum | Kararsızım | Katılıyorum | Kesinlikle Katılıyorum |
|---|--------------------------------|---------------------|-------------------|--------------------|-------------------------------|
| Şirketin tepesindeki pazarlama anlayışı alt kademelere iletilir ve şirket içerisinde uygulanır. | | | | | |
| Şirket yönetimi ani pazar gelişmelerine çabuk ve etkili bir biçimde reaksiyon verir. | | | | | |
| Şirket yönetimi pazarlama süreçlerinin mükemmelliğine bağlılık gösterir. | | | | | |
| Şirket yönetimi pazarlama kaynaklarını etkili bir şekilde kullanmaktadır. | | | | | |

| | | | | | |
|---|--|--|--|--|--|
| Pazarlama direktörümüz diğer direktörlerle etkili bir biçimde çalışmaktadır. | | | | | |
| Şirket yönetimi sosyal sorumluluklarına önem verir. | | | | | |
| Şirketimiz, organizasyonu seçilen pazarların ihtiyaç ve isteklerine etkin bir biçimde cevap verecek şekilde yapılandırmanın öneminin farkındadır. | | | | | |
| Şirketimiz pazarın değişik segmentleri için farklı ürünler/servisler ve pazarlama planları oluşturur. | | | | | |
| Şirketimizde müşteri memnuniyeti yakın ve etkili bir şekilde takip edilir. | | | | | |
| Ürünler/servisler konusunda müşteriler arasındaki ağızdan ağıza iletişim desteklenir ve takip edilir. | | | | | |
| İş planları yapılırken kapsamlı bir pazarlama sistemi bakış açısı mevcuttur. | | | | | |
| Şirketimizde pazarlama harcamalarının etkinliğini ölçmek üzere çalışmalar yapılır. | | | | | |
| Şirketimizde düzenli olarak müşteriler, ürünler vb. ile ilgili pazar araştırmaları yapılır/yaptırılır. | | | | | |
| Şirketimizde üst yönetim farklı segmentlerin, müşterilerin vb. satış potansiyelini ve karlılığını bilmektedir. | | | | | |
| Şirketimizde yazılı bir pazarlama planı mevcuttur. | | | | | |
| Üst yönetim şirket stratejisinin tanımını yapar ve şirket içinde iletilmesini sağlar. | | | | | |
| Şirketimizde <u>uzun dönemli</u> büyümeye odaklanılır. | | | | | |
| Şirketimizin çok gelişmiş bir pazarlama stratejisi mevcuttur. | | | | | |

GİRİŞİMCİLİK

Aşağıdaki birbirine paralel cümlelerden hangisine daha yakın hissediyorsanız ona yakın olan boşluğa çarpı (x) koyunuz:

Rakip firmalar ile başetme konusunda,

| | | | | | | |
|--|--|--|--|--|--|---|
| Şirketimiz genellikle rakip firmaların öncülük ettiği aksiyonlara tepki gösterir. | | | | | | Şirketimiz aksiyonlara öncülük eder ve rakip firmalar tepki gösterir. |
| Şirketimiz <u>nadiren</u> yeni ürün ve servis, idari teknikler, işletme teknolojileri, vb. konularında öncülük eder. | | | | | | Şirketimiz <u>sıklıkla</u> yeni ürün ve servis, idari teknikler, işletme teknolojileri, vb. konularında öncülük eder. |
| Şirketimiz genellikle rekabet çatışmalarından kaçınır ve “yaşa ve yaşat” yaklaşımını benimser. | | | | | | Şirketimiz genellikle çok rekabetçidir ve “rakipleri önle” yaklaşımını benimser. |

Genellikle, şirketimizin üst yönetimi

| | | | | | | |
|--|--|--|--|--|--|--|
| Az riskli (geri dönüş oranı normal ve belli olan) projelere eğilim gösterir. | | | | | | Yüksek riskli (çok yüksek geri dönüş oranı ihtimali olan) projelere eğilim gösterir. |
|--|--|--|--|--|--|--|

Belirsiz durumlarda karar verme gerektiğinde şirketimiz,

| | | | | | | |
|---|--|--|--|--|--|--|
| Sonuçları pahalıya malolan kararlar verme olasılığını en aza indirmek amacıyla genellikle tedbirli “bekle ve gör” yaklaşımını benimser. | | | | | | Potansiyel fırsatlardan yararlanma olasılığını en yükseğe çıkarmak amacıyla genellikle cesur ve agresif bir yaklaşım benimser. |
|---|--|--|--|--|--|--|

