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STRATEGIC ORIENTATION AND BUSINESS PERFORMANCE
RELATIONSHIP WITH FOCUS ON
BUSINESS AND FUNCTIONAL LEVEL STRATEGY FIT:
AN EMPIRICAL STUDY ON TURKISH ENTERPRISES

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ALI HAYDAR ARK

DANIŞMAN: DOÇ. DR. FATMA GÜLRUH GÜRBÜZ

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Marmara Üniversitesi
Sosyal Bilimler Enstitüsü Müdürlüğü

Tez Onay Belgesi

İŞLETME Anabilim Dalı YÖNETİM VE ORGANİZASYON(İNG)   Bilim Dalı Doktora öğrencisi ALİ HAYDAR   ARK   nın STRATEGIC ORIENTATION AND BUSINESS PERFORMANCE RELATIONSHIP WITH FOCUS ON BUSINESS AND FUNCTIONAL LEVEL STRATEGY FIT:AN EMPIRICAL STUDY ON TURKISH ENTERPRISES adlı tez çalışması ,Enstitümüz Yönetim Kurulunun 07.07.2008 tarih ve 2008-11/26 sayılı kararıyla oluşturulan jüri tarafından oybirliği/oyçokluğu ile Doktora Tezi olarak kabul edilmiştir.

	Öğretim Üyesi Adı Soyadı	İmzası
Tez Savunma Tarihi :	04/09/2008	
1) Tez Danışmanı :	DOÇ. DR. FATMA GÜLRUH GÜRBÜZ	
2) Jüri Üyesi :	PROF. DR. ŞULE IŞINSU ÖZMEN	
3) Jüri Üyesi :	PROF. DR. YONCA (KARAPAZAR) ASLANBAY	
4) Jüri Üyesi :	DOÇ.DR.FATMA ASLI KÜÇÜKASLAN	
5) Jüri Üyesi :	PROF.DR.SEDEFHAN OĞUZ	
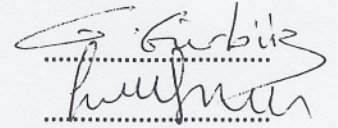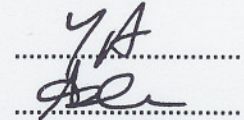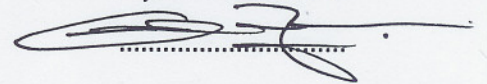
ACKNOWLEDGEMENTS

ÖZET

Bu çalışma, sistem teorisi ve bağlılık teorisi perspektiflerinde işletmelerin stratejik oryantasyonları ve bu oryantosyanların iş performansları ile ilişkisinin ve bu ilişkinin pazarlama stratejileri ile nasıl mediasyona tabi olduğunun Türk işletmeleri üzerinde araştırmasını kapsamaktadır.

İşletmeler ve ortamları artan bir şekilde kompleksti, dinamizm, belirsizlik, rekabet yoğunluğu ve pazar türbülansları ile şekillenmektedir. Değişim kaotik seviyelerde oluşmakta, değişen ortamlardaki yeni gözlemlerin mevcut teorilere nazaran teyit edilmesi veya reddi ve yeni ilişkilerin bulunması yönündeki gerekli araştırmaların büyük oranda eksik olduğu izlenmektedir. Bu çalışma, stratejik yönetim temelinde iş birimi yönetimi seviyesinde, stratejik oryantasyon ve iş performansı ilişkisini üç ayrı entegre model geliştirerek triangulasyon yöntemi ile Türk işletmeleri üzerinde araştırarak ve önerilen değişkenlerin performanstaki değişimleri ne ölçüde izah ettiğini tespit ederek ve temel fonksiyonel stratejilerden biri olan pazarlama stratejilerinin (pazarlama davranışının) bu ilişkiyi ne denli etkilediğini hiyerarşik çoklu regresyon ve mediasyon analizleri kullanmak sureti ile ampirik olarak test ederek anılan boşluğun giderilmesine katkıda bulunmayı hedeflemiştir.

Bu çalışmanın sonuçları stratejik oryantasyonun, Miles ve Snow'un boyutsal tipolojileri, Miles ve Snow'un oryantasyon tipolojileri ve Venkatraman'ın STROBE boyutları modlarının tamamında olmak üzere, iş performansı ile arasındaki anlamlı ilişkinin varlığını ortaya çıkarmıştır. Bunun ötesinde bulgular, iş ve pazarlama stratejileri etkileşimi ile ilgili olarak eldeki bilgilere de büyük katkıda bulunmuştur. Bu araştırma neticesinde, iş stratejilerinin performans etkileşiminde, gizlenmiş etkileyici mekanizmanın mediatör olarak pazarlama stratejileri olduğunu ampirik olarak teyit etmek mümkün olmuştur.

Yöneticilere iş stratejilerinin fonksiyonel stratejiler aracılığı ile uygulanmasının oluşumları kadar önemli olduğunun farkında olmaları, Türk Hükümetine ise SPI Stratejik Planlama Enstitüsüne benzer stratejik araştırmalar için bir Enstitü kurulması ve bu yeni oluşumda PIMS pazarlama stratejilerinin karlılık üzerine etkisine benzer stratejik araştırmalar yapılması önerilmektedir.

ABSTRACT

This study is about strategic orientation of business enterprises and its relationship with business performance and how this relationship is mediated by marketing strategies on Turkish enterprises with a systems and contingency perspective.

Businesses and their environments are increasingly characterized by complexity, dynamism, uncertainty, competitive intensity, and market turbulence. The change has been chaotic and the amount of research required to corroborate/refute existing theories against new observations in different environments and to seek new relations appears to be missing at large. This study aimed to contribute in closing this gap by developing a set of three integrated models within the context of strategic management to investigate strategic orientation and business performance relationship at business unit level in Turkish environment with a triangulation methodology, and to determine if selected variables explain a significant proportion of variances in performance and to test empirically if this relationship is intervened by marketing strategies (marketing behavior) as one of the major functional strategies by using hierarchical multiple regression and mediation analyses.

The results of the study revealed that significant relationships exist between each mode of strategic orientation in Miles and Snow's typologies in dimensions, in Miles and Snow's typologies in orientations, in Venkatraman's STROBE dimensions and business performance. Mediation analysis has contributed at large in disclosing the latent effect of marketing strategies as mediator in implementing business strategies. Further more the results have added much to our knowledge of interaction between business and marketing strategies. It is now possible to confirm on empiric basis that marketing strategies is the generative mechanism of business strategies in its implementation on performance.

Managers are recommended to be aware that that the implementation of business strategies through functional strategies are just as important as their formation, and Turkish Government recommended to establish an institute for strategic research similar to SPI Strategic Planning Institute and to undertake strategic studies similar to PIMS profit impact of marketing strategies on continuous basis.

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I.   INTRODUCTION

This study is about strategic orientation of business enterprises (Miles and Snow, 1978; Venkatraman, 1985) and its relationship with business performance and how this relationship is intervened (Baron and Kelly, 1986) by marketing strategies (Kotler, 1984) on Turkish enterprises with a systems model of contingency-theory based perspective (Kast and Rosenzweig, 1985; Ginsberg, 1984). Marketing strategies will be representative of functional level strategies in this discourse. The foci of the study are on strategic orientation construct, and business and functional level strategy fit with effect on performance. The range and impact of the study together with the rationale for focusing on the constructs will follow in section 1.1. Purposes of the study have been discussed in multiple perspectives in section 1.2. Contributions have been delineated in the order of subjects where they belong in section 1.3. Organization of the study is briefed in section 1.4.

1.1.   SCOPE AND SIGNIFICANCE OF THE STUDY

Businesses and their environments are increasingly characterized by complexity, dynamism, uncertainty, competitive intensity, and market turbulence (Miller, 1988; D'Aveni, 1999). Companies are managed in chaotic and challenging environments (Pascale, 1999; Arias and Acebròn, 2001). The whole globe is turning into one market place and companies are not spared of its dynamic progress any more; the rest of the globe has become their challenge (Collis and Montgomery, 1995; Pearson, 1999). To deal with those challenges, organizational models and management approaches have been adopted such as hypertext organizations, chaordic organizations, the minding organizations, the learning organizations, cluster organizations to spell some. Across kaleidoscopic view of these phenomenon and paradigms, and changes of structure it has also become even more important to formulate compelling strategies to consolidate and integrate capabilities and resources and secure the enactment of these strategic choices across the Board Rooms at the marketplace in congruence (Herbert and Deresky, 1987; Venkatraman, 1989a) in order to meet the organizational goals (Slater *et al*, 2006) and performance targets. The importance and changing requirements of formulating strategies and their implementation at business and functional levels for

adapting to environment of uncertainty (Jauch and Kraft, 1986; Namiki, 1989), complexity and dynamism (Porter, 1991) have raised need for more research studies on strategic orientation of companies (Zahra and Pearce, 1990) and respective results of their performance. The change has been chaotic and the amount of research required to corroborate/refute existing theories against new observations in different environments (Arnold and Quelch, 1999; Douglas and Rhee, 1989) and to seek new relations appears to be missing at large. This study aims to contribute in filling this gap by developing an integrated model within the context of strategic management (Ginsberg, 1984) to investigate strategic orientation and business performance relationship at business unit level, in Turkish environment, and to determine if selected variables explain a significant proportion of variances in performance and to test empirically if this relationship is intervened by marketing strategies (marketing behavior) as one of the major functional strategies.

1.1.1. Strategic Orientation Defined

Strategic orientation both in military and social sciences has been at the heart of decision-making with respect to managing difficult situations in meeting challenges described in space and time in foregoing section. In recent years, the evolution of strategic management, housing strategic orientation within its domain, has been fostered by a confluence of perspectives from multiple disciplines in search of any such panacea. Contributions have come not only from researchers in business policy and strategy (Hofer and Schendel, 1978; Miles and Snow, 1978) but also from researchers in industrial organization and micro economics (Porter, 1980, 1981, 1985), from authors in organization theory and design (Kast and Rosenzweig, 1985), and from marketers (Anderson, 1982; Day and Wensley, 1983; Wind and Robertson, 1983). Strategic orientation being at the vertex of these interests has been defined as *"how an organization uses strategy to adapt and/or change aspects of its environment for a more favorable alignment"* (Manu and Srinam, 1996) and has been said to be synonymous with the term *competitive strategy* (Morgan and Strong, 1998). O'Regan and Ghobadian (2006) defines strategic orientation as "concerned with the direction and the thrust of the firm and is based on the perceptions, motivations and desires that precede and guide

the strategy formulation and deployment process" leading to an understanding expressed by Hambrick (1984) on how some firms perform better than the others despite a common operating environment and how the change in performance is based on variance in strategic orientation. Venkatraman (1985) has defined STROBE strategic orientation of business enterprises construct as 'the general pattern of various means employed (i.e. realized) to achieve the business goals, with a particular emphasis on the business-unit level of the organizational hierarchy'. It is also characterized as strategic fit, strategic predisposition, strategic thrust and strategic choice (Chaffee, 1985) while schemas based on environmental adaptation patterns are commonly referred to as strategic configurations (Ketchen *et al,* 1997). Ansoff (1987) recapitulated all by naming it "strategic behavior".

1.1.2. Business Performance Defined

Performance has become an important criterion of empirical research in field of strategic management. Its definition is aligned relative to the theoretical framework of the study and based on identification of appropriate measures that operationalize performance (Dess and Robinson, 1984). Contextually, performance is more of an ordinal or interval nature rather than an absolute measurement and can be very diverse or subjective, especially in multivariate analyses. Chakravarthy (1986) refers to performance as distinguishing well-adapted firms from mal-adapted ones whereas in High Performing Systems Model (Porter, 1991) firms are considered high performers if their business performance is superior to that of directly comparable businesses. Much often business performance is measured using a subjective approach 'judgmental measure' which consists of asking respondents for their assessment of performance on various measures (Kumar, *et al.,* 1998) and has found strong support (Dess and Robinson, 1984). In support, Venkatraman and Ramanujam (1986) have found a strong correlation between both approaches, while postmodern paradigms justify subjective approach with hermeneutics tradition and interpretation school revived (Arias and Acebròn, 2001.

To provide a definition by rule, performance is "the final outcome of a firm that results from a number of internal activities or the manner in which or the efficiency

with which something reacts or fulfills its intended purpose" as per The Random House Dictionary. The conventional approach has been based on assessment to emphasize profitability, mostly measured by ROI (return rate on investment). However many have found this approach to be misleading like Sink and Tuttle (1989) who viewed performance with seven criteria: effectiveness, efficiency, quality, productivity, quality of work life, innovation, and profitability depending on the context and viewed performance as a "function of complex interrelationships". Kaplan and Norton (1996) developed a shift to an understanding that business performance is a multidimensional in nature and developed "balanced scorecard" to include strategy based performance evaluation in addition to financial measurements.

1.1.3. Marketing Strategy Defined

Strategies in the companies are being developed at various layers and most strategic researchers have agreed that strategy concepts can be classified into three levels (Hofer and Schendel, 1978). These layers of strategy starting from corporate strategies to business strategies and to functional strategies form a strategy–making pyramid that Thompson and Strickland (2001) describes in detail and demonstrates how they fit together.

Corporate level strategy:

Corporate strategy is the overall managerial plan for a diversified company extending over several businesses in different industries. It responds to accepted inquiry of "what businesses shall we be in" (Chaffee, 1985). Corporate strategy is formulated at the highest managerial level and senior management staff is responsible for formulating and implementation (Thompson and Strickland (2001).

Business level strategy:

The term business strategy [or business-level strategy named by Hofer and Schendel (1978)] refers to the managerial decision-making activities for a single business, whether it is the only business of a company or one of the several businesses of a corporation. It responds to accepted inquiry of "how shall we compete in each

business" (Chaffee, 1985). It is developed by business managers to produce successful performance in one specific line of business. The major challenge of business strategy is how to build up the company's sustainable competitive position in the industry it is competing in.

Functional [level] strategy:

The basic premise of the strategy implementation research reveals that business strategies require *different configurations of operational practices* to achieve best possible outcome (Slater and Olson, 2000). These configurations (operational strategies) at functional level precede business unit strategies historically. They were in use when SBU strategies were introduced. Functional strategies (operational strategies) had to step back to make room for SBU strategies to initiate and govern the business decisions at a higher level. In this progressive role functional level strategy is formulated to maximize resource productivity within such functions as operations management, marketing management, human resource management, etc (Ginsberg and Venkatraman, 1985; Venkatraman, 1989a). The key strategic components of this strategy level are synergy and the development of distinctive competencies (competitive advantages) leading to common naming of strategic orientation as 'competitive strategy'. In order to win competition by creating and delivering values to customer appropriately, business units should rely on functional areas, especially of marketing. Hence, it is contended that the business strategy, as an intended strategy, may not be appropriately implemented without attaining effective supports from functional strategies.

Marketing strategy:

Marketing serves as the boundary function between the firm and its customer, channel, and competitor environment (Biggadike, 1981; Day, 1992), and by virtue of core concept of strategy, marketing strategy always involves competitors and Adcock (2000) has versed this well by stating "marketing strategy is about where, how and when to compete". Kotler (1980) has defined marketing strategy as *the fundamental marketing logic* and Kotler (1984) also continued definition stating that "a basic approach that the business unit will use to achieve its objectives, and broad decisions on

target markets, marketing positioning, and mix, and marketing expenditures level". Furthermore, Kotler (1980) defines marketing concept as a management (marketing) orientation, and defines marketing orientation as the degree to which (how well) an institution has implemented marketing process, while Langerak (2002) also states that market (marketing) orientation is the foundation of marketing strategy. Ordering these related concepts in marketing, marketing strategy is marketing orientation (a fundamental marketing logic) that the business unit's management will use to achieve its marketing objective, and in this study, marketing strategy will also be used to mean marketing behavior or marketing orientation as a broader concept for multiple uses.

1.2.   PURPOSE OF THE STUDY

This study is expected to contribute to business management in multiple issues which have been discussed from different perspectives as follows.

1.2.1. Purpose in Strategic Management Perspective

Business's management is about resource utility; the grand strategy, as Rubinstein (1999) calls it, is to increase the utility ratio positively. Field of strategic management, particularly the broader domains of strategic orientation and marketing, serves to maximize the utility to gain competitively superior fit (Venkatraman and Camillus, 1984; Venkatraman, 1989a; Venkatraman and Prescott, 1990) between the organization and its daunting environment (Mintzberg, 1990) to achieve its organizational goals. Thereby, the challenges of dynamism and change as discussed in foregoing section becomes the central theme of strategic management with strategies developed at strategic business unit [SBU[1]] level (strategic orientation) and reflected through their implementations at the functional level (functional strategies) in the companies (Hambrick, 1980). To contribute to the main inquiry as set above, the purpose of this research is to study how different configurations of strategic orientation affects business performance and if this relationship is intervened by marketing

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[1] SBU is an abbreviation for Strategic Business Unit

strategies (representing functional level group of strategies) and if it is affected by the dynamics of industry characteristics, as surveyed on Turkish enterprises at SBU level. And at the functional level of management, the purpose of the study is to investigate how marketing strategies become effective to implement the intents of SBU strategies (Varadarjan and Clark, 1994) and how congruence in types and qualities of functional strategies with its SBU strategies (Skinner, 1969; Gupta and Govindarajan, 1984) are of critical value for their proper exercise. While the focus in this study is set solely on marketing strategies, the model of the study recognizes that the basic relationship is between business strategies and various functional strategies, and marketing strategies have received preference because of its having taken the lead and having risen to the degree of importance of "The Customer".

Despite its critical importance, the research on contingent relationship between SBU strategies and functional strategies, especially the marketing strategies, within performance context appears to be unexpectedly missing. The purpose of this study is also to contribute to scientific efforts in developing theories to guide executive communities in their strategy works and to scientists in their further research in strategic orientation.

For the discussions in this study, "business" will also stand for organization wherever applicable (Pearson, 1999).

1.2.2. Purpose in Strategic Marketing Management Perspective

Marketing strategy has proved its importance in the successful implementation of strategic orientation as the interface between the company, the customer and the competitors, Ohmae's strategic triangle (Ohmae, 1982; Day, 1992). The customers require more and more customization, they are less and less loyal, what they perceive is what they value; the competition has become more complex and demanding. Business strategies developed to meet those requirements, the power of servicing those needs of customers rely heavily via the marketing strategies implemented (Slater, 2000; Zhu and Nakata, 2007). In developing business strategy, the perspective is that of company mission whereas in developing a marketing strategy the perspective is that of the

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customer's choices in wants and offerings. Hence the role of marketing strategy versus competition as a function of business strategy (Slater and Olson, 2001) has never been so important in business performance. This study will investigate the role of marketing strategies which generally remained as a latent variable in relationship of strategic orientation and performance.

1.2.3. Purpose in Turkish Industries' Perspective

Most of the studies concerned with the formulation and implementation of business-level strategies as precursors of performance have utilized samples of firms from the Western world and have mostly used secondary data (e.g. PIMS data base). A much needed way to further investigate how strategic orientation determines firm performance and thereby contribute to the management literature in a meaningful way would be to undertake a study that shall use sample from a non-Western nation, examine businesses which have not been adequately investigated so far and use primary data as opposed to archival data.

Where in today's global environment, resources are easily available for their customers, and technologies are easier to reach through consultants, it is more critical for companies to develop capabilities of management in organizations with knowledge built in their own yard, and that is especially more crucial for developing countries like Turkey. Within this context, management in developing countries are in need of "strategy" occupation *(strategic orientation)* in their businesses as much as and maybe even more than any other resource; strategy means doing the right things besides doing the things right, it is needed to set direction, to focus and to coordinate, to define the organization, to provide consistency (Mintzberg, 1987a).

To pursue both challenges in foregoing paragraphs, this study will be carried out in Turkish industries with the primary data collected across companies registered at TOBB, The Union of Chambers and Bourses of Turkey. The knowledge that will be produced is expected to contribute also to the so much needed development of capabilities of managing organizations strategically and competitively. It is further

expected to evoke strategic awareness in the Turkish companies and may lead to taking measures to improve formation and implementation of the strategies.

1.3. CONTRIBUTIONS OF THE STUDY

1.3.1. Strategic Orientation Studies

Approaches to strategic orientation construct have been one of the challenging issues in the literature. After delineating works of Weick (1979), Pitts and Hopkins (1982), Snow and Hambrick (1980), Ginsberg (1984) concludes to state that to compare and integrate different approaches to strategy, understanding different types of defined (input) and operationalized (output) concepts that they reflect is fundamental and classifies defined concepts along three dimensions: *coherence* (holist/disjunctive), *activeness* (static/dynamic) and *normality* (unique/common). Ginsberg (1984) links these dimensions to four different types of operationalized concepts: (1) *narrative*, which describes objects or terms in a textual or journalistic fashion; (2) *quantitative*, which employs symbols for functions that have numerical value; (3) *classificative*, which places objects or terms in a particular category or grouping; and (4) *comparative*, which specifies qualitative relations between concepts (e.g., more than, less than, or equal to). Venkatraman (1985) has reduced approaches to strategic orientation to three excluding quantitative approach. Out of this revised set of viewpoints, the narrative approach, which is anchored to qualitative methodologies frequently employing case study analyses, while having its applications in organizational research (Morgan and Strong, 1998), is limited in its use for theory testing and therefore appears to be in lesser use. The classificatory approach attempts to group strategy on either a priori conceptual grounds or derived categorizations, and comparative approach enables assessment of strategic orientation along dimensions of competitive strategy. While classificatory approach is widely used with uni-dimensional simple self-typing choice, and comparative approach is rarely used with multiple dimensions, extensive literature survey carried out for this study has not revealed any study where both approaches have been facilitated simultaneously on the same sample. There is still no convergence among strategy scholars on which of the two approaches is overriding; in response to

Ginsberg's (1984) call for comparison and integration of approaches in strategic orientation, this dissertation appears to be the first to present a model where comparative and classificatory approaches have been facilitated at the same time, in the same study, also on the same sample with primary data. This unique contribution of methodological triangulation (Dahlstrom *et al*, 2008) makes it possible to arrange a comparison of the results obtained from two different basic approaches (Hambrick, 1980) with three separate models of relationship, each with a different viewpoint of strategic orientation.

1.3.2. Miles and Snow's Typological Strategy Studies

Classificatory approach to strategic orientation has extensively been represented by Miles and Snow (1978) typologies and its framework is the most enduring strategy classification system, the other option being Porter (1980)'s competitive strategies. Most of the studies of strategic orientation have facilitated M&S typologies on self-assessment basis where the managers have identified their choice of strategies as they perceive (Snow and Hrebiniak, 1980, McDaniel and Kolari, 1987; Zajac and Shortell, 1989; McKee *et al,* 1989; Golden, 1992; James and Hatten, 1995; Slater and Olson, 2000; Matsuno and Mentzer, 2000; O'Regan and Ghobadian, 2006).

The author concurs with some of the scientists who have decided that the simplicity of this approach may reduce the reliability and precludes the use of advanced statistical techniques and chose to develop dimensional approach in facilitating Miles and Snow's approach in operationalizing strategic orientation construct (Ginsberg and Venkatraman, 1985; Segev, 1987; Smith *et al,* 1989; Conant *et al,* 1993; Morgan and Strong, 1998; Desarbo *et al,* 2004; Moore, 2005). Some of the dimensions developed serves to classify subjects on basis of typologies (prospectors, defenders, analyzers, reactors) whereas some have used Miles and Snow's defined concepts in operationalizing dimensions of strategic orientation construct (prospector orientation, defender orientation, analyzer orientation, reactor orientation). In this study, to overcome the empirical limitations of the classificatory method, strategic orientation is viewed not across pure strategy typologies only, but alternatively along parsimonious classificatory dimensions or conceptual criteria that typologies are based on. The

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research studies that have been examined during extensive literature review have all facilitated only one of the methods (classificatory or comparative) of operationalizing Miles and Snow[2] whereas in this investigation Miles and Snow's typological approach has been facilitated in dual methods and it appears to be the first study facilitating both methods in utilizing Miles and Snow typologies simultaneously on the same sample. Using both methods of Miles and Snow typological approach on the sample simultaneously provides means of comparison which is of considerable interest. Furthermore, the development of a new battery of dimensions designed by the author based on previous research, and the testing on Turkish sample on primary data with a multivariate analysis, and the development of typological orientations (prospector, defender, analyzer, reactor orientations) by the author, as one of the few studies, makes this study's contribution unique.

1.3.3. Marketing Strategy Studies

Kotler has been acknowledged as having a leading role in contributing to the broadening of academic inquiry in the field of marketing and especially in introducing strategy into marketing (Bourassa, *et al,* 2007; Kotler and Singh, 1981). Although marketing strategy (marketing orientation) is most commonly employed concept in explaining how marketing management functions, it lacks deserved empirical study (Biggadike, 1981; Slater and Olson, 2001) when compared e.g. with business strategy which has Miles and Snow (1978) and Porter (1981) strategy typologies. El-Ansary (2006) has similar findings: *the marketing literature is replete with normative and positive theoretical and empirical research-based papers and articles ... albeit ... marketing strategy did not rise to the status of a sub-discipline of marketing ... the concept of marketing strategy lacks clarity ...* Hence, the typology of marketing strategies has received little attention till now. The existing ones have been mostly borrowed from management as in the examples of Miles and Snow (1978), Porter (1980) or have been produced without enough replication as in the examples of Slater

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[2] See Table 2.2 'List of some of studied examples of Miles and Snow typology based research articles for comparing measures used' with more than 30 examples

and Olson (2000), Treacy and Wiersema (1993). Extensive literature review does not reveal any study neither in operationalization of Kotler's marketing strategies, nor in studies involving multivariate analysis of the same. The development of a new battery of dimensions of marketing strategies designed by the author based on Kotler's marketing strategies, and the testing on Turkish sample on primary data with a multivariate regression analysis makes this study's contribution unique.

1.3.4. The Role of Marketing Strategy in Strategic Management Studies

It is a common topic in management and strategy discourse that implementation of business strategies are operational only through functional strategies with respect to performance (Biggadike, 1981; Slater and Narver, 1996), however this proposition of fit as per contingency theory (Segev, 1987; Venkatraman, 1989) involving business strategy and marketing strategy with performance implications appears not to have been validated with empirical research before, according to the results of extensive literature carried out for this study. This dissertation contributes to strategic management by empirically studying the role of marketing strategy in strategic orientation-performance relationship through a mediated hierarchical regression analysis, representing the generative mechanism through which the focal independent variable is able to influence the dependent variable, validating the mediated effect (Baron and Kelly, 1986) of marketing strategies i.e. empirically identifying that the effect of the strategic orientation on performance, in fact, materializes through marketing strategy as the mediating variable and it appears to be the first study to do so.

1.4. OUTLINE OF THE STUDY

The next chapter will give a through and comprehensive review of extant literature on the issues of strategic orientation, namely strategy, historical tracing of strategy, hierarchy of strategy and concept of "fit", business and functional strategies with typologies and taxonomies thereto, and business performance with business environments of the research area in its first part. The extensiveness is a necessity to substantiate how important conclusions based on this study are integrated and positioned in literature context. Some notes on Turkish Industries, and relevant studies

having similar context, significance, and objectives in the literature, will shape the latter part of the chapter. In the third chapter, theoretical framework, operationalization of the variables and hypotheses of the study are elaborated and a conceptual model is depicted. Chapter IV will include the research design and methodology, and the findings shall be summarized in chapter V with an adapted research model. Chapter VI will house summary, discussion and conclusion with implications to follow. Closing Chapter VII will deliver caveats and recommendations; it will be followed with section listing bibliography so far reviewed for this study.

II. LITERATURE REVIEW

This chapter will review studies contributing to the wider understanding of strategic behavior of the enterprise particularly at the business and functional levels and to determining the numerous dimensions of strategy, starting with the concept of strategy building up to strategic orientation construct. Studies on business performance are included in the review to discuss its juxtaposition in the conceptual model of this study and research experience. PIMS Profit Impact of Marketing Strategy as a sample model has valuable contribution to the strategy literature with the studies of performance-based strategy auditing of business units mainly in U.S.; PIMS contains valuable experience that supports the present model in this study and deserves a review that follows. Next, with reference to its role in the model as controlling variables and their relevance to theory, business environment is shortly recapped with a section on overview of the Turkish environment in particular. Several similar studies in which their authors have researched on germane strategies at business unit and functional levels are discussed to complete the review.

2.1. STRATEGIC ORIENTATION

STRATEGY

The core of the strategic orientation is the strategy concept that has been viewed as a powerful predictor of other organizational phenomena, and a through understanding of its content across various contexts will help to resolve debates and conflicts on paradigms of strategic behavior (Ansoff, 1987) for the robust development of theoretical framework in this study. Following sections will define strategy, discuss perspectives and mental models of strategy, deliver temporal introduction and integration of concepts in strategy, present hierarchy of strategies and concept of "fit", and introduce taxonomies and typologies of strategies.

2.1.1. Origin and Definitions of Strategy

Strategy appears to be one of the disciplines to have demanded focus as early as in Chinese dynasties (Sun-Tzu) and the records reveal that the concepts of those

times have prevailed along centuries (Mintzberg *et al* 1998; Adcock, 2000). Strategy - Greek *strategia* [3] is originally derived from ancient Athenian (Greek) composed of *stratos* an army and *agein* to lead (to lead an army). Adcock (2000) passes on a definition from the first century AD by Frontinus, S.J., [4] who suggests that a strategy is 'everything achieved by a commander, be it characterized by foresight, advantage, enterprise, or resolution'. The qualities as lined in the past appear to be inspirations for today's orientation in strategy perspective. Strategy involves actions to be taken that will affect future operations based on expectations, foresight; advantage is directly related to favoring strength for winning in a competitive situation; enterprise refers to the capacity to take initiatives; and resolution is the determination to see things through.

Chandler (1962) defines strategy as the determination of the basic long term goals of an enterprise, and the adoption of courses of action and the allocation of resources necessary for carrying out these goals. This is an example where strategy includes the formation of goals. Daft (2000) in the course of management science defines strategy as *the plan of action that prescribes resource action and other activities for dealing with the environment and helping the organization attain its goals*. This contemporary description excludes goals as its domain and deals with operationalization of strategy being directed to achievement.

Johnson and Scholes (1993)'s definition covers pillars of strategy: "strategy is the *direction* and *scope* of an organization over the *long term*: which matches its *resources* to its *changing environment* and in particular its *markets, customers or clients* so as to meet *stakeholder* expectations".

2.1.2. Various Perspectives in Strategy

Mintzberg's (1987) elaboration of 5Ps has managed to crystallize various perspectives to strategy concept. Following is a summary of Mintzberg's 5Ps mnemonic in conformity with original definitions, discussed by the author of this study:

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[3] Thesaurus: MS Bookshelf-British Reference Collection-Encyclopedia

[4] Wikipedia encyclopedia on The Internet

- Strategy is a *Pattern,* that is, consistency in behavior over time as realized. Pattern is an important concept associated with the chaos theory as well, explaining an order in completely random data. Pattern disclosed in the past reveals plan for the future.

- Strategy is a *Plan*, a direction, a guide or course of action into the future, a path to get from here to there as intended. Intention is the key to future in this context and represents the usual demonstration of strategy.

- Strategy is a *Position*, namely the locating of particular products in particular markets as defined by Michael Porter (1980). He reiterated recently (Porter, 1996) that "strategy is the creation of a unique and valuable position, involving a set of activities".

- Strategy is a *Perspective*, that is, a theory of business, as described by Peter Drucker (1994), an organization's fundamental way of doing things.

- Strategy is a *Ploy*, that is, a specific maneuver intended to outwit an opponent or competitor. Here the real strategy is based on threat.

While these perspectives finely build the content of the construct of strategic behavior, Johnson and Scholes, (1993) have identified between the strategies on temporal basis at its design (business strategy) and implementation (at functional level), between the strategy as planned and the strategy in retrospect:

(a)   Planned-intended strategy,
(b)   Unrealized strategy,
(c)   Emergent strategy,
(d)   Opportunistic strategy,
(e)   Imposed strategy,
(f)   Realized strategy

In this study, the research's primary data provides an appropriate base to take on strategy as planned-intended providing strong impetus for managers to propound their strategic orientation. It also provides capacity to identify performance

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implications. Otherwise, the author shall refrain from following a certain school of thought in this study not to prejudice objectivity.

Chaffee (1985) postulates on the basis of her extensive literature review that at the root of differentiation or diversity in strategy definition and strategic orientation lays the presence of three distinguishable mental models rather than one being referred without awareness and provides a vantage point for further elaboration and gives following descriptions:

(I) One of the mental models widely facilitated is *"Liner Strategy"*, which is basic and allied to planning. This model is inherited in Chandler's (1962) definition of strategy and it consists of integrated decisions, actions, or plans that will set and achieve viable organizational goals. Terms associated with the liner model include strategic planning, strategy formulation, and strategy implementation. In liner strategy, leaders of the organization plan how they will best deal with competitors for achieving their organization's goals.

(II) *"Adaptive strategy"* is the mental model associated with congruence between the opportunities and threats identified in the external environment and the organization's capabilities and resources that will make difference to reach organizational objectives. The adaptive model differs from linear model in several ways as per Chaffee (1985):

   a. Monitoring the environment and making changes to fit on auto-response basis is the theme in the adaptive model.

   b. The adaptive model's orientation is more focused on manager's implementation whereas the liner model places more emphasis on decisions about objectives.

   c. The adaptive model's approach of strategic behavior is also different from that of the linear model to deal with not only major changes but also with fine details in its content.

   d. Advance planning receives relatively less attention in the adaptive model.

e. The environment, in the adaptive model, is similar to "a complex organizational life support system" consisting of trends, events, competitors, and stakeholders.

The model has originated from *evolutionary biological model of organizations*; the organizations and its parts change, proactively or reactively, in order to be aligned with consumer preferences. This model is well illustrated with the theoretical framework provided in Miles and Snow (1978) for the process of adaptation of the organization to maintain an effective alignment with its environment.

(III) The third model named "interpretive strategy" is based on a *social contract, rather than an organismic or biological view of the organization that fits well with the adaptive system*; the organization appears to be like a union of cooperative agreements based on individual choice. The organization's existence is directly related to its ability to contain as many elements as possible. This model of strategy further assumes that *reality is socially constructed* and that *organizational representatives convey meanings that are intended to motivate stakeholders in ways that favor the organization*.

2.1.3. Historical Tracing of Strategy since Modern Times

Further to definitions and perspectives of strategy in thematic review in preceding sections, the quasi-historical approach on progress made along time line will demonstrate the importance of and the way holistic approach central to strategic orientation has taken its seat, how the strategic fit concept, as forcefully emphasized in Miles and Snow strategy model, has developed with internal means and external ways aligned, how structure and strategy support each other, how dimensions have been distinguished, how positioning and differentiating strategies as particularly underlined in Kotler's typologies are basic to strategy, how planning is essential in delineating the means and ends in all strategy models.

Origins of modern strategy according to Mintzberg *et al.* (1998) may be traced back to Philip Selznick's *Leadership in Administration* of 1957 and *Strategy and Structure* of 1962 by Alfred D. Chandler who has introduced the notion of distinctive

competence, internal state, and external expectations. The following review shall be based on contributions made by the representative scholars of their time to be demonstrative and there is no intention to be exhaustive. The pioneers of modern strategy in management have established that strategy represents a fundamental fit between external opportunity and internal capability. One of the paradigms of their time was the general systems theory, the basic concepts of which were introduced by the biologist Ludwig von Bertalanffy (1972) and introduced to social sciences by Talcon Parsons and Vilfredo Pareto (Kast and Rosenzweig, 1985). The other one was Gestalt theory in psychology, which also adopted systems theory (Kest and Rosenzweig, 1985). Strategy, with its modeling to include all elements available, to integrate them for a common goal and placing the system of a business or its function(s) in the context of the environment has flourished in the holistic scope of the systems theory. Pioneering work, according to Montgomery and Porter (1991), took place at the Harvard Business School in the early 1960s, led by Kenneth R. Andrews and C. Roland Christensen. At a time when management thinking was oriented towards individual functions such as marketing, production, and finance, Andrews and Christensen identified a pressing need for a holistic way of thinking about an enterprise (Montgomery and Porter, 1991). They articulated the concept of strategy as a tool for doing so. Andrews and Christensen saw strategy as the unifying idea that linked together the functional areas in a company and related its activities to its external environment (Snow and Hambrick, 1980). The General Systems Theory, the Gestalt Theory together with chaotic order theories have set the paradigm of the age where holistic approach rather than analytic approach has prevailed and affected the management theory to take a holistic view where strategy has been recognized as the central theme to performance. This study on strategic orientation is an investigation exercising along this current paradigm.

Edith Penrose just before Chandler had turned attention to internal affairs inside the firm to explain the company performance (Lynch, 2003) and in 1962 Chandler has published his seminal work which summarized an understanding of American businesses in retrospect as *structure follows strategy* and *the most complex type of structure is the result of the concentration of several basic strategies*. He defined strategy 'as the determination of the basic long-term goals and objectives of an

enterprise, and the adoption of courses of action and the allocation of resources necessary for carrying out these goals' and structure as 'the design of organization through which the enterprise is administered'.

Proceeding into 1965, Igor Ansoff, in its most influential book *Corporate Strategy*, has emphasized the virtues of *strategic planning* model which has made *the strategy* capstone of management planning. SWOT modeling of today and all of its elaborations were then the core of strategic planning. *Plan* has basically contributed to strategic thought's focusing in predicting and preparing in terms of internal capabilities and external opportunities in the industry environment. The contributions of other pioneers continued to build up.

Chandler, Andrews and Ansoff had all appealed to academics. It was Boston Consulting Group who was first to appeal to the industry. The Boston Consulting Group's growth-share matrix modeled by Bruce Henderson (Henderson, 1972) in strategic management of business portfolios in 1970s is accepted as being the first appeal to the industry for solving problems based on theory built up till then. Bruce Henderson, the founder of BCG, is well known for arguing that no two firms can coexist if they make their livings in identical ways. He frames the problem of strategy as *a continued struggle to distinguish a company from its rivals* (Montgomery and Porter 1991).

Another contribution has come from Sidney Schoeffeler's PIMS: *Profit Impact of Market Strategy* that encouraged him to state "all business situations are basically alike in obeying the same laws of the marketplace … a trained strategist can usefully function in any business" (Mintzberg *et al.* 1998). Other concepts of experience curves, learning curves, competitive dynamics, together with developments in industrial economics prepared the way to maturity in strategic look in management.

Several prominent initiatives to derive more generalized typologies of business-level strategy through empirical research follow. Two seminal classification of typologies have emerged from these efforts: Miles and Snow (1978)'s adaptive typology and Porter's (1980, 1985) competitive typology. In abstracting firm's behavior

Miles and Snow's primary variable in constructing types is its intended rate of product-market change. They classify business units into four strategic types: (1) prospectors, (2) defenders, (3) analyzers and (4) reactors. And in 1980, Michael Porter has published his *Competitive Strategy* which has brought into management a modern insight of Sun Tzu's positioning in war[5]. Positioning has been a break through as it represented accounts of results obtained through SWOT and abridged many elements of planning to a stage in targeting. Porter in fact introduced a representation of a new analytical approach and received a prominent standing in the strategic world with his model that distinguishes three types of strategy based on how a business attempts to gain and maintain a competitive advantage: (1) overall cost leadership, (2) differentiation based on building customer perceptions of superior product (3) a focus strategy whereby the business concentrates on a narrowly defined market niche and uses either a cost leadership or differentiation approach. Mintzberg *et al.* (1998) is careful to pay tribute to many other scholars like Dan Schendel and Ken Hatten at Purdue University Krannert Business School who have contributed to this achievement.

Value disciplines of 1993, introduced by management consultants of Michael Treacy and Fred Wiersema (1993), has contributed to customer oriented strategy formulation especially for practices in marketing. They have asserted that continuous improvement of value to the customer is critical and market leadership may only be attained by delivering maximization in value at lower cost through focusing on either of so named value disciplines: *customer intimacy*, *product leadership*, and *operational excellence*. This claim has its merits although there are debates as to its conflicts internally and its claim to exclusivity.

2.1.4. Various Levels of Strategy and Concept of "Fit"

Strategies in the business enterprises are being developed at various layers and differ in their orientations. These layers of strategy starting from corporate strategies to business strategies and to functional strategies (operational strategies) form a strategy–

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[5] The Art of War by Sun Tzu 5th century B.C. claimed to be the oldest military treatise

making pyramid that Thompson and Strickland (2001) describes similar to that of Johnson and Scholes (1993) and Stoner *et al* (1995) demonstrates how they fit together as summarized below.

Corporate level strategy:

Corporate strategy is the overall managerial plan for a diversified company extending over several businesses in different industries. It responds to accepted inquiry of "what businesses shall we be in" (Chaffee, 1985). Crafting a corporate strategy would require initiatives of directing and establishing different businesses around a vision, to benefit from the combined effort, to capture cross-business strategic fit and position them into competitive superiority.

Corporate strategy is formulated at the highest managerial level and senior management staff is responsible for its implementation. To identify the overall corporate strategy of a diversified company, issues relating to narrow or broad scope of diversification, extent of the operations being multinational or domestic, growth strategies of acquisition, merger, internal start-up, or alliances, moves of divestment or investment must be dealt with (Thompson and Strickland, 2001).

Business level strategy:

The term business strategy [or business-level strategy (Hofer and Schendel (1978)] refers to the managerial decision-making activities for a single business, whether it is the only business of a company or one of the several businesses of a corporation. It responds to accepted inquiry of "how shall we compete in each business" (Chaffee, 1985). It is developed by business managers to produce successful performance in one specific line of business. The major challenge of business strategy is how to build up the company's sustainable competitive position in the industry it is competing in and therefore sometimes called *competitive strategy* (Porter, 1985). To accomplish this key objective, business managers are primarily concerned with forming responses to changes in the environment, designing sustainable competitive advantage with a market perspective through distinctive competencies and capabilities, integrating the strategic initiatives of functional departments (Thompson and Strickland, 2001).

Functional level (operational) strategy:

Functional level strategies precede business unit strategies historically. They were in use when SBU strategies were introduced. Functional strategies had to step back to make room for SBU strategies to initiate and govern the business decisions at a higher level (Ginsberg, 1985; Venkatraman, 1989a). At the functional level, strategy is focused on the question "how can this function ensure success of business-level strategy?" and therefore reflects an orientation at functional level.   Functional units within an organization establish underlying strategies which provide a foundation that helps to guide them in the development and implementation of policies. The functional strategies at the operating end of the firm also contain the managerial planning activities for a particular functional role, business process or key department in a business like marketing, finance, manufacturing and so on. McDaniel and Kolari's (1987) research findings revealed the contingency relationships between Miles and Snow's strategy types and marketing responses.

Fit in Strategy:

The concept of fit in strategy research is an important building phenomenon in the interaction between different levels of strategy in organizations. In contingency theory, *an assertion of fit implies a relationship between two variables, which in turn predicts a third variable* (Schoonhoven, 1981). Within the context of the system approach to contingency theory, fit is interpreted as *feasibility sets of equally effective alternative configurations (equifinality)* (Segev, 1987). Venkatraman (1989) has compiled a conceptual study where he summarized alternative perspectives of fit in strategic management:

(a) *Fit as moderation (interaction) between two variables which predicts a third variable*; regression analysis, including main and interaction effect, and two and three way ANOVA are used to establish this mode of fit.

(b) *Fit as mediation (intervening/process) between two variables indicating the generative mechanism* (Baron and Kenny, 1986; MacKinnon, 2008); this form of fit would mean, in the most basic form, that a certain

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variable has an effect on performance through another variable.

(c)   *Fit as matching implies that a certain level of one variable has the best effect on performance when combined with a specific level of another variable.*

(d)   *Fit as gestalts (internal congruence) involves identifying groups of businesses sharing a combination of particular characteristics and then identifying the gestalts, the types that perform better than others.* Multivariate statistical tools, such as cluster analysis and MANOVA are used to establish fit a gestalts.

(e)   *Fit as profile deviation (adherence to a specified profile) leads to showing that business performance will depend on the degree of adherence to the specified profile.*

(f)   *Fit as covariation (internal consistency) establishes fit as a new factor that combines two variables into a latent variable, representing fit, which in turn will affect performance.*

2.1.5. Taxonomies and Typologies in Strategies

Sanchez (1993)'s findings reveal that since Aristotle, science pursues general knowledge as opposed to the particular knowledge of singular phenomena. Carper and Snizek (1980) submit their gathering and state *the most important and basic step in conducting any form of scientific inquiry involves the ordering, classification, or other grouping of the objects or phenomena under investigation.* This makes it necessary not only to establish general propositions or laws but also to determine the scope of applications; thus science is characterized among other things by its classificatory efforts. By definition, taxonomy or typology is a hierarchically ordered set of classifications, within which all designs can be allocated to a unique position, depending on the particular set of strategic elements involved (Campbell-Hunt, 2000). And a strategic typology is a broad categorization of firm's strategic behaviors into a few types; it is a simplified description of strategic options available to a firm (Namiki,

1989). Contrary to some understanding, typologies are not just classifications; typologies are complex theoretical statements that should be subjected to quantitative modeling and rigorous empirical testing (Doty and Glick, 1994). This is the basis of the present inquiry testing empirically newly developed Miles and Snow's typological classifications and Kotler's newly developed marketing strategies on a proposition of relationship between strategic orientation, marketing strategies and business performance.

Beyond the fundamental requirement of science, strategy classification has other contributions. Hambrick (1984) points out that some classification system is necessary for studying organizational strategies, a means by which the large number of potential variables is reduced to manageable (yet powerful) few. Hall (1987) also joins in agreement as he spells *classification enables a person to view the world; without classification an individual is surrounded by a chaos of stimuli*. Matsuno and Mentzer (2000) have empirically examined the role of business strategy type as an alternative, potential moderator of the market orientation-performance relationship; moderating effect of the typology has been positive. This is one of the cases where it has been empirically demonstrated that the strategy typologies are useful frameworks in distinguishing different strategic orientations of firms (Matsuno and Mentzer, 2000; McDaniel and Kolari, 1987). Based on these views of strategy classification, several typologies have been developed to describe firm's strategic behaviors. It should be noted that a strategic typology usually originates conceptually and not empirically, and by design particularly generic strategies are similar to *e pluribus unum*. Also, most strategic typologies have been developed under the substantial influence of two major paradigms: one is IO Industrial Organization Theory that focuses on the structure-conduct (i.e. strategy) performance relationship, and the other is Organizational Theory that focuses on the internal process of the firm and its impact on performance (Namiki, 1989).

These findings require that focus in developing typologies and classification research efforts must be reinforced as they seem to have remained limited in management sciences, and the findings will help to overcome the bounded rationality of man.