DEMOGRAFİK BİLGİLER

| | | | | | |
|---|--------------------------|-----------------------------|---------------------|---------------------------|------------------------------|
| Firmanızın İsmi: | | | | | |
| Firmanızın Sektörü (İşkolu): | | | | | |
| Çalışan Sayısı: | | | | | |
| İşletmenin Yaşı: | | | | | |
| Yaşınız: | | | | | |
| Ne zamandır bu firmada çalışıyorsunuz (ay olarak)? | | | | | |
| Hangi bölümde çalışıyorsunuz? | | | | | |
| Cinsiyetiniz: | KADIN | | ERKEK | | |
| | | | | | |
| Eğitim Durumunuz: | İlk veya Ortaokul | Lise | Yüksekokul | Lisans | Yüksek Lisans/Doktora |
| | | | | | |
| İşletmedeki Pozisyonunuz: | İşletme Sahibi | Orta Kademe Yönetici | Üst Yönetici | Diğer (belirtiniz) | |
| | | | | | |

Size yöneltilen sorular dışında belirtmek istediğiniz herhangi bir husus varsa lütfen ekleyiniz:

SURVEY IN ENGLISH

| Environmental Dimensions | Strongly Disagree | Disagree | Undecided | Agree | Strongly Agree |
|--|--------------------------|-----------------|------------------|--------------|-----------------------|
| *1. Our firm rarely changes marketing practices to keep up with the market and competitors. | | | | | |
| *2. The rate at which products/services become obsolete is very high. | | | | | |
| 3. Actions of competitors are easy to predict. | | | | | |
| 4. Demand and consumer tastes are easy to forecast. | | | | | |
| *5. Our production technology changes very little. | | | | | |
| 6. Demand for the products/services of your principal industry is growing and will continue to grow. | | | | | |
| *7. The investment or marketing opportunities for firms in your principal industry are very favorable at the present time. | | | | | |
| *8. The opportunities for firms in your industry to expand the scope of their products/markets are extremely limited. | | | | | |
| *9. Resources for growth and expansions are easily accessible in your industry. | | | | | |
| 10. Sales have been growing and are likely to grow in your industry. | | | | | |
| *11. Capital expenditures in your industry are growing and will continue to grow. | | | | | |
| *12. We have a large number of competitors. | | | | | |
| 13. There is a variety in competition including some from other industries in the form of substitute products. | | | | | |
| 14. We deal with a large number of customers. | | | | | |
| 15. Our customers are quite diverse in their needs/requirements. | | | | | |
| *16. We have a large number of suppliers of material, parts, or equipment. | | | | | |
| 17. Our suppliers are quite similar to one another in their products and services. | | | | | |
| | | | | | |

| Innovativeness | Strongly Disagree | Disagree | Undecided | Agree | Strongly Agree |
|---|--------------------------|-----------------|------------------|--------------|-----------------------|
| 1. Technical innovation based on research results is readily accepted. | | | | | |
| 2. Management actively seeks innovative ideas. | | | | | |
| 3. Innovation is readily accepted in program/project management. | | | | | |
| *4. People are penalized for ideas that don't work. | | | | | |
| 5. Innovation in company is perceived as too risky and is resisted. | | | | | |
| MARKET ORIENTATION | Strongly Disagree | Disagree | Undecided | Agree | Strongly Agree |
| 1. In our organization, our salespeople share information about competitors. | | | | | |
| 2. Our business objectives are driven by customer satisfaction. | | | | | |
| 3. We respond rapidly to competitive actions. | | | | | |
| 4. We closely monitor and assess our level of commitment in serving customers' needs. | | | | | |
| 5. Our top managers from each business function regularly visits customers. | | | | | |
| *6. Information about customers is freely communicated throughout our organization. | | | | | |
| 7. Our competitive advantage is based on understanding customers' needs. | | | | | |
| 8. Business functions within are integrated to serve the target market needs | | | | | |
| 9. Business strategies are driven by the goal of increasing customer value | | | | | |
| 10. We frequently measure customer satisfaction | | | | | |
| 11. We pay close attention to after-sale service | | | | | |
| 12. Top management regularly discuss | | | | | |

| | | | | | |
|---|--|--|--|--|--|
| competitors' strengths and weaknesses | | | | | |
| *13. Our managers understand how employees contribute to value of customers | | | | | |
| *14. Customers are targeted when we have an opportunity for competitive advantage | | | | | |
| 15. We share resources with other business units | | | | | |

| Learning Orientation | Strongly Disagree | Disagree | Undecided | Agree | Strongly Agree |
|--|--------------------------|-----------------|------------------|--------------|-----------------------|
| 1. Managers basically agree that our business unit's ability to learn is the key to our competitive advantage. | | | | | |
| 2. The basic values of this business unit include learning as key to improvement. | | | | | |
| 3. The sense around here is that employee learning is an investment, not an expense. | | | | | |
| 4. Learning in my organization is seen as a key commodity necessary to guarantee organizational survival. | | | | | |
| *5. Our culture is one that does not make employee learning a top priority. | | | | | |
| 6. The collective wisdom in this enterprise is that once we quit learning, we endanger our future. | | | | | |
| 7. There is a well-expressed concept of who we are and where we are going as a business unit. | | | | | |
| 8. There is a total agreement on our business unit vision across all levels, functions, and divisions. | | | | | |
| 9. All employees are committed to the goals of this business unit. | | | | | |
| 10. Employees view themselves as partners in changing the direction of the business unit. | | | | | |
| 11. Top leadership believes in sharing its vision for the business unit with the lower levels. | | | | | |
| *12. We do not have a well-defined vision for the entire business unit. | | | | | |
| *13. We are not afraid to reflect critically on the shared assumptions we have about the way we do business. | | | | | |