BUSINESS STRATEGIES

2.1.6. Business Strategy Types

Strategy is the unifying element in management. It installs a virtual highway to reach long-term objectives. It brings in a holistic approach to the environments and a critical look in internal capabilities. Strategy is also seen as *a way of integrating the activities of the diverse functional departments within a firm, including marketing, production, research and development, procurement, finance, and the like* (Porter, 1991).

A well-developed strategy is expected to contain five components (Walker *et al,* 1999):

(1) *Scope, or the desired breadth of the organization's domain*

(2) *Goals and objectives*

(3) *Resource deployments, indicating how financial and human resources are to be distributed across businesses, product-markets, and/or functional departments and activities*

(4) *Identification of a source of sustainable competitive advantage*

(5) *Specifications of potential sources of synergy across business and/or functional departments.*

Strategy's major role is in drawing up an audit of intangibles which are not in balance sheets and which are difficult to measure like marketing audit, systems audit, and management performance audit. Strategic approach first derives an analysis then provides solutions for integration around the plan's objectives. It maintains harmony and internal consistency for the business units and assists managers to make their businesses more competitive (Certo, 2000).

Strategy delivers a totality of concepts, relationships, tools, and practices providing strong means in communications. A summary model of how strategy fits into management applications, the elements of strategic management borrowed from Johnson and Scholes (1993) is depicted in Figure 2.1.

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True, all these properties make strategy unique for every corporate, business and function however the study of strategies have shown common patterns and trends enabling a basis of recognition and learning. For normative purposes and praxis, strategies have been clustered to form typologies and taxonomies.

Literature survey that has been carried out for this study has revealed that Slater and Olson (2001)'s research is one of the latest published work that reports an empirical survey on the issue of strategy typology. In his studies, the authors' review of literature on *business strategy* through 1970s to date of research reveals that Miles and Snow (1978) is heading the modern typologies of strategy. Garrigòs-Simòn and Marquès (2005) have also found out that "of all the typologies proposed in the literature, the most frequently used in empirical research is that proposed by Miles and Snow (Snow and Hrebiniak, 1980; Hambrick, 1983; Davig, 1986; Smith et al, 1986, 1989; Venkatraman, 1986; McDaniel and Kolari, 1987; Zajac and Shortell, 1989, 1990; Conant et al, 1990; Zahra and Pearce, 1990; James and Hatten, 1995; Bahaee, 1992; Abernethy and Guthrie, 1994; Doty and Glick, 1994; Schenk, 1994; Williams and Tse, 1995; Brock, 1997; Kald et al, 2000; Slater and Olson, 2000 among others). This typology has been cited more than 650 times in recent years (Croteauet al, 1999)". Gimenez (2000) has identified over 50 papers that have applied Miles and Snow's model in the period between 1987 and 1994. Miles and Snow (1978) typologies has been widely facilitated to conceptualize strategic orientation of the firm in research studies[6] as shall be done in this present study.

A strategic typology is a broad categorization of firm's strategic behaviors into a few types (Namiki, 1989). The major strength of Miles and Snow typology is its exhaustive description of organization's behavior, comprising the simultaneous consideration of key elements of strategy, structure, process variables and their relationships with performance (Segev, 1989). Aside from various case studies, only Miles and Snow have systematically examined business-level strategy.

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[6] See Table 2.2. List of some of studied examples of Miles and Snow typology based research articles for comparing measures used' with more than 30 examples
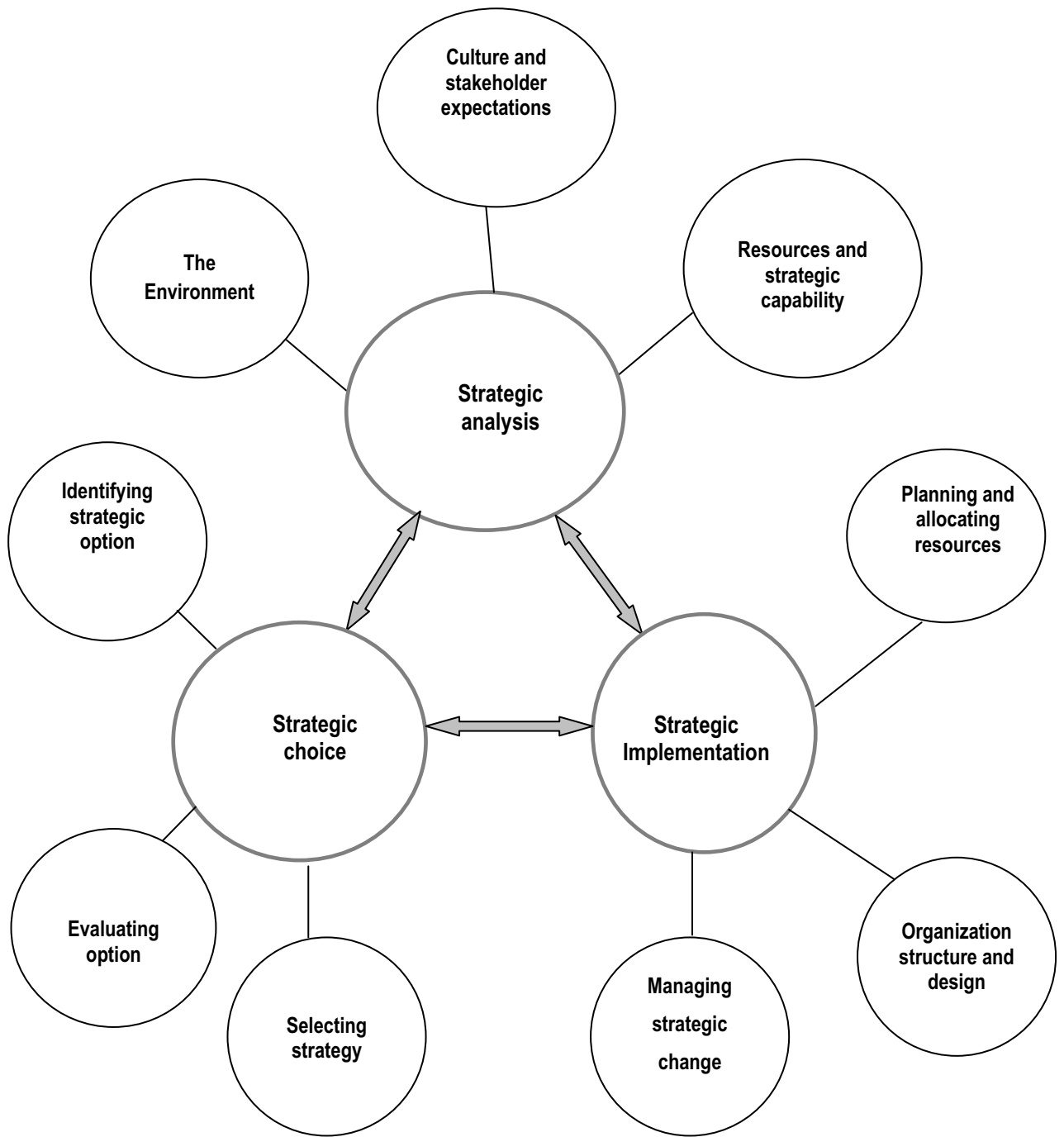
Figure 2.1 *A Summary Model of the Elements of Strategic Management*

(Hambrick, 1980) and developed a comprehensive framework that introduced four archetypes of how firms define and approach their product-market domains and construct structures and processes to achieve their business objectives; it has been the most enduring classification system and *unique because it views the organization as a complete and integrated system in dynamic interaction with its environment* (Daniel and Kolari, 1987). At the root of the framework is *the adaptive cycle* intended to portray the

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full adaptive process which is essentially composed of *the entrepreneurial dimension* (selecting a viable market domain and a set of objectives relative to it), *the engineering dimension* (creating a technological process for serving the selected domain), and *the administrative dimension* (developing an organization structure and a set of managerial processes to coordinate and control the selected technology). Miles and Snow (1978) contend that four basic patterns or strategies emerge as firms attempt to solve these recurring problems and that these strategies may be fitted on a continuum (Smith *et al,* 1989). One of the key dimensions underlying the typology appears to be the rate at which organization changes its products or markets. Various attributes of interrelationships of product/market entry behavior, technology, structure, managerial processes, and power distribution within each strategic type have also been examined; other variables of interest tested have been performance levels (as measured by profitability, cash flow, and market share change), life cycle stage, spending on R&D, marketing expenses, fixed assets, etc. (Miles and Snow, 1978; Hambrick, 1983; Slater and Narver, 1993, Walker and Ruekert, 1987).

McKee *et al* (1989) contend that miles and Snow's typology "constitutes a continuum of increasing adaptive capability ranging from the reactor (with relatively little adaptive capability) to the prospector (with the highest level of adaptive capability). The four archetypes of organization and corresponding strategy types of Miles and Snow are called adaptive strategies (Robbins and Coulter, 1996) or strategic dimensions or orientations and described as follows:

● *Prospectors*: they continuously seek to locate and exploit new product and market opportunities[7]. These organizations are creators of change and uncertainty to which their competitors must respond. Because of their strong concern for product and market innovation, these organizations usually lack complete efficiency. Prospector strategy is at the beginning of the continuum.

● *Defenders*: attempt to seal off a portion of the total market to create a stable

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[7] This appears to be the origin of Value Disciplines: Product leadership

set of products and customers. They have narrow product-market domain, and top managers are highly expert in their organization's limited area of operation; they do not tend to search outside of their domains for new opportunities. They devote primary attention to improving the efficiency of their existing operations. Defender strategy is towards the end of the continuum.

● *Analyzers*: occupy an intermediate position between the two extremes by combining the strengths of both preceding schools to cautiously follow prospectors into new product-market domains while protecting a stable set of products and customers. In their stable areas, these organizations operate routinely and efficiently through use of formalized structures and processes. In their more turbulent areas, top managers watch their competitors closely for new ideas, and then they rapidly adopt those which appear to be the most promising. This strategy falls between prospectors and defenders on the continuum.

● *Reactors*: do not have a consistent response to the entrepreneurial problem. They represent those who have no plans of own but only react to threats and opportunities as they occur. Because this type of organization lacks a consistent strategy-structure relationship, it seldom makes adjustment of any sort until forced to do so by environmental pressures. Reactor type is at the very end of the continuum or not even on the continuum, no consensus is reached on this duality.

The first three of these typologies (defender, prospector and analyzer) represent three successful types. Though they are different in their orientations and adaptive processes they all have equal chance of being successful, irrespective of market environment (Douglas and Rhee, 1989). This appears to agree with the concept of *equifinality* that states final results, here in relevance with success, may be achieved with different initial conditions and in different ways (Kast and Rosenzweig, 1985). This also supports the core concept of typologies where with different initial conditions and in different ways strategies come together to be classified under one type. Reactor type is by theory deemed as the unsuccessful type as they have no consistency and apt to behave in response without having a strategic standing.

Empirical research on the business strategy-marketing competency relationship findings reveal that prospector and analyzer organizations place greater emphasis on marketing activities than do defender organizations and that prospector organizations emphasize marketing more than analyzer organizations (Conant, Mokwa, and Varadarjan, 1990; McDaniel and Kolari, 1987; McKee, Varadarajan, and Pride, 1989). The current study will also aim to find out more on this relation.

Hambrick (1983) places a caveat that Miles and Snow typology aims at explaining business-level phenomena and its applicability for viewing corporate-level strategy is not clear, but it probably is very limited. This does not disturb the current investigation as the focus is on business and functional strategies.

Hambrick (1983) has attempted to test and further extend the Miles and Snow typology as he discussed his findings in his article *Some Tests of the Effectiveness and Functional Attributes of Miles and Snow's Strategic Types* published in Academy of Management Journal.

His paper particularly addresses two broad questions:

(a)   How does the industry environment affect the effectiveness of Miles and Snow's different strategic types?
(b)   How do the strategic types differ in their functional tendencies?

In this study the author appeals to similar inquiries as well:

(a)   Business environment has been introduced into the model as industry environment to measure its effects,

(b)   Different functional typologies have been introduced to find out which ones match with different strategic types.

Murray and Torres (2000) have drawn up a comprehensive table on "*Approach of Miles and Snow' strategic types in solving the entrepreneurial, engineering, administrative and marketing problems*" in a good summary provided here in Table 2.1. A caveat must be placed that Murray and Torres have added additional key dimension

to Miles and Snow's original model, which is marketing practice; this appears not to have been confirmed in any other source. However, it helps to merge the adaptive cycle with a marketing perspective germane to the coverage in our study. The authors have exercised to investigate diversity issues in marketing by following the thoughts of the Miles and Snow model. Based on their research experience in marketing, they have concluded that (a) diversity is a better characterization of marketing and need arises for a contingency theory, (b) there is an archetypal order in the diversity, (c) marketing diversity is linked with strategic configuration (strategic orientation). These findings reveal much insight for this investigation as well, as shall be discussed.

Also a list of Miles and Snow typologies based research articles studied by the author is produced and provided in Table 2.2. The list contains title of the articles displaying the themes studied and measures used. Paragraph approach is commonly used where the key informants of the participating companies would be required on perception which type of Miles and Snow's typologies his/her company would fit best. Making of this choice is called self-typing. Only few of the authors have developed measures in multiple items: Segev (1987), Namiki (1989), Conant *et al* (1990)*,* Moore (2005), and DeSarbo *et al* (2005).

Later on Porter (1980) has demonstrated a new approach based on 'how a business creates value must be central to business strategy' and based upon *positioning*. Whereas Miles and Snow's typology is consisted with the *design school* (represented by Christensen, Andrews, Bower), the Porter's typology is representative of the *positioning school* (Mintzberg *et al,* 1989). Campbell-Hunt (2000) reviews Porter's theory of generic competitive strategy as unequivocally among the most substantial and influential contributions that have been made available to the study of strategic behavior (*strategic orientation*) in organizations. A generic strategy is a broader classification of strategic options available, regardless of industry, type, size, kind of organization (Herbert and Deresky, 1987), and Kabanoff and Brown (2008) consolidate views in the literature from a generic strategy perspective by stating "as a result of organizational and environmental characteristics that are critical to competition regardless of industry, there are a limited number of strategic configurations that available in any industry".

Table 2.1 *Miles and Snow's Strategic Types and Dimensional Approach on Adaptive Cycle*

Strategic Types	*Entrepreneurial Problem*	*Engineering Problem*	*Administrative Problem*	*Marketing Problem (Propositions only)*
Defender	*To seal off a portion of the total market to create a stable set of products and customers*	*To produce and distribute goods and services as efficiently as possible*	*To maintain strict control of the organization in order to ensure efficiency*	*To safeguard relations with targeted market segment(s)*
Costs and benefits to strategy type	*Very difficult for compete-tors to dislodge firm from its industry niche, but a major market shift may threaten survival.*	*Technological efficiency is central to performance but heavy investment in technology require that these problems remain familiar and predictable for lengthy periods of time*	*Administrative system is ideally suited to maintain stability an efficiency, but but not well suited to locating and responding to new products or market opportunities*	*Marketing planning has long-term, stable, per-spective and may be highly detailed. Marketing practices tend to be mechanistic in nature, and maintain the established brand image*

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Strategic Types	Entrepreneurial Problem	Engineering Problem	Administrative Problem	Marketing Problem (Propositions only)
Prospector	To locate and exploit new product and market opportunities	To avoid long term commitment to a single technological process	To facilitate and co-ordinate numerous and diverse operations	To exploit first mover advantage, establish trust and creditability for successive innovations
Costs and benefits to strategy type	Product and market innovations protect firm from a changing environment, but the firm also runs the risk of lower profitability and over-extension of resources	Technological flexibility permits a rapid response to a changing domain, but the firm cannot develop maximum efficiency in its production and distribution systems due to multiple technologies	Administrative system is ideally suited to maintain flexibility and effectiveness, but may under-utilize and utilize resources badly	Marketing practices and planning are short-run in nature, and not very detailed. The exception is in the area of corporate branding which is vital in its communicating the brand values and securing the brand asset (i.e. customer loyalty)

Strategic Types	Entrepreneurial Problem	Engineering Problem	Administrative Problem	Marketing Problem (Propositions only)
Analyzer	To locate and exploit new product and market opportunities while simultaneously maintaining a firm base of traditional products and customers	To be efficient in stable portions of the domain and flexible in changing portions	To differentiate the organization's structure and processes to accommodate both stable and dynamic areas of operation	To manage marketing communication requirements for stable and dynamic products sets and the associated audiences
Costs and benefits to strategy type	Low investment in R&D, combined with imitation of demonstrably successful products, minimizes risk, but domain must be optimally balanced at all times between stability and flexibility	Dual technological care is able to serve a hybrid stable-changing domain, but the technology can never be completely effective or efficient	Administrative system is ideally suited to balance stability and flexibility, but if this balance is lost, it may be difficult to restore equilibrium	Marketing practices that reflects the duality of nature for established and pioneered products, in how to strike the appropriate balance in marketing efforts

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Table 2.2 *Some of Studied Examples of Miles and Snow Typology Based Research Articles*

Name of Researcher (s)	Title of the article	Measures used
McDaniel, S.W. & Kolari, J.W.(1987)	Marketing strategy implications of the Miles and Snow strategic typology	Paragraph approach; Self-typing
Walker, O.C.Jr. & Ruekert, R.W. (1987)	Marketing's role in the implementation of business strategies: a critical review and conceptual framework	Review and conceptual framework: a new hybrid typology, adapted from Miles & Snow and Porter
McKee, D.O.; Varadarajan, P.R.; Pride, William M. (1989)	Strategic adaptability and firm performance: a market-contingent perspective	Paragraph approach; Self-typing
Conant, J.S.; Mokwa, M.P.; Varadarajan, P.R. (1990)	Strategic types, distinctive marketing competencies and organizational performance: a multiple measures-based study	Multiple item approach; 4 optional choices corresponding to 4 typologies
Shortell, S.M. & Zajac, E.J. (1990)	Perceptual and archival measures of Miles and Snow strategic types: a comprehensive assessment of reliability and validity	Paragraph approach adapted; Self-typing
Golden, B.R. (1992)	SBU strategy and performance: the moderating effects of the corporate-SBU relationship	Paragraph approach; Self-typing
Jennings, D.F. (1994)	High and low level organizational adaptation: an empirical analysis of strategy, structure, and performance	Paragraph approach; Self-typing
James, W.L. & Hatten K. J. (1994)	Evaluating performance effects of Miles' and Snow's strategic archetypes in banking, 1983 to 1987: big or small?	Paragraph approach adapted; Self-typing
Eric, P. (1995)	Strategic types and growth strategies used by public accounting firms	Paragraph approach; Self-typing
James, W.L. & Hatten K. J. (1995)	Further evidence on the validity of self-typing paragraph approach: Miles and Snow strategic archetypes in banking	Paragraph approach; Self-typing
Torres, A.M. & Murray, J.A. (2000)	Diversity and marketing practice	Paragraph approach; Case study
Matsuno, K. & Mentzer, J.T. (2000)	The effects of strategy type on the market orientation-performance relationship	Paragraph approach; Self-typing
Slater, S.F. & Olson, E.M. (2000)	Strategy type and performance: the influence of sales force management	Newly developed, adapted from Walker & Ruekert; Self-typing
Slater, S.F. & Olson, E.M.(2001)	Marketing's contribution to the implementation of business strategy: an empirical analysis	Paragraph approach; Self-typing
Snow, C. C. and Hrebiniak, L.G.(1980)	Strategy, distinctive competency, and organizational performance	Paragraph approach; Self-typing
Dvir,D.;Segev, E.; Shenhar, A. (1993)	Technology's varying impact on the success of strategic business units within the Miles and Snow typology	Paragraph approach; Self-typing

Name of Researcher (s)	Title of the article	Measures used
Segev, E. (1987)	Strategy, strategy-making, and performance in a business game	Multiple item approach; 7 points Likert scale
Moore, M. (2005)	Towards a confirmatory model of retail strategy types: en empirical test of Miles and Snow	Multiple item approach; 7 points Likert scale
Smith, K.G.; Guthrie, J.P.; Chen, M. (1989)	Strategy, size and performance	Multiple item approach; 5 response categories on a continuum
Laugen, B.T.; Boer, H.; Acur, N. (2006)	The new product development improvement motives and practices of Miles and Snow's prospectors, analyzers and defenders	Two criteria developed particularly for the investigation; Self typing
Namiki, N. (1989)	Miles and Snow's typology of strategy, perceived environmental uncertainty, and organizational performance	Multiple item approach; 7 points Likert scale
De Sarbo, W.S.; Di Benedetto, C.A.; Song, M.; Sinha, I. (2005)	Revisiting the Miles and Snow strategic framework: uncovering interrelationships between strategic types, capabilities, environmental uncertainty, and firm performance	Multiple item approach; 4 optional choices corresponding to 4 typologies
Golden, B.R. (1992)	SBU strategy and performance: the moderating effects of the corporate-SBU relationship	Paragraph approach; Self-typing
Segev, E. (1987)	Strategy, strategy-making, and performance- an empirical investigation	Paragraph approach; Self-typing
Davig, W. (1986)	Business strategies in smaller manufacturing firms	Paragraph approach; Self-typing
Garrigòs-Simòn, F. J. and Marquès, D. (2005).	Competitive Strategies and Performance in Spanish Hospitals	Paragraph approach; Self-typing
Bahaee, M.S. (1992)	Strategy-comprehensiveness Fit and Performance	Multiple item approach; 4 optional choices corresponding to 4 typologies
O'Regan, N. and Ghobadian, A. (2006)	Perceptions of generic strategies of small and medium sized engineering and electronics manufacturers in the UK: the applicability of the Miles and Snow typology	Paragraph approach; Self-typing
Bird, A. and Beechler, S. (1995)	Links between business strategy and human resource management	Paragraph approach; Self-typing
Parnell, J.A. (1997)	New evidence in the generic strategy and business performance debate: a research note	Multiple item approach; 5 optional choices
Panitz, Eric (1995)	Strategic types and growth strategies used by public accounting firms	Paragraph approach; Self-typing

Name of Researcher (s)	Title of the article	Measures used
Gimenez, F.A.P. (2000)	The benefits of a coherent strategy for innovation and corporate change: a study applying Miles and Snow's model in the context of small firms	Multiple item approach; 4 optional choices corresponding to 4 typologies
Kabanoff, B. and Brown, S. (2008)	Knowledge structures of prospectors, analyzers, and defenders: content, structure, stability, and performance	Multiple item approach; Expert raters on annual reports

In essence the theory contains two elements: first, a schema for describing firm's competitive strategies *(strategic orientation)* according to their market scope (focused or broad), and their source of competitive advantage (cost or differentiation); and second, a theoretical proposition about the performance outcomes of these strategic designs; and failure to choose between one of cost or differentiation leadership will result in inferior performance, the so-called 'stuck-in-the middle' hypothesis (Kotabe and Duhan, 1993). Porter's low cost strategy is especially a viable strategy in paralyzed markets; the China experience in foreign trade is an impressive example still in motion. A low-cost position protects the firm against all five of Porter's competitive forces because competing can only continue to erode profits until those of the next most efficient competitor are eliminated, and because the less efficient competitors will suffer first in the face of competitive pressures. Achieving a low cost strategy usually requires a bigger market share or other supporting advantages. The striking correlation between low cost and market share is well explained with the experience curve, the name applied to overall cost behavior by The Boston Consulting Group in 1966 in underlining competitive profitability produced by cost advantage (Henderson, 1974). The experience curve is related with the learning curve, which in its simplicity explains that labor hours per unit decline on repetitive tasks, however it is more extensive in explaining cost behavior over time in a process industry. It meant that systematic cost differences, in proportion to relative market share, should arise between competitors due to cost of value added declines with experience accumulated.

- *Differentiation*: being different in providing value or providing different values makes the organization unique and indispensable. The differentiation strategy' focus on being of unique value does not necessarily mean that the firm ignores costs, but rather they are not the primary strategic targets. Differentiating can also take many forms: design or brand image, technology, features, customer service, distributor network or other dimensions. Differentiation strategy is viable in gaining above average profits by creating an environment to cope with five competitive forces in a different way than cost leadership. Differentiation provides insulation against competitive rivalry (cut-throat competition) because of brand loyalty by customers and resulting lower sensitivity to price. Achieving differentiation may preclude gaining a high market share because it may require a perception of exclusivity which is incompatible with high market share. It is a trade-off between choices which is believed to be central theme to strategy.

- *Focus*: Porter suggests that if it is not possible to become a leading party in any industry, it is better to focus on a segment, where a company may become a leader or one of the leading parties by practicing one of low cost or differentiation strategies. Focus strategy, also called segmentation, aims at employing low cost strategy or differentiation strategy in a part or segment of the market. Similar contentions of strategy requirements are applicable in focus strategies. The premise which supports this arrangement is the understanding that the company is able to serve a narrow market more effectively and efficiently than in a broader market. The company is more successful in meeting the needs of this segment either trough differentiation or lower costs, and these strategies are being developed from the perspective of the narrower market rather than the whole market which makes a key difference.

Porter announces a caveat on his algorithm by underlining that a choice must be made between seeking overall cost leadership and differentiation because he believes pursuit of differentiation is incompatible with cost leadership because of intrinsic nature of differentiation requires high spending. This is one of the issues that O'Shaughnessy (1995) and alike criticize Porter for his strategy; they contend that both strategies may be applicable in combinations. However all value his works. Porter himself draws

caution in developing above strategies as well; it is prudent to bring to the attention of managers to be fully aware of particular critics of their own cases (Porter, 1983). Figure 2.2 demonstrates a summary of Porter's generic strategies.

	STRATEGIC ADVANTAGE	
Broad Market	Cost Leadership	Differentiation
Narrow Market	(Low Cost)	(Differentiation)

STRATEGIC TARGET

Generic Strategies
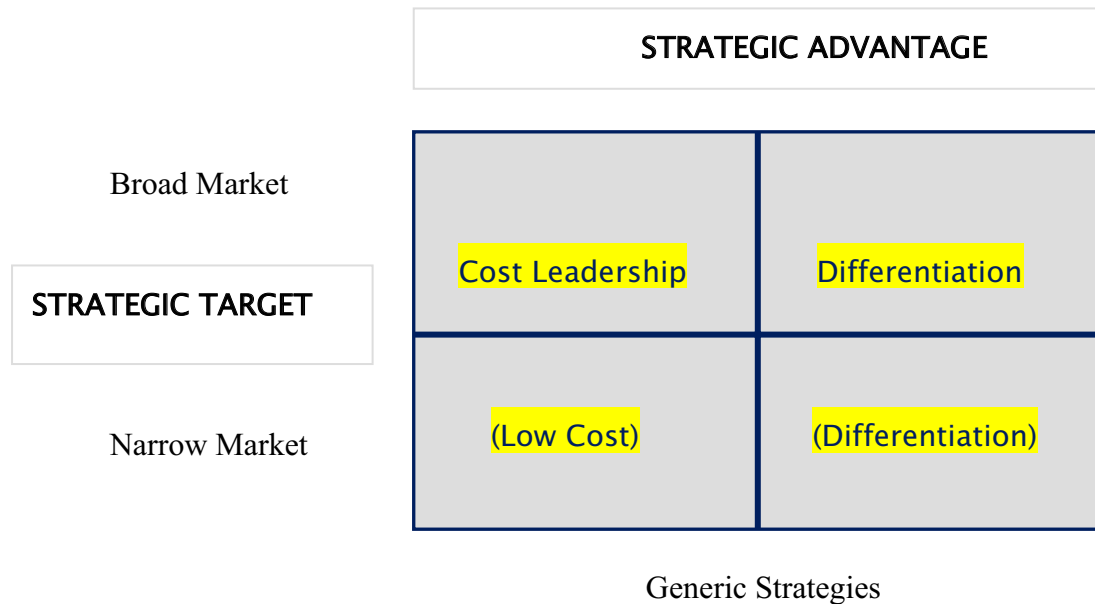
Figure 2.2 *Porter's Generic Strategies*

Miles and Snow's and Porter's typologies have emerged as two dominant strategies developed under a priori approach later combined by Walker & Ruekert (1987) to create a hybrid typology of business unit strategy (Hooley *et al,* 1993) using two dimensions of intensity of product market/development (high to low) and basis of competitive advantage (cost or differentiation) resulting in the classification that Slater and Olsen (2001) has depicted in Table 2.3.

Walker and Ruekert (1987) have contributed much to the relation between different types of business strategies and marketing strategies with their article *Marketing's Role in the Implementation of Business Strategies: a Critical Review and Conceptual Framework*. They have reviewed and integrated various theoretical perspectives, normative statements, and pieces of empirical evidence about the organizational structures and processes best suited for implementing different types of business strategies. Particular emphasis has been placed on the relationships of different types of marketing activities to the overall performance of different business strategies. In this respect, it is more activity oriented rather than strategy oriented.

Type of Strategy	Description
Prospectors	Continuously seek to locate and exploit new product and market opportunities: in search of innovation
Low cost defenders	Attempt to seal off a certain portion of the total market to create a stable set of products and customers on low cost leverage: competitive advantage on capabilities
Differentiated defenders	Attempt to seal off a certain portion of the total market to create a stable set of products and customers on differentiation leverage: competitive advantage in providing solutions
Analyzers	An intermediate position by combining strength of both prospectors and defenders: follow innovation to develop new market dominations
Reactors	No consistent response to entrepreneurial problems: do not pursue active strategy

Table 2.3 *Slater and Olson's Typologies (table drawn by the author)*

The contribution of these researchers is particularly valuable to the theory with their prominent works in the strategy. Business strategy and marketing strategy seem to be strongly interrelated in a market-oriented organization and this recent article (Slater and Olson, 2001) provides further insight on this assumed relationship based on their performance implications.

Walker and Ruekert (1987) and Slater and Olson (2001) studies have brought much broader view on the typologies of strategies, however Miles and Snow's original typology remained dominant and accepted source of reference and therefore in this study its original definition has been used.

To continue with their study, it is interesting to note that Slater and Olson have not identified *Value Disciplines*[8] as a typology. They may have decided that it requires more time before the academia gives it a mutual consent of its contribution, besides it has no empirical support. The author finds this omission as debatable and therefore will

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[8] Treacy, M. and F. Wiersema, (1993). "Customer Intimacy and Other Value Disciplines". *Harvard Business Review*. J-F, 84-93

review the model of *value disciplines* to enhance understanding of strategic orientation and marketing strategies.

Redefining value for customers, raising customers' expectations beyond the competition's reach and delivering more of that value are at the core of the philosophy of value disciplines. While Porter's model is more industry oriented value disciplines' model is more market (customer) oriented. Value disciplines target the requirements of the customer in a categorized manner and try to excel in each type introduced in the following sections (Treacy and Wiersema, 1995).

- *Operational excellence*: *the best price with the least inconvenience:*

The company provides superior value by leading its industry in price and convenience. This is being accomplished through reducing costs and creating a lean and efficient value-delivery system. Their customers are there for reliable and quality products, cheap and available in most convenient way. As in the Porter's low cost strategy, the authors here also emphasize that low cost sought in this discipline produces additional funds to create incremental value but not necessarily end up in lower prices. The maximization of convenience provided to the customer in obtaining the products is the other value proponed in this discipline. Product standardization, excellence in customer service, established culture of teamwork and supply chain management instead of vertical integration, the use of information technology, exploiting the value obtained through leadership advantage in growth are advocated to be the pillars of this system. With these properties, this discipline appears to succeed taking a different position from other typologies that Slater and Olson have reviewed.

- *Product leadership*: *the best product all the time:*

Treacy and Wiersema emphasize that the operating model should be appropriate to create an environment allowing vision, passion and competence for natural rate of diffusion for new products. Directing the portfolio of products into narrower band to allow focus and maximum utilization, appropriate structures and process modeling, and talented team members are imperative for successful product

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leadership. Exploiting product leadership also requires good balancing in turning innovation into value for customer and profit for the leadership.

- *Customer intimacy - focus on delivering what customers want:*

Customer intimacy has reference to what is generally known today as CRM with particular emphasis on talented and trained personnel at contact point with customers. Superior value is provided to the customers through precise segmenting. A close relationship and intimacy is at the root of the success with closest targeting at the customer. Long-term relationship is the main principle with this strategy, being rewarded with productivity gained thus wise. Superior value is provided to the customers through precise segmenting.

There is a caveat from Treacy and Wiersema (1999) that choosing one discipline is important however not abandoning the other two and keeping them at an average is just as important. This is a similar warning to Porter's that focusing on a strategy does not necessarily require total omission of the others.

This typology is getting some support and therefore borrowed modeling on the next page from Prof. George S. Day's seminar on the topic in Wharton School, University of Pennsylvania where he seems to have also attempted to remedy some of the shortcomings of the model such as 'performance leadership replacing product leadership', 'customer responsiveness replacing customer intimacy'.

However one has to concede that there are a lot of other puzzles to work out like other phenomenon that the authors introduce, e.g.:

- How a social marketer can provide middle-of-the-market product
- How to define the best product,

One may have an innovative product or a totally differentiated product but 'the best' is a perception on account of the customer.

They also provide a familiar definition of customer value (Kotler and Armstrong, 2001) as the sum of benefits provided less costs incurred by the customer and enlist rules to accommodate above propositions:

- Rule 1: Provide the best offering in the marketplace by excelling in a specific dimension of value
- Rule 2: Maintain threshold standards on other dimensions of value
- Rule 3: Dominate your market by improving value year after year
- Rule 4: Build a well-tuned operating model dedicated to delivering unmatched value

FUNCTIONAL STRATEGIES

2.1.7. Functional Strategies

The difference between identifying desirable ends and reaching those ends rests in the implementation success of a firm's strategy (Mintzberg, 1978; Namiki, 1989). It has long been recognized that major operating policies at the functional level should be an explicit part of a firm's strategy. Further, the policies in the various functional areas should be coordinated and work in concert to achieve the overall goals of the strategy (Herbert and Derensky, 1987). Wickham Skinner (1969), an eminent strategy scholar and a Harvard professor, has stressed that US industries' declining trend has been due to misalignment (fit missing) between business and manufacturing strategies underlining the importance of congruence between business level and functional level strategies. Business strategies' effectiveness depends on the fit and running of functional strategies; despite the importance of implementation, examples of failure due to poor internal consistency abound in the industries. Even worse in many cases, policies in various functional areas work in odds within one another, each guided by its own judgment of priorities and not influenced by the firm's strategic goals. The orientation of functional strategy needs to be dictated by its parent SBU's strategy (Wheelen and Hunger, 2002). Miles and Snow also proposed that strategy types of prospectors, analyzers, and defenders would achieve on average, equal performance (Slater and Olson, 2000). The implication of this proposition is that there is greater

performance variation within strategy types (inconsistency between strategy types at different levels) than there is between strategy types (difference between strategy types at the same level) which lead again to an emphasis on strategy implementation. The congruence between any SBU strategy and its functional level strategy is the key to successful performance.

Key strategies that follow must all be in sync rather than serving their own narrower purposes. Coordination and consistency among business strategies and functional and/or process strategies are best accomplished during the deliberation stage. The key strategic components of this strategy level are synergy and development of distinctive competencies.

Key functional strategies:

To build competitively valuable resource strengths and capabilities, following strategies are being developed as necessary --

- (a) Human resources strategy
- (b) Financial strategy
- (c) Marketing strategies
- (d) Manufacturing strategy
- (e) R&D, technology, engineering strategy
- (f) Information technology strategy
- (g) Environmental strategy
- (h) Supply chain management strategy

A company's human resources strategy, for example, concerns the human side of the management of enterprises and employees' relations with their firms. Human resources management sees employees as assets to be used strategically through their close involvement with the organization and by raising employees' levels of commitment to the aims and requirements of the firm. It involves such major directions on the philosophy of the business whether to recruit those employees perceived to possess large latent potential or to place an emphasis on job-security and the application of compensations and promotion policies, etc. (Bird and Beechler, 1995).

Functional strategy in the finance area consists of how financial activities will be managed in supporting business strategy and achieving the finance department's objectives and mission. It needs to address such issues as (*a*) *how, where and when the business will obtain funds, (b) the best use of financial resources, (c) how to maximize the market valuation of the firm, (d) what to do with the accumulated cash, (e) long-term financial planning for business expectations, (f) capital structure of the business, (g) the extent to which internally generated profits are reinvested within the company (h) choice of financial criteria for selecting major capital investments* (Bennett, 1999). Compatible, collaborative, mutually reinforcing functional strategies are essential for the overall business strategy to have business strategy to have maximum impact (Bennett, 1999).

The next section will introduce 'marketing strategies', a dominating functional strategy and the central dimension of the business (Cravens, 1997). A company's marketing strategy represents the managerial game plan for running the marketing part of the business and its marketing orientation. In spite of popular acceptance of its huge contribution in the current paradigm, marketing strategy till 1980s has been rarely a case of study or discussion if any in college marketing books. Stanton's 5th edition of *Fundamentals of Marketing* (1978) has no allocation for *marketing strategy*. This appears to have changed at large as exampled in the contents of Kotler (2000)'s *Marketing Management*, where *Developing Marketing Strategies* is a major chapter.

2.1.8. Marketing Strategy Types

Kotler (1984) has defined marketing strategy as "a basic approach that the business unit will use to achieve its objectives, and broad decisions on target markets, marketing positioning, and mix, and marketing expenditures level". The strategic approach in marketing is a recent phenomenon. It has arrived within the marketer's vista to provide a solution to further developing efficacy of marketing mix elements. Wind and Robertson (1983) gives an account of seven limitations that has caused the emergence of marketing strategy:

(a)   Fixation with the brand as the unit of analysis

(b)   The interdisciplinary isolation of marketing

(c)   The failure to examine synergy in the design of the marketing program

(d)   Marketing's short run orientation

(e)   The lack of rigorous competitive analysis

(f)   The lack of an international orientation and

(g)   The lack of an integrated strategic framework.

Marketing's major role with respect to above limitations has been its integrative quality.

Borden (1964) gives a long account of marketing mix elements that have direct effect on the marketing program; he indicates how a marketing program (marketing mix) may be drawn up and how a marketing plan may be produced on the pivotal leadership of a strategy. Shapiro (1991) has also shown that companies win or fail because of their marketing program and that the marketing mix elements of the program must have *internal consistency, integration and leverage among themselves* which is only manageable by the virtue of strategy that the program pursues. That is how marketing mix and its elements have come under the governance of strategy. And definition delineating this progress is given anonymously now: marketing strategy is the set of integrated decisions and actions by which a business expects to achieve its marketing objectives and meet the value requirements of its customers through utilizing variables of marketing mix elements under its control. By virtue of core concept of strategy, marketing strategy always involves competitors and Adcock (2000) has versed it well "marketing strategy is about where, how and when to compete". Hence, whether specifically indicated or not, marketing strategy involves a competitive approach, and in this study, competitive marketing strategies and marketing strategies have been used interchangeably.

Marketing strategy still exists as an eclectic issue and lacks sufficing research. Same is true for studies aimed at developing typologies for marketing strategies. A rare one is carried out by McDaniel and Kolari (1987). They have attempted to relate the usefulness of the Miles and Snow typology of business strategies to the field of marketing strategy in a dynamic environment. They claim that results provided support

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for the typology and its applicability to the area of marketing strategy. In retrospect, it appears interesting that they have not attempted to develop a typology for marketing strategies anew. In spite of all this, it is only in 1980s that strategy has entered into marketing books.

The approach that may be said to be represented by McDaniel and Kolari (1987)'s loose attitude in easily transferring Miles & Snow's typology of business strategies into marketing strategies has raised the question of marketing's boundaries and its contribution to the strategy dialogue examined in Day(1992)'s paper "Marketing's Contribution to the Strategy Dialogue". Strategic planning has been defined as about keeping the business in step with the anticipated environment, and marketing has traditionally served as the boundary function between the firm and its customer, channel, and competitor environment. As the customer's importance has grown into all parts of the company, marketing has become almost equal to business and the strategies of each have become overlapped. Day has voiced the concern over the issue: *the more important the marketing becomes the more it loses ground to other disciplines* as described by Glazer (1991), popularly summarized as '*marketing is too important to be left to the marketers*'. Under all circumstances the role of marketing strategy versus competition as a function of business strategy (Slater and Olson, 2001) has never been so important in business performance.

In this study, marketing strategy is considered to be functional within the business strategy domain and an instrumental part of the business philosophy in formulating and implementing, which is essentially a process of organizational adaptation to the market environment. The strategy typology suggests three points (Torres and Murray, 2000; Slater and Olson, 2001):

(a)　A company chooses its strategy on the basis of its understanding of environment.

(b)　A chosen strategy directs a company's attention to certain performance dimensions, and

(c)　A company tries to excel in the determined performance dimensions.

Torres and Murray (2000) address the issue of diversity in marketing implementation in competitive space and time, and their research findings reveal that to recognize diversity as proposed by Miles and Snow is normal in any industry. This leads to the understanding that marketing practice is diverse and contingent on strategy-structure configuration and points out the value of marketing strategy typologies. Baker (2000), at a simple level, categories basic marketing strategies into a typology of three marketing strategies:

      (a)   Undifferentiated marketing strategy,

      (b)   Differentiated marketing strategy,

      (c)   Concentrated marketing strategy

An undifferentiated strategy exists when the supplier offers the same product to all persons/organizations believed to have a demand for a product of that type.

A differentiated strategy exists where the supplier seeks to supply a modified version of the basic product to each of the major sub-groups which comprise the basic market.

For the smaller producer a concentrated strategy may be the only realistic option (Baker, 2000).

Baker's typology may have been used in the model of this study however the author has judged that nicher strategies and focus strategy here have parallel origins whereas leading, challenging and following strategies are more refined version of differentiated strategy whereas undifferentiated strategy has remained in the traditional pre-marketing era and need not to be considered.

The scarcity of research dealing with marketing strategy classification is surprising (Slater and Olson, 2001) since the classification is one of the most important and basic steps in conducting any form of scientific inquiry (Carper and Snizek, 1980; Sanchez, 1993). The typology that appears to be most suitable and one of few available is developed by Slater and Olson (2001) who have carried out extensive research to

determine that marketing strategy lags both business strategy and other areas of marketing in the use of classification schemata.

Their typology as described by themselves (Slate and Olson, 2001) follows:

I- 'Slater and Olsen' Typology

Aggressive Marketers:

They resemble Murphy and Enis's (1986) category of Specialty Product Marketers. Their conceptual scheme and empirical findings reveal that a group of firms target the segment of buyers that value high quality, innovative products, and that are willing to pay premium prices. Typically, these products are perceived by the buyers to provide an advantage in competitive markets. Aggressive marketers reach this select group of buyers with a very selective distribution strategy, utilize an internal sales force, and invest in advertising and marketing support functions.

Mass Marketers:

Offer a broad product line of largely undifferentiated products. They utilize an intensive distribution strategy and charge low prices.

Marketing Minimizers:

They provide the lowest level of customer service and put comparatively little effort into any marketing activity. Their limited product line, lack of investment in marketing or innovation, and low prices indicate that marketing is not a key element in their value chains (e.g., Miles and Snow, 1978; Porter, 1985; Walker and Ruekert, 1987).

Value Marketers:

It is similar to Murphy and Enis's (1986) description of shopping product marketers. These firms utilize selective distribution to provide high quality, innovative products, but at significantly lower prices than aggressive marketers. They seem to use their own sales forces instead of advertising to communicate their value proposition. Because of their premium customer service, and the apparent spread between product benefits and product cost, these businesses are named as value marketers.

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It appears that Slater and Olson's (2001) strategy types have characteristics that are internally consistent and mutually exclusive. Nevertheless, it has not received much citation to position itself as an established typology. Kotler's typology of marketing strategies has both long-lived and well established through 1980's and still protecting its esteemed position in current editions of marketing books (Keller and Kotler, 2006). Kotler's typology of marketing strategies shall be incorporated in this study to investigate how different types of marketing strategies affect the performance relationship of different types of business strategies.

II- Kotler's typology of competitive marketing strategies

Kotler has been acknowledged as having a leading role in contributing to the broadening of academic inquiry in the field of marketing and especially in introducing strategy into marketing (Bourassa, *et al,* 2007; Kotler and Singh, 1981). Although marketing strategy is most commonly employed concept in explaining how marketing management functions, it lacks deserved amount of research study (Slater and Olson, 2001) when compared e.g. with business strategy which has developed Miles and Snow (1978) and Porter (1980) strategy models. El-Ansary (2006) has the similar findings: *The marketing literature is replete with normative and positive theoretical and empirical research-based papers and articles ... albeit ... marketing strategy did not rise to the status of a sub-discipline of marketing. ... The concept of marketing strategy lacks clarity ....* Likewise the typology of marketing strategies has also received little attention till now. The existing ones have been mostly borrowed from management science as in the examples of Miles and Snow (1978), Porter (1980) or have been produced without enough replication as in the examples of Slater and Olson (2000), Treacy and Wiersema (1993). Extensive literature review reveals no study in operationalization of Kotler's marketing strategies or in studies involving multivariate analysis of the same.

The concept of marketing strategy (marketing behavior) to be incorporated in this study has been operationalized based on the roles firms play in their target market as delineated in Kotler (1991), Kotler and Armstrong (1999), Kotler and Armstrong (2001) in which it is stated that *the firms occupy different competitive positions in the*

target market and identify "… strategies based on the roles firms play in the target market- that *of leading, challenging, following, or niching*". It is similar to describing existing in space with coordinates in different intersecting planes. Kotler (1984) states that *much can be gained by classifying firms by their behavior in an industry, that of leading, challenging, following, or niching* and draws up following specific marketing strategy types that are available in following Table 2.4.

Market Leading Strategies	Market Challenging Strategies	Market Following Strategies	Market Niching Strategies
Expand total market	Attack market leader	Follow closely	Specializes along market, customer or product
Protect market share	Attack firms of its size	Follow at a distance	Multiple niching
Expand market share	Attack small and regional firms	Follow selectively	Marketing-mix lines

Table 2.4 *Kotler's Marketing Strategies*

Kotler and Keller (2006) reiterate the same schedule with further elaborations on market follower typologies of counterfeiter, cloner, imitator and adapter.

Doyle (1998) states that the marketing strategy so adopted will have to depend upon such factors:

(a)   What is its competitive position?

(b)   Is it a market leader or challenger?

(c)   What is its strategic objective?

(d)   Is it seeking market dominance or merely to carve out a profitable niche?

and agrees on a marketing strategy typology similar to Kotler's grouping above. Tek (1999) and Islamoglu (2000) have followed same grouping of strategies recognizing strategy as per competitive position with choices available in each.

Another EU-sponsored investigation carried out by Hooley, Beracs and Kolos (1993) *to test Western theories and marketing techniques and to examine marketing strategy typologies in Hungarian industries* have produced following marketing strategy typology. Hooley's marketing strategy is also based on positions in the target market and is similar to Kotler's typology that is being engaged in this study:

• Cluster 1: Efficiency Focus *Defenders*	(27.4 per cent of the study sample)
• Cluster 2: Quality Focus *Defenders*	(21.0 per cent of the study sample)
• Cluster 3: Low Price *Defenders*	(16.4 per cent of the study sample)
• Cluster 4: Market Share *Challengers*	(14.7 per cent of the study sample)
• Cluster 5: Organic Growth *Segmenters*	(21.6 per cent of the study sample)

Table 2.5 *Hooley's Marketing Strategies*

Thompson and Strickland (2001), Dibb *et al* (197), Doyle (1998) they all have similar strategy typology to Kotler's, based on positions in the target market where they have generic strategy postures in each of strategic marketing typology. PIMS studies also reveal that the strategic option *(strategy type)* available to management and the results that can be expected from a given strategy, both depend on business unit's competitive position of market leader, market follower and focus strategies (market nicher) *(typology based on position)* (Buzzell and Gales 1987). The description of Kotler's competitive marketing strategy typology model loyal to its original form follows right after the following Table 2.6 of various ideas on market sharing of these positions.

Kotler (1984) theorizes on the market shares of each strategic type and the following table summarizes similar thoughts from other leading paradigms:

	PIMS	Kotler	BCG[9]
Market leader	32.7	40	50
Market challenger	18.8	30	25
Market follower	11.6	20	15
Market nicher	6.9	10	10

Table 2.6 *Market Structure in Mature Industries: Market Shares in Percentages*

Market leading strategies:

Most industries contain one firm that is acknowledged as the market leader. The firm is the single player enjoying the largest individual market share (Dibb *et al* 1997); it usually leads other firms in price changes, new product introductions, distribution coverage, and promotion spending. Other firms concede in dominance. Unless the leader enjoys a protecting shield like a monopoly, it must maintain vigilance all the time. Other firms keep challenging its strengths or trying to keep advantage of any weakness that they can identify. A product innovation may be introduced by a competitor, and the market position may change for just the opposite within a very short period of time. The leader might choose to remain conservative on spending view difficult times ahead, while a challenger may spend with no such concern and may shake the leader within the nearest span of time and the leader may never get up to his feet again. The leader must be proactive and act. The options available to protect their leadership are:

(a) *Expand total market*:

Depending on the industry environment as modeled under *generic industry environments* by Porter (1980), the dominant firm normally gains the most. When the total market is expanded as having the largest market share, the leader will have the

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[9] *BCG* is an acronym for Boston Consulting Group

biggest absolute sales gained. The leader will normally push for market expansion especially when the time is ripe.

(b) *Protect market share*:

Expanding total market also requires that the leader protects market share. There will be competitor attacks for extending their share and the natural selection shall be the largest domain of the leader. With continuous innovation or similar the leader may seek proactive engagements to be on the forefront of the competition.

(c) *Expand market share*:

Market leaders can also grow by increasing their market share against competitors who are weaker than themselves. This does not only add to their total profits but also help to sustain their leverage of expanding the total market. A caveat: there is limit of profitable market share expansion; sometimes a share won is a loss in total.

Market challenging strategies:

A runner-up firm in an industry that is fighting hard to increase its market share (Kotler and Armstrong, 1999). Firms that are second or third in an industry are sometimes quite large and decide to bid for more market share aggressively. A market challenger must first define its strategic objective. It is usually advisable as in military combat superior power must be concentrated at the critical time and place for a decisive result. To succeed with such an attack a company must have some sustainable competitive advantage over the leader. Still, the challenger must decide its stance picking up:

(a) *A full frontal attack*:

An aggressor is said to launch a frontal (or head-on attack) when it masses its forces right up against those of its opponent. It attacks the opponent's strengths rather than its weaknesses; the attacker matches opponent's product, advertising, price, etc.

(b) *Indirect attack*:

Rather than challenging head on, the aggressor can engage in an indirect attack on the competitor's weakness rather than its strengths or on gaps rather than its fortified

strong holds in the competitor's market coverage. The challenger may try to use the traditional key aspect of Japanese strategy; prompted by the awareness of power limitations, they may change the battleground so that they would not have to fight head-on against the leader (Ohmae, 1983).

Market following strategies:

Not all runner-up companies want to challenge the market leader. Challengers are never taken lightly by the leader. A runner-up firm in an industry that wants to hold its share without rocking the boat follows the leader closely or at a distance and prefers to stay back. A follower avoids the risk and expenses of development in the market and can keep learning from the industry leader. The follower has options of:

(a) *Following closely*:

In this option, the follower imitates the leader in as many segments, mixes as they can manage. The follower almost appears to be like a challenger, the follower is every where that the leader is engaged. However, follower does not block the leader, no direct conflict is seen.

(b) *Following at a distance*:

Here, the follower maintains some differentiation but basically copies the leader in terms of major market and product innovations and activities. The follower may be quite acceptable to the leader as he is careful not to disturb the leader. The leader may be even pleased so that he does not have to engage a war against the follower.

Market niching strategies:

Almost every industry includes firms that specialize in serving market niches. Instead of pursuing the whole market, or even large segments, these firms target sub-segments. These firms, given various names such as market nicher, market specialist, threshold firm, or foothold firm, serve small segments in an industry that other firms overlook or ignore. Market niching is of interest not only to small firms but also to smaller divisions of large companies that are not able to achieve major standing in the

industry. These firms try to find one or market niches that are safe and profitable. An ideal niche would have the following characteristics (Kotler, 1986):

(a)   It is of sufficient size and purchasing power to be profitable.

(b)   It has growth potential.

(c)   It is of negligible interest to major competitors.

(d)   The firm has the required skills and resources to serve the niche effectively.

(e)   The firm can defend itself against an attacking major competitor through the customer goodwill it has built up.

The key idea in nichemanship is specialization. The firm has to specialize along market, customer, product, or marketing-mix lines. So market niches are created:

a)   By customer, market, product, quality-price, or service or

b)   By employing multiple of these niches

STRATEGIC ORIENTATION

2.1.9. Strategic Orientation

Strategic orientation has been defined as "how an organization uses strategy to adapt and/or change aspects of its environment for a more favorable alignment" (Manu and Srinam, 1996) reflecting adaptive mental model set (Chaffee, 1985) and has been said to be synonymous with the term competitive strategy (Morgan and Strong, 1998; Wang and Shyu, 2008). O'Regan and Ghobadian (2006) defines strategic orientation as "concerned with the direction and the thrust of the firm and is based on the perceptions, motivations and desires that precede and guide the strategy formulation and deployment process", and Hofer and Schendel (1978) refers strategic orientation to a *firm's particular patterns of behavior- the tendency of an organization to discover, develop and maintain a set of consistent responses to environmental events* paving the way for dimensional approach in strategic orientation. Hambrick (1984) posts a leading inquiry on how some firms perform better than the others despite a common operating

environment and the increase in performance is based on strategic orientation. It is also characterized as strategic fit, strategic predisposition, strategic thrust and strategic choice (Chaffee, 1985) while schemas based on environmental adaptation patterns are commonly referred to as strategic configurations (Moore, 2005). Ansoff (1987) recapitulated all by naming it "strategic behavior".

Approaches to strategic orientation construct have been one of the challenging issues in the literature. After delineating works of Weick (1979), Pitts and Hopkins (1982), Snow and Hambrick (1980), Ginsberg (1984) concludes to state that to compare and integrate different approaches to strategy, understanding different types of defined (input) and operationalized (output) concepts that they reflect is fundamental and classifies defined concepts along three dimensions: *coherence* (holist/disjunctive), *activeness* (static/dynamic) and *normality* (unique/common). Ginsberg (1984) links these dimensions to four different types of operationalized concepts that Hambrick (1980) have developed with focus on business level strategy: (1) *narrative*, which describes objects or terms in a textual or journalistic fashion; (2) *quantitative*, which employs symbols for functions that have numerical value; (3) *classificative*, which places objects or terms in a particular category or grouping; and (4) *comparative*, which specifies qualitative relations between concepts (e.g., more than, less than, or equal to). Venkatraman (1985) who has defined strategic orientation as *the general pattern of various means employed (i.e. realized) to achieve the business goals, with a particular emphasis on the business-unit level of the organizational hierarchy* has reduced operationalized concepts of strategic orientation to three excluding quantitative approach. Out of this revised set of viewpoints, the narrative approach, which is anchored to qualitative methodologies frequently employing case study analyses, while having its applications in organizational research (Morgan and Strong, 1998), is limited in its use for theory testing and therefore appears to be in lesser use. The classificatory approach attempts to group strategy on either a priori conceptual grounds or derived categorizations, and comparative approach enables assessment of strategic orientation along dimensions of competitive strategy; both multivariate approaches have been widely used in empirical studies. Yet, extensive literature survey carried out for this study has not revealed any investigation where both of theory-driven classificatory and

comparative approaches have been facilitated simultaneously on the same sample in the same study.

As a summary and established version of approach categorization, Morgan and Strong (1998) have also examined the three main viewpoints of strategic orientation:

(a) The narrative approach:

This approach reflects the case-based tradition of business policy (Venkatraman, 1989). The narrative approach is anchored to qualitative methodologies frequently employing case study analysis, describing verbally the holistic nature of strategy in its context. It has limited use in testing theories.

(b) The classificatory approach:

The classificatory approach attempts to group strategy as typologies, aggregating firms according to the nature of strategy emphasized moving away from idiosyncratic and narrative descriptions of strategy (Venkatraman, 1989).

(c) The comparative approach:

The third approach to assessing firms' strategic orientation is comparative in nature enabling assessment of strategy, not across various strategy classifications but, instead, along dimensions of competitive strategy.

Considering Ginsberg (1984)'s and Venkatraman (1985)'s categorization of strategic orientation approaches, this research has utilized two of the three available main view points: the 'classificatory' and the 'comparative' approaches and will now discuss in further details in the following parts. Meanwhile, the narrative approach is ideally fit for case studies; it has no application grounds in this empirical investigation and is therefore excluded.

The classificatory (typological) approach:

Miles and Snow (1978)'s framework is the most enduring strategy classification system, the other option being Porter (1980)'s competitive strategies. Most of the studies of strategic orientation have facilitated Miles and Snow typologies on self-assessment basis where the managers have identified their choice of strategies as they perceive (Snow and Hrebiniak, 1980, McDaniel and Kolari, 1987; Zajac and Shortell, 1989; McKee *et al,* 1989; Golden (1992); James and Hatten, 1995; Slater and Olson, 2000; Matsuno and Mentzer, 2000; O'Regan and Ghobadian, 2006). The author concurs with some of the scientists who have decided that the simplicity of this approach may reduce the reliability and precludes the use of advanced statistical techniques and chose to develop dimensional approach in facilitating Miles and Snow's approach in operationalizing strategic orientation construct (Hambrick, 1980; Ginsberg, 1984; Ginsberg and Venkatraman, 1985; Segev, 1987; Smith *et al,* 1989; Conant *et al,* 1990; Morgan and Strong, 1998; Desarbo *et al,* 2005; Moore, 2005). Some of the dimensions developed serves to classify subjects on basis of typologies (prospectors, defenders, analyzers, reactors) whereas some have used Miles and Snow's defined concepts in operationalizing dimensions of strategic orientation construct (prospector orientation, defender orientation, analyzer orientation, reactor orientation). To overcome the empirical limitations of the classificatory method, strategic orientation is viewed not across pure strategy typologies only but, alternatively along parsimonious classificatory dimensions or conceptual criteria that typologies are based on (Segev, 1987; Desarbo *et al,* 2004; Moore, 2005).

The research studies that have been examined during extensive literature review have all facilitated only one of the methods (classificatory or dimensional approach) of operationalizing Miles and Snow; Conant *et al* (1990) is not an exception however it is worth mentioning that they have used both approaches in categorizing firms in typologies but not in building dimensions of the construct. Recently there are various calls for triangulation approaches (Dahlstrom *et al*, 2008; Nwokah, 2008) and in response, within this investigation Miles and Snow's typological approach has been facilitated in dual methods and it appears to be the first study facilitating both methods in utilizing Miles and Snow typologies simultaneously on the same sample. Using both

methods of Miles and Snow typological approach on the sample simultaneously provides means of comparison which is of considerable interest.

The comparative approach:

This approach has been often associated with Venkatraman (1985)'s framework of conceptualizing strategic orientation. Its basic tenet is identifying the key traits (dimensions) of the strategic orientation common to all firms. Versus the typological approach, the scope is less on typologies and more on variations along characteristics (dimensions) that jointly identify between strategies. Strategy is assessed on the basis of relative emphasis placed by the firm along each strategic orientation dimension (Morgan and Strong (2003). Venkatraman (1985) himself calls classificatory approach as *substantive stream* and his approach as *measurement stream*.

Venkatraman (1985) originally developed seven dimensions and later have reduced the same to six dimensions (Venkatraman, 1989), accounts of which have been given as follows:

Aggressiveness

Aggressiveness is characterized by taking position faster than the competition in attaining lead in the market. Depending on the imminent contingencies, this may be accomplished through market expansion, market share gain, taking a competitive position through product development. This dimension reflects a determined behavior to act on all resources to gain market share over the competition. Wernfelt's (1984) discussion of how a company can range over the competition suits this quality here.

Analysis

The analysis dimension stands for the problem solving and decision-making ability of the firm at all fronts. This quality should not be confused with Miles and Snow's analyzer. Analysis refers to the tendency of a firm to investigate an innovation before a decision is made. It is similar to the quality of comprehensiveness in one's planning. The analysis dimension stand for being prudent in approaches made (Morgan and Strong, 1998).

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Defensiveness

The dimension of defensiveness also emphasizes efficiency and low cost similar to Miles and Snow's defender type. It is almost like the defensiveness posture of a military stance. Low cost sustainable quality being the focus, the dimension signifies consistency within its market domain. There is no inclination for development *per se*.

Futurity

Futurity is the vision of an enterprise to take possible future developments into sight and prepare its position in advance. It takes decisions based on a relatively longer period of time, and requires long term planning and emphasis.

Proactiveness

Proactiveness is another dimension that coheres with Miles and Snow's typology of prospector in that it constantly seeks new market opportunities for development. Innovation is the challenge and elimination of declining businesses or products are always attended with concern. They appear to carry the positive motivation of aggressiveness combined with prudence of analysis quality. Proactive firms are aggressive in getting products to market and they analyze the consequences of each opportunity in advance.

Riskiness

Riskiness refers to the firm's propensity for risk taking that can become manifest in resource allocation decisions. Risk is involved in entrepreneurships however it has a range based on the level that differentiates firms.

Miles and Snow (1978), Porter (1980) and Venkatraman (1985) frameworks are the most enduring strategy frameworks.

We have designed a tripartite conceptual model of the study to accommodate both of multivariate analyses of the classificatory approach and comparative approach with the same data and simultaneously.

2.2. Business Performance

The decision making in strategic management is encompassed within the context of strategic orientation construct, effects of which always involve performance; performance is a function of strategic orientation. Thus, business performance has become an important component of empirical research in the field of strategic management as have been recognized by Hambrick (1980) and as discussed by Venkatraman and Ramanujam (1986). A general definition on performance is the final outcome of a firm with respect to its mission and valued against company goals, measuring efficiency in general. This is a post-modern definition as we shall view in following discourse.

The research that covers any scale of organizational performance measurement must address two basic issues: selection of a conceptual framework from which to define performance and identification of accurate, available measures that operationalize performance (Dess and Robinson, 1984).

Ford and Schellenberg (1982) examine three such major frameworks:

(a)   The goal approach that seeks a definition from explicit goals
(b)   The systems resource approach that provides a framework to assess key internal and external factors of survival,
(c)   The constituency approach which views the organization as existing
        to benefit numerous external and internal 'constituencies'.

Regardless of the framework chosen, it is apparent that organizational performance, in this instance business performance, remains a complex and multi-dimensional phenomenon. Operationalizing such a complex concept is inherently difficult.

Traditionally, the last framework of measuring benefiting constituencies has been at the forefront of business performance evaluation and has been based on accounting results purely. This conventional approach to business assessment has been to emphasize profitability, most frequently measured by return rate on investment,

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which is widely regarded as the ultimate "bottom line" test of success. Although this framework based on accounting as a theoretical construct has served well for those businesses in modern times, the magnitude and environments of businesses have become too complex to be evaluated with such a single framework in 21st century. There are now other variables that need to be addressed requiring other frameworks to be jointly employed (Ford and Schellenberg, 1982). Accounting-measures-only may be misleading because of their inadequate handling of intangibles and improper or missing valuation of sources of competitive advantage. *Contemporary knowledge suggests that accounting-based issues need to be combined with market-based assets in order to generate a more composite assessment of business performance attributes* (Morgan and Strong, 2003). Others have also found the accounting-measures approach to be misleading like Sink and Tuttle (1989) who viewed performance with seven criteria: effectiveness, efficiency, quality, productivity, quality of work life, innovation, and profitability depending on the context and introduced performance as a "function of complex interrelationships". Walker and Ruekert (1987) have decided on three performance dimensions of primary importance:

(a) *Effectiveness* as the success of a business in comparison with the competition and measured with *change in market share.*

(b) *Efficiency* as the outcome of a business in relation to the resources employed in implementing them and measured with *ROI* return rate on investment.

(c) *Adaptability* as the success in responding over time to change in the environment and measured by the NPI new product introduction.

Kaplan and Norton (1996) developed a shift to an understanding that business performance is a multidimensional in nature and developed "balanced scorecard" to include strategy based performance evaluation in addition to financial measurements.

The balanced scorecard provides feedback around both the internal business processes and external outcomes in order to continuously improve strategic performance and results. Kaplan and Norton (2001) describe the innovation of the

balanced scorecard as follows. "The balanced scorecard retains traditional financial measures, but financial measures tell the story of past events, an adequate story for industrial age companies for which investments in long-term capabilities and customer relationships were not critical for success. These financial measures are inadequate for guiding and evaluating the journey that information age companies must make to create future value through investment in customers, suppliers, employees, processes, technology, and innovation".

Contextually, performance is more of an ordinal or interval nature rather than an absolute measurement and can be very diverse or subjective, especially in multivariate analyses particularly when being employed across industries as in this present study. Chakravarthy (1986) refers to performance as distinguishing well-adapted firms from mal-adapted ones whereas in High Performing Systems Model (Porter, 1991) firms are considered high performers if their business performance is superior to that of directly comparable businesses. Much often business performance is measured using a subjective approach 'judgmental measure' which consists of asking respondents for their assessment of performance on various measures (Kumar, *et al.,* 1998) and has found strong support (Dess and Robinson, 1984). Also in support, Venkatraman and Ramanujam (1986) have found a strong correlation between both approaches, while postmodern paradigms justify subjective approach with hermeneutics tradition and interpretation school revived (Arias and Acebròn, 2001). Dess and Robinson (1984) have also found support for use of subjective measures wherever objective measures are not available or not attainable

This study includes a wide range of performance measures of overall performance, comparative performance and performance compared to objectives and therefore fully satisfies the expectations of companies of present era of post-modern world. In this respect, the present study reflects similarity both to the futurity dimension of performance in balanced scorecard and principles of PIMS methods, which will be shortly reviewed hereafter.

2.3. PIMS Profit Impact of Marketing Strategy as a Model

The PIMS (Profit Impact of Market Strategy) research program was initiated and developed at the General Electric Co. from the mid-1960s and expanded upon at the Management Science Institute at Harvard in the early 1970s. Since 1975, The Strategic Planning Institute has continued the development and application of the PIMS research to provide empirical evidence about the relationships between strategy and business performance, to determine how key dimensions of strategy affect profitability and growth (Buzzell and Gale, 1987). For all these years with about 450 corporations of 3,000 strategic business units having contributed annual data to the program for periods that range from two to ten years, the PIMS data base provides a pool of rich information with over two-hundred variables describing each business (Woo and Cooper, 1981; Hambrick, 1983). Some of the *key dimensions* in PIMS research program database have also helped in shaping the dimensions in this research program. In fact, PIMS, by virtue of its approach of measuring relationships rather than the absolute values is an appropriate source of modeling how to identify strategic orientation and seek relationships with respect to performance. The data accumulated at PIMS based on U.S. experience will also make it possible to look at some of the relationships of interest to note the difference between those businesses of the United States and Turkey though that may best be left to be the subject of another study. Therefore, PIMS principles are shortly discussed in this section.

The comprehensive profiles of over 3,000 strategic experiences constitute the unique data pool that covers the important characteristics of the market environment, the state of competition, the strategy pursued by each business (Galbraith and Schendel, 1983). PIMS data has been used in dozens of academic articles; and PIMS findings provide valuable guidance on the decisions of senior executives in major companies around the world. PIMS is also able to produce industry averages for bench-marking, help to identify winning strategies and measure the profit potential of a business, provide a methodology for diagnosing business problems and identifying opportunities in many of the industries (Buzzell and Gale, 1987).

PIMS competitive strategy paradigm:

The PIMS database is a collection of statistically documented experiences drawn from thousands of businesses, designed to help understand which strategies (strategic orientation) work best in what kinds of business environments, which is also introduced into our current study as controlling variable, and evaluate business performance. The business performance depends on three major kinds of factors together called PIMS competitive strategy paradigm (Buzzell and Gales, 1987):

- The characteristics of the market in which a business competes,
  - This environmental determinant entered into the conceptual model of the present study as controlling variables

- The strategy it pursues,
  - This is reflected with the strategic orientation construct entered into the conceptual model of the present study as independent variable

- The business's competitive position in that market.
  - This is carried into the conceptual model of the present study with Kotler's marketing strategies based on positions taken in the market place as the intervening variable

The years of research on the PIMS database and on other cross-sectional databases of business units show quite clearly that profitability is strongly linked to "strategic position" and a major determinant of business success. Those businesses that position themselves to win the strategy game through a sustainable advantage also win the performance game (SPI, 2005)[10]. This approach of building performance on *strategic position* is extremely supportive of competitive marketing strategy typologies that the author has introduced from Kotler and Armstrong (see Table 2.4).

The business performance is measured against three widely used standards: SBU's own past experiences, the performance of others in the same industry, and the

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[10] Quoted from The Strategic Planning Institute at http://www.pimsonline.com on 02.02.2005

cost of capital (Buzzell and Gales, 1987). We have also utilized the first two standards and performance objectives of SBU. Following Table 2.7 summarizes the key strategic factors influencing business performance.

Unit of analysis at SBU at PIMS:

The PIMS unit of analysis is the Strategic Business Unit (SBU). Each business is a division, product line, or other profit center within its parent company. *The SBU sells a distinct set of products and/or services to an identifiable group of customers, in competition with a well-defined set of competitors, and for which revenues, operating costs, investments, and strategic plans can be identified*. This definition on the boundaries of SBU at PIMS program will be taken as the norm for the current study undertaken.

● Competitive Position	▯ Market Environment	▯Stage of Lifecycle
▯Market Share	▯Marketing/Sales	▯New Products/Sales
▯Relative Market Share	▯Customer Concentration	▯R & D/Sales
▯Relative Quality	▯Customer Purchase Amount	▯Real Market Growth
▯Relative Price	▯Industry Concentration	.

Table 2.7 *The Key Strategic Factors Influencing Business Performance*

Variables and dimensions in PIMS:

The PIMS database has financial, strategic, competitive, and background data on each business unit. Each business is profiled in terms of some five-hundred variables. The data include:

I- Standardized income statement --
o   Purchases and manufacturing components of cost of goods sold
o   Marketing expenses (4 categories)

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- o   R&D expenses (2 categories)
- o   Pretax, pre-interest income

II- Standardized balance sheet (primarily asset side) --
- o   P&E (net and gross book value)
- o   Inventory (finished goods, raw materials)
- o   Receivables
- o   Payables

III- Quality and price relative to competitors

IV- New product levels for business and competitors

V- Market share levels and changes for business and major competitors

VI- Descriptions of markets, channels, and competitive tactics

Variables and dimensions in PIMS data base reflect realized strategy whereas other strategy dimensions and types include intended strategy which sometimes are sought to determine the pattern as well. Some of the strategic dimensions require study of more expanded periods necessary to recognize the trend. This is a short coming of PIMS system; the conceptual model of the present study overcomes this relative deficiency partially by also introducing perceptional measurement also over a longer period. A similarity of PIMS studies to the present study here is that because companies participating in PIMS studies belong to many different businesses and randomly, there are no efforts to explore strategy issues that are unique to a single business. Another similarity is that according to Buzzell and Gale (1987) performance depends on three major kinds of factors: (a) the characteristics of the market in which a business competes [this is being represented by control variables of industry characteristics], (b) the businesses' competitive position in that marketplace [Marketing strategy based on firm's competitive position], (c) the strategy it pursues [strategic orientation].

The PIMS data look for statistical relationships among variables, and not at the individual data records, similar to the research that has been overtaken in this study. Table 2.8 indicates data characteristics and what PIMS is programmed to provide.

Data Characteristics	PIMS *can* provide	PIMS *cannot* provide
▢ Data describes business units, not companies	▢ Data on market shares, relative prices, and other factors that describe business units	▢ Data on debt, equity, diversification and other factors that describe companies
▢ Retrieval is restricted to statistical summaries of data, not individual records	▢ Average ROI of fast growing businesses	▢ ROI for GE Plastics
▢ There are eight broad categories for type of business (e.g. consumer durables, industrial capital goods) ; there is no data identifying the industry of the businesses	▢ Correlation between quality and market share for consumer durables businesses	▢ Correlation between quality and market share for automobile industry
▢ PIMS cases contain annual data, typically tracking a business over 4-6 years	▢ How an increase in R&D expenditures typically affects new product levels one, two or three years into the future	▢ How an increase in R&D affects new products three months into the future

Table 2.8 *PIMS Data Characteristics and Outputs*

Definitions of some major dimensions of business strategy have been presented in PIMS program on Table 2.9 (Buzzell and Gale, 1987).

The author has reduced the works at PIMS program to a conceptual model of (Market Structure + Competitive Position) being antecedents of (Strategy) ⟶ which is related to (Performance).

2.4. Business Environment

There are different views on how strategies develop such as the planning view, the logical incremental view, the cultural view, the political view, the visionary view, and the natural selection view, which are not mutually exclusive but rather each view is characterized by the dominating quality (Johnson and Scholes, 1993). The natural selection view is based on the argument that strategic options are severely limited by the environments at various levels that the organizations and/or businesses operate in. This

Some major dimensions of business strategy	

+ Product/service policies
   - Quality of product/services
   - Relative rate of new
     product introduction
+ Pricing policies
+ Marketing programs
   - Sales force
   - Advertising
   - Sales promotion
	+ Investment strategy
	   - Mechanization/automation
	     of operations
	   - Capacity addition
	   - Inventory levels
	+ Work force productivity
	+ Vertical integration
	+ Research & development

Table 2.9 *Major Dimensions of the Study at PIMS Program*

view is further supported with complex, dynamic environments of current ages that require the businesses to be considered within the context they operate and studies become more representative only with environmental forces also introduced. Duncan (1972) defined the environment as consisting of all the relevant physical and social factors outside the boundary of an organization that act as inputs to the organizational decision making process. The environment counts in developing strategies. Those limitations of environment become tangible while implementing strategies and making choices on the operational strategies. The literature survey has shown that many researchers have tried to reveal knowledge on the effects of the environmental forces on the managerial behavior in decision making and undertaking strategic choices. Each one of these environmental issues has been major subjects of research at Harvard, Wharton and Stanford for decades. These studies provide substantial insight on the impacts of many environmental factors (Ginsberg and Bucholtz, 1990; Hrebiniak and Joyce, 1985 as quoted in Jennings and Seaman, 1994).

Narver and Slater (1990) propose that the market orientation-performance relationship might be contingent on some industry situations in which firms operate, such as commodity versus non-commodity and/or competitive versus noncompetitive.

McKee *et al* (1989) have tested positively that the effectiveness of a particular strategic orientation- reactor, defender, analyzer, and prospector- is contingent upon the dynamics of the market

A key premise in the conceptual literature on *organizational change and adaptation* is that managers cope with changes in their firm's external environment through the choice of appropriate strategy and the design of a matching of structure (Andrews, 1971 as quoted by Jennings and Seaman, 1994). Another conceptual argument is that an optimum strategy-structure match yields a superior performance (Chakravarthy, 1982). The findings have shown that idiosyncratic nature of environmental conditions must be taken into consideration to promote successful implementation. Some environments support certain strategy types for a successful implementation while some others thwart effective implementation. The environment and the structures chosen will in turn influence strategies.

Miles and Snow (1978) have developed strategic typologies focusing on processes of internal adaptation to environmental changes following the tradition of Organization Theory (Namiki, 1989). Hence, the typologies are better demonstrated when variables of environmental nature are included. In this study we have included two environmental constructs as control variables (Zajac and Shortell, 1989) that are of major concerns in Porter's studies: industry (market turbulence) and competition (competitive intensity) (Porter, M, 1980: *Competitive Strategy: Techniques for Analyzing Industries and Competitors*). Miller and Friesen (1982) refer to competitive intensity as competitive environment and relate it to "dynamic and hostile" environment. *Dynamism* refer to (a) response to change in marketing practices, (b) rate of obsolescence of products/services, (c) predictability of competitor actions, (d) demand forecast, (e) change of technology; *hostility* refers to (a) threat to survival, (b) price competition, (c) competition in quality, (d) dwindling markets, (e) labor supply, (f) government inference (Miller and Friesen, 1982). Competitive intensity dimensions

do directly or indirectly refer to above elements and the present research's design has a wider scope to include different industry groups for the study and therefore these variables of common nature are best fit and have been included as environmental moderators. Market turbulence reflects market environment and its rate of change, and it will be included in the study as the other controlling variable.

Slater *et al* (2006) in their study of the moderating influence of strategic orientation on the strategy formation capability-performance relationship have adapted Jaworski and Kohli's (1993) measures as controlling variables: (a) market turbulence, (b) competitive intensity, (c) technological turbulence. Technological environment Dvir *et al* (1993) reflects the impact of change in technology with regard to performance and has also been included. This study will adapt DeSarbo's (2005) measures which include all three variables to enhance present knowledge on those effects of the major types of environment in making strategic choices.

2.5. Review of Relevant Literature on Strategic Orientation and Business Performance

Extensive literature review reveals no similar studies where marketing strategy has been included as a mediating variable in explaining the impact of business orientation (business strategies) on performance. However there are other studies that sought fit between business and other functional strategies, and that sought relationship between these matches and performance or that investigated the relationship between strategic orientation and performance, and a review of those of some interest will demonstrate the dynamics of the relationships. Slater and Olson (2001) notes that during the 1990s a substantial body of empirical research emerged examining the performance implications of a match between business strategy and functional strategies including: (1) human resource management strategy, (2) technology strategy, (3) administrative strategy, and underscores that their research supports the proposition: appropriate functional strategies contribute to the effectiveness of business strategies (e.g., Miles and Snow, 1978; Porter, 1980, 1985).

Bird and Beechler (1995) has carried out a study that examines linkages between business strategy and human resource management (HRM) strategy in Japanese subsidiaries in the U.S. The study investigates whether or not fit between a subsidiary's business strategy and its HRM strategy is associated with higher performance. The model used in that study also recognizes axiomatic relationships between business level strategies and various functional strategies. While many classificatory schemes exist for typing HRM strategies, the researchers appear to have used one that reflects the philosophical approach taken to manage human resources (Allan and Beechler, 1995):

  (a) Accumulator HRM strategy,

  (b) Facilitator HRM strategy,

  (c) Utilizer HRM strategy.

Typology for positioning strategies is another recently investigated but long-time overlooked area of marketing management. Blankson and Kalafatis (2001) have, through empirical research, developed a consumer/customer-derived generic typology of positioning strategies. The typology is comprised of eight dimensions aimed at providing favorable perceptions about the firm's offerings. Methodology used successfully in the foregoing research is another support for the employment of the model of dimensional approach in this investigation.

Another study on market strategy typology is carried out by Hooley, Beracs and Kolos (1993) to test Western theories and marketing techniques and examine strategic types in Hungary. Hooley *et al* ibid have given an account of their findings in their article *Marketing Strategy Types in Hungary*. Similar to the state of Turkish economy in the current investigation, the environment in Hooley's article, which is dominated by past economic recession and challenging EU entry with unprecedented reforms, is also a particular type of setting where after the collapse of the Iron Curtain moving to free economy, is guarded by dramatic reforms. To examine marketing strategy types in this setting is an unusual case; Hooley *et al* ibid have even underlined that to their knowledge no previous attempt has been made to examine strategic types in non-Western economies; so rare is the research in similar areas in non-Western states.

Also, the investigation in the current study is a rare one as to setting in an unusual geography, in unusual economy, in extensive coverage, and the author has not sighted any similar study in the literature covering Turkish markets. Hooley's research has been funded by EU commission set out to examine the state of art of marketing in Hungary and the objectives of the article are set to examine the different strategic approaches (strategic orientation) evident in the Hungarian market and, specifically to create a typology of approaches to marketing. They have identified five marketing strategy types:

Cluster 1: Efficiency Focus Defenders (27.4 per cent of the sample) The prime objective is to defend position mostly pursued through an internal focus on efficiency and productivity gains, targeting individual customers with products of comparable quality and price to those of competitors.

Cluster 2: Quality Focus Defenders (21.0 per cent of the sample) The same standing as first, a focus on defending position in unstable but mature, homogeneous markets. Focus on quality as a means of differentiating is the major difference.

Cluster 3: Low Price Defenders (16.4 per cent of the sample)
This final defender cluster's focus is same as cluster 1, on efficiency and productivity however with quality parity and at lower prices. Typically targeting individual customers, selling, competitive pricing and cost leadership are all important ingredients in the strategy.

Cluster 4: Market Share Challengers (14.7 per cent of the Sample)
The most aggressive, often following growth or even market domination objectives. Focus on winning market share by attacking the whole market with similar quality products at low prices.

Cluster 5: Organic Growth Segmenters (21.6 per cent of the Sample)
Growth oriented through emerging new segments, focus on selected market segments indicating a highly developed positioning strategy.

It appears that the congruence sought between business strategies and functional strategies related to performance have progressed within time further into congruence between business strategies and other internal processes. Slater and Olson (2000) found out that over the past fifteen years, a substantial body of empirical research has emerged that considers the match between business strategy and its internal processes as follows:

(a) Managerial characteristics (Gupta and Govindarajan, 1984; Slater, 1989),

(b) Strategic planning system characteristics (Veliyath, 1993),

(c) Human resource management practices ((Balkin and Gomez- Meija, 1990; Rajagopala, 1997),

(d) Technology strategy (Dvir, Segev, and Shenhar, 1993),

(e) Organizational structure (Powell, 1992),

(f) Control systems (Govindarajan and Fisher, 1990),

(g) Corporate-SBU relations (Golden,1992),

(h) Middle management involvement (Floyd and Woolridge, 1992),

(i) Managerial consensus (Homburg, Krohmer, and Workman, 1999).

Moore and Strong (2003) is one of several well-known examples of having investigated business performance results against varying strategic orientation facilitating Venkatraman's (1989) dimensions. Findings have confirmed positive relationship with analysis, futurity and defensiveness exhibiting higher levels of business performance. Many of the similar studies involving Miles and Snow typologies for strategic orientation have been listed on Table 2.2.

2.6. Context of the Study: Turkish Business Environment

Most of the studies concerned with the formulation and implementation of business-level strategies as precursors of performance have utilized samples of firms from the Western world and have mostly used archival data (PIMS data base). Douglas and Rhee (1989) have observed that there are findings leading to realize that differences may occur in competitive strategies from one country to another. A much needed way to

further investigate how strategic orientation determines firm performance and thereby contribute to the management literature in a meaningful way would be to undertake a study that shall use sample from a non-Western nation, examine businesses which have not been adequately investigated so far and use primary data as opposed to archival data. From this vantage point, Turkey is a considerable choice as one of the forerunners in World's emerging economies and as a State on the verge of accession with EU, and therefore this investigation aimed at responding to this need has pioneering contribution to the literature. Having finalized the literature review, an overview of the economic environment is provided in the next paragraph to serve as the background of the study.

While Turkish economy's overall performance has been reasonably fine until the late 1980s, Turkish economy's indicators over the last fifteen years have been poor if one starts from the assumption that convergence with EU is the norm among market economies. Since the late 1980s, Turkey has virtually made no progress on this front, its GDP per capita is about at the same level in 2004 (Dervis *et al,* 2004). The economic macro-environment of Turkish enterprises has evolved in a generally unfavorable business environment marked by sharp fluctuations in GDP, two recessions, high inflation over ten years between 1993 and 2003 (OECD report, 2004). In view of such adverse effects on competitiveness Turkey's international business has been limited to labor intensive and easily imitable research-oriented products (Seymen and Utku, 2004). Since 2001, with the commitment of the Government to sound economic policies, Turkey has significantly improved its macro economic situation, restructured the financial sector and improved the business environment. Thus, stability has been restored, predictability has improved and market confidence has increased (World Bank report, 2006). Following the record contradiction of GDP in 2001, the Turkish economy has recovered at a speed and become one of the fastest growing economies in the world in 2004; the private sector has been most operational in the success. The growth has been mainly due to private consumption, rise in investment and exports on the demand side. Strong investment activity has brought a significant increase in domestic demand since 2002. On the supply side, industry, trade, transportation and communication sectors have been mostly responsible for growth. Rapidly rising productivity has been the main source of strong growth trend. Firms have largely improved efficiency and

productivity and have launched great ambition in penetrating new international markets. With such reactions to recovery, they increased utilization of installed capacity and labor. Average capacity utilization and working hours in the economy rose significantly. The cumulative increase in labor productivity amounted to 23 percent during 2002-2004 (World Bank report, 2006). The study setting has followed those turbulent times in minds, and the field study has taken place during the better times of 2007.

Where in today's global environment, resources are easily available for their customers, and technologies are easier to reach, it is also more critical for companies to develop capabilities of management in organizations with knowledge built in their own yard, and that is especially more crucial for developing countries like Turkey.

To pursue both challenges in foregoing paragraphs, this study will be carried out in Turkish industries with the primary data collected across companies registered at TOBB, The Union of Chambers and Bourses of Turkey. The knowledge that will be produced is expected to contribute also to the so much needed development of capabilities of managing organizations strategically and competitively. It is further expected to evoke strategic awareness in the Turkish companies and may lead to taking measures to improve formation and implementation of the strategies.

Following chapter III presents the theoretical base of the study, within that context will provide the conceptual model and will establish the related components of the model and their links and will also serve as a summary of this literature review.

III. CONCEPTUAL FRAMEWORK OF THE STUDY

Subsequent the review of the literature and related theories in strategic orientation in the preceding parts, this chapter will present the theoretical base of the study, within that context will establish how the conceptual model is developed and will discuss the related components of the model and how they fit and their sources in the literature and by doing so will also serve as a summary of the literature review.

3.1. THEORETICAL BASE

The subject of this investigation, the heterogeneity of strategic orientation of the firm and its impact on performance is not independent of the internal arrangement and environmental context; and as dependence is best explained by the contingency theory, the author has employed a systems model perspective on the contingency theory as the theoretical base for this research model to explain how changes in strategic behaviors (strategic orientation) of the firm determine its performance. The fundamental basis for strategic orientation concept and strategic configurations is Weber's (1947) structural contingency theory (Ketchen *et al* 1997) which basically underlines that there is no best strategy for all of the business units and posits that the optimal option of strategy depends on certain conditions, termed contingencies (contingency factors).

Many research studies have been undertaken to examine a wide range of contingencies such as various aspects of environment, organization structure, marketing choices and how these factors interact with strategy variables. One focus of the literature considers structural forms as contingency like Chandler (1962) who considered the contingency relationship between a firm's corporate strategy and its internal administrative structure (Zott and Amit, 2008). Batteries of strategy research developed upon the premises of Weber's (1947) theory are based on the match or coalignment (fit) of a business unit with its environment at two levels. At one level, consisting of the structural features, strategies should be suited to the specific environment in which they exist, such as competitive environment, marketing environment and technological environment (contingency within external arrangement). At another level, similar to Skinner's (1974) focus factory on manufacturing strategy,

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functional strategies should be developed to suit to the strategies of business unit (contingency within internal arrangement) (Ginsberg and Venkatraman, 1985). Hence, contingency serves as the dynamic of adaptation process whereby congruence is best obtained.

The main premise of the contingency theory concerns dependence which is associated with the open systems. Business units can be considered in terms of general open-system model (Kast and Rosenzweig, 1985). The open system is in continuous interaction with its environment and achieves dynamic equilibrium while retaining the capacity for work. It refers to the deliveries from the environment (input dependence) and their transformation within the unit and products being supplied back to the environment (output dependence). The transformation taking place within the unit and related performance depend upon its structure within the firm and the environment. Hence a better structure leads to a better handling of the contingencies and that leads to superior performance; Figure 3.1 gives a better illustration on the relationships on a systems model.

Classification of firms based on their environmental adaptation patterns into schemata (Ketchen *et al,* 1997) also called strategic configurations are the basis of strategic typologies (Miles and Snow, 1978; Porter, 1980). The belief that performance differences can be attributed to configurations is grounded in structural contingency theory (Ketchen *et al,* 1997). The theory posits that for each strategic orientation there exists a configuration of business unit's characteristics that fits the strategy to yield superior performance. These configurations (typologies) represent *complex "gestalts" of multiple, interdependent, and mutually reinforcing characteristics* that enable businesses to achieve their performance target (Slater *et al,* 2006) and are defined by Ketchen *et al* (1997) as *commonly occurring clusters of strategic elements*. Adaptation, as a basic concept in strategy theory, defining appropriate relationships between variables of management controls such as marketing, manufacturing, investment decisions and those variables that are beyond the direct control of management (environmental variables) (Venkatraman, 1985), is the reason of appeal by strategy scientists for contingency approaches (Galbraith and Schendel, 1983). Many

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contingency theorists have studied variables related to strategy, structure of firms (Doty *et al,* 1993; Miles and snow, 1978; Mintzberg, 1979) and to examine their contingent effects on firm performance. Further, Schoonhoven (1981) remarks that "when contingency theorists assert that there is a relationship between two variables … which predicts a third variable … they are stating that an interaction exists between the first two variables" (Ginsberg and Venkatraman, 1985). The involvement of such interaction helps to explain the function of impact on the performance with a moderating or mediating effect. A systems model of contingency theory-based strategic research borrowed from Ginsberg and Venkatraman (1985) that basically delineates theoretical discourse on the contingency theory exhibits the discourse on Figure 3.1.

The tripartite systems model has three components input, process, and output (Kast and Rosenzweig, 1985), and when adapted with the contingency approach, *input* also refers to environmental dimensions like components of market structure and environmental uncertainty; *process* refers to organizational dimensions such as structure and systems; *output* refers to various performance dimensions such as financial performance and return on investment.

The three broad types of contingency variables (environmental variables, organizational variables, and performance variables) have been represented on the model with four major links. Link I designates the impact of external environmental factors (*control variables*) on strategy (*strategic orientation*); link II designates the impact of organizational variables (*functional strategies*) on the formulation of strategy; link III designates the influence of performance (*business performance*) variables on the formulation of strategy; link IV designates the influence of chosen strategy (*strategic orientation*) on organizational arrangements (*functional strategies*) such as structure, systems, and style (*marketing strategies, production strategies and supply chain management strategies*); *link V* (*attached by the author*) designates the impact of all independent variables (control variables + strategic orientation + functional level strategies) on business performance as the conceptual model of the present study. To identify how the conceptual model of the present study compares with the contingency theory-based strategic research model, the author has contributed in the exchange with
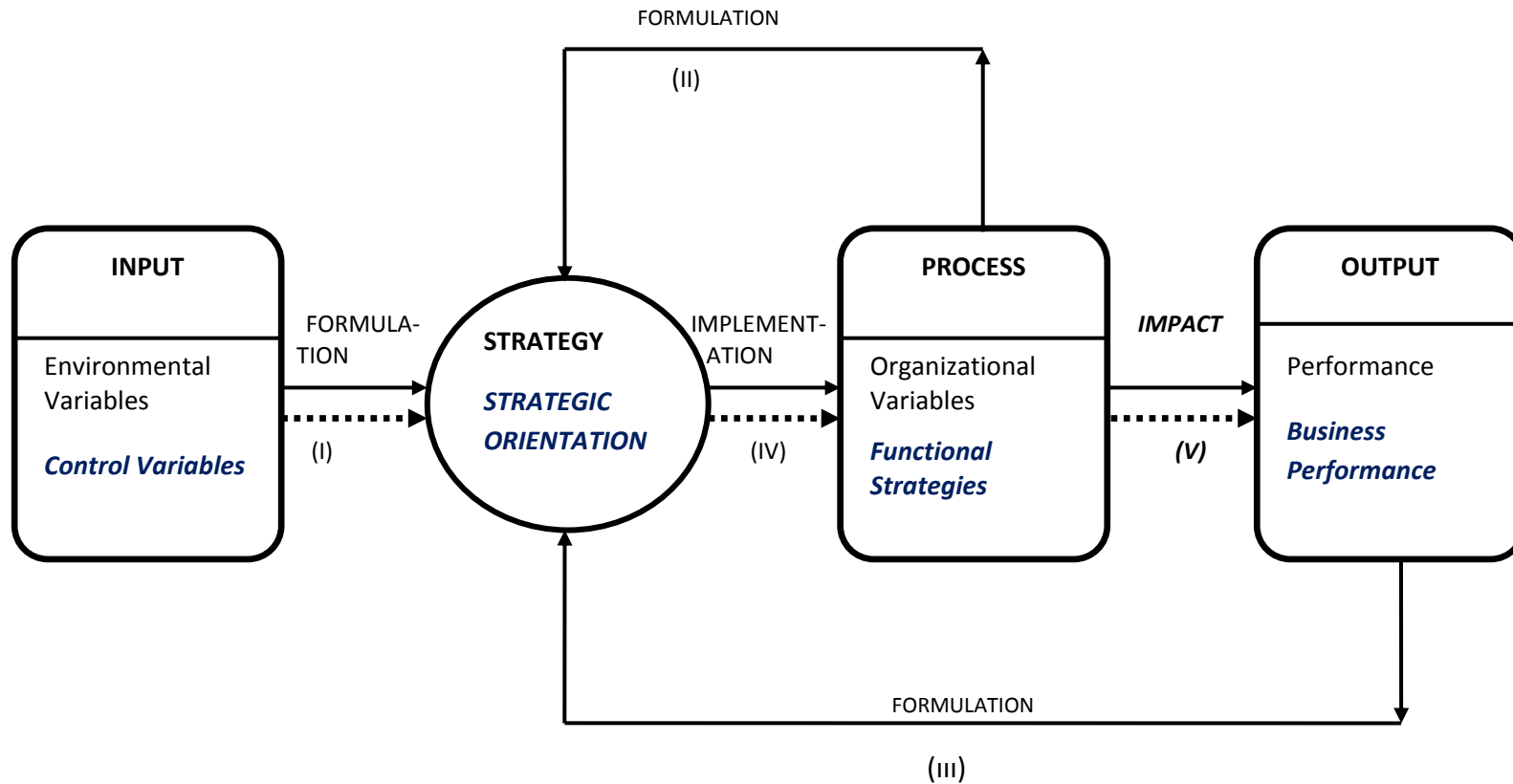
Figure 3.1 *A Systems Model of Contingency Theory-Based Strategic Research (Ginsberg and Venkatraman, 1985)*

(Text in italics-and-bold color and dashed arrows have been inserted by the author)

the text in italics-and-bold color, and dashed arrows. Environmental variables are also named as industrial characteristics to differentiate the type of environment to correlate with active involvement of these variables in empirical works as in the example of the present study. Organizational variables have been underscored with functional strategies to concur with the naming of the concept in the present study. To illustrate the asymmetric relationships of the conceptual model of the present study the arrows have been redrawn. This model also appears to reflect double-loop learning behavior with feedback systems integrated in the model (Argyris and Schön, 1996).