| | | | | | | |
|--|--|--|--|--|--|--|
| 14. Managers in this business unit do not want their “view of the world” to be questioned. | | | | | | |
| 15. Our business unit places a high value on open-mindedness. | | | | | | |
| 16. Managers encourage employees to “think outside of the box”. | | | | | | |
| 17. An emphasis on constant innovation is not a part of our corporate culture. | | | | | | |
| 18. Original ideas are highly valued in this organization. | | | | | | |

FIRM PERFORMANCE INDICATORS

Please mark your selection

| | Significantly Decreased | | | Significantly Increased | | | |
|--|--------------------------------|----------|----------|--------------------------------|----------|----------|----------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. For your business unit’s principal served market segment over the past 3 years, change in market share relative to your largest competitor: | | | | | | | |
| 2. Your business unit’s sales growth relative to major competitors over the past 3 years | | | | | | | |
| 3. Your business unit’s ROI relative to major competitors over the past 3 years | | | | | | | |
| 4. Percentage of sales generated by new products over the past 3 years relative to major competitors | | | | | | | |
| 5. Relative to competition, overall performance in your business unit over the past 3 years | | | | | | | |

| MARKETING EFFECTIVENESS | Strongly Disagree | Disagree | Undecided | Agree | Strongly Agree |
|--|--------------------------|-----------------|------------------|--------------|-----------------------|
| 1. Marketing thinking is at the top is communicated and implemented down the line. | | | | | |
| 2. Governing board shows good capacity to react quickly and effectively to on-the-spot developments. | | | | | |
| 3. Governing board is committed to marketing excellence. | | | | | |
| 4. Government board is doing an effective job with the marketing resources. | | | | | |
| 5. Marketing director is working well with other functional directors. | | | | | |
| *6. Government board's focus on the organization is to be a good community neighbor. | | | | | |
| 7. The company recognizes the importance of designing the organization to serve the needs and wants of chosen markets. | | | | | |
| *8. The company has different offerings and marketing plans for different segments of the market. | | | | | |
| 9. Customer satisfaction is monitored. | | | | | |
| *10. Word-of-mouth communication is stimulated and monitored. | | | | | |
| 11. There exists a whole marketing system view in planning business. | | | | | |
| 12. There exist efforts expended to measure cost-effectiveness of different marketing expenditures. | | | | | |
| 13. Regular marketing research of customers, buying influences, etc is conducted. | | | | | |
| *14. Governing board knows the sales potential and profitability of different market segments, customers, etc. | | | | | |
| 15. Formal market planning exists. | | | | | |
| *16. Governing board defines and communicates business objectives. | | | | | |
| *17. There is a focus on long-term growth. | | | | | |
| 18. A high quality marketing strategy exists. | | | | | |

| ENTREPRENEURIAL ORIENTATION | | | | | | |
|--|--|--|--|--|--|--|
| Please mark closer to the statement that you agree: | | | | | | |
| When dealing with competitors, | | | | | | |
| 1. Typically responds to actions which competitors initiate. | | | | | | Typically initiates actions to which competitors then respond. |
| 2. Is very seldom the first business to introduce new products and services, administrative techniques, operating technologies, etc. | | | | | | Is very often the first business to introduce new products and services, administrative techniques, operating technologies, etc. |
| 3. Typically seeks to avoid competitive clashes, preferring a "live-and-let-live" posture. | | | | | | Typically adopts a very competitive, undo-the-competitors posture. |
| In general, the top managers of my business unit have | | | | | | |
| 4. A strong proclivity for low risk projects (with normal and certain rates of return). | | | | | | A strong proclivity for high risk projects (with chances of very high return). |
| When confronted with decision making situations involving uncertainty, my business unit | | | | | | |
| 5. Typically adopts a cautious "wait and see" posture in order to minimize the probability of making costly decisions. | | | | | | Typically adopts a bold, aggressive posture in order to maximize the probability of exploiting potential opportunities. |

| DEMOGRAPHICS | | | | | |
|---|------------------------------|--------------------------|-------------------------|-------------------------------|----------------------------|
| Company Name: | | | | | |
| Industry : | | | | | |
| Number of Employees: | | | | | |
| How long has your firm been in the | | | | | |
| Your Age: | | | | | |
| How long have you been working here (in months)? | | | | | |
| Your Department | | | | | |
| Gender | Female | | | Male | |
| | | | | | |
| Education: | Primary/Middle School | Highschool | 2-year College | College | Graduate Degree/Phd |
| | | | | | |
| Position: | Owner/Partner | Middle Management | Upper Management | Other (Please specify) | |
| | | | | | |

Additional comments:

* Items removed from the analysis after scale purification and validation analyses.