3.2. THE CONCEPTUAL MODEL OF THE STUDY

Pursuant to strategic orientation and strategy literature review build up in previous chapter and discourse of theoretical base of the research on contingency in the preceding section, the conceptual model of the study on the association of strategic orientation and performance together with the involvement of business environment and intervening effect of marketing strategies is presented here. Although the model recognizes relationships between strategic business unit level strategies and various functional strategies, the focus of this study is restricted to the marketing management function. The proposed model has been developed within the contingency theory and has followed the systems model to involve all the contingency factors that have been included in Ginsberg and Venkatraman's (1985) contingency review to determine if selected variables explain a significant proportion of variances in performance and the generative mechanism thereto; the model is depicted in Figure 3.2.

The approach of including all the contingency factors together is also substantiated with the findings of James and Hatten (1994) whose study highlights ... *it is not the main effects of ... strategy or environment that explains the performance ... but the interactions between them.* The author has chosen appropriate analysis so that the interactions are apparent at each stage. It also appears that Venkatraman (1985) had used a much basic model of assessing predictive validity of the relationship {STROBE dimension → PERFORMANCE dimension} for methodological considerations, in a similar way. As the model of the present study includes two distinct approaches, classificatory and comparative, with two different perspectives of Miles and Snow

STRATEGIC ORIENTATION

[Model A]
CLASSIFICATORY APPROACH:

Typologies in dimensions
- Entrepreneurial dimension
- Engineering dimension
- Administrative dimension

[Model B]
CLASSIFICATORY APPROACH:

Typologies in orientations
- Prospector orientation
- Defender orientation
- Analyzer orientation
- Reactor orientation

[Model C]
COMPARATIVE APPROACH:

Dimensions
- Aggressiveness dimension
- Defensiveness dimension
- Analysis dimension
- Proactiveness dimension
- Futurity dimension
- Riskiness dimension

ENVIRONMENTAL VARIABLES
[Industry Characteristics]

Market turbulence

Technological turbulence

Competitive intensity

MARKETING STRATEGIES

Market-leading strategies

Market-challenging strategies

Market-following strategies

Market-niching strategies

BUSINESS PERFORMANCE

Total perceived performance:

- Overall performance
- Comparative performance
- Performance compared to objectives

Objective performance:

Performance over the past three years

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classificatory approach: dimensional and orientation modes of the core construct "strategic orientation", there are in fact three models being studied simultaneously with a triangulation methodology.

The major feature of the this integrative model is that it connects in a single framework, the concepts of industry environment and business position of Industrial Organization Economics Theory, organization structure of Organization Theory, and strategy of Business Policy (White and Hamermesh, 1981). The construct and concepts of the study will be recapitulated below for reflection in the model.

3.2.1. Strategic Orientation

The model includes strategic orientation construct as the predictor of the relationship, it is the core element of the systems model. It has been conceptualized and the studies in strategic orientation construct have been categorized under three approaches (Hambrick, 1980; Ginsberg, 1984; Venkatraman, 1989) which Morgan and Strong (1998) have examined as follows:

(d)   The narrative approach:

This approach reflects the case-based tradition of business policy. The narrative approach is anchored to qualitative methodologies frequently employing case study analysis, describing verbally the holistic nature of strategy in its context. It has limited use in testing theories.

(e)   The classificatory approach:

The classificatory approach attempts to group strategy as typologies, aggregating firms according to the nature of strategy emphasized moving away from idiosyncratic and narrative descriptions of strategy (Venkatraman, 1989). This represents a gestalt approach.

(f)   The comparative approach:

The third approach to assessing firms' strategic orientation is comparative in nature enabling assessment of strategy, not across various strategy classifications but, instead, along dimensions of competitive strategy. It measures strategy in terms of

several key variables. The approach has an advantage of added objectivity in strategic research and facilitates analysis of strategic behavior of the business units with multivariate techniques.

Hambrick (1980) who appears to be the originator of this categorization had drawn up a similar schedule and had identified them from an empirical vantage point, his manifestation follow:

(a)   The textual description (matching narrative approach)

(b)   Typologies of strategy (matching classificatory approach)

(c)   Multivariate measurement (matching comparative approach)

The narrative approach not being fitted for empiric investigation has been excluded and the remaining two approaches 'classificatory' and 'comparative' typologies have been employed in this study. By this virtue, the study captures a unique contribution to the literature by facilitating two approaches of strategic orientation simultaneously in the same study, with the same sample and instrument to compare two running approaches. It will also provide means for validation of new dimensions developed by the author for the typological approach of Miles and Snow in this study against test results obtained from the well established comparative approach.

3.2.1.1. Strategic Orientation: Classificatory Approach

The classificatory approach is best represented by Miles and Snow's (1978) framework as the most enduring strategy classification system. The typology's survival and superiority is due to its *innate parsimony and industry independent nature* (Desarbo *et al* (2005) which suits the present research area across industries in Turkey. Miles and Snow proposed a strategic typology classifying business units into four distinct groups:

a)   Prospectors *(Prospector orientation)*:

They lead change in their businesses, first to launch new products and identify new marketing opportunities, pioneers in innovation.

b)   Defenders *(Defender orientation)*:

They seek to maintain a secure niche in a stable product-market domain rather than expanding into new markets. They focus on low cost through efficiency and process control, defenders of position.

c)   Analyzers *(Analyzer orientation)*:

They share features of both prospectors and defenders to reflect defensive manners in their established markets and analysis manners in moving into proven (by the prospectors) promising new markets.

d)   Reactors *(Reactor orientation)*:

They lack consistency in strategy, effectively resulting in no strategy and respond, usually inappropriately, to environmental pressures as they develop.

The three strategic types *prospectors, defenders, analyzers* are consistent in strategies and perform well depending on the success of implementation whereas *reactors* are expected to be low in performance due lack of consistent strategy; reactors sometimes are not considered as a choice in research studies. However, in this study the results of analysis will prevail.

Most of the studies of strategic orientation have facilitated Miles and Snow typologies on self-assessment basis where the managers have identified their choice of strategies as they perceive (Snow and Hrebiniak, 1980, McDaniel and Kolari, 1987; Zajac and Shortell, 1989; McKee *et al,* 1989; Golden (1992); James and Hatten, 1995; Slater and Olson, 2000; Matsuno and Mentzer, 2000; O'Regan and Ghobadian, 2006). The author concurs with some of the authors who have claimed that the simplicity of this single-item nominal approach suffer from some serious limitations, may reduce the reliability and precludes the use of advanced statistical techniques; in line with this view the author has chosen to derive strategic typologies empirically in facilitating Miles and Snow's approach in operationalizing strategic orientation construct (Hambrick, 1984; Ginsberg and Venkatraman, 1985; Segev, 1987; Zajac and Shortell, 1989; Smith *et al,*

1989; Conant *et al,* 1990; Morgan and Strong, 1998; Desarbo *et al,* 2005; Moore, 2005; Kabanoff and Brown, 2008).

Venkatraman (1989) asserts that the *distinguishing feature of the typological approach is rooted in a set of parsimonious classificatory dimensions or conceptual criteria.* In overcoming the empirical limitations of the classificatory method while operationalizing strategic orientation construct, it is viewed not across pure strategy typologies only but, alternatively along parsimonious classificatory dimensions or conceptual criteria that typologies are based on (Segev, 1987; Desarbo *et al,* 2005; Moore, 2005). Hence, some of the dimensions developed serves to classify subjects on basis of Miles and Snow's typologies (prospector orientation, defender orientation, analyzer orientation, reactor orientation) whereas some have used Miles and Snow's defined concepts in adaptive cycle in operationalizing key dimensions of strategic orientation construct (entrepreneurial dimension, engineering dimension, administrative dimension) (Namiki, 1989; Conant *et al,* 1989; Zahra and Pearce, 1990). Adaptive cycle refers to the *choice (strategy)*, which top managers make, and *organizational structure* and *process* that *choice* determines; hence entrepreneurial dimension refers to choices on a market-product domain made by the top managers, engineering dimension refers to technical systems, and administrative dimension refers to structure and processes. Propositions regarding differences across strategic types in entrepreneurial and administrative dimensions have attracted more attention from researches; of seventeen studies reviewed by Zahra and Pearce (1990), six examined the typology's predictions regarding the entrepreneurial dimension and six others examined components of administrative dimension whereas only two studied the typology's predictions concerning the engineering problem. The tendency appears to have been reductionist in studying dimensions separately let alone studying more than an approach at a time. As an example, one of the major limitations of self-typing paragraph has been that the descriptions of each strategic type focus primarily on the rate of domain change representing entrepreneurial dimension to the complete exclusion of the two other dimensions of the adaptive cycle.

The research studies that have been examined during extensive literature review have all facilitated only one of the methods (classificatory or dimensional approach) of operationalizing Miles and Snow's typologies whereas in this investigation Miles and Snow's typological approach has been facilitated in dual methods and it appears to be the first study facilitating both methods in utilizing Miles and Snow typologies simultaneously on the same sample. Using both methods of Miles and Snow typological approach on the sample simultaneously provides grounds to compare two methods and also verify the approach as a whole for consistency which is of considerable contribution to the literature. For the dimensional approach of Miles and Snow's strategic typologies, a new, multi-item scale for operationalizing the typologies is proposed and tested in this study.

3.2.1.2. Strategic orientation: Comparative Approach

Venkatraman (1985), discussing Miles and Snow typologies as being single-item nominal scale with limited discriminatory power of analysis, had advocated multi-item scales as a better option in view of reducing the level of measurement error and developed a multi-item scale in conceptualizing the strategic orientation construct. Venkatraman (1989) has identified six traits (dimensions) in development of strategic orientation of business enterprises (STROBE) which are recapitulated below for their reflections in the model:

a) Aggressiveness:

This dimension is described with reference to the posture adopted by a business in its allocation of resources for aggressive strategies. This trait reflects ambition for accomplishment through market development by investing in market share or product innovation. Market-orientated and competitive stance is the distinct quality of this trait.

b) Analysis:

This dimension is described with reference to overall problem-solving posture and comprehensiveness as indicative of being very through in one's planning and internal consistency. These attributes would infer that this trait is cautious in practice, wise in business decisions and ambitious in high stable performance.

c) Defensiveness:

This dimension is described with reference to defender typology of Miles and Snow (1978) as manifested emphasis on efficiency and low cost signifying consistent performance within their chosen product-market domain.

d) Futurity:

This dimension is described with reference to key strategic decisions being taken in anticipation of 'desired future' in relative emphasis on effectiveness (in long-term) versus efficiency (in short-term) representing futuristic outlook in the opposite end of the continuum versus defensiveness.

e) Proactiveness:

This dimension is described with reference to proactive behavior in leading change in participation of industry and market expansion/ opportunities or decline/threats before they emerge.

f) Riskiness:

This dimension is described with reference to risk-taking as an organization-level construct versus individual-level trait in terms of propensity for taking risk in resource allocation, product-market initiatives and generally in terms of risk inherent in difficult decisions.

3.2.2. Business Performance

The model includes business performance as the criterion of the relationship; it is the output element in the systems model. Performance is defined as the final outcome of a firm that results from a number of internal activities or the manner in which or the efficiency with which something reacts or fulfills its intended purpose. It is a complex multidimensional construct (Chakravarthy, 1986; Kaplan and Norton, 2001; Walker and Ruekert, 1987) that is influenced by both the level of analysis (e.g., functional vs. business strategy) and strategy type (e.g., Prospector vs. Defender); it is a function of strategic orientation in this study. The focus shall be on totality in performance and market performance (i.e. sales and market share) versus competitors as they are also

widely recognized as the two of the most important indicators of performance (Caponi, Farley, and Hoenig, 1990; Kaplan and Norton, 1996; Varaiya, Kerin, and Weeks, 1987) and also because of their relevance regardless of strategy level or strategy type (Slater and Olson, 2000).

White and Hamermesh (1981) have accomplished a through investigation of how Industrial Organization Economics and Organization Theory scholars have modeled to predict business performance with different approaches and developed an integrative model of performance in resemblance with the models in this study. They have business performance predicted by strategy and structure (both well covered in Miles and Snow adaptive cycle as strategy typologies), where strategy is determined with business position and industry environment.

Objectives and competitors' performance level will be taken as the standard of comparison in the performance evaluation.

3.2.3. Marketing Strategies

The model includes marketing strategies as intervening in the relationship (Baron and Kelly, 1986; Venkatraman, 1989a) between strategic orientation and performance, and it corresponds to the process (functional) element of the systems model as a contingency factor. While, within the context of strategic management theory, marketing strategy (marketing orientation) is considered to be functional within the business strategy domain as a market interface; it is *the fundamental marketing logic,* an instrumental part of the strategic orientation. Kotler's (1984) definition underlines this positioning as "marketing strategy is a basic approach that the business unit will use to achieve its objectives, and broad decisions on target markets, marketing positioning, and mix, and marketing expenditures level". Furthermore, Langerak (2002) also states that market orientation is the foundation of marketing strategy. Extensive literature review reveals no study in operationalization of Kotler's marketing strategies, and it reveals no study involving marketing strategies' multi dimensional intervention in multivariate analysis of strategic orientation and performance relationship.

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The concept of marketing behavior to be incorporated in this study has been based on the roles firms play in their target market. However, as in business level strategies, marketing strategies are viewed not across their strategic roles but along parsimonious classificatory dimensions based on Kotler's marketing strategies: market leading strategies, market challenging strategies, market following strategies, market niching strategies. They will be recapitulated below for reflections in the model:

Market leading strategies:

These businesses (orientations) are acknowledged as number one and have the largest market share in the relevant product market. They try to expand (or at least protect) their market share and total market. They are an orientation point for competitors, a company to be challenged, imitated or avoided.

Market challenging strategies:

These businesses (orientations) occupy second, third, and lower ranks in an industry and can be called runner-up, or trailing firms. Some of them may be quite large and may adopt one of two postures: full frontal attack and indirect attack. They can attack the leader and other competitors in an aggressive bid for a further market share or play it softer and follow the leader at a close distance to position own selves as an option to gain shares continuously at a slow pace.

Market following strategies:

These businesses (orientations) do not invest heavily in new product development and prefer to imitate. They have no intention to overtake the leader. Some take the leader's products and adopt and sometimes improve it marginally sometimes to sell it to different markets to avoid confrontation.

Market-niching strategies:

These businesses (orientations) target segments within segments, or niches. This is particularly true of small businesses or business units of larger companies. Such businesses end up knowing the target customer group so well that they can meet the need better then other firms who are casually selling to the niche. These businesses may

be developing niche targets in relation to customer base, quality-price match, service, markets and may have multiple niches.

Hence, this study appears to be the first to contribute to literature as follows:

(a) It appears to be the first study that operationalizes Kotler's marketing strategy concept also in multi-dimensions.

(b) It appears to be the first study where marketing strategy has been facilitated as a mediating variable in a regression model

(c) It appears to be the first study where marketing strategies as a key functional strategy empirically demonstrates that operational strategies (strategies at functional level) in fact are the generative mechanisms of strategic orientation.

3.2.4. Environmental Variables

The model includes environmental variables as controlling variables of the relationship to enhance the research quality; it is the input element of the systems model. The systems model explains how any system exists not in a vacuum but in relation of supra systems and continuously interacts. The major supra systems of business units, affecting its vitality and environmental uncertainty (Namiki, 1989; Desarbo, 2005), are competitive environment with effect in competitive intensity, marketing environment with effect in marketing volatility (turbulence), and technological environment with effect in technological change (turbulence); these variables reflect IO industrial organization theory (Porter, 1981) in strategic management. The present research's design has a scope to include different industry groups for the study and therefore these variables of common nature are best fit and have been included as controlling variables. They are all effective in shaping orientation of business management, as has also been evidenced with studies below, and will be involved in representing the business environment as industry characteristics in this model.

Hambrick (1983) investigated how environmental variables have impact on the effectiveness of different strategies based on Miles and Snow typologies.

McKee *et al* (1989) have tested the effectiveness of a particular strategic orientation of Miles and Snow (1978) –reactor typology, defender typology, analyzer typology, and prospector typology- being contingent upon the dynamics of the market positively.

DeSarbo (2005) has employed environmental variables in testing Miles and Snow's (1978) typologies in dimensions he developed, with (a) competitive intensity, (b) market turbulence, and (c) technological turbulence. Slater *et al* (2006) in their study of the moderating influence of strategic orientation on the strategy formation capability-performance relationship have adapted Jaworski and Kohli's (1993) measures as controlling variables: (a) market turbulence, (b) competitive intensity, (c) technological turbulence.

Miller and Friesen (1982) refer to competitive intensity as competitive environment and relate it to "dynamic and hostile" environment. *Dynamism* refer to (a) response to change in marketing practices, (b) rate of obsolescence of products/services, (c) predictability of competitor actions, (d) demand forecast, (e) change of technology; *hostility* refers to (a) threat to survival, (b) price competition, (c) competition in quality, (d) dwindling markets, (e) labor supply, (f) government inference (Miller and Friesen, 1982). Market turbulence reflects state of market dynamics and lays an impact on the marketing orientation of the business. Technological environment that Dvir *et al* (1993) have found to reflect the impact of change in technology with regard to performance has also been included.

Following chapter IV presents research objectives, research design, and research methodology. Hypotheses are provided, operationalization of concepts is studied and the sample plan is discussed.

IV. RESEARCH DESIGN AND METHODOLOGY

The purpose of this chapter is to present research objectives and research design; to provide research methods and procedures used for collecting and analyzing data, and testing the study's hypotheses. Research objectives will be followed with the type of research design and research hypotheses in a row. Section on operational definitions and measures of the concepts of the model will be next. The sample plan and data analysis methodology will finalize the chapter.

4.1. RESEARCH OBJECTIVES

The strategic orientation construct, with multiple approaches prevailing and with various configurations available at different strategy levels, is still far from being integrated and convergent. However, there is an apparent consensus between the authors on the premise that different business orientations are based on different forms of adaptation, and are associated with different environments, marketing strategies (marketing behavior), and performance levels. This study's primary objective is to contribute to the theory in this context by developing an integrated model of the relationships between strategic orientation of business unit and performance with multivariate approaches and with various configurations and with the intervention of marketing strategies (marketing orientation) to determine if selected variables explain a significant proportion of variances in performance. The study within the Turkish context will also contribute to the need for testing the theory in less worn regions of the world in non-Western countries and will include environmental variables of industry characteristics at SBU level.

As the model includes two distinct approaches, classificatory and comparative, with two different perspectives of Miles and Snow classificatory approach: dimensional and orientation modes of the core construct "strategic orientation", there are in fact three models placed on test simultaneously: (a) Venkatraman's STROBE model named Model A, (b) Miles and Snow's adaptive cycle model on typological dimensions named Model B, (c) Miles and Snow's adaptive cycle model on typological orientations named Model C. The theoretical base of the research is the structural contingency theory that

basically underlines that there is no best strategy for all of the business units and posits that the optimal option of strategy depends on certain conditions, termed contingency factors; the objectives of the research will be to know more about these contingency factors, their dimensions and their relationships within the performance context.

The specific research questions are discussed below:

1. Does significant relationship exist between strategic orientation and business performance in Turkish business context?

2. A new set of typological dimensions in operationalizing Miles and Snow's business typologies is developed by the author.
   i.   Do newly developed dimensions confirm to have predictive power as good as Venkatraman's STROBE dimensional model?
   ii.   Which dimensions have more contributions to the prediction in explaining variance in performance?

3. A new set of typological orientations in operationalizing Miles and Snow's business typologies is developed by the author.
   i.   Do newly developed dimensions confirm to have predictive power as good as Venkatraman's STROBE dimensional model?
   ii.   Which orientations have more contribution to the prediction in explaining variance in performance?

4. A new set of typological orientations in operationalizing Kotler' marketing strategies are developed by the author.
   i.   Does this new set of dimensions of marketing strategies have any role as independent variable in relationship between strategic orientation and performance?
   ii.   Which orientation has more contribution to the prediction in explaining variance in performance in the regression model?

5. A new set of typological orientations in operationalizing Kotler' marketing strategies are developed by the author. As per organizational theory, this multidimensional variable is expected to demonstrate functional strategies' role in implementing business strategies. How well does this new set of dimensions

serve as mediating variable in relationship between strategic orientation and performance and hence verify this proposition empirically?

6. Do typological orientations show differences according to the type of industry (business) that the firms engage in?

7. Do exporting firms have different strategic orientations relative to non-exporting companies?

8. Do firms with a higher number of employees have strategic orientation different from those with a lower number of employees?

9. As environmental variables, what effects do market turbulence, technological turbulence, and competitive intensity have on performance?

4.2 TYPE OF THE RESEARCH DESIGN

A triangulation methodology, descriptive design that is primarily quantitative and correlational in nature, is employed in this study with a cross-sectional time setting. Type of data is primary data and instrumentation includes a self-administered mail questionnaire (with a fax and e-mail version) that is undisguised and structured.

Unit of analysis is designed as strategic business units of organizations registered with The Union of Chambers and Bourses of Turkey. This provides support for containing businesses with some degree of formalization. Also it is being required that business unit should be employing a certain number of employees and at least managed by a manager who has college education. Otherwise the inclusion of as many different businesses as possible has been encouraged, and to be random and representative of the population as much as practicable.

In the analysis of data, *SPSS for windows* release 13.0 is used. The statistical analysis employed are factor and reliability analyses, correlation analyses, hierarchical regression analyses and mediated hierarchical analyses, one-way ANOVA analysis, t-tests and cross-tabulation tests.

4.3 RESEARCH HYPOTHESES

This study defines a group of variables that have been selected to represent strategic orientation construct in two different approaches (classificatory and comparative) and in two perspectives of classificatory approach (typological dimensions and typological orientations) based on prior research and contingency theory and therefore comprises of three separate models: Model A, Model B, Model C. The conceptual model(s) developed in this study present the involvement of marketing strategies at functional level in connection with business level strategies within the construct of strategic orientation and also separately. Within this context, hypotheses developed with a priori conceptualization based on literature review and proposed conceptual models to be tested have been grouped under Model A, Model B, and Model C within the following section. Hence, the following hypothesis may be derived.

The first group covers relationships for Model A with Strategic Orientation based on Miles and Snow's classificatory approach with "typologies in dimensions".

> **H_1**: *There is a relationship between strategic orientation (typologies in dimensions) and business performance.*

> **H_2**: *The relationship between strategic orientation (typologies in dimensions) and business performance is mediated by marketing strategies.*

> **H_3**: *There is a relationship between business performance and marketing strategies.*

> **H_4**: *There is a relationship between marketing strategies and strategic orientation (typologies in dimensions).*

The second group covers relationships for Model B with Strategic Orientation based on Miles and Snow's classificatory approach with "typologies in orientations".

> **H_5**: *There is a relationship between strategic orientation (typologies in orientations) and business performance.*

H_6: *The relationship between strategic orientation (typologies in orientations) and business performance is mediated by marketing strategies.*

H_7: *There is a relationship between business performance and marketing strategies.*

H_8: *There is a relationship between marketing strategies and strategic orientation (typologies in orientations).*

The third group covers relationships for Model C with Strategic Orientation based on Venkatraman's dimensions.

H_9: *There is a relationship between strategic orientation (Venkatraman's dimensions) and business performance.*

H_{10}: *The relationship between strategic orientation (Venkatraman's dimensions) and business performance is mediated by marketing strategies.*

H_{11}: *There is a relationship between business performance and marketing strategies.*

H_{12}: *There is a relationship between marketing strategies and strategic orientation (Venkatraman's dimensions).*

4.4. THE SAMPLE AND DATA COLLECTION

The study is carried out with Turkish enterprises and the sample framework is intended to represent as wide a range as possible. The enterprises that are registered with chambers associated with TOBB Union of Turkish Chambers and Bourses is the population of the study and the purposive sample has been formed to serve in accordance with the research design. The author has intended to include a broad mix of organizations to insure generalizability with as wide coverage as possible in business sectors-industries such as services and manufacturing sectors, regional representation, ownership (domestic and foreign capital), old and new generations. Being

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representative of services sector and also with foreign ownership being higher than domestic, the insurance sector has been one of the particularly chosen sectors that have been focused. There has been a close cooperation between TSRSB 'Union of Turkish Insurance and Reinsurance Companies' who has made three calls to their members by sending the questionnaires with an e-mail attached presenting the research objectives and contribution asking the members to participate in the research. Being representative of manufacturing sector on the industry side and also with major orders being received from EU countries, the ship building sector has been another focus of the study. There has been a close cooperation between TGİSB 'Union of Turkish Ship Builders Association Companies' who has made all the efforts to have their members participate in the research by phoning each one of them and transmitting the questionnaire with an introduction. These sectors are very relevant to the focus of this research. Both servicing firms and manufacturing industries are in this sample and provide a broad base to gather a representative sample of different business strategy types.

To cover companies in Marmara region, the author has cooperated with Kocaeli Chamber of Commerce and Gebze Chamber of Commerce and Industry who have also made various calls to their members to participate in the research. Ege Chamber of Industry and Corlu Chamber of Industry have also called upon their members to participate in the research. YASED Union of Foreign Capital Investment Companies has also invited its members to participate in the research. Some of the Chambers have failed to participate because they had unsuccessful experience with previous similar research participation. Istanbul Chamber of Industry had at the time another extensive research undertaken with State Panning Organization and they have regretted because they could not participate although they wished to so. The author has partially used convenience sampling and has called upon some of the companies personally and has invited them to join.

Before any company has been provided with the questionnaire to participate, it was required that the key informant has had received a higher education and fit for and in a position of joining or making strategic decisions. Wherever this requirement has not been met, those participations have been eliminated. Within these organizations, the

target respondents being an owner, a chairperson, a manager in marketing, manufacturing, or administrations are considered as key informants for this survey. Key informants are company members who are in a position to report on the phenomena being surveyed because of their specific knowledge.

Companies have been usually contacted by phone. They would be introduced to the research and its projected implications for Turkish enterprises in general and their industry in particular; their questions would be answered and a summary of findings in general would be offered to them to be delivered at the end of completion of the research, if they are interested. The questionnaires have been either delivered by mail or courier or transmitted by e-mail or fax. Numerous reminder phone calls have been made ending sometimes with success and sometimes with failures due mostly either lack of time or sense of insecurity because of objective questions regarding the commercial and financial data. Most of the questionnaires have been returned by e-mail, fax or courier with share in this order. Overall, participants and non-participants alike were enthusiastic about this study and were interested in the results. Some of the participants have phrased their support and indicated need for further learning in the subjects captioned in the survey. A list of the firms in the sample is provided in Appendix 3.

4.5. THE INSTRUMENT

The primary data for this study is collected through a structured, undisguised questionnaire that has been administered to the companies together with a mail explaining the general purpose of the study, how they will benefit from the study in an indirect way. The questionnaire has been made available in hard copy, fax, and e-mail forms and has been designed to be completed within thirty minutes. The questions are detailed below.

The questionnaire, the survey instrument, is composed of eleven parts and 164 questions. It is provided as Appendix 1 in Turkish and as Appendix 2 in English.

4.5.1. Basic Information About the Participant

Part 1 has three open-ended questions (question numbers 1-3) asking about basic information of the participant: name, where and when established (Narver and Slater, 1990).

4.5.2. Strategic Orientation in Classificatory Approach

Part 2 has fifty-three questions (questions numbers: 4-56) operationalizing strategic orientation in classificatory approach with Miles and Snow's 'typologies in dimensions' and 'typologies in orientations' on Likert scale ranging from 1=strongly disagree to 6=strongly agree. The dimensions and their elements have been largely adapted from different sources in literature and also some of the dimensions have been developed by the author, based on theory. The key dimensions -entrepreneurial dimension, engineering dimension, administrative dimension- that have been identified in the conceptual model have been broken into dimensions to cover all the specifications per Miles and Snow's (1978) adaptive cycle specifications. For every typology –prospectors, defenders, analyzers, reactors- a separate list is drawn; closest and most commonly used dimension names from the literature have been adapted for easy correspondence. There are several sources for every dimension in the literature; the author has chosen the source with closest resemblance in theory (see Table 4.1).

A composite list of key dimensions with their sources, and elements and corresponding questions in English and Turkish with question numbers for defender typology is provided in Table 4.2, for prospector typology in Table 4.3, for analyzer typology in Table 4.4, for reactor typology in Table 4.5.

One of the major limitations of self-typing paragraph has been that the descriptions of each strategic type focus primarily on the rate of domain change (entrepreneurial dimension) to the complete exclusion of the two other dimensions of the adaptive cycle. It has been a deliberate policy on author's account to have the elements of dimensions most inclusive of typologies developed by accepted authors and be prepared for many of them to be excluded in factor analysis. Fifteen statements have been used for defender typology in this study

Dimension	Source
Key Dimension: Entrepreneurial	
Product-market domain	Adapted from Segev (1987); also developed by the author
Product-mix	Adapted from Segev (1987)
Competitive edge	Adapted from Segev (1987)
Surveillance-environment monitoring	Adapted from Segev (1987)
Growth	Adapted from Miles and Snow (1978); Conant *et al* (1990); DeSarbo *et al* (2005); also developed by the author
Success posture	Adapted from Segev (1987)
Market position	Adapted from Segev (1987); also developed by the author
Environmental monitoring	Adapted from Miles and Snow (1978); Conant *et al* (1990); DeSarbo *et al* (2005); also developed by the author
Key Dimension: Engineering	
Technological breadth	Adapted from Miles and Snow (1978); Conant *et al* (1990); DeSarbo *et al* (2005); also developed by the author
Key Dimension: Administration	
Structure	Adapted from Miles and Snow (1978); Conant *et al* (1990); DeSarbo *et al* (2005); also developed by the author
Planning	Adapted from Miles and Snow (1978); Conant *et al* (1990); DeSarbo *et al* (2005); also developed by the author
Control	Adapted from Miles and Snow (1978); Conant *et al* (1990); DeSarbo *et al* (2005); also developed by the author

Table 4.1 *M&S's Key Dimensions and Supportive Dimensions Designed by the Author*

Table 4.2 List of Key Dimensions and its sources with Elements and Corresponding Questions

in English and Turkish for Defender Typology

Key Dimension: Dimensions	Notes for sourcing	D. /Q. No	Question in English	D. /Q. No	Question in Turkish
Entrepreneurial: product-market domain	Adapted from Segev (1987)	D1 4	Our strategic business unit tries to locate a safe niche in a relatively stable products domain.	D1 4	İstikrarlı pazarda, güvenilir bir pazar dilimi bulmaya çalışırız.
Entrepreneurial: product-market domain	Adapted from Segev (1987)	D2 7	Our strategic business unit tries to maintain a safe niche in a relatively stable products domain.	D2 7	İstikrarlı pazarda, güvenilir bir pazar dilimini elimizde tutmaya çalışırız.
Entrepreneurial: product mix	Adapted from Segev (1987)	D3 10	Our strategic business unit tends to offer a narrower set of products than its competitors.	D3 10	Rakiplere kıyasla daha az ürün çeşidi ile çalışırız.
Entrepreneurial: competitive edge	Adapted from Segev (1987)	D4 15	Our strategic business unit tries to protect the environment domain in which it operates by stressing higher quality than its competitors.	D4 15	Pazar payımızı korumak için rakiplere nazaran yüksek kaliteye daha çok önem veririz.
Entrepreneurial: competitive edge	Adapted from Segev (1987)	D5 18	Our strategic business unit tries to protect the environment domain in which it operates by stressing lower prices than its competitors.	D5 18	Pazar payımızı korumak için rakiplere nazaran daha düşük fiyat uygularız
Entrepreneurial: product-market domain	Adapted from Segev (1987)	D6 9	Our strategic business unit concentrates on trying to achieve the best performance in a relatively narrow product-market domain.	D6 9	Pazarın oldukça dar bir diliminde en iyi performansı sağlamaya odaklıyız

Key Dimension: Dimensions	Notes for sourcing	D./ Q. No	Question in English	D. /Q. No	Question in Turkish
Entrepreneurial: surveillance-environment monitoring	Adapted from Segev (1987)	D7 20	Our strategic business unit places less stress on the examination of changes in the industry that are not directly relevant to Our strategic business unit.	D7 20	Sektörde bizi doğrudan etkilemeyen değişiklikler bizim için önemli değildir.
Entrepreneurial: product mix	Adapted from Segev (1987)	D8 11	Our strategic business unit tries to maintain a limited line of products.	D8 11	Sınırlı sayıda ürün/hizmet çeşidi ile çalışırız.
Entrepreneurial: product mix	Adapted from Segev (1987)	D9 13	Our strategic business unit tries to maintain a stable line of products.	D9 13	Ürün çeşidinde istikrara önem veririz.
Engineering: Technological breadth	Developed by the author by adapting from Miles and Snow (1978)	D10 35	Our strategic business unit has competencies that can be characterized as specialization concentrated into one or few specific areas.	D10 35	Kabiliyetlerimizi bir veya bir kaç alanda odaklanmış uzmanlık olarak tanımlayabiliriz.
Administrative: structure	Developed by the author by adapting from Miles and Snow (1978)	D11 41	Our strategic business unit's organizational structure is functional in nature (i.e. organized by department-marketing, accounting, personnel, etc.)	D11 41	Organizasyon yapımız esas itibari ile fonksiyoneldir. (Şöyle ki pazarlama, muhasebe personel gibi birimler itibari ile yapılanmıştır.)
Administrative: planning	Developed by the author by adapting from Miles and Snow (1978)	D12 45-46	Our strategic business unit's planning is concentrated in identifying those problems, which if solved, will maintain and then improve its current product offerings and market position.	D12 45, 46	Planlamamız, ürün/hizmet çeşitlerimizin piyasadaki konumunu korumaya odaklanmıştır. Planlamamız, ürün/hizmet çeşitlerimizin piyasadaki konumunu güçlendirmeye yönelik odaklanmıştır.
Administrative: control	Developed by the author by adapting from Miles and Snow (1978)	D13 51, 52	Our strategic business unit's procedures to evaluate performance are highly centralized and primarily the responsibility of senior management.	D13 51, 52	Performans değerlendirme süreçlerimiz merkeziyetçidir. Performans değerlendirme süreçlerimiz üst yönetimin sorumluluk alanına girmektedir.

Key Dimension: Dimensions	Notes for sourcing	D. / Q. No	Question in English	D./ Q. No	Question in Turkish
Entrepreneurial: growth	Developed by the author by adapting from Miles and Snow (1978)	D14 24	Our strategic business unit's cautious and incremental growth is realized through market penetration.	D14 24	Pazara dikkatli bir şekilde azar azar nüfuz ederek büyürüz.
Entrepreneurial: growth	Developed by the author by adapting from Miles and Snow (1978)	D15 26	Our strategic business unit's cautious and incremental growth is sometimes realized through some product development.	D15 26	Pazarda dikkatli bir şekilde az sayıda ürün (hizmet) geliştirerek büyürüz.

Table 4.3 List of Key Dimensions and their Sources with Elements and Corresponding Questions

in English and Turkish for Prospector Typology

Key Dimension: Dimensions	Notes for sourcing	D. /Q. No	Question in English	D. /Q. No	Question in Turkish
Entrepreneurial: competitive edge	Adapted from Segev (1987)	PR1 5	Our strategic business unit leads in innovation in its industry.	PR1 5	Sektörde yenilikçilikte lideriz.
Entrepreneurial: product-market domain	Adapted from Segev (1987)	PR2 12	Our strategic business unit operates in a broad product domain.	PR2 12	Geniş bir ürün/hizmet çeşidimiz mevcuttur.
Entrepreneurial: product-market domain	Adapted from Segev (1987)	PR3 14	Our strategic business unit's product domain is periodically redefined.	PR3 14	Ürün/hizmet çeşitlerimizi dönemsel olarak değerlendirilip tekrar düzenleriz.
Entrepreneurial: success posture	Adapted from Segev (1987)	PR4 30	Our strategic business unit believes in being the 'first-in' in the industry in development of new products.	PR4 30	Yeni ürün geliştirmede daima "ilk yapan"ı olmaya önem veririz.
Entrepreneurial: success posture	Adapted from Segev (1987)	PR5 32	Not all the efforts invested in being 'first-in' in the industry in development of new products prove to be profitable.	PR5 32	Sektörün "ilk yapan" ı olmak adına yeni ürün geliştirilmesi için sarf edilen gayretlerin hepsi başarılı değildir.
Entrepreneurial: success posture	Adapted from Segev (1987)	PR6 33	Our strategic business unit responds rapidly to early signals of opportunities in the environment.	PR6 33	Çevremizdeki en küçük fırsat sinyallerini bile en seri şekilde değerlendiririz.
Entrepreneurial: market position	Adapted from Segev (1987)	PR7 34	Our strategic business unit's actions often lead to a new round of competitive activity in the industry.	PR7 34	Yenilikçi uygulamalarımız sektörde, rekabet hareketine neden olur.

Key Dimension: Dimensions	Notes for sourcing	D. /Q. No	Question in English	D. /Q. No	Question in Turkish
Entrepreneurial: environmental monitoring	Adapted from Miles and Snow (1978); Conant *et al* (1990); De Sarbo *et al* (2005);	PR8 21	Our strategic business unit continuously monitors the marketplace for new product and market development.	PR8 21	Yeni ürünleri ve pazardaki gelişmeleri sürekli izleriz.
Engineering: technological breadth	Developed by the author by adapting from Miles and Snow (1978)	PR9 36, 37, 38	Our strategic business unit has competencies that can be characterized as broad and entrepreneurial with skills diverse, with multiple technologies, flexible enabling change to be created.	PR9a 36 PR9b 37 PR9c 38	Yapımız değişimlere uyum sağlayacak kabiliyettedir. Geniş bakış açılı ve girişimciyiz. Değişik uzmanlıklara ve çoklu teknolojilere sahibiz.
Administrative: structure	Developed by the author by adapting from Miles and Snow (1978)	PR10 42	Our strategic business unit's organizational structure is product or market oriented)	PR10 42	Örgüt yapımız ürün (hizmet)/pazar odaklıdır.
Administrative: planning	Developed by the author by adapting from Miles and Snow (1978)	PR11 47	Our strategic business unit's planning is concentrated in identifying trends and opportunities in the marketplace which can result in the creation of offerings or programs which are new to the market or reach new markets.	PR11 47	Planlamamız, sektördeki fırsat ve eğilimleri teşhis etmeye yöneliktir.

Key Dimension: Dimensions	Notes for sourcing	D./Q. No	Question in English	D./Q. No	Question in Turkish
Administrative: control	Developed by the author by adapting from Miles and Snow (1978)	PR12 53	Our strategic business unit's procedures to evaluate performance are decentralized and participatory encouraging many organizational members to be involved.	PR12 53	Performans değerlendirme süreçlerimiz merkez kaç ve katılımcıdır.
Entrepreneurial: growth	Developed by the author by adapting from Miles and Snow (1978)	PR13 27	Our strategic business unit's growth is achieved through product development.	PR13 27	Sektörde (pazarda) yeni ürün geliştirerek büyürüz.
Entrepreneurial: growth	Developed by the author by adapting from Miles and Snow (1978)	PR14 28	Our strategic business unit's growth is achieved through market diversification.	PR14 28	Sektörde yeni pazarlar oluşturarak büyürüz.

Table 4.4 List of Key Dimensions and its Sources with Elements and Corresponding Questions

in English and Turkish for Analyzer Typology

Key Dimension: Dimensions	Notes for sourcing	D./ Q. No	Question in English	D./ Q. No	Question in Turkish
Entrepreneurial: competitive edge	Adapted from Segev (1987)	AN1 16	Our strategic business unit adopts quickly promising innovations in the industry.	AN1 16	Sektördeki yeniliklere süratle uyum sağlarız.
Entrepreneurial: product-market domain	Adapted from Segev (1987)	AN2 11	Our strategic business unit tries to maintain a limited line of products	AN2 11	Sınırlı sayıda ürün/hizmet çeşidi ile çalışırız.
Entrepreneurial: product-market domain	Adapted from Segev (1987)	AN3 13	Our strategic business unit tries to maintain a stable line of products.	AN3 13	Ürün çeşidinde istikrara önem veririz.
Entrepreneurial: competitive edge	Adapted from Segev (1987)	AN4 17	The innovations which are chosen by our strategic business unit are carefully examined.	AN4 17	Tespit ettiğimiz yeniliklerin uygulanabilirliğini dikkatlice inceleriz.
Entrepreneurial: competitive edge	Adapted from Segev (1987)	AN5 19	Our strategic business unit often reacts to innovations in the industry by offering similar, lower-cost products.	AN5 19	Sektördeki yeni ürünlere düşük maliyetli ve benzer ürünlerle karşılık veririz.
Entrepreneurial: environmental monitoring	Adapted from Miles and Snow (1978); Conant *et al* (1990); DeSarbo *et al* (2005)	AN6 22	Our strategic business unit carefully monitors competitors' actions in the industry.	AN6 22	Rakiplerimizin hareketlerini dikkatlice gözlemleriz
Entrepreneurial: product-market domain	Adapted from Miles and Snow (1978); Conant *et al* (1990); DeSarbo *et al* (2005)	AN7 8	Our strategic business unit accrues most of its profit from its firm base of traditional products and customers.	AN7 8	Kârımızın büyük bölümünü geleneksel ürün/hizmet ve müşterilerimizden sağlarız

Key Dimension: Dimensions	Notes for sourcing	D./ Q. No	Question in English	D./ Q. No	Question in Turkish
Engineering: technological breadth	Developed by the author by adapting from Miles and Snow (1978)	AN8 39	Our strategic business unit has competencies that can be characterized as analytical with skills enabling them to both identify trends and then develop new offerings or markets.	AN8 39	Kabiliyetlerimiz pazardaki eğilimleri teşhis etmeye ve yeni çözümler üretmeye yöneliktir.
Administrative: Structure	Developed by the author by adapting from Miles and Snow (1978)	AN9 43	Our strategic business unit's organizational structure is matrix combining both functional divisions and product-market divisions.	AN9 43	Örgüt yapımız matriks yapıdır. (İki ayrı tür ilişki üzerine kurulmuştur: fonksiyonel bölümler dikey hiyerarşi içinde iken yatayda fonksiyonel bölümlerden belli kişiler bir ürün/pazar yöneticisi eşliğinde proje ekibi olarak bu ürün/pazarı geliştirmeye odaklanırlar.)
Administrative: planning	Developed by the author by adapting from Miles and Snow (1978)	AN10 48, 49	Our strategic business unit's planning is concentrated in identifying those trends in the industry which other competitors have proven possess long-term potential while also solving problems related to our current offerings and our current customer needs.	AN10a 48 AN10b 49	Planlamamız, rakiplerin başarılı uygulamalarını teşhis etmeye odaklıdır. Planlamamız, mevcut ürün/hizmet müşterilere ilişkin sorunları gidermeye odaklıdır.

Key Dimension: Dimensions	Notes for sourcing	D./ Q. No	Question in English	D./ Q. No	Question in Turkish
Administrative: control	Developed by the author by adapting from Miles and Snow (1978)	AN11 54, 55	Our strategic business unit's procedures to evaluate performance are centralized in established products' areas and more participatory in newer products' areas.	AN11a 54 AN11b 55	Performans değerlendirme süreçlerimiz eski ürünler/ hizmetler söz konusu olduğunda merkeziyetçidir. Performans değerlendirme süreçlerimiz yeni ürünler/ hizmetler söz konusu olduğunda katılımcıdır.
Entrepreneurial: growth	Developed by the author by adapting from Miles and Snow (1978)	AN12 29	Our strategic business unit's growth is achieved through adopting new products only after a very careful review of their potential.	AN12 29	Büyümemizi, yüksek potansiyelli yeni ürün geliştirerek sağlarız.
Entrepreneurial: growth	Developed by the author by adapting from Miles and Snow (1978)	AN13 25	Our strategic business unit's growth is achieved through assertively penetrating more deeply into markets that are currently served.	AN13 25	Büyümemizi, bulunduğumuz pazarlara daha derinlemesine nüfuz ederek sağlarız.

Table 4.5 List of Key Dimensions and its Sources with Elements and Corresponding Questions

in English and Turkish for Reactor Typology

Key Dimension: Dimensions	Notes for sourcing	Q. No	Question in English	Q. No	Question in Turkish
Entrepreneurial: product-market domain	Adapted from Segev (1987)	R1 6	Compared to its competitors in the industry, our strategic business unit is aggressive in maintaining its product/market domain.	R1 6	Pazarımızı korumak için rakiplerimize nazaran daha saldırgan davranırız.
Entrepreneurial: success posture	Adapted from Segev (1987)	R2 31	Our strategic business unit takes many risks.	R2 31	Risk almaktan çekinmeyiz.
Entrepreneurial: environmental monitoring	Adapted from Segev (1987)	R3 23	Our strategic business unit responds to areas in which pressure is made on it by its environment	R3 23	Çevremizden baskı gördüğümüz alanlarda karşılık veririz.
Engineering: technological breadth	Adapted from Miles and Snow (1978); Conant *et al* (1990); DeSarbo *et al* (2005)	R4 40	Our strategic business unit has competencies that can be characterized as fluid with skills related to the near-term demands of the market-place.	R4 40	Pazarın kısa vadeli taleplerine cevap vermede çok becerikliyiz
Administrative: structure	Developed by the author by adapting from Miles and Snow (1978)	R5 44	Our strategic business unit's organizational structure is continuously changing to enable us to meet opportunities and solve problems as they arise.	R5 44	Örgüt yapımız fırsat ve problemlerle baş edebilmek için devamlı değişmektedir

Key Dimension: Dimensions	Notes for sourcing	D./Q. No	Question in English	D./Q. No	Question in Turkish
Administrative: planning	Developed by the author by adapting from Miles and Snow (1978)	R6 50	Our strategic business unit's planning is concentrated in identifying the best possible solutions to those problems or challenges which require immediate attention.	R6 50	Planlamamız, acil çözüm bekleyen sorun ve meydan okumalara odaklanmıştır
Administrative: control	Developed by the author by adapting from Miles and Snow (1978)	R7 56	Our strategic business unit's procedures to evaluate performance are heavily oriented towards those reporting requirements which demand immediate attention.	R7 56	Performans değerlendirme süreçlerimiz esasen acil taleplere cevap verecek şekilde yapılandırılmıştır.

whereas Segev's (1987) adapted typology contains only nine statements; fifteen statements have been used for prospector typology in this study whereas Segev's (1987) adapted typology contains only eight statements; fourteen elements(questions) have been used for analyzer typology in this study whereas Segev's (1987) adapted typology contains only seven statements; eight statements have been used for reactor typology in this study whereas Segev's (1987) adapted typology contains only four statements. Conant *et al* (1990) and DeSarbo (2005) has only eleven statements in total whereas this study has fifty-three statements. Most of studies have developed typologies on entrepreneurial dimensions (Slater and Olson, 2000; James and Hatten, 1994); the author has followed the school (Conant *et al*, 1990; DeSarbo, 2005) which has given equal attention also to engineering and administrative dimensions.

4.5.3. Strategic Orientation in Comparative Approach

Part 3 has twenty-six questions (question numbers: 57-82) operationalizing strategic orientation in comparative approach with Venkatraman's (1989) dimensions on Likert scale ranging from 1=strongly disagree to 6=strongly agree:

- Aggressiveness dimension
- Analysis dimension
- Defensiveness dimension
- Futurity dimension
- Proactiveness dimension
- Riskiness dimension

Venkatraman (1985) has originally developed eight dimensions in his doctoral dissertation including

- Innovativeness
- Uniqueness

Later on, Venkatraman and other authors have left these two dimensions out ending with generally adapted six dimensions. The dimensions have been operationalized as

per Morgan and Strong's (1998, 2003) adapted version. A composite list of the dimensions with corresponding questions in English and Turkish with question numbers is provided in Table 4.6.

Table 4.6 *List of Key Dimensions and itsSources with Elements and Corresponding Questions*

in English and Turkish for Venkatraman's STROBE Dimensions

Dimension	Var. No	Question in English	Q. No	Var. No	Question in Turkish
Aggressiveness	AG1 AG2 AG3 AG4	We often sacrifice profitability to gain market share. We often cut prices to to increase market share. We often set prices below competition. We often seek market share position at the expense of cash flow and profitability.	57 58 59 60	AG1 AG2 AG3 AG4	Çoğunlukla pazar payı kazanmak için kârlılıktan fedakârlık ederiz Çoğunlukla pazar payını arttırmak için fiyat kırarız Çoğunlukla fiyatlarımızı rakip fiyatları altında tespit ederiz. Çoğunlukla nakit akışı ve kârlılık aleyhine de olsa Pazar payı konumumuz için gerekeni yaparız.
Analysis	AN1 AN2 AN3 AN4 AN5 AN6	We emphasize effective coordination among different functional areas. Our information systems provide support for decision making When confronted with a major decision, we usually try to develop through analysis. We use several planning techniques. We use the outputs of management information and control systems. We commonly use manpower planning and performance appraisal of senior managers.	61 62 63 64 65 66	AN1 AN2 AN3 AN4 AN5 AN6	Değişik fonksiyonel alanlar arasındaki etkin eşgüdümü vurgularız. Bilgi sistemlerimiz karar verme süreçleri için destek sağlar. Ana konularda bir karar verme süreci ile karşılaşıldığında genellikle detaylı bir analiz geliştirmeye çalışırız. Birçok planlama tekniği kullanırız. Yönetim bilgileri ve kontrol sistemleri verilerini kullanırız. Genel olarak insan kaynakları planlaması ve üst düzey performans değerlendirmelerini kullanırız.
Defensiveness	DF1 DF2 DF3 DF4	We occasionally conduct significant modifications to manufacturing technology. We often use control systems for monitoring performance. We often use production management techniques. We often emphasize product quality through the use of quality circles.	67 68 69 70	DF1 DF2 DF3 DF4	Ara sıra imalat teknolojilerinde önemli tadilatlar gerçekleştiririz. Çoğunlukla performansı izlemek için kontrol sistemleri kullanırız. Çoğunlukla üretim yönetimi teknikleri kullanırız. Çoğunlukla Kalite çemberlerini kullanarak ürün kalitesini vurgularız.

Dimension	Var. No	Question in English	Q. No	Var. No	Question in Turkish
Futurity	FT1	We emphasize basic research to provide us with future competitive edge.	71	FT1	Önümüzdeki dönemlerde rekabette fark yaratmak için temel araştırmaya vurgu yapmaktayız.
	FT2	Forecasting key indicators of operations is common.	72	FT2	Operasyonların kilit göstergelerini tahmin çalışmaları yaygındır.
	FT3	Formal tracking of significant general trends is common.	73	FT3	Önemli genel akımların düzenli olarak izlenmesi yaygındır.
	FT4	We often conduct 'what if' analyses of critical issues.	74	FT4	Çoğunlukla kritik hususların 'eğer olsaydı' analizlerini gerçekleştiririz.
Proactiveness	PA1	We are constantly seeking new opportunities related to present operations.	75	PA1	Devamlı olarak güncel operasyonlarla ilişkili yeni fırsatlar kollamaktayız.
	PA2	We are usually the first ones to introduce new brands or products/services on the market.	76	PA2	Pazar için yeni markalar veya ürün/hizmet geliştirmekte genellikle önde gelenlerdeniz.
	PA3	We are constantly on the look for businesses that can be acquired.	77	PA3	Sürekli olarak elde edebilecek işlerin peşindeyiz.
	PA4	Operations in later stages of the life cycle are strategically eliminated.	78	PA4	Yaşam döngüsünün daha sonraki aşamalarındaki operasyonlar stratejik olarak bertaraf edilmiştir.
Riskiness	RK1	We seem to adopt a rather conservative view when making major decisions (rev.)	79	RK1	Esasa yönelik kararlar verirken muhafazakar bir duruş benimsediğimiz görüntüsü vermekteyiz (rev.)
	RK2	New projects are approved on a 'stage by stage' basis rather than with "blanket" approval (rev.).	80	RK2	Yeni projeler "toptan" onay yönteminden çok 'aşama aşama' incelenerek onaylanmaktadır (rev.).
	RK3	We have a tendency to support projects where the expected returns are certain (rev.)	81	RK3	Geri dönüşleri belli olan projeleri destekleme eğilimindeyiz. (rev.)
	RK4	Our operations have generally followed 'the tried and true' paths (rev.).	82	RK4	Operasyonlarımız genellikle denenmiş ve doğrulanmış yöntemleri takip eder. (rev.)

4.5.4. Overall Performance

Part 4 has two questions (question numbers: 83-84) measuring overall performance compared to objectives (as perceived by the key informant) and overall performance compared to competitors (as perceived by the key informant) as per Jaworski and Kohli's (1993) measures on Likert scale ranging from 1=poor to 6=excellent as provided in Table 4.7.

Q. No	Variable	Source
83	Overall performance compared to objectives	Jaworski and Kohli (1993)
84	Overall performance compared to objectives	Jaworski and Kohli (1993)

Table 4.7 *Variables Measuring Overall Performance*

4.5.5. Performance Compared to Competitors

Part 5 has seven variables (question numbers: 85-91) which have been used to measure performance compared to competitors (as perceived by the key informant) on Likert scale ranging from 1=poor to 6=excellent, that are provided in Table 4.8.

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Q. No	Variable	Source
85	Market share compared to competitors	Jaworski and Kohli (1993)
86	Market share growth	Jaworski and Kohli (1993)
87	Sales volume compared to competitors	Morgan and Strong (2003)
88	Sales growth compared to competitors	Jaworski and Kohli (1993)
89	ROA compared to competitors	Adapted from Jaworski and Kohli (1993); Ruekert (1993)
90	ROI compared to competitors	Adapted from Jaworski and Kohli (1993); Ruekert (1993)
91	Product/service quality compared to competitors	Morgan and Strong (2003)

Table 4.8 *Variables Measuring Performance Compared to Competitors*

4.5.6. Performance Compared to Objectives

Part 6 has eight variables (questions numbers: 92-99) which have been used to measure performance compared to objectives (as perceived by the key informant) on Likert scale ranging from 1=poor to 6=excellent, that are provided in Table 4.9.

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Q. No	Variable	Source
92	Customer satisfaction compared to objectives	Morgan and Strong (2003)
93	Customer retention compared to objectives	Cavusgil and Zou (1994)
94	Market share compared to objectives	Matzuno and Mentzer (2000)
95	Market share growth compared to objectives	Matzuno and Mentzer (2000)
96	Sales volume in YTL compared to objectives	Morgan and Strong (2003)
97	Sales growth in YTL compared to objectives	Morgan and Strong (2003)
98	ROA Return on assets	Adapted from Jaworski and Kohli (1993); Ruekert (1992)
99	ROI Return on investment	Adapted from Jaworski and Kohli (1993); Ruekert (1992)

Table 4.9 *Variables Measuring Performance Compared to Objectives*

4.5.7. Performance over the Past Three Years

Part 7 has five variables (question numbers: 100-104) which have been used to measure performance over the past three years on Likert scale ranging from 1=poor to 6=excellent, that are provided in Table 4.10. The respondent is asked to respond to the questions by filling in the blanks with percentage points for the years between 2004, 2005, and 2006.

Q. No	Variable	Source
100	ROA over the past three years	Adapted from Jaworski and Kohli (1993); Ruekert (1992); Narver and Slater (1990, 1994)
101	ROI over the past three years	Adapted from Jaworski and Kohli (1993); Ruekert (1992); Narver and Slater (1990, 1994)
102	Market share over the past three years	Adapted from Matzuno and Mentzer (2000); Narver and Slater (1990, 1994)
103	Market share growth over the past three years	Adapted from Matzuno and Mentzer (2000); Narver and Slater (1990, 1994)
104	Sales revenue growth over the past three years	Adapted from Matzuno and Mentzer (2000); Narver and Slater (1990, 1994)

Table 4.10 *Variables Measuring Performance over the Past Three Years*

4.5.8. Marketing Strategies

Part 8 has twenty-eight questions (question numbers: 105-132) operationalizing Kotler's marketing strategies on Likert scale ranging from 1=strongly disagree to 6=strongly agree. The scale has been developed by the author; on the basis of extensive literature review carried out for this study, it appears to be the first time that Kotler's marketing strategies are operationalized and empirically tested. Operationalization of the dimensions and elements have been developed on basis of definitions and descriptions of Kotler's (1984, 1997), Dibb *et al* (1997), Kotler and Armstrong (1999).

There are four typological orientations (dimensions) of this construct: market-leading strategies, market-challenging strategies, market-following strategies, market-niching strategies similar to prospector-defender-analyzer-reactor orientations of Snow and Miles's (1978) typologies and aggressiveness-defensiveness-analysis-proactiveness-futurity- riskiness dimensions of Venkatraman's (1989) model.

Market-leading strategies is a dimension representing leader's orientation in marketing management operationalized as being number one with the largest share in the market. It represents propensity to expand total market, protect market share or expand market share. Similar variables have been used by other authors in different studies. A composite list of variables (market share position, marketing objective, strategic focus, approach to the market) operationalizing this dimension with six questions developed in English and Turkish together with references of similar studies undertaken is provided in Table 4.11.

Table 4.11 *List of Key Variables and their Sources with Elements and Corresponding Questions*

in English and Turkish for Market-Leading Strategies

Key Variable	Notes if any	V. /Q. No	Question in English	V. /Q. No	Question in Turkish
Market share-position		L1 106	Our business is number one with the largest market share.	L1 105	En büyük pazar payı ile pazarda bir numarayız.
Marketing objective	Similar variable also utilized by Wong *et al* (1987), Hooley *et al* (1992), Hooley *et al* (1993), Doyle (1998). Question designed by the researcher.	L2 110	We lead other firms in price changes, distribution coverage and promotion spending	L2 110	Fiyat geçişlerinde öncüyüz
Strategic focus Approach to the market: whole or selected, individual customer	Similar variable also utilized by Wong *et al* (1987), Hooley *et al* (1992), Hooley *et al* (1993), Doyle (1998). Question designed by the researcher.	L3 111 L4 112 L5 116 L6 117	As the market leader, we try and support to expand the total market to gain more sales. As the market leader, our major concern is to protect our market share against attacks. We take proactive measures with continuous innovation to be always ahead of competition. To expand our market share, we build up to gain more shares from weaker competitors	L3 111 L4 112 L5 116 L6 117	En yüksek dağılım (bulunurluk) oranına sahibiz. Tutundurma (promosyon) harcamalarında bütün firmaların önündeyiz. Pazar lideri olarak, satışlarımızı arttırmak amacı ile toplam pazar hacminin büyütülmesi için çalışırız. Pazar lideri olarak saldırılara karşı pazar payımızı korumada hassasız.

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Market-challenging strategies is a dimension representing aggressor's orientation who are not the market leaders, operationalized as being a runner-up or trailing firm, keen to fight hard to increase market share. It represents propensity to attack market leader with the largest share in the market, or those of his size who are inefficient and underfinanced, or those of smaller size or regional extent who are inefficient and underfinanced. Similar variables have been used by other authors in different studies. A composite list of variables (market share position, marketing objective, strategic focus, approach to the market) operationalizing this dimension with five questions developed in English and Turkish together with references of similar studies undertaken is provided in Table 4.12

Table 4.12 *List of Key Dimensions and their Sources with Elements and Corresponding Questions*

in English and Turkish for Market-Challenging Strategies

Key Variable	Notes if any	V. /Q. No	Question in English	V. /Q. No	Question in Turkish
Market share-position		C1 106	Our business is not number one and we do not have the largest market share.	C1 106	Pazar lideri değiliz. En büyük pazar payına sahip değiliz.
Marketing objective	Similar variable also utilized by Wong *et al* (1987), Hooley *et al* (1992), Hooley *et al* (1993), Doyle (1998). Question designed by the researcher.	C2 113	We are keen to fight aggressively to gain shares from our competitors	C2 113	Pazar payını arttırmak için rakiplere saldırırız.
Strategic focus Approach to the market: whole or selected, individual customer	Similar variable also utilized by Wong *et al* (1987), Hooley *et al* (1992), Hooley *et al* (1993), Doyle (1998). Question designed by the researcher.	C3 118 C4 121 C5 122	We attack the market leader aggressively to gain more shares. We attack not the market leader but those of our size who are underfinanced and not so successful. We attack not the market leader but those of smaller or regional size who are underfinanced and not so successful.	C3 118 C4 121 C5 122	Pazar payımızı arttırmak için, pazar liderine şiddetli bir şekilde saldırırız. Pazar payımızı arttırmak için, pazar liderine saldırmayız. Bize yakın büyüklükte, finansman sıkıntısı çeken ve başarılı olamayan rakiplere saldırırız. Pazar payımızı arttırmak için, pazar liderine saldırmayız. Küçük veya bölgesel çalışan, finansman sıkıntısı çeken, başarılı olamayan rakiplere saldırırız.

Market-following strategies is a dimension representing follower's orientation (following the market leader) operationalized as being an imitator and a low-share competitor with no intention to overtake the leader. It represents propensity to hold share without rocking the boat avoiding confrontation with the leader. Similar variables have been used by other authors in different studies. A composite list of variables (market share position, marketing objective, strategic focus, approach to the market) operationalizing this dimension with six questions developed in English and Turkish together with references of similar studies undertaken is provided in Table 4.13.

Table 4.13 *List of Key Variables and their Sources with Elements and Corresponding Questions*

in English and Turkish for Market-Following Strategies

Key Variable	Notes if any	Var. No	Question in English	Var. No	Question in Turkish
Market share-position		F1 108	Our business is a low market share, and we avoid confrontation with the market leader.	F1 108	Pazar payımız düşüktür. Pazar lideri ile çatışmaktan sakınırız.
Marketing objective	Similar variable also utilized by Wong *et al* (1987), Hooley *et al* (1992), Hooley *et al* (1993), Doyle (1998). Question designed by the researcher.	F2 114	We prefer to imitate or adopt leader's products and hold share without rocking the boat.	F2 114	Pazar liderinin ürünlerini taklit ederek veya uyarlayarak pazar payımızı koruruz.
Strategic focus Approach to the market: whole or selected, individual customer	Similar variable also utilized by Wong *et al* (1987), Hooley *et al* (1992), Hooley *et al* (1993), Doyle (1998).	F3 123, 124	We duplicate leader's products and packages and sell on the black market or through some distributors dealing with duplicated products.	F3 123, 124	Pazar liderinin ürünlerini/hizmetlerini ve/veya ambalajlarını aynen taklit edip kendimiz piyasalara doğrudan satış yaparız. Taklit ettiğimiz pazar liderine ait ürünleri/hizmetleri, kendimiz veya bu tip ticaret yapan kimi dağıtıcılar aracılığı ile satarız.

Question designed by the researcher.	F4 125	We emulate leader's products, name and packaging with slight variations, as extensively as possible.	F4 125	Adını ve ambalajını küçük değişikliklerle kopyaladığımız pazar liderine ait ürünleri, pazarın mümkün olan her dilimine yaymaya çalışırız.	
	F5 126	We copy some things from the leader but maintain differentiation in terms of packaging, advertising, pricing, or location.	F5 126	Bazı unsurları pazar liderinden kopyalasak da ambalaj, reklâm, fiyatlandırma ve satış yeri unsurlarında farklılaşmamızı koruruz.	
	F6 127, 128	We take the leader's products and adapt or improve them to sell same or different markets.	F6 127, 128	Pazar liderine ait ürünleri geliştirerek ayni pazara satarız. Pazar liderine ait ürünleri geliştirerek değişik pazarlara satarız.	

Market-niching strategies is a dimension representing nicher's orientation (target segments within segments) operationalized as being a player targeting a smaller customer base with distinct needs of goods or services. They operate in narrower markets and have specializations that others do not have; their markets are the ones that larger firms are not interested to serve. It represents propensity to find niches and hold the segment with specialization. Similar variables have been used by other authors in different studies. A composite list of variables (market share position, marketing objective, strategic focus, approach to the market) operationalizing this dimension with six questions developed in English and Turkish together with references of similar studies undertaken is provided in Table 4.14.

Table 4.14 *List of Key Variables and their Sources with Elements and Corresponding Questions*

in English and Turkish for Market-Niching Strategies

Variable	Notes if any	Var. No	Question in English	Var. No	Question in Turkish
Market share-position		N1 109	We target segments within segments or niches that other firms overlook or ignore.	N1 109	Hedef pazarımız, rakiplerimizin önemsemediği nişlerdir (küçük pazar dilimleri).
Marketing objective	Similar variable also utilized by Wong *et al* (1987), Hooley *et al* (1992), Hooley *et al* (1993), Doyle (1998). Question designed by the researcher.	N2 115	It is crucial for us to specialize to know our customers better and to serve them better than any other firm.	N2 115	Bizim için müşterilerimizi diğer firmalardan daha iyi tanımak ve hizmet etmek önemlidir.
Strategic focus Approach to the market: whole or selected, individual customer	Similar variable also utilized by Wong *et al* (1987), Hooley *et al* (1992), Hooley *et al* (1993), Doyle (1998). Question designed by the researcher.	N3 129 N4 130 N5 131 N6 132	We serve one niche with specialization in specific/geographic market, Our specialization is on serving a niche customer base. We provide a specialized product (service) required by a small market segment. We serve multiple niches with specialization in one or more areas.	N3 129 N4 130 N5 131 N6 132	Belirli pazarlarda ve coğrafyada uzmanlaşma ile oluşmuş bir nişte (küçük pazar diliminde) hizmet veririz. Niş pazara (küçük pazar dilimi) hizmet vermekte uzmanız. Niş (küçük pazar dilimi) pazarın özel ürün talebini karşılarız. Çok sayıda niş (küçük pazar dilimi) pazara bir veya birkaç alandaki uzmanlığımız ile hizmet veririz.

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4.5.9. Characteristics of Companies and Key Informants

Part 9 has thirteen descriptive questions (question numbers: 133-145) on characteristics of companies and key informants with five questions on industry types with 'economic sector' (question no.133) adapted from Narver and Slater (1990), 'number of full- time employees' (question no. 142) also a reliable indicator of organization size (Smith *et* al, 1989) adapted from Naidu and Prasad (1994), and the rest 'industrial segment', 'type of operation', 'products/brands', and three questions on key informant characteristics designed by the author with five questions on export management criteria including the administrative structuring, which is a sign of company policy in export and reveals a good sign on its standing (see Appendix 1 or 2 for questions on the questionnaire). Export orientation in a company follows a development in structural adaptability from someone in sales taking responsibility of exports to export and marketing departments as discussed in Kotler's (1975) model for a five-stage evolution of marketing departments in the business sector from simple sales department to sophisticated modern marketing company.

4.5.10. Environmental Variables: Industry Characteristics-Competitive Environment

Part 10 has six questions (questions numbers: 146-151) developed by DeSarbo (2005) for key concept of competitive environment (competitive intensity) in English and Turkish on Likert scale ranging from 1=strongly disagree to 6=strongly (see Appendix 1 or 2 for questions on the questionnaire).

4.5.11. Environmental Variables: Industry Characteristics-Market Environment and Technological Environment

Part 11 has twelve questions (questions numbers: 152-163) developed by DeSarbo *et al* (2005) for two key concepts of market environment and technological environment in English and Turkish on Likert scale ranging from 1=strongly disagree to 6=strongly agree (see Appendix 1 or 2 for questions on the questionnaire).

Question 164 reminds the key informant that this questionnaire is developed for one business unit and if he (she) is in charge of more than one, he (she) must complete another questionnaire.

4.6. DATA ANALYSIS METHODOLOGY

A variety of statistical analyses have been conducted to test the research hypotheses and answer the research questions. Significance level for all hypotheses has been set at 0.05 unless otherwise specified. Quantitative data have been analyzed employing the Statistical Package for the Social Sciences 13.0 for Windows.

Descriptive statistics have been used to describe the sample based upon the data provided on demographic sheet. Frequencies, means, and standard deviations have been calculated for each demographic variable.

To proceed with inferential statistics, collected date has been first tested with principal components factor analysis and reliability analysis in order to produce factors at desired reliability levels. Internal consistency of scale is evaluated by using Cronbach's α set at 0.70 as recommended by Nunnally (1978) unless otherwise specified.

In order to determine if relationships existed between various variables, a Pearson-Product Moment Correlation analyses have been calculated.

To determine whether the fundamental analysis model(s) delineated have exploratory power, hierarchical multiple regression analyses are performed for each of three models separately. Multiple regression analyses have been used to determine predictive capacity of independent variables in relationships between strategic orientation construct, marketing strategies and performance. There is a need for discussion on the methodology of regression analyses to be used in the study.

The objective of regression analysis is to predict variance in the dependent variable in response to changes in independent variables involved in the relation and thereby serve to estimate the most representative model that yields the best, linear, unbiased estimate of parameters that minimize the sum of squared errors of prediction

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(OLS ordinary least square statistical technique). The multiple regression equation summarizes above relation as $\{y = b_0 + b_1x_1 + b_2x_2 + \ldots + b_3x_3 + e\}$ where b_0 is the constant, where the regression line intercepts the y axis, the term b_x is called a regression coefficient, denoting the estimated change in the dependent variable for a unit of change in the independent variable, and (*e*) is the prediction error representing the difference between the actual and predicted values of the dependent variable (Hair *et al,* 1998).

There are several types of multiple regression analyses like standard and hierarchical regression, and which one to choose depends on the variables and the research model. The statistical difference between these types of regression analyses is the way variables are entered into regression equation model when analyzing data. In a standard multiple regression analysis, the predictor variables are entered together and employed to evaluate the relationships between a set of independent variables and a dependent variable. The statistical computing software will treat each of the predictor variables as though it had been entered after each of the other predictor variables; this reflects the researcher's passive state not to interfere with the mechanism of the model. To overcome this short coming, another type of regression method is employed. In a hierarchical multiple regression analysis, it is the researcher who designs the order of entry of predictor variables into regression equation after examining the relationships between a set or groups of independent variables and a dependent variable. The researcher, after controlling the effects of some other independent variables or groups of variables on the dependent variable, is provided with means to exercise other options as desired (Hair *et al*, 1998).

For an analysis using stepwise statistical regression, the order in which predictor variables are entered is a statistical decision made by the software and not the theory on which the dissertation is based on. Stepwise has a data-driven methodology and can lead to the inclusion and exclusion of variables from the regression equation on the basis of very marginal differences in explained variance. Stepwise method is always treated separately because it differs in its underlying philosophy and the program is designed to select a variable that has the largest contribution to R^2 from a battery of

independent variables at every stage and they terminate accepting additional independent variables at a level specified in the program (Cohen *et al,* 1998).

The other method which the author has decided to opt for is theory-driven with 'forced entry' option on SPSS 13.0 using command *enter* where all predictor variables in the research model are included in the regression equation regardless of their semi-partials. The entry of all variables is forced in a pre-specified sequence, either individually or in blocks, as a means of testing particular theoretical model and assessing the combined predictive power of the variables under study. This regression method provides an additional advantage of allowing the researcher to recognize R^2 and partial regression and correlation coefficients as the impact of one (or group of) variable(s) as each of independent variable group joins the preceding ones one after another. Criteria for determining the order of entry of groups of independent variables is based on the principle of casual priority and temporal precedence which again is managed by the logic and relevance of the research (Cohen *et al,* 1998). The hierarchical multiple regression analysis is the method to be employed in this study.

Causal analysis enables the research model to represent the causal direction and nature of relationship in terms of variables that are involved in the research model. The variables in the model have a number of distinguishable roles that they may play such as a cause *(X),* of some variable *(Y)*, has a generative mechanism that accounts for its impact on *(Y)*. Such effects in which one variable causes another variable are called asymmetric effects to specify the direction of the relationship. These mechanisms often implicit in the research logic are called mediators of the effect of *(X)* on *(Y)*. Following figure provides examples of a mediator *(W)* that totally accounts for the relationship between *(X)* and *(Y)*, and a mediator *(Z)* that partially accounts for the relationship between *(X)* and *(Y)* (Venkatraman, 1989a; Cohen, 2003). A variable becomes a mediator *(Z)* to the extent that it accounts for the relation between the predictor and the criterion {between *(X)* and *(Y)*}; it represents the generative mechanism revealing how the independent variable inserts effect on the dependent variable (Baron and Kenny, 1986). The partial mediation is called *simple mediation model* (Preacher and Hayes). This method is called mediated hierarchical regression analysis.
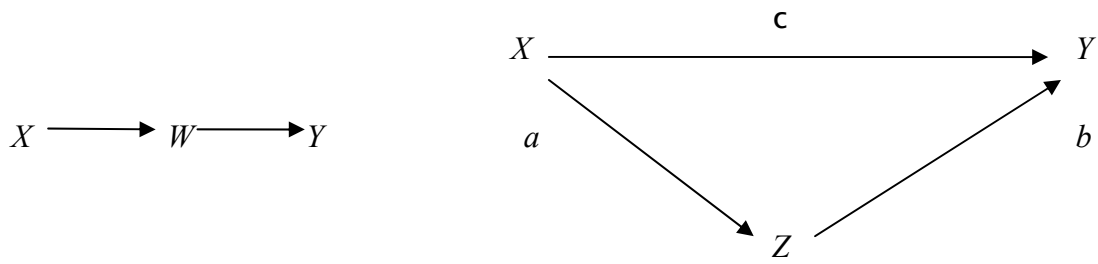
Figure 4.1 *Asymmetric Interactions for Mediating Variables W and Z*

Equations for the path diagram and the mediation model is given below:

$$Y = i_1 + cX + e_1,$$
$$Y = i_2 + cX + bZ + e_2,$$
$$Z = i_3 + aX + e_3,$$

where e_1, e_2, e_3 represent unexplained or error variability, and the intercepts are being entered with i_1, i_2, i_3.

The contribution of mediation analysis comes from its ability to go beyond the merely descriptive to a more functional understanding of the relationships among variables. It helps to understand the mechanism through which the initial variable *(X)* in the above figure affects the outcome *(Y)* in the above figure. *In this context, the purpose of mediation analysis is to investigate the processes underlying the observed relation between an independent variable and dependent variable* (MacKinnon, 2008). This meets the author's objective of investigating the premise on role of functional strategies (as a subset of business strategies) in relationship between business strategies and business performance. The meditational hypotheses reflect causal hypotheses about variables whereby the relationship between an independent variable and dependent variable is decomposed into direct and indirect (mediated) effects (MacKinnon, 2008; Venkatraman 1989a). Hence, a mediational model is a causal model and Hayes (2004) underlines that *a statistically and practically significant indirect effect is* the *necessary component of mediation.*

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Causal steps in fulfilling the requirements of the mediation model as outlined by Baron and Kenny (1986) on the path diagram are:

1- The total effect of the independent variable on the dependent variable must be significant (path *c* on the above figure). This establishes that there is an effect that may be mediated.

2- The path from the independent variable to the mediator variable (path a on the above figure) must be significant. This involves treating the mediator as an outcome (dependent) variable.

3- The path from the mediator variable to the dependent variable must be significant (path *b* on the above figure).This involves treating the mediator as an independent variable

4- The fourth step is required only for the complete mediation. If the independent variable no longer has any effect on the dependent variable when the mediator variable has been controlled, the complete mediation has occurred. A less stringent variation of the causal step method is to require simply that both *a* and *b* be significant.

For testing mediation Baron and Kenny (1986) recommends: (1) regressing the dependent variable on the independent variable, (2) regressing the mediator variable on the independent variable, (3) regressing the dependent variable on both the independent and mediator variables.

The author has followed the definitions and requirements set by Baron and Kenny (1986) and perspectives outlined by MacKinnon (2008) and Venkatraman (1989a) and practices designed by Williams (2003).

Independent sample *t*-tests and ANOVA tests have been calculated to determine the relationships between various groups.

SUMMARY

This chapter has presented the research methodology including the research design, research objectives and hypotheses together with data collection and the various

methods for the analysis of the data. It identifies the methodological hallmarks of the analysis and explains the procedures developed to attend to research questions.

Following chapter V presents the results of the study. Demographic characteristics of the sample are presented, examination of each question and testing of research hypotheses are discussed.

V.   RESEARCH FINDINGS

This chapter presents the findings on the data and results of statistical analyses undertaken to assess the relationships of strategic orientation and business performance with the mediating role of marketing strategies and other relationships between these key construct/concepts. Data are analyzed using descriptive and inferential statistical techniques. Descriptive overview of the study sample is presented, and results of factor analysis and reliability tests are discussed. It will be followed by amendments on conceptual model as per factor and reliability test results to become the research model of the study, which will then be tested with simple, hierarchical and mediated hierarchical analyses for various relations as per objectives and hypotheses listed in foregoing sections. Results of paired t-tests and ANOVA analyses for specific between-group mean differences across the variables being studied will be reported as the last section.

5.1.   FINDINGS OBTAINED FROM DESCRIPTIVE STATISTICS

5.1.1. Sample Description

This section covers the descriptive statistics for variables in the study. The aim is to produce general knowledge on the sample and establish a basis for further analyses of comparison, correlation and regression. Results on sample characteristics for the companies and the key informants are presented in the following part. There are 224 elements in this sample.

5.1.1.1.   Characteristics of the Companies

In this part, company characteristics are sought with following elements:

(a)   Company characteristics with fifteen variables in terms of company type, age, capital source being foreign or domestic, geographical area of operation, number of employees;

(b)   Company's business in terms of the aggregate and sections by business sector, business type, industry type;

Export orientation in terms of export history, export intensity, relative share of exports and administrative structuring in export operations.

(a) Company characteristics

Data on company type has been produced from the content of the response given to 'the title of your firm (organization)' item of the questionnaire. The responses have been checked for the type of the company and the results have been used to produce the tabulation presented on Table 5.1 below. Incorporation type of the companies has the highest frequency while private companies, state companies and associations score very low with total of hardly three percent.

Company type	Frequency	Percentage	Cumulative Percentage
Incorporation	132	58,9	58,9
Limited Company	86	38,4	97,3
Private Company	2	,9	98,2
State company	2	,9	99,1
Association, Union	2	,9	100,0
Total	224	100,0	

Table 5.1 *Respondent's "Company Type"*

Data on company age has been produced on the basis of the response given to 'the year of foundation of your firm (organization)' item of the questionnaire. The responses have been checked to calculate years of age of the companies, and the results have been used to produce the tabulation on Table 5.2 below. The first three levels are based on five years' period for total of fifteen years; the consecutive four levels are based on ten years' period for total of forty years; the next level is for a period of hundred years from 56 years to 150 years of age.

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Periods	Frequency	Percentage	Cumulative Percentage
years 1-5	40	17,9	17,9
years 6-10	39	17,4	35,3
years 11-15	51	22,8	58,1
years 16-25	40	17,9	76,0
years 26-35	27	12,1	88,1
years 36-45	7	3,1	91,2
years 46-55	11	4,8	96,0
years 56-150	9	4,0	100,0
Total	224	100,0	

Table 5.2 *Groupings of Companies per Age*

The structure of the company capital with respect to foreign or domestic ownership has been questioned. The first level is reserved for companies who have no foreign investment in the capital. Consecutive two levels represent quarterly division of each twenty-five percent. The next level represents the controlling share level in the capital of fifty-one to sixty-seven percent. Fifty-one percent shares are usually enough to manage the company as per the directives of the Board of Shareholders, whereas sixty-seven percent share is enough to have a decisive role on the decisions of the Board as well. The responses have been presented in the Table 5.3.

Levels	Frequency	Percentage	Cumulative Percentage
None	176	78,6	78,6
% 1 - % 25	6	2,7	81,3
% 26 - % 50	12	5,4	86,7
% 51 - % 67	5	2,2	88,9
%68 and over	25	11,1	100,0
Total	224	100,0	

Table 5.3 *Companies' Foreign-Owned Shares*

The respondent is asked to state name of the cities that the companies have presence in, and these cities have been categorized according to regions where they concentrate in the Table 5.4 below. The first group represents the companies that operate nation-wide. Other groups represent those companies that are not already represented in the first group. The second group includes major cities of where companies operate, with respect to population concentration. Istanbul has an important place in business analyses due to its largest share in many of the economic activities.

Geographic region	Frequency	Percentage	Cumulative Percentage
Turkey all regions	84	37.5*	37,5
Big cities (including Istanbul and one of Ankara, Izmir, Konya, Adana, Gaziantep)	19	8.5*	46.0
Marmara region (including Istanbul]	3	1,3*	47,3
Istanbul region	99	44,2*	91,5
Ankara region	4	1,8	93,3
Izmir region	6	2,7	96,0
Sakarya	1	,4	96,4
Bursa	1	,4	96,8
Kocaeli	6	2,8	99,6
Diğerleri	1	,4	100,0
Total	224	100,0	

*Includes Istanbul

Table 5.4 *Respondent's Geographical Area of Operation*

The respondents are asked to indicate 'number of employees' in their companies. The sizes of groups represent customary levels. The first group is for companies having less than fifty employees followed by companies over fifty and up to hundred employees. The next level is for companies having employees of hundred to 250 which is the level over which big size companies with employees of size 501 to 750 are grouped. The last group is for companies having employees of more than 750. The results are provided in Table 5.5.

Groups for number of employees	Frequency	Percentage	Cumulative Percentage
<50	91	40,6	40,6
50-100	30	13,4	54,0
101-250	43	19,2	73,2
251-500	25	11,2	84,4
501-750	5	2,2	86,6
>750	30	13,4	100,0
Total	224	100,0	

Table 5.5 *Number of Employees*

(b)   Company's Business

The respondents are asked to identify their core business with one of manufacturing or services or otherwise. This is the simplest traditional segmentation of business activities and represented in Table 5.6.

Company's Business	Frequency	Percentage	Cumulative Percentage
Manufacturing	83	37,1	37,1
Service	140	62,5	99,6
Others	1	,4	100,0
Total	224	100,0	

Table 5.6 *Respondent's Business Sector*

The respondent is asked to indicate what type of business activity the company is involved in and the results are provided in Table 5.7. The first group represents general trade as specialization while the rest of the groups' businesses are characterized with product type. The contributing companies appear to hold business types more diverse than scheduled for.

Business Type	Frequency	Percentage	Cumulative Percentage
Trade	25	11,2	11,2
Chemical	13	5,8	17,0
Food and retailing	30	13,4	30,4
Automotive	15	6,7	37,1
Textile	12	5,4	42,4
Energy	1	,4	42,9
Financial services (including banking and insurance)	27	12,1	54,9
Construction	17	7,6	62,5
Health care	16	7,1	69,6
Household goods	1	,4	70,1
Others	67	29,9	100,0
Total	224	100,0	

Table 5.7 *Respondent's Business Type*

Following industry type, as referred in micro economics, is another categorization of companies' activities based on the product/services that the companies deal with, as given in Table 5.8. The companies that deal with consumer durables are in the first group versus those companies which deal with non-durables in the second group. The companies that deal with raw and semi-finished materials are positioned in the third group versus those companies that deal with components in the fourth group.

Supplies, services and wholesale and retail distribution types of support activities follow in consecutive groups.

Industry Type	Frequency	Percentage	Cumulative Percentage
Consumer durables	16	7,1	7,1
Consumer non-durables	30	13,4	20,5
Capital goods	18	8,0	28,5
Raw and semi-finished materials	25	11,2	39,7
Components	15	6,7	46,4
Supplies	1	,4	46,8
Services	93	41,5	88,3
Wholesale and retail distribution	24	10,7	99,0
Total	222	99,0	99,0
No response	2	1,0	100,0
Total	224	100,0	

Table 5.8 *Respondent's Industry Type*

Company's Export Orientation

The respondents are asked to indicate years of their export history. The first group contains companies within their first year of export; second group contains companies with export history up to three years. The third group contains companies with export history up to five years and following group contains companies with export history experience of more than five years. The response rate is low and may be taken as 'no export history', the results are provided in Table 5.9.

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Periods of export history	Frequency	Percentage	Cumulative Percentage
0-1 years	8	3,6	8,5
1-3 years	13	5,8	22,3
3-5 years	12	5,4	35,1
5 and even more years	61	27,2	100,0
Total	94	42,0	
No clear response	2	,9	
No response	128	57,1	
Total	130	58,0	
Total	224	100,0	

Table 5.9 *Respondent's Years of Export History*

Export intensity is measured with two options of 'regular' and 'sporadic'. The response rate here is low and the results are provided in Table 5.10.

Export intensity	Frequency	Percentage	Cumulative Percentage
Regular	65	29,0	69,1
Sporadic	29	12,9	100,0
Total	94	42,0	
No response	130	58,0	
Total	224	100,0	

Table 5.10 *Respondent's Export Intensity*

The respondent is asked to indicate 'ratio of domestic sales to export sales' as the next question. The first group represents companies that operate only in domestic markets; they have no exports. The second group represents companies that solely sell to foreign markets; they have no domestic business. The next group represents companies that are basically domestic players however they have also considerable amount of export sales. The fourth group represents companies that have almost equal sales to domestic and foreign markets. The results are provided in Table 5.11 above.

Ratio of Domestic Sales to Foreign Sales	Frequency	Percentage	Cumulative Percentage
Totally selling to domestic markets	130	58,0	58,0
Totally selling to foreign markets	3	1,3	59,4
Domestic sales are higher than the foreign	62	27,7	87,1
Foreign sales are higher than the domestic sales	18	8,0	95,1
Sales to foreign markets and domestic markets are almost equal	11	4,9	100,0
Total	224	100,0	

Table 5.11 *Respondent's Ratio of Domestic Sales to Foreign Sales*

The respondent is asked to advise who is responsible for export sales' management. The first option is export department; the second option is marketing department. The third option is the general manager followed by company owner. The response rate is low, and the results are provided in Table 5.12.

Department Responsible for Export	Frequency	Percentage	Cumulative Percentage
Export Department	45	20,1	47,9
Marketing Department	23	10,3	72,3
General Manager	14	6,3	87,2
Company owner	12	5,4	100,0
Total	94	42,0	
No response	130	58,0	
Total	224	100,0	

Table 5.12 *Department Responsible for Export*

5.1.1.2. Characteristics of Key Informants

Key informants are asked to reveal three things about themselves. First they are asked to state job title as an indication of their current position within the organization. They are also asked to state their area of expertise and level of education for further distinction of their professional background as managers and key informants.

The respondents have been asked to state their job titles in an open-ended question. The first results are given below. The positions of the key informants are quite diverse. The results are provided in Table 5.13.

Key Informant's Job Title	Frequency	Percentage	Cumulative Percent
President, Vice-President, Chairperson, CEO, Director, General Coordinator, General Manager, Assistant General Manager	73	32,6	32,7
Owner-Manager, Share-Holder Manager	29	12,9	45,7
Marketing Director, Marketing Manager, Assistant Marketing Manager, Sales Director, Sales Coordinator, Sales Manager, Sales Expert	49	21,9	67,7
Production Manager, Technical Coordinator, Technical Manager, R&D Manager, Quality Manager	9	4	71,7
Company Manager, Assistant Company Manager, Regional Manager, Human Resources Manager, Personnel Manager , Strategy Manager	40	17,9	89,7
Finance and Administration Director, Finance and Administration Manager, Finance Manager	19	8,5	98,2
Operations Director, Operations Manager, Business Development Manager,	4	0,8	100,0
No response	1	0,4	
Total	224	100,0	

Table 5.13 *Key Informant's Job Title*

The key informants are asked to state their area of expertise by selecting one of predetermined options. Options of response includes 'others' and has received some quantity of responses. The results are provided in Table 5.14.

Key Informant's Area of Expertise	Frequency	Percentage	Cumulative Percentage
Production-technology	49	21,9	21,9
Finance-accounting	37	16,5	38,4
Marketing-sales	93	41,5	79,9
Human resources	4	1,8	81,7
Others	41	18,3	100,0
Total	224	100,0	

Table 5.14 *Key Informant's Area of Expertise*

Following Table 5.15 is the last for key informant characteristics on level of education on customary basis. College education has been grouped according to period of education as a short period of two years and a long period of four years. It was required that key informant should hold college education, as a minimum.

Key Informant's Level of Education	Frequency	Percentage	Cumulative Percentage
Primary school	1	,4	,4
High school	5	2,2	2,6
College- 2 years	28	12,5	15,1
College- 4 years	133	59,4	74,5
Post-Graduate school	57	25,5	100,0
Total	224	100,0	

Table 5.15 *Key Informant's Level of Education*

5.1.2. Descriptive Statistics for Strategic Orientation

This section covers the descriptive statistics for independent variable 'strategic orientation construct'. The construct has been operationalized with two approaches of

classificatory (Miles and Snow, 1978) and comparative (Venkatraman, 1989). The following part will present results for Miles and Snow typologies that will be followed by Venkatraman's comparative approach.

5.1.2.1. Descriptive Statistics for Strategic Orientation: Classificatory Approach

Miles and Snow's (1978) typologies in classificatory approach for strategic orientation have been operationalized with three key dimensions (entrepreneurial, engineering, and administrative), twelve dimensions and fifty-three statements. Miles and Snow have four typologies: prospector orientation, defender orientation, analyzer orientation and reactor orientation. Prospector orientation has been operationalized with fifteen statements; defender orientation has been operationalized with fifteen statements; analyzer orientation has been operationalized with fourteen statements, and reactor orientation has been operationalized with eight statements. The lists of statements for each orientation and their descriptive statistics are presented below.

5.1.2.1.1. Descriptive Statistics for Miles and Snow Prospector Orientation

The lists of statements for prospector orientation and their descriptive statistics are presented in Table 5.16. Out of fourteen statements, ten of them represent entrepreneurial key dimension of typologies. Only PR9 represents engineering dimension and PR10, PR11, and PR12 represent administrative dimension of the prospector orientation.

Variables	Code	Statement	n	Mean	Standard Deviation
Entrepreneurial: competitive edge	PR1	Our strategic business unit leads in innovation in its industry.	224	4,47	1,385
Entrepreneurial: product-market domain	PR2	Our strategic business unit operates in a broad product domain.	224	4,45	1,523

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Variables	Code	Statement	n	Mean	Standard Deviation
Entrepreneurial: product-market domain	PR3	Our strategic business unit's product domain is periodically redefined.	224	4,46	1,241
Entrepreneurial: success posture	PR4	Our strategic business unit believes in being the 'first-in' in the industry in development of new products.	224	4,28	1,526
Entrepreneurial: success posture	PR5	Not all the efforts invested in being 'first-in' in the industry in development of new products prove to be profitable.	224	3,34	1,337
Entrepreneurial: success posture	PR6	Our strategic business unit responds rapidly to early signals of opportunities in the environment.	224	3,85	1,278
Entrepreneurial: market position	PR7	Our strategic business unit's actions often lead to a new round of competitive activity in the industry.	224	4,29	1,178
Entrepreneurial: environmental monitoring	PR8	Our strategic business unit continuously monitors the marketplace for new product and market development.	224	5,17	1,015
Engineering: technological breadth	PR9 PR9a PR9b PR9c	Our strategic business unit has competencies that can be characterized as broad and entrepreneurial with skills diverse, with multiple technologies, flexible enabling change to be created.	224	4,83 4,92 4,38	1,028 1,043 1,243
Administrative: structure	PR10	Our strategic business unit's organizational structure is product or market oriented.	224	4,75	1,216

Variables	Code	Statement	n	Mean	Standard Deviation
Administrative: planning	PR11	Our strategic business unit's planning is concentrated in identifying trends and opportunities in the marketplace which can result in the creation of offerings or programs which are new to the market or reach new markets.	224	4,27	1,160
Administrative: control	PR12	Our strategic business unit's procedures to evaluate performance are decentralized and participatory encouraging many organizational members to be involved.	224	3,51	1,527
Entrepreneurial: growth	PR13	Our strategic business unit's growth is achieved through product development.	224	3,95	1,413
Entrepreneurial: growth	PR14	Our strategic business unit's growth is achieved through market diversification.	224	4,15	1,364
Average score	PR		224	4,32	
Scale 1=Strongly disagree … 6=Strongly disagree					

Table 5.16 *Statements and Descriptives for Prospector Orientation*

The average response score is 4.32. The average score of entrepreneurial dimension is at 4.24, the average score of engineering dimension is at 4.71, and the average score of administrative dimension is at 4.17 with the lowest in the group. The highest score is 5.17 for environmental monitoring.

5.1.2.1.2. Descriptive Statistics for Miles and Snow Defender Orientation

The lists of statements for defender orientation and their descriptive statistics are presented in Table 5.17. Out of fifteen statements, ten of them represent entrepreneurial key dimension of typologies. Only D10 represents engineering dimension and D11, D12, and D13 represent administrative dimension of the defender orientation.

Variables	Code	Statement	n	Mean	Standard Deviation
Entrepreneurial: product-market domain	D1	Our strategic business unit tries to locate a safe niche in a relatively stable products domain.	224	4,73	1,195
Entrepreneurial: product-market domain	D2	Our strategic business unit tries to maintain a safe niche in a relatively stable products domain.	224	4,75	1,210
Entrepreneurial: product mix	D3	Our strategic business unit tends to offer a narrower set of products than its competitors.	224	2,46	1,640
Entrepreneurial: competitive edge	D4	Our strategic business unit tries to protect the environment domain in which it operates by stressing higher quality than its competitors.	224	5,25	,885
Entrepreneurial: competitive edge	D5	Our strategic business unit tries to protect the environment domain in which it operates by stressing lower prices than its competitors.	224	2,85	1,340
Entrepreneurial: product-market domain	D6	Our strategic business unit concentrates on trying to achieve the best performance in a relatively narrow product-market domain.	224	3,76	1,722

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Variables	Code	Statement	n	Mean	Standard Deviation
Entrepreneurial: surveillance-environment monitoring	D7	Our strategic business unit places less stress on the examination of changes in the industry that is not directly relevant to our strategic business unit.	224	2,65	1,364
Entrepreneurial: product mix	D8	Our strategic business unit tries to maintain a limited line of products.	224	2,49	1,624
Entrepreneurial: product mix	D9	Our strategic business unit tries to maintain a stable line of products.	224	4,91	1,042
Engineering: Technological breadth	D10	Our strategic business unit has competencies that can be characterized as specialization concentrated into one or few specific areas.	224	4,49	1,274
Administrative: structure	D11	Our strategic business unit's organizational structure is functional in nature (i.e. organized by department-marketing, accounting, personnel, etc.)	224	4,62	1,360
Administrative: planning	D12 D12a D12b	Our strategic business unit's planning is concentrated in identifying those problems, which if solved, will maintain and then improve its current product offerings and market position.	224	4,04 4,62	1,243 1,039
Administrative: control	D13 D13a D13b	Our strategic business unit's procedures to evaluate performance are highly centralized and primarily the responsibility of senior management.	224	3,69 4,04	1,503 1,451
Entrepreneurial: growth	D14	Our strategic business unit's cautious and incremental growth is realized through market penetration.	224	4,08	1,337

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Variables	Code	Statement	n	Mean	Standard Deviation
Entrepreneurial: growth	D15	Our strategic business unit's cautious and incremental growth is sometimes realized through some product development.	224	3,19	1,459
	D	Average score	224	3,92	
Scale 1=Strongly disagree … 6=Strongly disagree					

Table 5.17 *Statements and Descriptives for Defender Orientation*

The average response score is 3.92. The average score of entrepreneurial dimension is at lows 3.74. The lowest score is 2.65 for environmental monitoring and 2.49 for product mix. The average score of engineering dimension is at 4.49 and the average score of administrative dimension is at 4.20.

5.1.2.1.3. Descriptive statistics for Miles and Snow Analyzer Orientation

The lists of statements for analyzer orientation and their descriptive statistics are presented in Table 5.18. Out of thirteen statements, nine of them represent entrepreneurial key dimension of typologies. Only AN8 represents engineering dimension and AN9, AN10, and AN11 represent administrative dimension of the analyzer orientation.

Variables	Code	Statement	n	Mean	Standard Deviation
Entrepreneurial: competitive edge	AN1	Our strategic business unit adopts promising innovations in the industry quickly.	224	4,96	1,056
Entrepreneurial: product-market domain	AN2	Our strategic business unit tries to maintain a limited line of products	224	2,49	1,624

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Variables	Code	Statement	n	Mean	Standard Deviation
Entrepreneurial: product-market domain	AN3	Our strategic business unit tries to maintain a stable line of products.	224	4,91	1,042
Entrepreneurial: competitive edge	AN4	The innovations which are chosen by our strategic business unit are carefully examined.	224	4,97	1,008
Entrepreneurial: competitive edge	AN5	Our strategic business unit often reacts to innovations in the industry by offering similar, lower-cost products.	224	2,85	1,393
Entrepreneurial: environmental monitoring	AN6	Our strategic business unit carefully monitors competitors' actions in the industry.	224	4,86	1,106
Entrepreneurial: product-market domain	AN7	Our strategic business unit accrues most of its profit from its firm base of traditional products and customers.	224	4,58	1,210
Engineering: technological breadth	AN8	Our strategic business unit has competencies that can be characterized as analytical with skills enabling them to both identify trends and then develop new offerings or markets.	224	4,43	1,158
Administrative: Structure	AN9	Our strategic business unit's organizational structure is matrix combining both functional divisions and product-market divisions.	224	3,86	1,468
Administrative: planning	AN10 AN10a AN10b	Our strategic business unit's planning is concentrated in identifying those trends in the industry which other competitors have proven possess long-term potential while also solving problems related to our current offerings and our current customer needs.	224	3,72 4,56	1,328 1,262

Variables	Code	Statement	n	Mean	Standard Deviation
Administrative: control	AN11 AN11a AN11b	Our strategic business unit's procedures to evaluate performance are centralized in established products' areas and more participatory in newer products' areas.	224	3,34 3,90	1,474 1,354
Entrepreneurial: growth	AN12	Our strategic business unit's growth is achieved through adopting new products only after a very careful review of their potential.	224	4,01	1,425
Entrepreneurial: growth	AN13	Our strategic business unit's growth is achieved through assertively penetrating more deeply into markets that are currently served.	224	4,51	1,116
	AN	Average score	224	4,13	
Scale 1=Strongly disagree … 6=Strongly disagree					

Table 5.18 *Statements and Descriptives for Analyzer Orientation*

The average response score is 4.13. The average score of entrepreneurial dimension is at 4.23, the engineering dimension is at 4.43, and administrative dimension is at 3.87. The average response rate for product-market domain is 2.49.

5.1.2.1.4. Descriptive Statistics for Miles and Snow Reactor Orientation

The lists of statements for reactor orientation and their descriptive statistics are presented in Table 5.19. Out of seven statements, three of them represent entrepreneurial key dimension of typologies. Only R4 represents engineering dimension, and R5, R6, R7 represent administrative dimension of the reactor orientation.

Variables	Code	Statement	n	Mean	Standard Deviation
Entrepreneurial: product-market domain	R1	Compared to its competitors in the industry, our strategic business unit is aggressive in maintaining its product/market domain.	224	3,47	1,439
Entrepreneurial: success posture	R2	Our strategic business unit takes many risks.	224	3,73	1,225
Entrepreneurial: environmental monitoring	R3	Our strategic business unit responds to areas in which pressure is made on it by its environment	224	3,61	1,301
Engineering: technological breadth	R4	Our strategic business unit has competencies that can be characterized as fluid with skills related to the near-term demands of the market-place.	224	4,17	1,177
Administrative: structure	R5	Our strategic business unit's organizational structure is continuously changing to enable us to meet opportunities and solve problems as they arise.	224	3,24	1,447
Administrative: planning	R6	Our strategic business unit's planning is concentrated in identifying the best possible solutions to those problems or challenges which require immediate attention.	224	3,92	1,391
Administrative: control	R7	Our strategic business unit's procedures to evaluate performance are heavily oriented towards those reporting requirements which demand immediate attention.	224	3,63	1,253
	R	Average score	224	3,68	
Scale 1=Strongly disagree … 6=Strongly disagree					

Table 5.19 *Statements and Descriptives for Reactor Orientation*

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The average response score is 3.68. The average score of entrepreneurial dimension is at lows 3.60, very low. The average score of engineering dimension score is 4.17. The average lowest score is 3.60 for administrative dimension.

5.1.2.2. Descriptive Statistics for Comparative Approach of Venkatraman's STROBE Dimensions

Venkatraman has modeled six dimensions to operationalize strategic orientation and the descriptive results are presented in Table 5.20 below. Aggressiveness trait scores 3.11; analysis trait scores 4.21; defensiveness trait scores 3.38; futurity trait scores 4.10; proactiveness trait scores 4.12; riskiness trait scores 2.88 on the sample.

Variables	Code	Statement	n	Mean	Standard Deviation
Aggressiveness	1	We often sacrifice profitability to gain market share.	224	3,63	1,402
	2	We often cut prices to increase market share.	224	3,06	1,326
	3	We often set prices below competition.	224	2,78	1,350
	4	We often seek market share position at the expense of cash flow and profitability.	224	2,96	1,362
		Average score	224	3,11	
Analysis	1	We emphasize effective coordination among different functional areas.	224	4,20	1,159
	2	Our information systems provide support for decision making	224	4,46	1,151
	3	When confronted with a major decision, we usually try to develop through analysis.	224	4,50	1,088
	4	We use several planning techniques.	224	4,11	1,224

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Variables	Code	Statement	n	Mean	Standard Deviation
	5	We use the outputs of management information and control systems.	224	4,20	1,219
	6	We commonly use manpower planning and performance appraisal of senior managers.	224	3,79	1,535
		Average score	224	4,21	
Variables	Code	Statement	n	Mean	Standard Deviation
Defensiveness	1	We occasionally conduct significant modifications to manufacturing technology.	224	3,20	1,596
	2	We often use control systems for monitoring performance.	224	3,61	1,294
	3	We often use production management techniques.	224	3,26	1,475
	4	We often emphasize product quality through the use of quality circles.	224	3,45	1,463
		Average score	224	3,38	
Futurity	1	We emphasize basic research to provide us with future competitive edge.	224	4,00	1,300
	2	Forecasting key indicators of operations is common.	224	4,34	1,254
	3	Formal tracking of significant general trends is common.	224	4,26	1,151
	4	We often conduct 'what if' analyses of critical issues.	224	3,78	1,309
		Average score	224	4,10	
Proactiveness	1	We are constantly seeking new opportunities related to present operations.	224	4,46	1,112
	2	We are usually the first ones to introduce new brands or products/services on the market.	224	3,42	1,462
	3	We are constantly on the look for businesses that can be acquired.	224	4,29	1,357
	4	Operations in later stages of the life cycle are strategically eliminated.	224	4,30	1,118
		Average score	224	4,12	

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Variables	Code	Statement	n	Mean	Standard Deviation
Riskiness	1	We seem to adopt a rather conservative view when making major decisions (rev.)	224	3,13	1,225
	2	New projects are approved on a 'stage by stage' basis rather than with "blanket" approval (rev.).	224	3,31	1,249
	3	We have a tendency to support projects where the expected returns are certain (rev.)	224	2,46	,988
	4	Our operations have generally followed 'the tried and true' paths (rev.).	224	2,62	1,085
		Average score	224	2,88	
Scale 1=Strongly disagree … 6=Strongly disagree					

Table 5.20 *Statements and Descriptives for Venkatraman's dimensions*

5.1.3. Descriptive Statistics for Business Performance

Below, findings obtained from perceived performance indicators as well as partial answers received to objective performance indicators are presented.

5.1.3.1. Overall Performance Last Year

Overall performance is represented on basis of 'compared to objectives' and 'compared to objectives' in following Table 5.21.

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Variables	Code	Statement	n	Mean	Standard Deviation
Overall performance compared to objectives	1	Overall performance of the business unit compared to objectives is	224	4,54	,883
Overall performance compared to competitors	2	Overall performance compared to major competitors is	224	4,58	,953
		Average score	224	4,56	
Scale 1=Poor … 6=Excellent					

Table 5.21 *Statements and Descriptives for Overall Performance*

Both performance compared to objectives and compared to competitors score above 4.50.

5.1.3.2. Performance Compared to Competitors

The tabulation of scores on comparative performance is in Table 5.22. It comprises of market share (item 3) with mean value 4.27, also growth in market share (item 4) with mean value 4.40 compared to competitors, sales volume (item 5) with mean score 4.38, and growth in sales volume (item 6) with mean value 4.36, return rate on assets (item 7) with mean value 4.11, and return rate on investment (item 8) with mean value 4.08 compared to competitors, and product or service quality (item 9) with mean value 5.02 compared to competitors. Average score is 4.38 at higher end of the performance scale.

Variables	Code	Statement	n	Mean	Standard Deviation
Market share compared to competitors	3	When compared with the major competitors over the past year, our business unit's market share	223	4,27	1,010
Market share growth compared to competitors	4	When compared with the major competitors over the past year, our business unit's market share growth	223	4,40	,976
Sales volume compared to competitors	5	When compared with the major competitors over the past year, our business unit's total sales volume in YTL	223	4,38	,897
Sales growth compared to competitors	6	When compared with the major competitors over the past year, our business unit's sales growth (in YTL) in percentage	222	4,36	,925
ROA compared to competitors	7	When compared with the major competitors over the past year, our business unit 's ROA	221	4,11	,947
ROI compared to competitors	8	When compared with the major competitors over the past year, our business unit's ROI	221	4,08	1,095
Product/service quality compared to competitors	9	When compared with the major competitors over the past year, our business unit's product/service) quality	223	5,02	,816
		Average score	221	4,38	
Scale 1=Poor … 6=Excellent					

Table 5.22 *Statements and Descriptives for Performance Compared to Competitors*

5.1.3.3. Performance Compared to Objectives

The tabulation of score on performance compared to objectives is presented in Table 5.23 below. It comprises of customer satisfaction (item 10) with mean value 4.85, also customer retention (item 11) with mean value 4.80, market share (item 12) with mean value 4.48, also growth in market share (item 13) with mean value 4.36, sales volume (item 14) with mean value 4.38, and growth in sales volume (item 15) with mean value 4.35, return rate on assets (item 16) with mean value 4.12, and return rate on investment compared to objectives (item 17) with mean value 4.11 compared to objectives. Average score is 4.43 at higher end of the performance scale.

Variables	Code	Statement	n	Mean	Standard Deviation
Customer satisfaction compared to objectives	10	Customer satisfaction	224	4,85	,821
Customer retention compared to objectives	11	Customer retention	224	4,80	,815
Market share compared to objectives	12	Market share	224	4,48	,984
Market share growth compared to objectives	13	Market share growth	224	4,36	,993
Sales volume YTL compared to objectives	14	Total sales volume in YTL	224	4,38	,968
Sales growth (in YTL) compared to objectives	15	Sales growth (in YTL) in percentage	224	4,35	,950
ROA compared to objectives	16	ROA	224	4,12	,981

Variables	Code	Statement	n	Mean	Standard Deviation
ROI compared to objectives	17	ROI	221	4,11	1,064
		Average score	221	4,43	
Scale 1=Poor … 6=Excellent					

Table 5.23 *Statements and Descriptives for Performance Compared to Objectives*

5.1.3.4. Performance over the Past Three Years

The tabulation of scores on performance over the past three years with a high non-response rate on the questions is presented in Table 5.24 below. It comprises of return rate on assets over the past three years (item 18) with an average of about 44 percent, with return rate on investment over the past three years (item 19) with an average about 98 percent, market shares over the past three years (item 20) with an average about 59 percent, with growth in market share over the past three years (item 21) with an average about 55 percent, sales revenue growth over the past three years (item 22) with a n average about 95 percent.

Variables	Code	Statement	n

ROA over the past three years	18	For your SBU, please indicate ROA for each of following years.
		    a. 2006 60,6266 %
		    b. 2005 38,3969 %
		    c. 2004 31,2379 %
		         Average 44.0417 %
			80
			74
			71

ROI over the past three years	19	For your SBU, please indicate ROI for each of following years.
		    a. 2006 65,9493 %
		    b. 2005 197,5608 %
		    c. 2004 30,5305 %
		         Average 98.2341 %
			68
			63
			60

Market share over the past three years	20	For your SBU, please indicate market share for each of following years.	
		a. 2006 24,0018 %	95
		b. 2005 21,4376 %	89
		c. 2004 138,8185 %	84
		Average 59,1376 %	
Market share growth over the past three years	21	For your SBU, please indicate market share growth for each of following years.	
		a. 2006 120,0419 %	91
		b. 2005 20,3093 %	85
		c. 2004 16,5060 %	77
		Average 55,0240 %	
Sales revenue growth over the past three years	22	For your SBU, please indicate sales revenue growth for each of following years.	
		a. 2006 33,5786 %	97
		b. 2005 30,2761 %	90
		c. 2004 238,6463 %	82
		Average 94,9850 %	

Table 5.24 *Statements and Descriptives for Performance over the Past Three Years*

5.1.4. Descriptive Statistics for Marketing Strategies

Descriptive statistics for marketing strategies are presented below in the order of strategies.

5.1.4.1. Descriptive Statistics for Market-leading Strategies

The items cover inquiries on market-share position as perceived (L1), marketing objective with respect to position (L2), strategic focus whereby the business seeks to accomplish objectives and approach to the market in implementing strategies (L3, L4, L5, L6, L7). The average scores of responses have been presented below in Table 5.25. Mean value for market for market share position is 3.14, for marketing objective it is 3.23 while for strategic focus and approach to the market, average score is 3.53. The average of the strategy score is 3.44.

Variables	Code	Statement	n	Mean	Standard Deviation
Market share-position	L1	Our business unit is number one with the largest market share.	224	3,14	1,771
Marketing objective	L2	Our business unit leads other firms in price changes, distribution coverage and promotion spending	224	3,23	1,304
Strategic focus Approach to the market: whole or selected, individual customer	L3	As the market leader, our business unit tries and supports to expand the total market to gain more sales.	224	3,57	1,419
	L4	As the market leader, our business unit's major concern is to protect our market share against attacks.	224	2,58	1,293
	L5	Our business unit takes proactive measures with continuous innovation to be always ahead of competition.	224	4,04	1,596
	L6	To expand market share, our business unit builds up to gain more shares from weaker competitors	224	4,08	1,595
	L7	Our business unit takes proactive measures with continuous innovation to be always ahead of competition	224	4,13	1,368
	L8	To expand market share, our business unit builds up to gain more shares from weaker competitors	224	2,76	1,453
		Average score	224	3,44	
Scale 1=Strongly disagree … 6=Strongly agree					

Table 5.25 *Statements and Descriptives for Market-Leading Strategies*

5.1.4.2. Descriptive Statistics for Market-Challenging Strategies

The items cover inquiries on market-share position as perceived (C1), marketing objective with respect to position (C2), strategic focus whereby the business seeks to accomplish objectives and approach to the market in implementing strategies (C3, C4, C5, C6). The average scores of responses have been presented in Table 5.26 below. Mean value for market share position is 2.21, for marketing objective it is 2.07 while for strategic focus and approach to the market average score is 2.70. The average score is 2.47.

Variables	Code	Statement	n	Mean	Standard Deviation
Market share-position	C1	Our business unit is not number one and we do not have the largest market share.	224	2,21	1,298
Marketing objective	C2	Our business unit is keen to fight aggressively to gain shares from its competitors	224	2,07	1,249
Strategic focus	C3	Our business unit attacks the market leader aggressively to gain more shares.	224	2,40	1,242
Approach to the market: whole or selected, individual customer	C4	Our business leader attacks not the market leader but those of its size who are underfinanced and not so successful to gain more shares.	224	2,17	1,362
	C5	Our business unit attacks not the market leader but those of smaller or regional size who are underfinanced and not so successful to gain more shares.	224	3,52	1,875
		Average score	224	2,47	
Scale 1=Strongly disagree … 6=Strongly agree					

Table 5.26 *Statements and Descriptives for Market-Challenging Strategies*

5.1.4.3. Descriptive Statistics for Market-Following Strategies

The items cover inquiries on market-share position as perceived (F1), marketing objective with respect to position (F2), strategic focus whereby the business seeks to accomplish objectives and approach to the market in implementing strategies (F3, F4, F5, F6). The average scores of responses have been presented in Table 5.27 below. Mean value for market share position is 2.4, for marketing objective it is 1.75, while for strategic focus and approach to the market it is 1.79. The average score is 1.91.

Variables	Code	Statement	n	Mean	Standard Deviation
Market share-position	F1	Our business is a low market share, and we avoid confrontation with the market leader.	224 224	2,50 2,17	1,596 1,368
Marketing objective	F2	We prefer to imitate or adopt leader's products and hold share without rocking the boat.	224	1,75	1,036
Strategic focus Approach to the market: whole or selected, individual customer	F3	We duplicate leader's products and packages and sell on the black market or through some distributors dealing with duplicated products.	224 224	1,50 1,49	0,998 1,011
	F4	We emulate leader's products, name and packaging with slight variations, as extensively as possible.	224	1,48	0,951
	F5	We copy some things from the leader but maintain differentiation in terms of packaging, advertising, pricing, or location.	224	2,19	1,585
	F6	We take the leader's products and adapt or improve them to sell same or different markets.	224 224	2,01 2,08	1,351 1,457
		Average score	224	1,91	
Scale 1=Strongly disagree … 6=Strongly agree					

Table 5.27 *Statements and Descriptives for Market-Following Strategies*

5.1.4.4. Descriptive Statistics for Market-Niching Strategies

The items cover inquiries on market-share position as perceived (N1), marketing objective with respect to position (N2), strategic focus whereby the business seeks to accomplish objectives and approach to the market in implementing strategies (N3, N4, N5, N6). The average scores of responses have been presented in Table 5.28 below. Mean value for market share position is 2.16, for marketing objective it is 5.08, while for strategic focus and approach to the market average score is 2.83. The average score is 3.09.

Variables	Code	Statement	n	Mean	Standard Deviation
Market share-position	N1	Our business unit targets segments within segments or niches that other firms overlook or ignore.	224	2,16	1,339
Marketing objective	N2	It is crucial for our business unit to specialize to know its customers better and to serve them better than any other firm.	224	5,08	0,997
Strategic focus	N3	Our business unit serves one niche with specialization in specific/geographic market.	224	2,55	1,438
Approach to the market: whole or selected, individual customer	N4	Our business unit's specialization is on serving a niche customer base.	224	2,75	1,529
	N5	Our business unit provides a specialized product required by a small market segment.	224	3,01	1,589
	N6	Our business unit serves multiple niches with specialization in one or more areas.	224	3,01	1,506
		Average score	224	3,09	
Scale 1=Strongly disagree … 6=Strongly agree					

Table 5.28 *Statements and Descriptives for Market-Niching Strategies*

5.1.5. Descriptive Statistics for Environmental Variables

Descriptive statistics for environmental key concepts of industrial characteristics are presented below. Each of the key industry characteristics, competitive intensity, market turbulence and technological turbulence, has six elements to operationalize.

5.1.5.1. Descriptive Statistics for Competitive Intensity

This key concept reflects how the whole market is behaving with respect to competition. The elements being questioned are competition (CI1) on the level of competition with mean value 5.13, promotion wars (CI2) on the density of promotions with mean value 3.29, competitor match (CI3) on the responsiveness to competition with mean value 3.78, price competition (CI4) on the level of price race with mean value 4.31, competitive move frequency (CI5) on the frequency level of competitive moves with mean value 3.74, competitive strength (CI6) on how strong the competitors are with mean value 2.82. The average score is 3.84. The list of the statements and descriptive results are presented in Table 5.29 below.

Variables	Code	Statement	n	Mean	Standard Deviation
Competition	CI1	Competition in our industry is cutthroat.	223	5,13	0,987
Promotion wars	CI2	There are many promotion wars in our industry.	223	3,29	1,627
Competitor match	CI3	Anything that one competitor can offer others can match readily.	223	3,78	1,313
Price competition	CI4	Price competition is a hallmark of our Industry.	223	4,31	1,311
Competitive move frequency	CI5	One hears of a new competitive move almost every day.	223	3,74	1,331

Variables	Code	Statement	n	Mean	Standard Deviation
Competitive strength	CI6	Our competitors are relatively weak	223	2,82	1,345
		Average score	223	3,84	
Scale 1=Strongly disagree … 6=Strongly agree					

Table 5.29 *Statements and Descriptives for Competitive Intensity*

5.1.5.2. Descriptive Statistics for Market Turbulence

This key concept reflects the dynamism in the market with respect to stability. The elements being questioned are change in preferences (MT1) with mean value 3.94, inclination for new products (MT2) with mean value 4.06, sensitivity for price change (MT3) with mean value 4.36, change in product-related requirements of new customers (MT4) with mean value 3.47, continuation in customer base (MT5) with mean value 4.95, predictability of change in the market (MT6) with mean value 3.17. The average score is 3.99.The list of the statements and descriptive results are presented in Table 5.30 below.

Variables	Code	Statement	n	Mean	Standard Deviation
Preferences change through time	MT1	In our kind of business, customers' product preferences change quite a bit over time.	224	3,94	1,164
Customers look for new products	MT2	Our customers tend to look for new products all the time.	224	4,06	1,198
Price relatively unimportant	MT3	Sometimes our customers Are Very price-sensitive, but on the other occasions, price is relatively unimportant.	224	4,36	1,147

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Variables	Code	Statement	n	Mean	Standard Deviation
Product-related needs are different	MT4	New customers tend to have product-related needs that are different form those of our existing customers.	224	3,47	1,263
Cater to many of the same customers	MT5	We cater to many of the same customers that we used to in the past.	224	4,95	1,032
Difficult to predict marketplace changes	MT6	It is very difficult to predict any changes in this marketplace.	224	3,17	1,192
		Average score		3,99	
Scale 1=Strongly disagree … 6=Strongly agree					

Table 5.30 *Statements and Descriptives for Market Turbulence*

5.1.5.3. Descriptive Statistics for Technological Turbulence

This key concept reflects the dynamic change in technologies related to production or services. The elements being questioned are change in technology (TE1) with mean value 4.01, technology's contribution (TE2) with mean value 4.29, predictability of change in technology (TE3) with mean value 3.53, innovation due to technology (TE4) with mean value 4.08, technological development (TE5) with mean value 2.88, frequency of technological change (TE6) with mean value 3.62. Technological turbulence is a commonly used variable to identify respective dynamism in the market place. The average score is 3.74.The list of the statements and descriptive results are presented in Table 5.31 below.

Variables	Code	Statement	n	Mean	Standard Deviation
Technology changing rapidly	TE1	The technology in our industry is changing rapidly.	224	4,01	1,310

Variables	Code	Statement	n	Mean	Standard Deviation
Technological change provides opportunities	TE2	Technological changes provide big opportunities in our industry.	224	4,29	1,295
Difficult to forecast technology	TE3	It is very difficult to forecast where the technology in our industry will be in the next two to three years.	224	3,53	1,342
New product ideas from technology	TE4	A large number of new product ideas have been made possible through technological breakthroughs in our industry.	224	4,08	1,391
Technological developments are minor	TE5	Technological developments in our industry are rather minor.	224	2,88	1,573
Technological changes are frequent	TE6	The technological changes in this industry are frequent.	224	3,62	1,438
		Average score	224	3,74	
Scale 1=Strongly disagree … 6=Strongly agree					

Table 5.31 *Statements and Descriptives for Market-Leading Strategies*

5.2. RESULTS FOR FACTOR AND RELIABILITY ANALYSES

This section presents results of factor analysis of the scales used in the research. The goal of the analyses is to describe the data by grouping variables that are correlated with each other and derive a relatively small number of common underlying dimensions (factors) that account for the variability found in a relatively large number of measured responses with minimum loss of information. The exploratory factor

analysis (EFA) is most suitable for this purpose. Extracting method the principal component analysis PCA used provides both common and unique variances and includes as many significant factors as possible from the data set. The PCA with R-mode analyzing relationships among variables to identify groups forming latent dimensions (factors), and with orthogonal method of Varimax rotation and Kaiser normalization summarizing variables into parsimonious and uncorrelated factors (components) are preferred and employed on SPSS 13.0. PCA seeks a liner combination of variables such that maximum variance is extracted and total (common and unique) variance is obtained. In this respect, the Guttman-Kaiser criterion (Yeomans and Golder, 1982) and Cattell's (1966) scree plot have been utilized to determine number of factors (components) for each construct. The Guttman-Kaiser criterion (also called Kaiser Rule K1) requires all components with eigenvalues (latent roots) under 1.0 to be dropped and has been taken as the major criteria, while Cattell's scree plot helps to display components and eigenvalues in linear relationship and is taken as guidance in this study.

Before conducting factor analyses, two tests are computed to examine whether data is appropriate for factor analysis: [1] Bartlett's Test of Sphericity testing the hypothesis that the correlation matrix is an identity matrix with no correlation between variables, its value must be significant at $p < 0.50$ rejecting the null hypothesis and confirming correlation exists between variables, and [2] Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO-MSA) must be higher than 0.50 indicating that partial correlations are low. The next step is to consider the individual measure of sampling adequacy of the variables from the anti-image correlation matrix. Loadings under 0.50 have been suppressed. To test the reliabilities of the scales, Cronbach's alpha reliability analysis is conducted. Factors having reliability below Nunnally's (1978) recommended threshold of 0.70 are dropped unless it is necessary to keep them in the analyses due to data scarcity. Items whose deletion contributes to an increase in the reliability of a factor above Nunnally's (1978) recommended threshold of 0.70 are also dropped.

5.2.1. Factor and Reliability Analysis for Strategic Orientation: Classificatory Approach- M&S Typologies in Dimensions

This scale has fifty-three items (fifty-five statements in Turkish version of the instrument) comprising of all widely used variables in the literature and those operationalized by the author based on organizational adaptation theory developed by Miles and Snow (1978). The statements have been randomly ordered in the questionnaire to preclude respondent's bias. This analysis will focus on determining dimensions (factors) and their elements in common without any regard to prior conceptualization on typologies.

The analysis starts with a decision on whether data is rated as being appropriate for factor analysis or not. As per initial test results, Bartlett's Test of Sphericity gives significant results: chi-square value at 5420.778, significant at 0.000 levels confirming correlations among variables. Initial KMO-MSA test result is 0.809 which indicates that the total correlation in the matrix is also well above the threshold limit level at 0.50. The initial test values reveal that data is suitable so that factor analysis may be proceeded with.

The next step is to consider the individual measure of sampling adequacy of the variables from the anti-image correlation matrix. Even though some of the variables have sampling adequacy levels lower than the sampling adequacy of the scale (0.809), none falls below the threshold limit of 0.50 (defined by Kaiser) except Prospector 5 with a factor loading of 0.405. Prospector 5 is eliminated and the factor analysis is run again. The KMO-MSA rises to 0.818, and the Bartlett's test of sphericity (chi-square value of 5310.480) is significant at 0.000 levels.

The consecutive step is to assess the number of factors that are extracted. The Guttman-Kaiser criterion, percentage of variance explained, and the scree plot are examined for this purpose. There are fourteen factors with eigenvalues above level of one explaining 66.071 per cent of the total variance.

The rotated component matrix results are examined to identify the variables underlying each factor, against a threshold limit of loadings on factors being 0.50.

Prospector 7 (MSA=0.488), Analyzer 8 (MSA=0.455), Prospector 3 (MSA=0.400), Defender 9 (MSA=0.387), and Reactor 4 (MSA=0.361), having factor loading values lower than limits, do not load highly on any factor and therefore have been eliminated. The factor analysis is run again and resulting sampling adequacy of each variable in the newly obtained rotated component matrix is examined. Reactor 7 falls short of threshold limit of 0.50 with a value of MSA=0.470, and thus it is eliminated. Similarly, the factor analysis has been run again and again to eliminate Prospector 9b (MSA=0.488), Prospector 9a (MSA=0.498), Analyzer 9 (MSA=0.416), Prospector 1 (MSA=0.417), Reactor 3 (MSA=0.417), Reactor 2 (MSA=0.432), Reactor 5 (MSA=0.462), Prospector 6 (MSA=0.444) at successive stages. After these analyses, the scale has ended in twelve factors with KMO-MSA value 0.785 and Bartlett's test of sphericity (chi-square 3429.288) being significant at 0.000 levels.

Reliability analyses have been carried out for each factor. Factors 1, Factor 2 and Factor 3 have resulted with reliability of Cronbach's alpha 0.826, 0.806 and 0.809 values respectively. For Factor 4, reliability was low and therefore Prospector 2 has been dropped to increase reliability above limits to 0.729. Factor analysis has been repeated accordingly to eliminate Prospector 2. Reliability analyses for Factor 5 and Factor 6 have resulted with Cronbach's alpha of 0.716 and 0.709 values respectfully, while Factor 7 has been dropped due low reliability. Factor analysis has been repeated accordingly eliminating Prospector 12, Analyzer 11b (of Factor 7) while results required further elimination of Defender 7 (0.395) and Analyzer 7 (0.489) due to low factor loadings. Reliability analysis for newly formed Factor 7 has resulted with Cronbach's alpha value of 0.704 while Factor 8 has been dropped due low reliability. Factor analysis has been repeated accordingly eliminating Defender 2 and Defender 1 (of Factor 8). Newly formed Factor 8 has also been dropped due to low reliability and factor analysis has been run again eliminating variables Defender 14, Reactor 1, and Analyzer 13 (of new Factor 8). For the third time, newly formed Factor 8 has been dropped due to low reliability and factor analysis has been run again eliminating variables Defender 6 and Defender 10 (of newer Factor 8) resulting in seven factors with KMO-MSA value 0.795 and Bartlett's test of sphericity (chi-square 2342.153) significant at 0.000 levels. Reliability test for the scale as a total has been carried out

and has resulted with reliability of Cronbach's alpha 0.807. A list of the eliminated items is provided in Table 5.32 below.

Variables excluded in factor analysis for M&S typologies: dimensional approach		
Variables	Code	Statement
Entrepreneurial: competitive edge	PR1	Our strategic business unit leads in innovation in its industry.
Entrepreneurial: product-market domain	PR2	Our strategic business unit operates in a broad product domain.
Entrepreneurial: product-market domain	PR3	Our strategic business unit's product domain is periodically redefined.
Entrepreneurial: success posture	PR5	Not all the efforts invested in being 'first-in' in the industry in development of new products prove to be profitable.
Entrepreneurial: success posture	PR6	Our strategic business unit responds rapidly to early signals of opportunities in the environment.
Entrepreneurial: market position	PR7	Our strategic business unit's actions often lead to a new round of competitive activity in the industry.

Variables	Code	Statement
Engineering: technological breadth	PR9a PR9b	Our strategic business unit has competencies that can be characterized as broad and entrepreneurial with skills diverse, with multiple technologies, flexible enabling change to be created.
Administrative: control	PR12	Our strategic business unit's procedures to evaluate performance are decentralized and participatory encouraging many organizational members to be involved.
Entrepreneurial: product-market domain	D1	Our strategic business unit tries to locate a safe niche in a relatively stable products domain.
Entrepreneurial: product-market domain	D2	Our strategic business unit tries to maintain a safe niche in a relatively stable products domain.
Entrepreneurial: product-market domain	D6	Our strategic business unit concentrates on trying to achieve the best performance in a relatively narrow product-market domain.
Entrepreneurial: surveillance-environment monitoring	D7	Our strategic business unit places less stress on the examination of changes in the industry that is not directly relevant to our strategic business unit.

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Variables	Code	Statement
Entrepreneurial: product mix	D9	Our strategic business unit tries to maintain a stable line of products.
Engineering: Technological breadth	D10	Our strategic business unit has competencies that can be characterized as specialization concentrated into one or few specific areas.
Entrepreneurial: growth	D14	Our strategic business unit's cautious and incremental growth is realized through market penetration.
Entrepreneurial: product-market domain	AN7	Our strategic business unit accrues most of its profit from its firm base of traditional products and customers.
Engineering: technological breadth	AN8	Our strategic business unit has competencies that can be characterized as analytical with skills enabling them to both identify trends and then develop new offerings or markets.
Administrative: Structure	AN9	Our strategic business unit's organizational structure is matrix combining both functional divisions and product-market divisions.
Administrative: control	AN11b	Our strategic business unit's procedures to evaluate performance are centralized in established products' areas and more participatory in newer products' areas.

Variables	Code	Statement
Entrepreneurial: growth	AN13	Our strategic business unit's growth is achieved through assertively penetrating more deeply into markets that are currently served.
Entrepreneurial: product-market domain	R1	Compared to its competitors in the industry, our strategic business unit is aggressive in maintaining its product/market domain.
Entrepreneurial: success posture	R2	Our strategic business unit takes many risks.
Entrepreneurial: environmental monitoring	R3	Our strategic business unit responds to areas in which pressure is made on it by its environment.
Engineering: technological breadth	R4	Our strategic business unit has competencies that can be characterized as fluid with skills related to the near-term demands of the market-place.
Administrative: structure	R5	Our strategic business unit's organizational structure is continuously changing to enable us to meet opportunities and solve problems as they arise.
Administrative: control	R7	Our strategic business unit's procedures to evaluate performance are heavily oriented towards those reporting requirements which demand immediate attention.

Table 5.32 *Items Excluded in Factor and Reliability Analysis from Miles and Snow's Typologies*

The remaining seven factors have been labeled:

Factor 1- *Competitive edge (competitive stance);*

Factor 2- *Focus of planning (effective planning)*;

Factor 3- *Growth pattern (positive)*;

Factor 4- *Product mix (limited range)*;

Factor 5- *Performance evaluation (centralized)*;

Factor 6- *Structure (classical but prospective)*;

Factor 7- *Competitive cost (low cost)*

The final KMO and Bartlett's test results, reliability test results and factor names and values together with corresponding contained variables are presented in Table 5.33.

Table 5.33 *Factor and Reliability Analysis for Strategic Orientation: Classificatory Approach Scale-M&S Typologies in Dimensions*

Factor Names	Factor Loadings	Variance explained	Cronbach's Alpha	Number of items
Factor 1: ***Competitive edge (competitive stance)***		12.894 %	.826	5
Our strategic business unit continuously monitors the marketplace for new product and market development. (PR8)	,752			
Our strategic business unit carefully monitors competitors' actions in the industry. (A6)	,740			
The innovations which are chosen by our strategic business unit are carefully examined. (AN4)	,718			
Our strategic business unit tries to protect the environment domain in which it operates by stressing higher quality than its competitors. (D4)	,683			
Our strategic business unit adopts promising innovations in the industry quickly. (A1)	,669			
Factor 2: ***Focus of planning (effective planning)***		11.700 %	.806	6
Our strategic business unit's planning is concentrated in improving its market position. (D12b)	,703			
Our strategic business unit's planning is concentrated in identifying those trends which competitors have proven to be successful. (A10a)	,694			
Our strategic business unit's planning is concentrated in identifying trends and opportunities in the marketplace which can result in the creation of offerings or programs which are new to the market or reach new markets. (PR11)	,679			
Our strategic business unit's planning is concentrated in solving problems related to our current offerings and our current customer needs. (A10b)	,675			
Our strategic business unit's planning is concentrated in maintaining its market position. (D12a)	,660			
Our strategic business unit's planning is concentrated in identifying the best possible solutions to those problems or challenges which require immediate attention. (R6)	,619			

Factor 3: *Growth pattern (positive)*	10.517 %	.809	4

Our strategic business unit's growth is achieved through adopting new products only after a very careful review of their potential. (AN12) — .899

Our strategic business unit's growth is achieved through product development. (PR13) — .834

Our strategic business unit's growth is achieved through market diversification. (PR14) — .663

Our strategic business unit believes in being the 'first-in' in the industry in development of new products. (PR4) — ,653

Factor 4: *Product mix (limited range)*	8.098 %	.729	3

Our strategic business unit tends to offer a narrower set of products than its competitors. (D3) — ,836

Our strategic business unit tries to maintain a limited line of products. (D8) — ,826

Our strategic business unit's cautious and incremental growth is sometimes realized through some product development. (D15) — ,657

Factor 5: *Performance evaluation (centralized)*	8.032 %	.716	3

Our strategic business unit's procedures to evaluate performance are highly centralized. (D13a) — .793

Our strategic business unit's procedures to evaluate performance are primarily the responsibility of senior management. (D13b) — ,760

Our strategic business unit's procedures to evaluate performance are centralized When dealing in established products' areas. (A11a) — ,733

Factor 6: *Structure (classic but prospective)*		7.413 %	.709	3
Our strategic business unit's organizational structure is functional in nature (i.e. organized by department- marketing, accounting, personnel, etc.). (D11)	.811			
Our strategic business unit's organizational structure is product or market oriented. (PR10)	.708			
Our strategic business unit has diverse skills and multiple technologies. (PR9c)	.530			

Factor 7: *Competitive cost (low cost)*		6.385 %	.704	2
Our strategic business unit often reacts to innovations in the industry by offering similar, lower-cost products. (AN5)	.877			
Our strategic business unit tries to protect the environment domain in which it operates by stressing lower prices than its competitors. (D5)	.783			

Total variance explained — 65.039 %

Scale's Cronbach's Alpha — .807 — 26

KMO Measure of Sampling Adequacy — .795

Bartlett's Test of Sphericity

Approx. Chi-Square   2342.153
Df   325
Sig.   .000

Factor 1 includes those variables reflecting how the company monitors the competition and intends to be successful versus competitors with five variables. These variables are representative of key concept of *entrepreneurial orientation* of the firm.

Factor 2 reflects *administrative* characteristics of company's propensity in making plans related to where its focus and effectiveness are.

Factor 3 reflects company's stance regarding how it tends to grow, reflecting another *entrepreneurial* characteristic.

Factor 4 reflects company's product mix selection as an *entrepreneurial* characteristic. This is largely defender's orientation and therefore pointed at from having limited range of products.

Factor 5 reflects an *administrative* orientation regarding control with performance evaluation from classical perspective of centralized evaluation policy.

Factor 6 reflects structure of the company with respect to internal alignment basically as an *administrative* characteristic. Statements have been designed for positive implications.

Factor 7 reflects low cost as an *entrepreneurial* approach for competitive advantage.

5.2.2. Factor and Reliability Analysis for Strategic Orientation: Classificatory Approach- M&S Typologies in Orientations

This scale has fifty-three items (fifty-five statements in Turkish version of the instrument) comprising of all widely used variables in the literature and those operationalized by the author, based on organizational adaptation theory developed by Miles and Snow (1978) as explained in the preceding part, where the analysis has taken a dimensional approach and eliminated reoccurring themes around key concepts of entrepreneurial, engineering and administrative key dimensions for each of the typologies. The analysis in this section will take a typological approach and focus on determining dimensions (factors) not across all the typologies together but instead

within each typology as a group separately, each typology representing an orientation as such prospector orientation, defender orientation, analyzer orientation, and reactor orientation. For every orientation, a different factor analysis is carried out.

5.2.2.1. Factor and Reliability Analysis for Classificatory Approach- M&S Typologies: Prospector Orientation

This scale has sixteen statements, and the analysis will focus on determining dimensions (factors) and their elements for prospector orientation of M&S typologies.

The analysis starts with a decision on whether data is rated as being appropriate for prospector orientation's factor analysis or not. As per initial test results, Bartlett's Test of Sphericity gives significant results: chi-square value at 1150.862, significant at 0.000 levels confirming correlations among variables. Initial KMO-MSA test result is 0.867 which indicates that the total correlation in the matrix is also well above the threshold limit level at 0.50. The initial test values reveal that data is suitable, so that factor analysis may be proceeded with.

The next step is to consider the individual measure of sampling adequacy of the variables from the anti-image correlation matrix. Even though some of the variables have lower sampling adequacy levels lower than the sampling adequacy of the scale (0.867), none falls below the threshold limit of 0.50 (defined by Kaiser).

The consecutive step is to assess the number of factors that are extracted. The Guttman-Kaiser criterion, percentage of variance explained, and the scree plot are examined for this purpose. There are four factors with eigenvalues above level of one explaining 57.099 per cent of the total variance.

The rotated component matrix results are examined to identify the variables underlying each factor, against a threshold limit of loadings on factors being 0.50. Prospector 3 (MSA=0.471) in Factor 2, having factor loading values lower than limits, do not load highly on any factor and therefore has been eliminated, and factor analysis is run again. Similarly Prospector 2 (MSA=0.452) in Factor 3, having factor loading values lower than limits, do not load highly on any factor and therefore has been

eliminated, factor analysis is run again. Variable Prospector 12 has been eliminated since it is one variable left alone that loads on another factor. After these analyses are processed, the scale has ended in three factors with KMO-MSA value 0.860 and Bartlett's Test of Sphericity (chi-square 941.770) being significant at 0.000 levels.

Reliability analyses have been carried out for each factor. Factors 1 and Factor 2 have resulted with reliability of Cronbach's alpha 0.825 and 0.757 values respectively. Factor 3 has been dropped due to low reliability, and factor analysis has been run again eliminating Prospector 5 (of Factor 3) and Prospector 1 (of Factor 3) resulting in two factors with KMO-MSA value 0.856 and Bartlett's Test of Sphericity (chi-square 854.484) being significant at 0.000 levels. Reliability test for the scale as a total has been carried out and has resulted with reliability of Cronbach's alpha 0.846. A list of the eliminated items is provided in Table 5.34.

Variables *excluded in factor analysis* for M&S typologies: dimensions in prospector orientation		
Variables	Code	Statement
Entrepreneurial: competitive edge	PR1	Our strategic business unit leads in innovation in its industry.
Entrepreneurial: product-market domain	PR2	Our strategic business unit operates in a broad product domain.
Entrepreneurial: product-market domain	PR3	Our strategic business unit's product domain is periodically redefined.
Entrepreneurial: success posture	PR5	Not all the efforts invested in being 'first-in' in the industry in development of new products prove to be profitable.

Variables	Code	Statement
Administrative: control	PR12	Our strategic business unit's procedures to evaluate performance are decentralized and participatory encouraging many organizational members to be involved.

Table 5.34 *Items Excluded in Factor and Reliability Analysis from Miles and Snow Typologies Prospector Orientation*

The remaining two factors have been labeled:

Factor 1- *Prospector orientation 1,*

Factor 2- *Prospector orientation 2.*

The final KMO and Bartlett's test results, reliability test results and factor names and values together with corresponding contained variables are presented in Table 5.35.

Factor 1 includes those variables reflecting *engineering* and *administrative* dimensions of prospector orientation while Factor 2 reflects ambitious characteristics of *entrepreneurial* dimension.

Table 5.35 *Factor and Reliability Analysis for Strategic Orientation: Classificatory Approach Scale- M&S Typologies in Prospector Orientation*

Factor Names	Factor Loadings	Variance explained	Cronbach's Alpha	Number of items
Factor 1: Prospector orientation 1		40.935 %	.825	7
Our strategic business unit has competencies that can be characterized as broad and entrepreneurial (PR9b)	,813			
Our strategic business unit is flexible enabling change to be created. (PR9a)	,764			
Our strategic business unit continuously monitors the marketplace for new product and market development. (PR8)	,674			
Our strategic business unit's planning is concentrated in identifying trends and opportunities in the marketplace which can result in the creation of offerings or programs which are new to the market or reach new markets. (PR11)	,672			
Our strategic business unit has diverse skills and multiple technologies. (PR9c)	,639			
Our strategic business unit's organizational structure is product or market oriented. (PR10)	,632			
Our strategic business unit responds rapidly to early signals of opportunities in the environment. (PR6)	,552			
Factor 2: Prospector orientation 2		12.842 %	.757	4
Our strategic business unit's growth is achieved through product development. (PR13)	,783			
Our strategic business unit believes in being the 'first-in' in the industry in development of new products. (PR4)	,762			
Our strategic business unit's growth is achieved through market diversification. (PR14)	,744			
Our strategic business unit's actions often lead to a new round of competitive activity in the industry. (PR7)	,619			

Total variance explained	53.778 %	
Scale's Cronbach's Alpha	.846	11
KMO Measure of Sampling Adequacy	.856	

Bartlett's Test of Sphericity

Approx. Chi-Square	854,484
Df	55
Sig.	.000

5.2.2.2. Factor and Reliability Analysis for Classificatory Approach- M&S Typologies: Defender Orientation

This scale has seventeen statements, and the analysis will focus on determining dimensions (factors) and their elements for defender orientation of M&S typologies.

The analysis starts with a decision on whether data is rated as being appropriate for defender orientation's factor analysis or not. As per initial test results, Bartlett's Test of Sphericity gives significant results: chi-square value at 712.697, significant at 0.000 levels confirming correlations among variables. Initial KMO-MSA test result is 0.680 which indicates that the total correlation in the matrix is also well above the threshold limit level at 0.50. The initial test values reveal that data is suitable, so that factor analysis may be proceeded with.

The next step is to consider the individual measure of sampling adequacy of the variables from the anti-image correlation matrix. Even though some of the variables have lower sampling adequacy levels lower than the sampling adequacy of the scale (0.680), none falls below the threshold limit of 0.50 (defined by Kaiser).

The consecutive step is to assess the number of factors that are extracted. The Guttman-Kaiser criterion, percentage of variance explained, and the scree plot are examined for this purpose. There are five factors with eigenvalues above level of one explaining 54.841 per cent of the total variance.

The rotated component matrix results are examined to identify the variables underlying each factor against a threshold limit of loadings on factors being 0.50. Defender 5 (MSA=0.473) in Factor 1, having factor loading values lower than limits, do not load highly on any factor and therefore has been eliminated, and factor analysis is run again. Similarly Defender 7(MSA=0.414) in Factor 2, having factor loading values lower than limits, do not load highly on any factor and therefore has been eliminated, and factor analysis is run again. This time, Defender 6 (MSA=0.489) in Factor 3 having factor loading values lower than limits, do not load highly on any factor and therefore has been eliminated. After these analyses are processed, the scale has ended in five

factors with KMO-MSA value 0.647 and Bartlett's Test of Sphericity (chi-square 596.066) being significant at 0.000 levels.

Reliability analyses have been carried out for each factor. Factor1has resulted with reliability of Cronbach's alpha 0.729. For Factor 2, reliability was low and therefore Defender 12a has been dropped to increase reliability to best possible level of 0.684; although lower than the foreseen limit of 0.70 for reliability, factor has been accepted to include scarce data available. Accordingly factor analysis has been run again to eliminate Defender 12a, and the results concerning the consecutive factors have ended with factor loading value lower than limits (0.430) for Defender 11and not loading highly on any factor. Accordingly, the factor analysis is run again to eliminate Defender 11, and the results concerning the consecutive factors has ended with factor loading value lower than limits (0.473) for Defender 10. Accordingly, the factor analysis is run again to eliminate Defender 10, and the results concerning the consecutive factors has ended with factor loading value lower than limits (0.399) for Defender 9 and not loading highly on any factor. Similarly, the factor analysis is run again to eliminate Defender 9. Factor 3 has been dropped due to low reliability. Accordingly, factor analysis is run again to eliminate Defender 4, Defender 14, and Defender 12b (of Factor 3), and the results concerning the consecutive factors have ended with factor loading values lower than limits (0.481) for Defender 2 and (0.483) for Defender 1and not loading highly on any factor. Accordingly, Factor analysis is run again resulting in two factors with KMO-MSA value 0.585 and Bartlett's Test of Sphericity (chi-square 256.406) being significant at 0.000 levels. Reliability test for the scale as a total has been carried out and has resulted with reliability of Cronbach's alpha 0.644; although lower than the foreseen limit of 0.70 for reliability, the author has decided to include this scale in the analysis for maximum utilization of data available. A list of the excluded items is provided in Table 5.36.

Variables *excluded in factor analysis* for M&S typologies: dimensions in defender orientation		
Variables	Code	Statement
Entrepreneurial: product-market domain	D1	Our strategic business unit tries to locate a safe niche in a relatively stable products domain.
Entrepreneurial: product-market domain	D2	Our strategic business unit tries to maintain a safe niche in a relatively stable products domain.
Entrepreneurial: competitive edge	D4	Our strategic business unit tries to protect the environment domain in which it operates by stressing higher quality than its competitors.
Entrepreneurial: competitive edge	D5	Our strategic business unit tries to protect the environment domain in which it operates by stressing lower prices than its competitors.
Entrepreneurial: product-market domain	D6	Our strategic business unit concentrates on trying to achieve the best performance in a relatively narrow product-market domain.
Entrepreneurial: surveillance-environment monitoring	D7	Our strategic business unit places less stress on the examination of changes in the industry that is not directly relevant to our strategic business unit.
Entrepreneurial: product mix	D9	Our strategic business unit tries to maintain a stable line of products.
Engineering: Technological breadth	D10	Our strategic business unit has competencies that can be characterized as specialization concentrated into one or few specific areas.

Variables	Code	Statement
Administrative: structure	D11	Our strategic business unit's organizational structure is functional in nature (i.e. organized by department-marketing, accounting, personnel, etc.)
Administrative: planning	D12 D12a D12b	Our strategic business unit's planning is concentrated in identifying those problems, which if solved, will maintain and then improve its current product offerings and market position.
Entrepreneurial: growth	D14	Our strategic business unit's cautious and incremental growth is realized through market penetration.

Table 5.36 *Items Excluded in Factor and Reliability Analysis from Miles and Snow Typologies Defender Orientation*

The remaining two factors have been labeled:

Factor1- *Defender orientation 1* and
Factor 2- *Defender orientation 2.*

The final KMO and Bartlett's test results, reliability test results and factor names and values together with corresponding contained variables are presented in Table 5.37.

Factor 1 includes those variables of reflecting entrepreneurial dimension of defender orientation while Factor 2 reflects centralized management approaches of administrative dimension.

Table 5.37 *Factor and Reliability Analysis for Strategic Orientation: Classificatory Approach Scale- M&S Typologies in Defender Orientation*

Factor Names	Factor Loadings	Variance explained	Cronbach's Alpha	Number of items
Factor 1: Defender orientation 1		41.787 %	.729	3
Our strategic business unit tends to offer a narrower set of products than its competitors. (D3)	.882			
Our strategic business unit tries to maintain a limited line of products. (D8)	.864			
Our strategic business unit's cautious and incremental growth is sometimes realized through some product development. (D15)	.640			
Factor 2: Defender orientation 2		28.452 %	.684	2
Our strategic business unit's procedures to evaluate performance are primarily the responsibility of senior management. (D13b)	,885			
Our strategic business unit's procedures to evaluate performance are highly centralized. (D13a)	.835			
Total variance explained		70,240 %		
Scale's Cronbach's Alpha			.644	5
KMO Measure of Sampling Adequacy		, 585		

Bartlett's Test of Sphericity

Approx. Chi-Square	256,406
Df	10
Sig.	.000

5.2.2.3. Factor and Reliability Analysis for Classificatory Approach-M&S Typologies: Analyzer Orientation

This scale has fifteen statements, and the analysis will focus on determining dimensions (factors) and their elements for analyzer orientation of M&S typologies.

The analysis starts with a decision on whether data is rated as being appropriate for analyzer orientation's factor analysis or not. As per initial test results, Bartlett's Test of Sphericity gives significant results: chi-square value at 623.620 significant at 0.000 levels confirming correlations among variables. Initial KMO-MSA test result is 0.780 which indicates that the total correlation in the matrix is also well above the threshold limit level at 0.50. The initial test values reveal that data is suitable, so that factor analysis may be proceeded with.

The next step is to consider the individual measure of sampling adequacy of the variables from the anti-image correlation matrix. Even though some of the variables have lower sampling adequacy levels lower than the sampling adequacy of the scale (0.780), none falls below the threshold limit of 0.50 (defined by Kaiser) except Analyzer 7 with a factor loading of 0.490 and Analyzer 5 with a factor loading of 0.465. Analyzer 7 and Analyzer 5 are eliminated and the factor analysis is run again. The KMO-MSA rises to 0.801, and the Bartlett's test of sphericity (chi-square value of 578.423) is significant at 0.000 levels.

The consecutive step is to assess the number of factors that are extracted. The Guttman-Kaiser criterion, percentage of variance explained, and the scree plot are examined for this purpose. There are four factors with eigenvalues above level of one explaining 56.305 per cent of the total variance.

The rotated component matrix results are examined to identify the variables underlying each factor against a threshold limit of loadings on factors being 0.50; there is none.

Reliability analyses have been carried out for each factor. Factor 1 has resulted with reliability of Cronbach's alpha 0.764. Factor 2 has been dropped due low

reliability, and accordingly factor analysis has been run again to eliminate Analyzer 11b (of Factor 2) and Analyzer 12 (of Factor 2). Similarly, Factor 3 has been dropped due low reliability, and accordingly factor analysis has been run again to eliminate Analyzer 10a (of Factor 3), Analyzer 10b (of Factor 3) and Analyzer 9 (of Factor 3), while results required further elimination of Analyzer 11a due to low factor loading at 0.448. Variable Analyzer 2 has been eliminated since it is one variable left alone that loads on another factor resulting in one factor with KMO-MSA value 0.813 and Bartlett's test of sphericity (chi-square 295.331) significant at 0.000 levels. A list of the eliminated items is provided in Table 5.38 below.

Variables *excluded in factor analysis* for M&S typologies: dimensions in analyzer orientation		
Variables	Code	Statement
Entrepreneurial: product-market domain	AN2	Our strategic business unit tries to maintain a limited line of products
Entrepreneurial: competitive edge	AN5	Our strategic business unit often reacts to innovations in the industry by offering similar, lower-cost products.
Entrepreneurial: product-market domain	AN7	Our strategic business unit accrues most of its profit from its firm base of traditional products and customers.
Administrative: Structure	AN9	Our strategic business unit's organizational structure is matrix combining both functional divisions and product-market divisions.

Variables	Code	Statement
Administrative: planning	AN10 AN10a AN10b	Our strategic business unit's planning is concentrated in identifying those trends in the industry which other competitors have proven possess long-term potential while also solving problems related to our current offerings and our current customer needs.
Administrative: control	AN11 AN11a AN11b	Our strategic business unit's procedures to evaluate performance are centralized in established products' areas and more participatory in newer products' areas.
Entrepreneurial: growth	AN12	Our strategic business unit's growth is achieved through adopting new products only after a very careful review of their potential.

Table 5.38 *Items Excluded in Factor and Reliability Analysis from Miles and Snow Typologies Analyzer Orientation*

One factor remained with six variables. Having all come under one key dimension, entrepreneurial dimension, they are of qualities of competitive edge and product-market domain. The final KMO and Bartlett's test results, reliability test results and factor names and values together with corresponding contained variables are summarized in Table 5.39.

Table 5.39 *Reliability Analysis for Strategic Orientation:*
Classificatory Approach Scale- M&S Typologies in Analyzer Orientation

Factor (left):	Cronbach's Alpha: .764	Number of items: 6

Our strategic business unit adopts promising innovations in the industry quickly. (AN1)

The innovations which are chosen by our strategic business unit are carefully examined. (AN4)

Our strategic business unit carefully monitors competitors' actions in the industry. (AN6)

Our strategic business unit's growth is achieved through assertively penetrating more

   deeply into markets that are currently served. (AN13)

Our strategic business unit has competencies that can be characterized as analytical with

   skills enabling them to both identify trends and then develop new offerings or markets. (AN8)

Our strategic business unit tries to maintain a stable line of products. (AN3)

5.2.2.4. Factor and Reliability Analysis for Classificatory Approach-M&S Typologies: Reactor Orientation

This scale has seven statements, and the analysis will focus on determining dimensions (factors) and their elements for rector orientation of M&S typologies.

The analysis starts with a decision on whether data is rated as being appropriate for reactor orientation's factor analysis or not. As per initial test results, Bartlett's Test of Sphericity gives significant results: chi-square value at 117.751, significant at 0.000 levels confirming correlations among variables. Initial KMO-MSA test result is 0.697 which indicates that the total correlation in the matrix is also well above the threshold limit level at 0.50. The initial test values reveal that data is suitable so that factor analysis may be proceeded with.

The next step is to consider the individual measure of sampling adequacy of the variables from the anti-image correlation matrix. Even though some of the variables have lower sampling adequacy levels lower than the sampling adequacy of the scale (0.697), none falls below the threshold limit of 0.50 (defined by Kaiser).

The consecutive step is to assess the number of factors that are extracted. The Guttman-Kaiser criterion, percentage of variance explained, and the scree plot are examined for this purpose. There are two factors with eigenvalues above level of one explaining 44.169 per cent of the total variance.

The rotated component matrix results are examined to identify the variables underlying each factor against a threshold limit of loadings on factors being 0.50. Reactor 1 (0.406), having factor loading values lower than limits, do not load highly on any factor and therefore has been eliminated, and factor analysis is run again. The scale has ended in two factors with KMO-MSA value 0.670 and Bartlett's Test of Sphericity (chi-square 98.126) being significant at 0.000 levels.

Reliability analyses have been carried out for each factor. Factor 1 and Factor 2 have resulted with reliability of Cronbach's alpha 0.543 and 0.340 values respectively

resulting in the elimination of both factors and hence elimination of reactor orientation. A list of the reactor items is provided on Table 5.40.

Variables *excluded in factor analysis* for M&S typologies reactor orientation		
Variables	Code	Statement
Entrepreneurial: product-market domain	R1	Compared to its competitors in the industry, our strategic business unit is aggressive in maintaining its product/market domain.
Entrepreneurial: success posture	R2	Our strategic business unit takes many risks.
Entrepreneurial: environmental monitoring	R3	Our strategic business unit responds to areas in which pressure is made on it by its environment
Engineering: technological breadth	R4	Our strategic business unit has competencies that can be characterized as fluid with skills related to the near-term demands of the market-place.
Administrative: structure	R5	Our strategic business unit's organizational structure is continuously changing to enable us to meet opportunities and solve problems as they arise.
Administrative: planning	R6	Our strategic business unit's planning is concentrated in identifying the best possible solutions to those problems or challenges which require immediate attention.
Administrative: control	R7	Our strategic business unit's procedures to evaluate performance are heavily oriented towards those reporting requirements which demand immediate attention.

Table 5.40 *Items Excluded in Factor and Reliability Analysis from Miles and Snow Typologies Reactor Orientation*

5.2.3. Factor and Reliability Analysis for Strategic Orientation: Comparative Approach- Venkatraman's Dimensions

This scale has six key dimensions and twenty-six items based on Venkatraman's (1989) STROBE model. This analysis will focus on determining dimensions (factors) and their elements based on responses obtained from the sample.

The analysis starts with a decision on whether data is rated as being appropriate for factor analysis or not. As per initial test results, Bartlett's Test of Sphericity gives significant results: chi-square value at 2681.275, significant at 0.000 levels rejecting hypothesis that the correlation matrix is an identity matrix with no correlation between variables and confirming correlations among variables. Initial KMO-MSA test result is 0.850 which indicates that the total correlation in the matrix is also well above the threshold limit level at 0.50. The initial test values reveal that data is suitable so that factor analysis may be proceeded with.

The next step is to consider the individual measure of sampling adequacy of the variables from the anti-image correlation matrix. Even though some of the variables have sampling adequacy levels lower than the sampling adequacy of the scale (0.850), none falls below the threshold limit of 0.50 (defined by Kaiser) except Riskiness 1 with a factor loading of 0.461. Riskiness 1 is eliminated and the factor analysis is run again. The KMO-MSA rises to 0.861, and the Bartlett's test of sphericity (chi-square value of 2618.274) is significant at 0.000 levels.

The consecutive step is to assess the number of factors that are extracted. The Guttman-Kaiser criterion, percentage of variance explained, and the scree plot are examined for this purpose. There are six factors with eigenvalues above level of one explaining 64.691 per cent of the total variance.

The rotated component matrix results are examined to identify the variables underlying each factor, against a threshold limit of loadings on factors being 0.50. Proactiveness 4 (0.492), having factor loading values lower than limits, do not load highly on any factor and therefore has been eliminated. The factor analysis is run again and resulting sampling adequacy of each variable in the newly obtained rotated

component matrix is examined. Futurity 1 falls short of threshold limit of 0.50 with a value of 0.443, and thus it is eliminated. After these analyses, the scale has ended in six factors with KMO-MSA value 0.840 and Bartlett's test of sphericity (chi-square 2332.956) being significant at 0.000 levels.

Reliability analyses have been carried out for each factor. Factors 1, Factor 2, Factor 3 and Factor 4 have resulted with reliability of Cronbach's alpha 0.884, 0.802, 0.791 and 0782 values respectively. Factor 5 has been dropped due low reliability (0.560). Factor analysis has been repeated accordingly eliminating Riskiness 4, Riskiness 3 and Riskiness 2 (of Factor 5). Newly formed Factor 5 has resulted with reliability of Cronbach's alpha 0.638; although lower than the foreseen limit of 0.70 for reliability, factor has been accepted to include as many dimensions as possible as per original Venkatraman design. The analysis has resulted in five factors with KMO-MSA value 0.862 and Bartlett's test of sphericity (chi-square 2131.654) significant at 0.000 levels. Reliability test for the scale as a total has been carried out and has resulted with reliability of Cronbach's alpha 0.851. A list of the eliminated items is provided in Table 5.41 below.

Variables excluded in factor analysis for Venkatraman's Dimensions		
Variables	Code	Statement
Futurity	1	We emphasize basic research to provide us with future competitive edge.
Proactiveness	4	Operations in later stages the life cycle are strategically eliminated.

Variables	Code	Statement
Riskiness	1	We seem to adopt a rather conservative view when making major decisions (rev.)
	2	New projects are approved on a 'stage by stage' basis rather than with "blanket" approval (rev.).
	3	We have a tendency to support projects where the expected returns are certain (rev.)
	4	Our operations have generally followed 'the tried and true' paths (rev.).

Table 5.41 *Items Excluded in Factor and Reliability Analysis
from Venkatraman's Dimensions*

Venkatraman's original scale had six dimensions of aggressiveness, analysis, defensiveness, futurity, proactiveness, and riskiness; factor analysis has eliminated riskiness dimension leaving five dimensions and twenty variables. Riskiness dimension has been known as showing divergence in the literature and sometimes being replaced by risk awareness. Otherwise, the dimensions have proved to be in congruence with reported findings in the literature. The final KMO and Bartlett's test results, reliability test results and factor names and values together with corresponding contained variables are presented in Table 5.42.

Table 5.42 *Factor and Reliability analysis for Strategic Orientation: Venkatraman's Dimensions*

Factor Names	Factor Loadings	Variance explained	Cronbach's Alpha	Number of items
Factor 1 Analysis		20.934 %	.884	6
Our information systems provide support for decision making.(AN2)	.827			
When confronted with a major decision, we usually try to develop through analysis.(AN3)	.797			
We use the outputs of management information and control systems.(AN5)	.792			
We use several planning techniques.(AN4)	.743			
We emphasize effective coordination among different functional areas.(AN1)	.650			
We commonly use manpower planning and performance appraisal of senior managers.(AN6)	.621			
Factor 2 Defensiveness		13.255 %	.802	4
We often use production management techniques.(DF3)	.824			
We occasionally conduct significant modifications to manufacturing technology.(DF1)	.819			
We often emphasize product quality through the use of quality circles.(DF4)	.659			
We often use control systems for monitoring performance.(DF2)	.604			
Factor 3 Aggressiveness		12.652 %	.791	4
We often cut prices to increase market share.(AG2)	.877			
We often sacrifice profitability to gain market share.(AG1)	.795			
We often seek market share position at the expense of cash flow and profitability.(AG4)	.721			
We often set prices below competition.(AG3)	.721			

Factor 4 Futurity		11.931 %	.782	4

We often conduct 'what if' analyses of critical issues.(FT4) — .750

We are constantly seeking new opportunities related to present operations.(PA1) — .746

Forecasting key indicators of operations is common.(FT2) — .634

Formal tracking of significant general trends is common.(FT3) — .622

Factor 5 Proactiveness		8.4020%	.638	2

We are constantly on the look for businesses that can be acquired.(PA3) — .805

We are usually the first ones to introduce new brands or products/services on the market..(PA2) — .706

Total variance explained — 67.393 %

Scale's Cronbach's Alpha — .851 — 20

KMO Measure of Sampling Adequacy — .862

Bartlett's Test of Sphericity

Approx. Chi-Square   2131.654
Df   190
Sig.   .000

5.2.4. Factor and Reliability Analysis for Environmental Variables: Industry Characteristics

The findings on the descriptive results have revealed some peculiarities for industry characteristics. The descriptive analyses for competitive intensity have included a contradictory result where competition appears to be not so high with a score of 3.84, while the statement (CI1) 'competition in our industry is cutthroat' scoring 5.13 and the statement (CI4) 'price competition is a hallmark of our industry' scoring 4.31 reveal very high competition.

Descriptive results for market turbulence have also included a peculiar result. The author has noted that average score of 3.99 for market turbulence reveals presence of changing market situation while response to (MT5) "we cater many of the same customers that we used to in the past" appears to indicate a stable market with a score of 4.95, highest among all.

Also descriptive results for technological turbulence have included a contradictory result. The average score of 3.74 together with high values at 4.29 for the statement TE2 "technological changes provide big opportunities in our industry" reveals that the impact of technological change among the companies is high, whereas variable (TE5) "'technological developments in our industry are rather minor" with a low value of 2.88 reveals low impact and hence they appear to be in conflict. (TE5) also appears to be in conflict with the scores for rest of the variables. Because of these peculiarities for environmental variables, the author has decided to carry out factor and reliability analysis for these variables as well.

This scale has three key dimensions of eighteen items adapted from DeSarbo (2005) who was particularly concerned how the changes in the environment would effect Miles and Snow's (1978) typological behaviors. It is similar to Jaworski and Kohli's (1993) dimensions. The analyses will focus on determining divergences described in the foregoing paragraph. For each of key dimensions, separate factor and reliability analyses are carried out.

5.2.4.1. Factor and Reliability Analysis for Environmental Variables: Competitive Intensity

This scale has six statements, and the analysis will focus on determining a combination of elements with an acceptable level of internal consistency.

The analysis starts with a decision on whether data is rated as being appropriate for competitive intensity's factor analysis or not. As per initial test results, Bartlett's Test of Sphericity gives significant results: chi-square value at 237.629, significant at 0.000 levels rejecting hypothesis that the correlation matrix is an identity matrix with no correlation between variables and confirming correlations among variables. Initial KMO-MSA test result is 0.782 which indicates that the total correlation in the matrix is also well above the threshold limit level at 0.50. The data is suitable so that factor analysis may be proceeded with.

The next step is to consider the individual measure of sampling adequacy of the variables from the anti-image correlation matrix. Even though some of the variables have lower sampling adequacy levels lower than the sampling adequacy of the scale (0.782), none falls below the threshold limit of 0.50 (defined by Kaiser).

Factor analysis with principal component analysis and Varimax rotation has resulted in a single factor. The reliability analysis has resulted with Cronbach's alpha at 0.646 with six items. Item six (CI6) "our competitors are relatively weak" has been dropped to increase reliability and reliability has increased to 0.745 with five items remaining. As a consequence of this structuring, the peculiarity has also been dismissed.

5.2.4.2. Factor and Reliability Analysis for Environmental variables: Market Turbulence

This scale has six statements, and the analysis will focus on determining a combination of elements with an acceptable level of internal consistency.

The analysis starts with a decision on whether data is rated as being appropriate for market turbulence's factor analysis or not. As per initial test results, Bartlett's Test of Sphericity gives significant results: chi-square value at 244.426, significant at 0.000

levels rejecting hypothesis that the correlation matrix is an identity matrix with no correlation between variables and confirming correlations among variables. Initial KMO-MSA test result is 0.697 which indicates that the total correlation in the matrix is also well above the threshold limit level at 0.50. The data is suitable so that factor analysis may be proceeded with.

The next step is to consider the individual measure of sampling adequacy of the variables from the anti-image correlation matrix. Even though some of the variables have lower sampling adequacy levels lower than the sampling adequacy of the scale (0.697), none falls below the threshold limit of 0.50 (defined by Kaiser).

Factor analysis with principal component analysis and Varimax rotation has resulted in two factors. The variable (MT6) "it is very difficult to predict any changes in this marketplace" has been eliminated as it remains alone in the second factor, leaving single factor. The reliability analysis has resulted with Cronbach's alpha at 0.718 with five items. As a consequence of this structuring, the peculiarity has also been dismissed.

5.2.4.3. Factor and Reliability Analysis for Environmental variables: Technological Turbulence

This scale has six statements, and the analysis will focus on determining a combination of elements with an acceptable level of internal consistency.

The analysis starts with a decision on whether data is rated as being appropriate for technological turbulence's factor analysis or not. As per initial test results, Bartlett's Test of Sphericity gives significant results: chi-square value at 556.806, significant at 0.000 levels rejecting hypothesis that the correlation matrix is an identity matrix with no correlation between variables and confirming correlations among variables. Initial KMO-MSA test result is 0.860 which indicates that the total correlation in the matrix is also well above the threshold limit level at 0.50. The data is suitable so that factor analysis may be proceeded with.

The next step is to consider the individual measure of sampling adequacy of the variables from the anti-image correlation matrix. Even though some of the variables

have lower sampling adequacy levels lower than the sampling adequacy of the scale (0.860), none falls below the threshold limit of 0.50 (defined by Kaiser).

Factor analysis with principal component analysis and Varimax rotation has resulted in a single factor. The reliability analysis has resulted with Cronbach's alpha at 0.615 with six items. Item five (TE5) "technological developments in our industry are rather minor" has been dropped to increase reliability and reliability increased to 0.854 with five items remaining. As a consequence of this structuring, the peculiarity has also been dismissed.

5.2.5. Factor and Reliability Analysis for Marketing Strategies: Kotler's Strategies

This scale has twenty-eight items comprising of four parsimonious typological orientations based on Kotler's marketing strategies: market leading strategies, market challenging strategies, market following strategies, market niching strategies developed by the author.

The analysis starts with a decision on whether data is rated as being appropriate for factor analysis or not. As per initial test results, Bartlett's Test of Sphericity gives significant results: chi-square value at 3551.792, significant at 0.000 levels confirming correlations among variables. Initial KMO-MSA test result is 0.809 which indicates that the total correlation in the matrix is also well above the threshold limit level at 0.50. The initial test values reveal that data is suitable so that factor analysis may be proceeded with.

The next step is to consider the individual measure of sampling adequacy of the variables from the anti-image correlation matrix. Even though some of the variables have lower sampling adequacy levels lower than the sampling adequacy of the scale (0.809), none falls below the threshold limit of 0.50 (defined by Kaiser).

The consecutive step is to assess the number of factors that are extracted. The Guttman-Kaiser criterion, percentage of variance explained, and the scree plot are

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examined for this purpose. There are seven factors with eigenvalues above level of one explaining 68.688 per cent of the total variance.

The rotated component matrix results are examined to identify the variables underlying each factor, against a threshold limit of loadings on factors being 0.50. Nicher 2 (0.285) in Factor 2, having factor loading values lower than limits, do not load highly on any factor and therefore has been eliminated, and factor analysis is run again. Similarly Leader 7 (0.374) in Factor 2, having factor loading values lower than limits, do not load highly on any factor and therefore has been eliminated, factor analysis is run again. After these analyses are processed, the scale has ended in six factors with KMO-MSA value 0.814 and Bartlett's Test of Sphericity (chi-square 3408.474) being significant at 0.000 levels.

Reliability analyses have been carried out for each factor. Reliability analysis for Factor 1 has resulted with Cronbach's alpha value of 0. 244. Challenger 1 has been dropped to increase reliability; reliability analysis has been repeated and resulted with Cronbach's alpha value of 0.594. As per lead in item-total statistics, Follower 1a has been dropped to increase reliability; reliability analysis has been repeated and resulted with Cronbach's alpha value of 0.826. Factor analysis has been run to eliminate Challenger 1 (of Factor 1) and Follower 1a (of Factor 1) in succession. Reliability analyses for Factor 2, Factor 3, Factor 4 and Factor 5 have resulted with Cronbach's alpha values of 0.907, 0.827, 0.794 and 0.860 respectively. Reliability analysis for Factor 6 has been run, resulting with Cronbach's alpha value of 0.700. As per lead in item-total statistics, Follower 1b has been dropped to increase reliability; reliability analysis has been repeated and resulted with Cronbach's alpha value of 0.713. Similarly, as per lead in item-total statistics, Nicher 1 has been dropped to increase reliability; reliability analysis has been repeated and resulted with Cronbach's alpha value of 0.920. Factor analyses have been repeated to eliminate Follower 1b and Nicher 1 resulting in six factors with KMO-MSA value 0.800 and Bartlett's Test of Sphericity (chi-square 2901.165) being significant at 0.000 levels. Reliability test for the scale as a total has been carried out and has resulted with reliability of Cronbach's alpha 0.835. A list of the eliminated items is provided in Table 5.43 below.

Variables excluded in factor analysis for Kotler's Marketing Strategies		
Variables	Code	Statement
Market share-position	N1	Our business unit targets segments within segments or niches that other firms overlook or ignore.
Marketing objective	N2	It is crucial for our business unit to specialize to know its customers better and to serve them better than any other firm.
Strategic focus	L7	Our business unit takes proactive measures with continuous innovation to be always ahead of competition
Market share-position	C1	Our business unit is not number one and we do not have the largest market share.
Market share-position	F1 F1a F1b	Our business is a low market share, and we avoid confrontation with the market leader.

Table 5.43 *Items Excluded in Factor and Reliability Analysis from Kotler's Marketing Strategies*

The six factors have survived and been labeled:

Factor1: *Market-leading strategies;*

Factor2: *Market-niching strategies*;

Factor3: *Market-follower/imitating strategies*;

Factor4: *Market-follower/adapting strategies*;

Factor5: *Market-challenger/aggressor strategies*;

Factor6: *Market-challenger/sweeping strategies.*

The final KMO and Bartlett's test results, reliability test results and factor names and values together with corresponding contained variables are presented in Table 5.44 below.

Table 5.44 *Factor and Reliability Analyses for KT Marketing Strategies Scale*

Factor Names	Factor Loadings	Variance explained	Cronbach's Alpha	Number of items
Factor 1 Market leading strategies		14.831%	.826	6
As the market leader, our business unit tries and supports to expand the total market to gain more sales. (L5)	.814			
As the market leader, our business unit's major concern is to protect our market share against attacks. (L6)	.798			
Our business unit leads other firms in price changes. (L3)	.791			
Our business unit is number one with the largest market share. (L1)	.766			
Our business unit leads other firms in price changes. (L2)	.588			
Our business unit leads other firms in promotion spending. (L4)	.559			
Factor 2 Market niching strategies		14.570%	.907	4
Our business unit's specialization is on serving a niche customer base. (N4)	.938			
Our business unit provides a specialized product required by a small market segment. (N5)	.928			
Our business unit serves multiple niches with specialization in one or more areas. (N6)	.859			
Our business unit serves one niche with specialization in specific/geographic market. (N3)	.776			
Factor 3 Market following/imitating strategies		12.858%	.827	4
Our business unit duplicates leader's products and/or packages exactly and sells them on the market directly. (F3a)	.813			
Our business unit sells duplicated leader's products on the market or through some distributors dealing with duplicated products. (F3b)	.796			
Our business unit emulates leader's products, name and packaging with slight variations, as extensively as possible. (F4)	.746			
Our business unit prefers to imitate or adopt leader's products and hold share without rocking the boat. (F2)	.579			

Factor 4 Market following/adapting strategies	11.418%	.860	3

Our business unit takes the leader's products and adapts or improves them to sell to same markets. (F6a) .870

Our business unit takes the leader's products and adapts or improves them to sell to different markets. (F6b) .827

Our business unit copies some things from the leader but maintains differentiation in terms of packaging, advertising, pricing, or location. (F5) .740

Factor 5 Market challenging/aggressing strategies	10.443%	.794	3

Our business unit is keen to fight aggressively to gain shares from its competitors. (C2) .829

To gain more market shares, our business unit attacks the market leader aggressively. (C3) .815

To expand market share, our business unit builds up to gain more shares from weaker competitors. (L8) .668

Factor 6 Market challenging/sweeping strategies	9.197%	.920	2

Our business unit attacks not the market leader but those of smaller or regional size who are underfinanced and not so successful. (C5) .867

To gain more market shares, our business leader attacks not the market leader but those of its size who are underfinanced and not so successful. (C4) .858

Total variance explained 72.747 %

Scale's Cronbach's Alpha .835 22

KMO Measure of Sampling Adequacy .800

Bartlett's Test of Sphericity

Approx. Chi-Square 2901.165
Df 231
Sig. .000

5.3. TEST OF THE RESEARCH MODEL

This section will present findings obtained on correlational analyses. On the basis of the findings in descriptive statistics, and factor and reliability analyses, the conceptual model has been modified to contain results of the analyses, and the research model so obtained is presented.

Hierarchical regression analyses will follow. As the model includes two distinct approaches, classificatory and comparative, while Miles and Snow's classificatory approach has two different perspectives of dimensional and orientation modes of the core construct "strategic orientation", there are in fact three models being studied simultaneously:

(a) Miles and Snow's adaptive cycle model on typological dimensions,
(b) Miles and Snow's adaptive cycle model on typological orientations,
(c) Venkatraman's STROBE model.

Hence there will be three different research models to be placed on test.

5.3.1. The Research Model(s)

Factor and reliability analyses' results have caused the modifications of dimensions in independent variable of strategic orientation construct.

For classificatory approach *(Model A: typologies in dimensions)*, the key dimensions of entrepreneurial dimension, engineering dimension, and administrative dimension have been now reduced into new dimensions as per results of factor and reliability analyses. Factor and reliability analyses have modified classificatory approach *(Model B. typologies in orientations)* by eliminating *reactor orientation* leaving *prospector orientation, defender orientation, and analyzer orientation* in place.

For comparative approach *(Model C: dimensions)*, factor and reliability analyses have modified the dimensions by eliminating *riskiness dimension* leaving *aggressiveness dimension, defensiveness dimension, analysis dimension, proactiveness dimension, futurity dimension* in place.

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Factor and reliability analyses have modified the dimensions in marketing strategies variable by splitting the dimension of market-challenging strategies into two dimensions of market-challenging aggressive strategies and market-challenging sweeping strategies and also by splitting the dimension of market-following strategies into two dimensions of market-following imitating strategies and market-following strategic orientation construct.

No change occurred in environmental variables of industry characteristics except in their lower elements which have not been indicated on the model.

For business performance, due to lack of sufficient response to objective performance statements, business performance is measured by key informant's perceived evaluation on three dimensions.

Accordingly newly drawn research models are presented in Figure 5.1.

Figure 5.1 *The Proposed Research Model to be Tested on Strategic Orientation of Business Unit*

ENVIRONMENTAL VARIABLES
[Industry Characteristics]

Market turbulence

Technological turbulence

Competitive intensity

STRATEGIC ORIENTATION

[Model A]
CLASSIFICATORY APPROACH:
Typologies in dimensions
- Competitive edge
- Focus of planning
- Growth pattern
- Product mix
- Performance evaluation
- Structure
- Competitive cost

[Model B]
CLASSIFICATORY APPROACH:
Typologies in orientations
- Prospector orientation I
- Prospector orientation II
- Defender orientation I
- Defender orientation II
- Analyzer orientation

[Model C]
COMPARATIVE APPROACH:
Dimensions
- Aggressiveness dimension
- Defensiveness dimension
- Analysis dimension
- Proactiveness dimension
- Futurity dimension

MARKETING STRATEGIES

Market-leading strategies

Market-challenging/
aggression strategies

Market-challenging/
sweeping strategies

Market-following/
imitating strategies

Market-following/
adapting strategies

Market-niching strategies

BUSINESS PERFORMANCE

Total perceived performance:

- Overall performance

- Comparative performance

- Performance compared to
  objectives

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5.3.2. Hypotheses of the Research Model (s)

Factor and reliability analyses' results have caused the modifications of dimensions in strategic orientation construct and marketing strategies, and thereby have also required some modifications in the research hypotheses that follow:

The first group covers relationships for Model A with hypotheses developed for the relationship between strategic orientation (M&S typologies in dimensions) and business performance; hypotheses developed for the mediating effects of marketing strategies in relationship between strategic orientation (M&S typologies in dimensions) and business performance will follow:

> *H_1: There is a relationship between strategic orientation (Miles and Snow typologies in dimensions) and business performance.*
>
> > *H_{1a}: There is a relationship between competitive edge and business performance.*
> >
> > *H_{1b}: There is a relationship between focus of planning and business performance.*
> >
> > *H_{1c}: There is a relationship between growth pattern and business performance.*
> >
> > *H_{1d}: There is a relationship between performance evaluation and business performance.*
> >
> > *H_{1e}: There is a relationship between product mix and business performance.*
> >
> > *H_{1f}: There is a relationship between structure and business performance.*
> >
> > *H_{1g}: There is a relationship between competitive cost and business performance.*

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H₂: The relationship between strategic orientations (M&S typologies in dimensions) and business performance is mediated by marketing strategies.

Hypotheses developed for relationship between Business Performance and Marketing Strategies, will follow:

H₃: There is a relationship between business performance and marketing strategies.

H₃ₐ: There is a relationship between business performance and market-leading strategies.

H₃ᵦ: There is a relationship between business performance market-challenging/aggressor strategies.

H₃c: There is a relationship between business performance market-challenger/sweeping strategies.

H₃d: There is a relationship between business performance and market-follower/imitating strategies.

H₃ₑ: There is a relationship between business performance and market-follower/adapting strategies.

H₃f: There is a relationship between business performance and market-niching strategies.

Hypotheses developed for relationship between Marketing Strategies (marketing orientation) and Strategic Orientation (typologies in dimensions) will follow:

H₄: There is a relationship between marketing strategies (marketing orientation) and strategic orientation (Miles and Snow typologies in dimensions).

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H_{41}: *There is a relationship between market-leading strategy and. strategic orientation (Miles and Snow typologies in dimensions).*

H_{41a}: *There is a relationship between market-leading strategy and competitive edge.*

H_{41b}: *There is a relationship between market-leading strategy and focus of planning.*

H_{41c}: *There is a relationship between market-leading strategy and growth pattern.*

H_{41d}: *There is a relationship between market-leading strategy and performance evaluation.*

H_{41e}: *There is a relationship between market-leading strategy and product mix.*

H_{41f}: *There is a relationship between market-leading strategy and structure.*

H_{41g}: *There is a relationship between market-leading strategies and competitive cost.*

H_{42}: *There is a relationship between market-niching strategy and. strategic orientation (Miles and Snow typologies in dimensions).*

H_{42a}: *There is a relationship between market-niching strategy and competitive edge.*

H_{42b}: *There is a relationship between market-niching strategy and focus of planning.*

H_{42c}: *There is a relationship between market-niching strategy and growth pattern.*

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H_{42d}: There is a relationship between market-niching strategy and performance evaluation.

H_{42e}: There is a relationship between market-niching strategy and product mix.

H_{42f}: There is a relationship between market-niching strategy and structure.

H_{42g}: There is a relationship between market-niching strategy and competitive cost.

H_{43}: There is a relationship between market-follower/imitating strategies and. strategic orientation (Miles and Snow typologies in dimensions).

H_{43a}: There is a relationship between market-follower/imitating strategy and competitive edge.

H_{43b}: There is a relationship between market-follower/imitating strategy and focus of planning.

H_{43c}: There is a relationship between market-follower/imitating strategy and growth pattern.

H_{43d}: There is a relationship between market-follower/imitating strategy and performance evaluation.

H_{43e}: There is a relationship between market-follower/imitating strategy and product mix.

H_{43f}: There is a relationship between market-follower/imitating strategy and structure.

H_{43g}: There is a relationship between market-follower/imitating strategy and competitive cost.

H_{44}: *There is a relationship between marketing-follower/adapting strategies and. strategic orientation (Miles and Snow typologies in dimensions).*

H_{44a}: *There is a relationship between market-follower/adapting strategy and competitive edge.*

H_{44b}: *There is a relationship between market-follower/adapting strategy and focus of planning.*

H_{44c}: *There is a relationship between market-follower/adapting strategy and growth pattern.*

H_{44d}: *There is a relationship between market-follower/adapting strategy and performance evaluation.*

H_{44e}: *There is a relationship between market-follower/adapting strategy and product mix.*

H_{44f}: *There is a relationship between market-follower/adapting strategy and structure.*

H_{44g}: *There is a relationship between market-follower/adapting strategy and competitive cost.*

H_{45}: *There is a relationship between market-challenger/aggressor strategies and. strategic orientation (M&S typologies in dimensions).*

H_{45a}: *There is a relationship between market-challenger/aggressor strategy and competitive edge.*

H_{45b}: *There is a relationship between market-challenger/aggressor strategy and focus of planning.*

H_{45c}: *There is a relationship between market-challenger/aggressor strategy and growth pattern.*

H_{45d}: There is a relationship between market-challenger/aggressor strategy and performance evaluation.

H_{45e}: There is a relationship between market-challenger/aggressor strategy and product mix.

H_{45f}: There is a relationship between market-challenger/aggressor strategy and structure.

H_{45g}: There is a relationship between market-challenger/aggressor strategy and competitive cost.

H_{46}: There is a relationship between market-challenger/sweeping strategies and. strategic orientation (M&S typologies in dimensions).

H_{46a}: There is a relationship between market-challenger/sweeping strategy and competitive edge.

H_{46b}: There is a relationship between market-challenger/sweeping strategy and focus of planning.

H_{46c}: There is a relationship between market-challenger/sweeping strategy and growth pattern.

H_{4d}: There is a relationship between market-challenger/sweeping strategy and performance evaluation.

H_{46e}: There is a relationship between market-challenger/sweeping strategy and product mix.

H_{46f}: There is a relationship between market-challenger/sweeping strategy and structure.

H_{46g}: There is a relationship between market-challenger/ sweeping strategy and competitive cost.

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The second group covers relationships for Model B with hypotheses developed for the relationship between strategic orientation (M&S typologies in orientations) and business performance, and hypotheses developed for the mediating effects of marketing strategies in relationship between strategic orientation (M&S typologies in orientations) and business performance will follow:

> ***H₅****: There is a relationship between strategic orientation (Miles and Snow typologies in orientations) and business performance.*
>
> ***H₅ₐ₁****: There is a relationship between prospector orientation I and business performance.*
>
> ***H₅ₐ₂****: There is a relationship between prospector orientation II and business performance.*
>
> ***H₅ᵦ₁****: There is a relationship between defender orientation II and business performance.*
>
> ***H₅ᵦ₂****: There is a relationship between defender orientation I and business performance.*
>
> ***H₅c****: There is a relationship between analyzer orientation and business performance.*
>
> ***H₅d****: There is a relationship between reactor orientation and business performance.*
>
> ***H₆****: The relationship between strategic orientation (typologies in orientations) and Business performance is mediated by marketing strategies.*

Hypotheses developed for relationship between Business Performance and Marketing Strategies, will follow:

> ***H₇****: There is a relationship between business performance and marketing strategies (marketing orientation).*

H_{7a}: *There is a relationship between business performance and market-leading strategies.*

H_{7b}: *There is a relationship between business performance market-challenger/aggressor strategies.*

H_{7c}: *There is a relationship between business performance market-challenger/sweeping strategies.*

H_{7d}: *There is a relationship between business performance and market-follower/imitating strategies.*

H_{7e}: *There is a relationship between business performance and market-follower/adapting strategies.*

H_{7f}: *There is a relationship between business performance and market-niching strategies.*

Hypotheses developed for relationship between marketing strategies *(marketing orientation)* and Strategic Orientation (Miles and Snow typologies in orientations) will follow:

H_8: *There is a relationship between marketing strategies (marketing orientation) and strategic orientation (Miles and Snow typologies in orientations).*

H_{81}: *There is a relationship between market-leading strategy and. strategic orientations (Miles and Snow typologies in orientations).*

H_{81a}: *There is a relationship between market-leading/strategy and prospector orientation I.*

H_{81b}: *There is a relationship between market-leading/strategy and prospector orientation II.*

H_{81c}: *There is a relationship between market-leading/strategy and defender orientation I.*

H_{81d}: *There is a relationship between market-leading/strategy and defender orientation II.*

H_{81e}: *There is a relationship between market-leading/strategy and analyzer orientation.*

H_{82}: *There is a relationship between market-niching strategy and. strategic orientations (Miles and Snow typologies in orientations).*

H_{82a}: *There is a relationship between market-niching/strategy and prospector orientation I.*

H_{82b}: *There is a relationship between market-niching/strategy and prospector orientation II.*

H_{82c}: *There is a relationship between market-niching/strategy and defender orientation I.*

H_{82d}: *There is a relationship between market-niching/strategy and defender orientation II.*

H_{82e}: *There is a relationship between market-niching/strategy and analyzer orientation.*

H_{83}: *There is a relationship between market-following/imitating strategy and. strategic orientations (Miles and Snow typologies in orientations).*

H_{83a}: *There is a relationship between market-follower/imitating and prospector orientation I.*

H_{83b}: *There is a relationship between market-follower/imitating and prospector orientation II.*

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H_{83c}: *There is a relationship between market-follower/imitating and defender orientation I.*

H_{83d}: *There is a relationship between market-follower/imitating and defender orientation II.*

H_{83e}: *There is a relationship between market-follower/imitating and analyzer orientation.*

H_{84}: *There is a relationship between market-follower/adapting strategy and. strategic orientations (Miles and Snow typologies in orientations).*

H_{84a}: *There is a relationship between market-follower/adapting and prospector orientation I.*

H_{84b}: *There is a relationship between market-follower/adapting and prospector orientation II.*

H_{84c}: *There is a relationship between market-follower/adapting and defender orientation I.*

H_{84d}: *There is a relationship between market-follower/adapting and defender orientation II.*

H_{84e}: *There is a relationship between market-follower/adapting and analyzer orientation.*

H_{85}: *There is a relationship between market-challenger/aggressor strategy and. strategic orientations (Miles and Snow typologies in orientations).*

H_{85a}: *There is a relationship between market-challenger/ aggressor strategy and prospector orientation I.*

H_{85b}: *There is a relationship between market-challenger/ aggressor strategy and prospector orientation II.*

H_{85c}: *There is a relationship between market-challenger/ aggressor strategy and defender orientation I.*

H_{85d}: *There is a relationship between market-challenger/ aggressor strategy and defender orientation II.*

H_{85e}: *There is a relationship between market-challenger/ aggressor strategy and analyzer orientation.*

H_{86}: *There is a relationship between market-challenger/sweeping strategy and. strategic orientations (Miles and Snow typologies in orientations).*

H_{86a}: *There is a relationship between market-challenger/ sweeping strategy and prospector orientation I.*

H_{86b}: *There is a relationship between market-challenger/ sweeping strategy and prospector orientation II.*

H_{86c}: *There is a relationship between market-challenger/ sweeping strategy and defender orientation I.*

H_{86d}: *There is a relationship between market-challenger/ sweeping strategy and defender orientation II.*

H_{86e}: *There is a relationship between market-challenger/ sweeping strategy and analyzer orientation.*

The third group covers relationships for Model C with hypotheses developed for the relationship between strategic orientation (Venkatraman's dimensions) and business performance, and hypotheses developed for the mediating effects of marketing strategies in relationship between strategic orientation (Venkatraman's dimensions) and business performance will follow:

H_9: *There is a relationship between strategic orientation (Venkatraman's dimensions) and business performance.*

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H_{9a}: *There is a relationship between aggressiveness and business performance.*

H_{9b}: *There is a relationship between defensiveness and business performance.*

H_{9c}: *There is a relationship between analysis and business performance.*

H_{9d}: *There is a relationship between proactiveness and business performance.*

H_{9e}: *There is a relationship (marketing orientation) between futurity and business performance.*

H_{10}: *The relationship between strategic orientation (Venkatraman's dimensions) and business performance is mediated by marketing strategies.*

Hypotheses developed for relationship between Business Performance and Marketing Strategies, will follow:

H_{11}: *There is a relationship between business performance and marketing strategies (marketing orientation).*

H_{11a}: *There is a relationship between business performance and market-leading strategies.*

H_{11b}: *There is a relationship between business performance market-challenging/aggressor strategies.*

H_{11c}: *There is a relationship between business performance market-challenging/sweeping strategies.*

H_{11d}: *There is a relationship between business performance and market-following/imitating strategies.*

H_{11e}: *There is a relationship between business performance and market-following/adapting strategies.*

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H_{11f}: *There is a relationship between business performance and market-niching strategies.*

Hypotheses developed for relationship between Marketing Strategies *(marketing orientation)* and Strategic Orientation (Venkatraman's dimensions) will follow:

H_{12}: *There is a relationship between marketing strategies and strategic orientation (Venkatraman's dimensions).*

H_{121}: *There is a relationship between market-leading strategies and strategic orientation (Venkatraman's dimensions).*

H_{121a}: *There is a relationship between market-leading strategy and aggressiveness.*

H_{121b}: *There is a relationship between market-leading strategy and defensiveness.*

H_{121c}: *There is a relationship between market-leading strategy and analysis.*

H_{121d}: *There is a relationship between market-leading strategy and proactiveness.*

H_{121e}: *There is a relationship between market-leading strategy and futurity.*

H_{122}: *There is a relationship between market-niching strategy and strategic orientation (Venkatraman's dimensions).*

H_{122a}: *There is a relationship between market-niching strategy and aggressiveness.*

H_{122b}: *There is a relationship between market-niching strategy and defensiveness.*

H_{122c}: There is a relationship between market-niching strategy and analysis.

H_{122d}: There is a relationship between market-niching strategy and proactiveness.

H_{122e}: There is a relationship between market-niching strategy and futurity.

H_{123}: There is a relationship between market-following/imitating strategy and strategic orientation (Venkatraman's dimensions).

H_{123a}: There is a relationship between market-follower/ imitating strategy and aggressiveness.

H_{123b}: There is a relationship between market-follower/ imitating strategy and defensiveness.

H_{123c}: There is a relationship between market-follower/ imitating strategy and analysis.

H_{123d}: There is a relationship between market-follower/ imitating strategy and proactiveness.

H_{123e}: There is a relationship between market-follower/ imitating strategy and futurity.

H_{124}: There is a relationship between market-following/adapting strategy and strategic orientation (Venkatraman's dimensions).

H_{124a}: There is a relationship between market-follower/ adapting strategy and aggressiveness.

H_{124b}: There is a relationship between market-follower/ adapting strategy and defensiveness.

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H_{124c}: *There is a relationship between market-follower/ adapting strategy and analysis.*

H_{124d}: *There is a relationship between market-follower/ adapting strategy and proactiveness.*

H_{124e}: *There is a relationship between market-follower/ adapting strategy and futurity.*

H_{125}: *There is a relationship between market-challenger/aggressor strategy and strategic orientation (Venkatraman's dimensions).*

H_{125a}: *There is a relationship between market-challenger/ aggressor strategy and aggressiveness.*

H_{125b}: *There is a relationship between market-challenger/ aggressor strategy and defensiveness.*

H_{125c}: *There is a relationship between market-challenger/ aggressor strategy and analysis.*

H_{125d}: *There is a relationship between market-challenger/ aggressor strategy and proactiveness.*

H_{125e}: *There is a relationship between market-challenger/ aggressor strategy and futurity.*

H_{126}: *There is a relationship between market-challenger/sweeping strategy and strategic orientation (Venkatraman's dimensions).*

H_{126a}: *There is a relationship between market-challenger/ sweeping strategy and aggressiveness.*

H_{126b}: *There is a relationship between market-challenger/ sweeping strategy and defensiveness.*

H$_{126c}$: There is a relationship between market-challenger/ sweeping strategy and analysis.

H$_{126d}$: There is a relationship between market-challenger/ sweeping strategy and proactiveness.

H$_{126e}$: There is a relationship between market-challenger/ sweeping strategy and futurity.

5.3.3. Regression Results

To determine whether the fundamental analysis model(s) delineated above have exploratory power, hierarchical multiple regression analyses are used to test each of three models in holistic approach (Venkatraman and Prescott, 1990) in separate analyses. The mode of entry used is 'forced entry' option on SPSS 13.0 using command *enter* where all predictor variables in the research model are included in the regression equation.

To test the functional strategies' role (marketing strategies) in mediating between strategic orientation (business strategies) and business performance, the author has used mediated hierarchical regression analysis for which the definitions and requirements set by Baron and Kenny (1986) and perspectives outlined by MacKinnon (2008) and practices designed by Williams (2003) as outlined in section "4.5 Data Analysis Methodology" are followed:

To perform mediated hierarchical regression, every variable goes under a series of analyses to conclude if mediation exists and if that mediation is partial or full

1. The control variables (*industry characteristics*) (C) have been entered into the model as block one, then the independent variables (X) *strategic orientation* have been entered into the model as block two, and regressed on the dependent variable (Y) *business performance*.
2. The control variables (*industry characteristics*) (C) have been entered into the model as block one, then the mediator variable (Z) *marketing strategies* have

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been entered into the model as block two, and regressed on the dependent variable (Y) *business performance.*

3. The control variables (*industry characteristics*) (C) have been entered into the model as block one, then the independent variables (X) *strategic orientation* have been entered into the model as block two, and regressed on the mediator variable (Z) *marketing strategies.*

4. If steps 1-3 had produced significant models, control variables (*industry characteristics*) (C) have been entered into the model as block one, then the mediator variable (Z) *marketing strategies* have been entered into the model as block two, then the independent variables (X) *strategic orientation* have been entered into the model as block three and regressed on the dependent variable (Y) *business performance*.

If a significant model for step four has resulted, partial mediation existed, whereas, if a non-significant model has resulted, full mediation existed. If full mediation was found to exist, the effect of (X) on (Y) would be mediated or altered by (Z), that is when (Z) is controlled for, the effect of (X) on (Y) would no longer be significant (Baron and Kenny, 1986).

There are three sections that follow, each for one of the three models to be analyzed. Before each of the models is analyzed, the researcher evaluates whether the criterion and predictor variables meet regression assumptions: linearity, homos-cedasticity, independence of residuals, and normality. For evaluation, the residual plot, partial regression plots and normality plots are examined (Hair, 1998; Cohen *et al,* 2003).

In the following sections, first hierarchical regression analyses' results are provided and then the outcome of mediation analyses are delivered as per methodologies described above.

5.3.3.1. Regression Results for Model A for Miles and Snow's Typologies in Dimensions- Classificatory Approach

As per the research Model A in Figure 5.1, hierarchical multiple regression analysis has been used to assess the combined predictive power of the variables under study.

The control variables (*industry characteristics*) have been entered into the model as block one, then the independent variables (X) *Miles and Snow typologies in dimensions* have been entered into the model as block two, and then the mediator variable (Z) *marketing strategies* have been entered into the model as block three, regressed on the dependent variable (Y) *business performance*.

These analyses are discussed in the next section and will be followed by a section on mediation analyses.

5.3.3.1.1. Hierarchical Multiple Regression Results for Model A

The group of variables (1) environmental variables of industry characteristics, (2) predictor variables of strategic orientation of Miles and Snow typologies in dimensions, (3) Kotler's marketing strategies have been entered into regression in the analysis. Criterion variable is total perceived performance as summated score of performance dimensions.

Table 5.45 presents Pearson correlation results indicating that (1) market turbulence is the only industry characteristics' dimension that is correlated. It has a positive correlation $r=0.117$ at $p<0.05$. Competitive intensity and technological turbulence interestingly have been insignificant. (2) Out of Miles and Snow dimensions, following findings are noted: competitive edge ($r=0.441$, $p<0.001$) supporting H_{1a}, focus of planning ($r=0.228$, $p<0.001$) supporting H_{1b}, structure ($r=0.354$, $p<0.001$) supporting H_{1f} are positively correlated; product mix ($r=-0.179$, $p<0.001$) supporting H_{1e}, performance evaluation ($r=-0.121$, $p<0.05$) supporting H_{1d} are negatively correlated. Interestingly growth pattern and competitive cost have no significant correlation with performance (H_{1c} and H_{1g} are rejected). (3) Out of Kotler's marketing strategies

following findings are noted: market-leading strategies (r=0.472, p<0.001) supporting H_{3a} and market challenging/aggressor strategies (r=0.158, p<0.001) supporting H_{3b} are positively correlated; market following/imitating strategies (r=-0.279, p<0.001) supporting H_{3d}, market challenging/sweeping strategies (r=-0.139, p<.005) supporting H_{3c} are negatively correlated. Leading and challenging leader strategies are positively correlated with performance, while imitating and attacking smaller unsuccessful competitors have negative correlation with performance. Market/follower-adapter and niching strategies are not at all correlated with performance (rejecting H_{3e} and H_{3f}).

Table 5.45 *Pearson Correlation Results for Total Perceived Performance with Strategic Orientation of M&S Classificatory Approach Typologies in Dimensions)*

Pearson correlation	D	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Total perceived performance (D)	1,000																
Competitive intensity (1)	,018	1,000															
Market turbulence (2)	,117**	,367***	1,000														
Technological turbulence (3)	-,084	,197***	,426***	1,000													
Competitive edge (4)	,441***	,130**	,222***	,045	1,000												
Focus of planning (5)	,228***	,058	,108*	-,023	,037	1,000											
Growth pattern (6)	,071	,068	,223***	,376***	,043	-,029	1,000										
Product mix (7)	-,179***	-002	,031	,105*	-,007	,007	,015	1,000									
Performance evaluation (8)	-,121**	,158**	,063	,107*	-,026	,011	,000	-,001	1,000								
Structure (9)	,354***	,043	,048	-,012	,024	-,002	-,009	,000	-,003	1,000							
Competitive cost (10)	-,106*	,172***	,131**	,148**	-,041	,040	,038	-,030	-,020	,023	1,000						
Market leading strategies (11)	,472***	-,004	,051	-,056	,093*	,271***	,172***	-,116**	,064	,173***	-,024	1,000					
Market niching strategies (12)	-,100*	,000	,196***	,178**	,084	,162***	,139**	,211***	,091*	-,047	,125**	-,012	1,000				
Market following/imitating str (13)	-,279***	,007	-,085	,110*	-,271***	-,015	,085	,113**	,002	-,056	,124**	,004	,011	1,000			
Market following/adapting str(14)	,099*	,051	,110*	,111*	,016	,031	,079	-,007	,048	,003	-,055	,007	-,003	,008	1,000		
Market challenge/ aggr str (15)	,158***	,268***	,034	,087	,080	,099*	,068	-,093*	-,027	,104*	,226***	,014	,016	,014	-,004	1,000	
Market challenge/sweep str (16)	-,139**	,053	-,014	-,102*	-,133**	,052	-,104*	,114**	,150**	,036	,123**	,009	,003	-,003	-,009	,010	1,000
*p<0.10, **p<0.05, ***p<0.01																	

Hierarchical regression results are provided in Table 5.46. (1)The first model is composed of the industry characteristics' entries and with market turbulence having positive contribution (β=0.195, $p<0.05$) and technological turbulence having negative contribution (β=-0.163, $p<0.05$) with the model's R^2=0.036, and F value (2.657, $p<0.05$). R^2 is low. (2) In the second model M&S typologies in dimensions are entered with F value (19.962, $p<0.001$), while R^2 increased to 0.427 with ΔR^2=0.391. Industry characteristics' variables are no longer significant and excluded; M&S typologies in dimensions with positive contribution of competitive edge (β=0.411, $p<0.001$), focus of planning (β=0.218, $p<0.001$), and structure (β=0.345, $p<0.001$) with negative contribution of performance evaluation (β=-0.173, $p<0.001$) are the cause of change in R^2. (3) In the third model, industry characteristics' variables remain not being significant while newly entered KT marketing strategies with F value (10.792, $p<0.001$) has total positive contribution with market-leading strategies (β=0.343, $p<0.001$), market-following/adapting strategies (β=0.112, $p<0.05$), market-niching strategies (β=-0.100, $p<0.05$), and market-following/imitating strategies (β=-0.148, $p<0.001$), and R^2 increases to 0.568 with ΔR^2=0.141.

Table 5.46 Hierarchical Regression Analyses of Business Performance-Model Testing (Total Perceived Performance) on Study Variables with MS Typologies in Dimensions

Hierarchical Regression Analyses of Business Performance-Model Testing (Total Perceived Performance) on Study Variables with MS (Dimensions)									
Independent variables entered	**Model I**			**Model II**			**Model III**		
	B	SE B	β	B	SE B	β	B	SE B	β
Industry Characteristics									
CI Competitive intensity	-0.015	0.050	-0.021	-0.023	0.040	-0.033	-0.036	0.037	-0.051
MT Market turbulence	0.136	0.055	0.195 **	0.030	0.044	0.043	0.033	0.040	0.047
TT Technological turbulence	-0.114	0.052	-0.163**	-0.069	0.044	-0.099	-0.041	0.040	-0.058
Strategic orientation: **MS Typologies (dimensions)**									
MS1 Competitive edge				0.291	0.039	0.411****	0.238	0.036	0.336****
MS2 Focus of planning				0.153	0.038	0.218****	0.091	0.035	0.129**
MS3 Growth pattern				0.070	0.040	0.099*	0.018	0.037	0.026
MS4 Performance evaluation				-0.120	0.037	-0.173****	-0.053	0.034	-0.077
MS5 Product mix				-0.071	0.038	-0.101*	-0.073	0.034	-0.104**
MS6 Structure				0.244	0.037	0.345****	0.188	0.034	0.266****
MS7 Competitive cost				-0.073	0.039	-0.102*	-0.049	0.036	-0.069
KT Marketing Strategies									
KT1 Market-leading strategies							0.241	0.036	0.343****
KT2 Market-niching strategies							-0.070	0.035	-0.100**
KT3 Market-follower/imitating strategies							-0.102	0.035	-0.148***
KT4 Market-challenger/aggressor strategies							0.062	0.033	0.090*
KT5 Market-follower/adapting strategies							0.079	0.036	0.112**
KT6 Market-challenger/sweepingstrategies							-0.056	0.034	-0.081*
R^2	,036			.427			.568		
Adjusted R^2	,023			.399			.533		
ΔR^2	,036			.391			.141		
F for ΔR^2	2.657**			19.962****			10.792****		
F for ANOVA	2.657**			15.269****			16.325****		
*p<.10 **p<.05 ***p<.01 ****p<.001				2008					

The results indicate that R^2 increases significantly from Model I to Model III from 0.036 to 0.568. This reveals the predictive contribution of each block of variables and 56.8 percent of the variance is explained by M&S typologies in dimensions and KT marketing strategies. ANOVA analysis with F value significant at 0.001 levels suggests a good fit for the full model. Therefore support for hypotheses H_1 and H_3 are confirmed.

The results also indicate that as values of competitive edge ($\beta=0.336$, $p<0.001$), focus of planning ($\beta=0.129$, $p<0.05$), structure ($\beta=0.266$, $p<0.001$) increases and as product mix value ($\beta=-0.104$, $p<0.05$) decreases, business performance of business units increases. The results also indicate that as values of market-leading strategies ($\beta=0.343$, $p<0.001$), market-following/adapting strategies ($\beta=0.112$, $p<0.05$) increases and as market-niching value ($\beta=-0.100$, $p<0.05$) and market-following/imitating strategies ($\beta=-0.148$, $p<0.01$) decreases, business performance of business units increases.

5.3.3.1.2. Mediated Hierarchical Regression Results for Model A

The model utilizing performance as the dependent variable is broken down into four steps for testing a mediated model. The results of each step are presented with (C) representing the industry characteristics as control variables, (X) representing strategic orientation M&S typologies in dimensions as independent variable, (Z) representing KT marketing strategies as mediating variable and (Y) representing total perceived performance as dependent variable. The four steps in the hierarchical regression produced statistically significant models as results are presented below:

1. Step 1: Control variables (C) are entered into the model as block 1, independent variables (X) are entered into the model as block 2, and regressed on the dependent variable (Y). See Table 5.47 on page 245 for hierarchical regression results.

   Step 1 {C+X=Y) produced a statistically significant model $p<0.001$, $R^2=0.427$. H_1 is supported.

2. Step 2: Control variables (C) are entered into the model as block 1, mediator variable (Z) are entered into the model as block 2, and regressed

on the dependent variable (Y) confirming support for H_2. See Table 5.48 on page 246 for hierarchical regression.

Step 2 {C+Z=Y} produced a statistically significant model (P<0.001), R^2=0.380. H_3 is supported.

3. Step 3: Control variables (C) are entered into the model as block 1, independent variables (X) are entered into the model as block 2 and regressed on mediator variable (Z). See Table 5.49 on page 247 for hierarchical regression results.

Step 3 {C+X=Z} produced a statistically significant model (P<0.001), R^2=0.156. H_4 is supported. Due to the significance of the models in Steps 1 through 3, Step 4 is conducted.

4. Step 4: Control variables (C) are entered into the model as block 1, mediator variable (Z) are entered into the model as block 2, independent variables (X) are entered into the model as block 3, and regressed on the dependent variable (Y). See Table 5.50 on page 248 for hierarchical regression results.

Step 4 {C+Z+X=Y} produced a statistically significant model (P<0.001), R^2=0.568

Since a statistically significant model resulted at step 4, existence of partial mediation is concluded, hence there is support for hypothesis H_2.

Table 5.47 *Hierarchical Regression Analyses of Total Perceived Performance on MS Typologies in Dimensions and Industry Characteristics*

Hierarchical regression analyses of Total Perceived Performance on MS Typologies (Dimensions) and Industry Characteristics						
Independent variables entered	**Model I**			**Model II**		
	B	SE B	β	B	SE B	β
Industry Characteristics						
CI Competitive intensity	-,015	,050	-,021	-0.023	0.040	-0.033
MT Market turbulence	,136	,055	,195**	0.030	0.044	0.043
TT Technological turbulence	-,114	,052	-,163**	-0.069	0.044	-0.099
Strategic orientation: **MS Typologies (dimensions)**						
MS1 Competitive edge				0.291	0.039	0.411****
MS2 Focus of planning				0.153	0.038	0.218****
MS3 Growth pattern				0.070	0.040	0.099*
MS4 Performance evaluation				-0.120	0.037	-0.173****
MS5 Product mix				-0.071	0.038	-0.101*
MS6 Structure				0.244	0.037	0.345****
MS7 Competitive cost				-0.073	0.039	-0.102*
R²	.036			.427		
Adjusted R²	.023			.399		
ΔR²	.036			.391		
F for ΔR²	2,657**			19,962****		
F for ANOVA	2,657**			15.269****		
*p<.10 **p<.05 ***p<.01 ****p<.001 2008						

Table 5.48 *Hierarchical Regression Analyses of Total Perceived Performance on KT Marketing Strategies and Industry Characteristics*

Hierarchical Regression Analyses of Total Perceived Performance on KT Marketing Strategies and Industry Characteristics						
Independent variables entered	**Model I**			**Model II**		
	B	SE B	β	B	SE B	β
Industry Characteristics						
CI Competitive intensity	-,015	,050	-,021	-,036	,043	-,052
MT Market turbulence	,136	,055	,195**	,094	,046	,135**
TT Technological turbulence	-,114	,052	-,163**	-,070	,044	-,101
KT Marketing Strategies						
KT1 Market leader strategies				,321	,039	0.457****
KT2 Market nicher strategies				-,071	,039	-,102*
KT3 Market follower/imitator strategies				-,180	,039	-,260****
KT4 Market challenger/aggressor strategies				,067	,038	,096*
KT5 Market follower/adapter strategies				,125	,040	,177***
KT6 Market challenger/sweeper strategies				-,104	,038	-,151***
R^2	,036			,380		
Adjusted R^2	,023			,353		
ΔR^2	,036			,344		
F for ΔR^2	2,657**			19,060****		
F for ANOVA	2,657**			14.045****		

*p<.10   **p<.05   ***p<.01   ****p<.001   2008

Table 5.49 *Hierarchical Regression Analyses of KT Marketing Strategies on Industry Characteristics and MS Typologies in Dimensions*

Hierarchical regression analyses of KT Marketing Strategies on Industry Characteristics and MS Typologies (dimensions)						
Independent variables entered	**Model I**			**Model II**		
	B	SE B	β	B	SE B	β
Industry Characteristics						
CI Competitive intensity	,087	,050	,124	,065	,049	,093
MT Market turbulence	,018	,054	,026**	,004	,053	,006
TT Technological turbulence	,064	,052	,090	,010	,053	,014
Strategic orientation: **MS Typologies (dimensions)**						
MS1 Competitive edge				-,067	,046	-,096
MS2 Focus of planning				,148	,045	,211***
MS3 Growth pattern				,108	,048	,153**
MS4 Performance evaluation				,075	,045	,106*
MS5 Product mix				,074	,045	,105
MS6 Structure				,044	,045	,062
MS7 Competitive cost				,124	,046	,175***
R²	,033			,156		
Adjusted R²	,020			,117		
ΔR²	,033			,124		
F for ΔR²	2,482			4,434****		
F for ANOVA	2,482			3,930****		
*p<.10 **p<.05 ***p<.01 ****p<.001				2008		

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Independent variables entered	Model I			Model II			Model III		
Mediated Hierarchical Regression Analyses of Total Perceived Performance on Industry Characteristics, KT Marketing Strategies and MS Typologies in Dimensions									
	B	SE B	β	B	SE B	β	B	SE B	β
Industry Characteristics									
CI Competitive intensity	-0.015	0.050	-0.021	-,036	0.043	-0.052	-0.036	0.037	-0.051
MT Market turbulence	0.136	0.055	0.195 **	,094	0.046	0.135**	0.033	0.040	0.047
TT Technological turbulence	-0.114	0.052	-0.163**	-,070	0.044	-0.101	-0.041	0.040	-0.058
KT Marketing Strategies									
KT1 Market leader strategies				,321	0.039	0.457****	0.241	0.036	0.343****
KT2 Market nicher strategies				-,071	0.039	-0,102*	-0.070	0.035	-0.100**
KT3 Market follower/imitator strategies				-,180	0.039	-0,260****	-0.102	0.035	-0.148***
KT4 Market challenger/aggressor strategies				,067	0.038	0,096*	0.062	0.033	0.090*
KT5 Market follower/adapter strategies				,125	0.040	0,177***	0.079	0.036	0.112**
KT6 Market challenger/sweeper strategies				-,104	0.038	-0,151***	-0.056	0.034	-0.081*
Strategic orientation: MS Typologies (dimensions)									
MS1 Competitive edge							0.238	0.036	0.336****
MS2 Focus of planning							0.091	0.035	0.129**
MS3 Growth pattern							0.018	0.037	0.026
MS4 Performance evaluation							-0.053	0.034	-0.077
MS5 Product mix							-0.073	0.034	-0.104**
MS6 Structure							0.188	0.034	0.266****
MS7 Competitive cost							-0.049	0.036	-0.069
R^2	,036			.380			.568		
Adjusted R^2	,023			.353			.533		
ΔR^2	,036			.344			.187		
F for ΔR^2	2.657**			19.060****			12.314****		
F for ANOVA	2.657**			14.045****			16.325****		

*p<.10   **p<.05   ***p<.01   ****p<.001   2008

Table 5.50 *Mediated Hierarchical Regression Analyses of T. P. Performance* on Ind. Characteristics, *KT Marketing Str. and MS Typologies in Dimensions*

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5.3.3.2. Regression Results for B for Miles and Snow's Typologies in Orientations- Classificatory Approach

As per the research Model B in Figure 5.1, hierarchical multiple regression analysis has been used to assess the combined predictive power of the variables under study.

The control variables (*industry characteristics*) have been entered into the model as block one, then the independent variables (X) *Miles and Snow typological in orientations* have been entered into the model as block two, and then the mediator variable (Z) *marketing strategies* have been entered into the model as block three, regressed on the dependent variable (Y) *business performance*.

These analyses are discussed in the next section and will be followed by a section on mediation analyses.

5.3.3.2.1. Hierarchical Multiple Regression Results for Model B

The group of variables (1) environmental variables of industry characteristics, (2) predictor variables of strategic orientation of Miles and Snow typologies in orientations, (3) Kotler's marketing strategies have been entered into regression in the analysis. Criterion variable is total perceived performance as summated score of performance dimensions.

Table 5.51 on the next page presents Pearson correlation results indicating that (1) market turbulence is the only industry characteristics' dimension that is correlated. It has a positive correlation $r=0.117$ at $p<0.05$. Competitive intensity and technological turbulence interestingly have been insignificant. (2) Out of Miles and Snow orientations, following findings are noted: prospector orientation 1 ($r=0.546$, $p<0.001$) supporting H_{5a1}, prospector orientation 2 ($r=0.160$, $p<0.001$) supporting H_{5a2}, analyzer orientation ($r=0.538$, $p<0.001$) supporting H_{5c} are positively correlated; defender orientation 1 ($r=-0.288$, $p<0.001$) supporting H_{5b2} are negatively correlated. (3) Out of Kotler's marketing strategies following findings are noted: market-leading strategies

Table 5.51 *Pearson Correlation Results for Total Perceived Performance with Strategic Orientation of M&S Classificatory Approach Typologies in Orientations*

Pearson correlation	D	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Total perceived performance (D)	1,000														
Competitive intensity (1)	,018	1,000													
Market turbulence (2)	,117**	,367***	1,000												
Technological turbulence (3)	-,084	,197***	,426***	1,000											
Defender orientation 1 (4)	-,288***	,016	,010	,106*	1,000										
Defender orientation 2 (5)	-,015	,160***	,121**	,117**	,006	1,000									
Prospector orientation 1 (6)	,546***	,138**	,173***	,007	-,241***	,069	1,000								
Prospector orientation 2 (7)	,160***	,121**	,267***	,335***	-,178***	,048	,024	1,000							
Analyzer orientation (8)	,538***	,183***	,313***	,113**	-,178***	,137**	,689***	,401***	1,000						
Market leading strategies (9)	,472***	-,004	,051	-,056	-,162***	,096*	,233***	,215***	,250***	1,000					
Market niching strategies (10)	-,100*	,000	,196***	,178***	,190***	,125**	,034	,097*	,141**	-,012	1,000				
Market following/imitating str (11)	-,279***	,007	-,085	,110*	,155**	-,019	-,178***	-,009	-,216***	,004	,011	1,000			
Market following/adapting str (12)	,099*	,051	,110*	,111*	-,018	,067	,006	,101*	,039	,007	-,003	,008	1,000		
Market challenge/aggr str (13)	,158***	,268***	,034	,087	-,074	-,008	,136**	,139**	,124**	,014	,016	,014	-,004	1,000	
Market challenge/sweep str (14)	-,139**	,053	-,014	-,102*	,165***	,166***	-,072	-,079	-,052	,009	,003	-,003	-,009	,010	1,000
*p<0.10, **p<0.05, ***p<0.01															

(r=0.472, p<0.001) supporting H_{7a} and market challenging/aggressor strategies (r=0.158, p<0.001) supporting H_{7b} are positively correlated; market following/imitating strategies (r=-0.279, p<0.001) supporting H_{7d}, market challenging/sweeping strategies (r=-0.139, p<.005) supporting H_{7c} are negatively correlated. Leading and challenging leader strategies are positively correlated with performance, while imitating and attacking smaller unsuccessful competitors have negative correlation with performance. Market/follower-adapter and market-niching strategies are not at all correlated with performance (H_{7e} and H_{7f} are rejected).

Hierarchical regression results are provided in Table 5.52 on next page. (1)The first model is composed of the industry characteristics' entries and with market turbulence having positive contribution ($\beta=0.195$, p<0.05) and technological turbulence having negative contribution ($\beta=-0.163$, p<0.05) with the model's $R^2=0.036$, and F value (2.657, p<0.05). R^2 is low. (2) In the second model M&S typologies in orientations are entered with F value (24.346, p<0.001), while R^2 increased to 0.393 with $\Delta R^2=0.370$. Industry characteristics' variables are no longer significant and excluded; M&S typologies in orientations with positive contribution of prospector orientation 1 ($\beta=0.312$, p<0.001) and analyzer orientation ($\beta=0.300$, p<0.01) with negative contribution of defender orientation 1 ($\beta=-0.137$, p<0.05) are the cause of change in R^2. (3) In the third model, industry characteristics' variables remain not being significant while newly entered KT marketing strategies with F value (12.079, p<0.001) has total positive contribution with all the variables: market-leading strategies ($\beta=0.349$, p<0.001), market-following/adapting strategies ($\beta=0.122$, p<0.05), market challenging/aggressor strategies ($\beta=0.099$, p<0.05), market-niching strategies ($\beta=-0.117$, p<0.05), market-following/imitating strategies ($\beta=-0.164$, p<0.01) and market challenging/sweeping strategies ($\beta=-0.099$, p<0.05); R^2 increases to 0.554 with $\Delta R^2=0.161$.

The results indicate that R^2 increases significantly from Model I to Model III from 0.036 to 0.554. This reveals the predictive contribution of each block of variables and 55.4 percent of the variance is explained by M&S typologies in orientations and KT marketing strategies. ANOVA analysis with F value significant at 0.001 levels suggests

Hierarchical regression analyses of Business Performance–model testing (Total Perceived Performance) on study variables with M&S Typologies in Orientations									
Independent variables entered	**Model I**			**Model II**			**Model III**		
	B	SE B	β	B	SE B	β	B	SE B	β
Industry Characteristics									
CI Competitive intensity	-0,015	0.050	-0.021	-0.045	0.041	-0.065	-0.056	0.037	-0.080
MT Market turbulence	0.136	0.055	0.195 **	0.028	0.046	0.040	0.030	0.041	0.043
TT Technological turbulence	-0.114	0.052	-0.163**	0.083	0.044	-0.119	-0.046	0.040	-0.066
Strategic orientation: MS Typologies (whole) orientation									
MS Defender orientation 1				-0.095	0.040	-0.137**	-0.037	0.036	-0.053
MS Defender orientation 2				-0.041	0.039	-0.059	-0.043	0.035	-0.062
MS Prospector orientation 1				0.218	0.058	0.312****	0.151	0.052	0.216***
MS Prospector orientation 2				0.034	0.049	0.048	-0.032	0.044	-0.046
MS Analyzer orientation 1				0.207	0.063	0.300***	0.196	0.055	0.285****
KT Marketing Strategies									
KT1 Market leader strategies							0.245	0.0 36	0.349****
KT2 Market nicher strategies							-0.082	0.035	-0.117**
KT3 Market follower/imitator strategies							-0.114	0.034	-0.164***
KT4 Market challenger/aggressor strategies							0.069	0.033	0.099**
KT5 Market follower/adapter strategies							0.086	0.035	0.122**
KT6 Market challenger/sweeper strategies							-0.068	0.034	-0.099**
R²	.036			.393			,554		
Adjusted R²	,023			,370			,523		
ΔR²	,036			,357			,161		
F for ΔR²	2,657**			24,346****			12,079****		
F for ANOVA	2,657**			16,761****			17,830****		
*p<.10 **p<.05 ***p<.01 ****p<.001									2008

Table 5.52 *Hierarchical Regression Analyses of Business Performance-Model Testing (Total Perceived Performance) on Study Variables with M&S Typologies in Orientations*

a good fit for the full model. The results also indicate that as values of prospector orientation I (β=0.216, p<0.01) and analyzer orientation (β=0.285, p<0.001) increases, business performance of business units increases. Therefore support for hypotheses H_5 and H_7 are confirmed. The results also indicate that as values of market-leading strategies (β=0.349, p<0.001), market-challenging/aggressor strategies (β=0.099, p<0.05), market-following/adapting strategies (β=0.122, p<0.05) increases and as market-niching value (β=-0.117, p<0.05) and market-following/imitating strategies (β=-0.164, p<0.05), market-challenging-sweeping strategies (β=-0.099, p<0.05) decreases, business performance of business units increases.

5.3.3.2.2. Mediated Hierarchical Regression Results for Model B

The model utilizing performance as the dependent variable is broken down into four steps for testing a mediated model. The results of each step are presented with (C) representing the industry characteristics as control variables, (X) representing strategic orientation M&S typologies in orientations as independent variable, (Z) representing KT marketing strategies as mediating variable and (Y) representing total perceived performance as dependent variable. The four steps in the hierarchical regression produced statistically significant models as results are presented below:

1. Step 1: Control variables (C) are entered into the model as block 1, independent variables (X) are entered into the model as block 2, and regressed on the dependent variable (Y). See Table 5.53 on page 255 for hierarchical regression results.

   Step 1 {C+X=Y) produced a statistically significant model p<0.001, R^2=0.393. H_5 is supported.

2. Step 2: Control variables (C) are entered into the model as block 1, mediator variable (Z) are entered into the model as block 2, and regressed on the dependent variable (Y). See Table 5.48 for hierarchical regression.

   Step 2 {C+Z=Y} produced a statistically significant model (P<0.001), R^2=0.380. H_7 is supported.

3. Step 3: Control variables (C) are entered into the model as block 1, independent variables (X) are entered into the model as block 2 and

regressed on mediator variable (Z). See Table 5.54 on page 256 for hierarchical regression results.

Step 3 {C+X=Z} produced a statistically significant model (P<0.01), R^2=0.090. H_8 is supported. Due to the significance of the models in Steps 1 through 3, Step 4 is conducted. H_8 is supported.

4. Step 4: Control variables (C) are entered into the model as block 1, mediator variable (Z) are entered into the model as block 2, independent variables (X) are entered into the model as block 3, and regressed on the dependent variable (Y). See Table 5.55 on page 257 for hierarchical regression results.

Step 4 {C+Z+X=Y} produced a statistically significant model (P<0.001), R^2=0.554.

Since a statistically significant model resulted at step 4, existence of partial mediation is concluded, hence there is support for hypothesis H_6.

Table 5.53 *Hierarchical Regression Analyses of Total Perceived Performance on MS Typologies in Orientations and Industry Characteristics*

Hierarchical regression analyses of Total Perceived Performance on MS Typologies (whole) orientation and Industry Characteristics						
Independent variables entered	**Model I**			**Model II**		
	B	SE B	β	B	SE B	β
Industry Characteristics						
CI Competitive intensity	-,015	,050	-,021	-0.045	0.041	-0.065
MT Market turbulence	,136	,055	,195**	0.028	0.046	0.040
TT Technological turbulence	-,114	,052	-,163**	-0.083	0.044	-0.119*
Strategic orientation: MS Typologies dimensions						
MS Defender orientation 1				-0.095	0.040	-0.137**
MS Defender orientation 2				-0.041	0.039	-0.059
MS Prospector orientation 1				0.218	0.058	0.312****
MS Prospector orientation 2				0.034	0.049	0.048
MS Analyzer orientation 1				0.207	0.063	0.300****
R²	.036			.393		
Adjusted R²	.023			.370		
ΔR²	.036			.357		
F for ΔR²	2,657**			24,346****		
F for ANOVA	2,657**			16.761****		
*p<.10 **p<.05 ***p<.01 ****p<.001						2008

Table 5.54 *Hierarchical Regression Analyses of KT Marketing Strategies on*

M&S Typologies in Orientations and Industry Characteristics

Hierarchical regression analyses of KT Strategies on MS Typologies (whole) orientation and Industry Characteristics						
Independent variables entered	**Model I**			**Model II**		
	B	SE B	β	B	SE B	β
-,037 **Industry Characteristics**						
CI Competitive intensity	,087	,050	,124*	,071	,050	,100
MT Market turbulence	,018	,054	,026	,004	,055	,006
TT Technological turbulence	,064	,052	,090	,008	,054	,011
Strategic orientation: MS Typologies dimensions						
MS Defender orientation 1				,117	,049	,166**
MS Defender orientation 2				,095	,047	,134**
MS Prospector orientation 1				,052	,069	,074
MS Prospector orientation 2				,139	,059	,198**
MS Analyzer orientation 1				-,042	,075	-,059
R²	,033			,090		
Adjusted R²	,020			,056		
ΔR²	,033			,057		
F for ΔR²	2,482			2,676**		
F for ANOVA	2,482			2,639***		
*p<.10 **p<.05 ***p<.01 ****p<.001						2008

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Independent variables entered	Model I			Model II			Model III		
	B	SE B	β	B	SE B	β	B	SE B	β
Industry Characteristics									
CI Competitive intensity	-0,015	0.050	-0.021	-,036	,043	-,052	-0.056	0.037	-0.080
MT Market turbulence	0.136	0.055	0.195 **	,094	,046	,135**	0.030	0.041	0.043
TT Technological turbulence	-0.114	0.052	-0.163**	-,070	,044	-,101	-0.046	0.040	-0.066
KT Marketing Strategies									
KT1 Market leader strategies				,321	,039	,457****	0.245	0.0 36	0.349****
KT2 Market nicher strategies				-,071	,039	-,102*	-0.082	0.035	-0.117**
KT3 Market follower/imitator strategies				-,180	,039	-,260****	-0.114	0.034	-0.164***
KT4 Market challenger/aggressor strategies				,067	,038	,096*	0.069	0.033	0.099**
KT5 Market follower/adapter strategies				,125	,040	,177***	0.086	0.035	0.122**
KT6 Market challenger/sweeper strategies				-,104	,038	-,151**	-0.068	0.034	-0.099**
Strategic orientation: **MS Typologies (whole) orientation**									
MS Defender orientation 1							-0.037	0.036	-0.053
MS Defender orientation 2							-0.043	0.035	-0.062
MS Prospector orientation 1							0.151	0.052	0.216***
MS Prospector orientation 2							-0.032	0.044	-0.046
MS Analyzer orientation 1							0.196	0.055	0.285****
R²	.036			.380			,554		
Adjusted R²	,023			,353			,523		
ΔR²	,036			,344			,174		
F for ΔR²	2,657**			19,060****			15,653****		
F for ANOVA	2,657**			14,045****			17,830****		

Mediated Hierarchical Regression Analyses of Total Perceived Performance on Industry Characteristics, KT Marketing Strategies and MS Typologies in Orientations

*p<.10   **p<.05   ***p<.01   ****p<.001   2008

Table 5.55 *Mediated Hierarchical Regression Analyses of Total Perceived Performance on Industry Characteristics, KT Marketing Strategies and M&S Typologies in Orientations*

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5.3.3.3. Regression Results for Model C for Venkatraman's STROBE Dimensions-Comparative Approach

As per the research Model C in Figure 5.1, hierarchical multiple regression analysis has been used to assess the combined predictive power of the variables under study.

The control variables (*industry characteristics*) have been entered into the model as block one, then the independent variables (X) *Venkatraman's STROBE dimensions* have been entered into the model as block two, and then the mediator variable (Z) *marketing strategies* have been entered into the model as block three, regressed on the dependent variable (Y) *business performance*.

These analyses are discussed in the next section and will be followed by a section on mediation analyses.

5.3.3.3.1. Hierarchical Multiple Regression Results for Model C

The group of variables (1) environmental variables of industry characteristics, (2) predictor variables of strategic orientation of Venkatraman's STROBE dimensions, (3) Kotler's marketing strategies have been entered into regression in the analysis. Criterion variable is total perceived performance as summated score of performance dimensions.

Table 5.56 presents Pearson correlation results indicating that (1) market turbulence is the only industry characteristics' dimension that is correlated. It has a positive correlation $r=0.117$ at $p<0.05$. Competitive intensity and technological turbulence interestingly have been insignificant. (2) Out of Venkatraman's STROBE dimensions, following findings are noted: analysis dimension ($r=0.359$, $p<0.01$) supporting H_{9c}, futurity dimension ($r=0.172$, $p<0.01$) supporting H_{9c}, proactiveness dimension ($r=0.386$, $p<0.01$) supporting H_{9d} are positively correlated; aggressiveness dimension ($r=-0.113$, $p<0.01$) supporting H_{9a} is negatively correlated. Defensiveness dimension's significance remained higher than 0.05 however less than 0.10 and therefore excluded. Aggressiveness dimension interestingly contributed negatively to performance. (3) Out of Kotler's marketing strategies following findings are noted:

market-leading strategies (r=0.472, p<0.001) supporting H_{11a} and market challenging/aggressor strategies (r=0.158, p<0.001) supporting H_{11b} are positively correlated; market following/imitating strategies (r=-0.279, p<0.001) supporting H_{11d}, market challenging/sweeping strategies (r=-0.139, p<.005) supporting H_{11c} are negatively correlated. Leading and challenging leader strategies are positively correlated with performance, while imitating and attacking smaller unsuccessful competitors have negative correlation with performance. Market/follower-adapter and market niching strategies are not at all correlated with performance (H_{11e} and H_{11f} are rejected).

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Table 5.56 *Pearson Correlation Results for Total P. Performance with Strategic Orientation of* STROBE (dimensional approach)

Pearson correlation	D	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Total perceived performance (D)	1,000														
Competitive intensity (1)	,018	1,000													
Market turbulence (2)	,117**	,367***	1,000												
Technological turbulence (3)	-,084	,197***	,426***	1,000											
Analysis (4)	,359***	,216***	,155**	,035	1,000										
Defensiveness (5)	,103*	,124**	,012	,141**	-,023	1,000									
Aggressiveness (6)	-,113**	,105*	,040	,095*	,027	,017	1,000								
Futurity (7)	,172***	,071	,182***	,221***	-,010	,000	,016	1,000							
Proactiveness (8)	,386***	-,029	,121**	-,072	-,008	,015	,029	-,010	1,000						
Market leading strategies (9)	,472***	-,004	,051	-,056	,198***	,174***	,002	,074	,335*-*	1,000					
Market niching strategies (10)	-,100*	,000	,196***	,178***	-,015	,066	,097*	,190***	-,021	-,012	1,000				
Market following/imitating str (11)	-,279***	,007	-,085	,110*	-,058	,175***	,114**	-,056	-,108*	,004	,011	1,000			
Market following/adapting str (12)	,099*	,051	,110*	,111*	,021	,089*	,027	,054	,089*	,007	-,003	,008	1,000		
Market challenge/aggr str (13)	,158***	,268***	,034	,087	,127**	,088*	,221***	,052	,151**	,014	,016	,014	-,004	1,000	
Market challenge/sweep str (14)	-,139**	,053	-,014	-,102*	-,046	-,097*	,049	,081	-,003	,009	,003	-,003	-,009	,010	1,000
*p<0.10, **p<0.05, ***p<0.01															

Hierarchical regression results are provided in Table 5.57. (1)The first model is composed of the industry characteristics' entries and with market turbulence having positive contribution ($\beta=0.195$, $p<0.05$) and technological turbulence having negative contribution ($\beta=-0.163$, $p<0.05$) with the model's $R^2=0.036$, and F value (2.657, $p<0.05$). R^2 is low. (2) In the second model Venkatraman's STROBE dimensions are entered with F value (21.075, $p<0.001$), while R^2 increased to 0.361 with $\Delta R^2=0.325$. Industry characteristics' variables are no longer significant and excluded; Venkatraman's STROBE dimensions with positive contribution of analysis dimension ($\beta=0.380$, $p<0.001$), defensiveness dimension ($\beta=0.135$, $p<0.05$), futurity dimension $\beta=0.206$, $p<0.001$), proactiveness dimension $\beta=0.374$, $p<0.001$) with negative contribution of aggressiveness dimension ($\beta=-0.122$, $p<0.05$) are the cause of change in R^2. (3) In the third model, industry characteristics' variables remain not being significant while newly entered KT marketing strategies with F value (10.514, $p<0.001$) has total positive contribution with all the variables: market-leading strategies ($\beta=0.300$, $p<0.001$), market-following/adapting strategies ($\beta=0.124$, $p<0.05$), market-niching strategies ($\beta=-0.112$, $p<0.05$), market-following/imitating strategies ($\beta=-0.218$, $p<0.001$), and market challenging/sweeping strategies ($\beta=-0.136$, $p<0.01$); R^2 increases to 0.514 with $\Delta R^2=0.153$.

The results indicate that R^2 increases significantly from Model I to Model III from 0.036 to 0.514. This reveals the predictive contribution of each block of variables and 51.4 percent of the variance is explained by M&S typologies in orientations and KT marketing strategies. ANOVA analysis with F value significant at 0.001 levels suggests a good fit for the full model. Therefore support for hypotheses H_9 and H_{11} are confirmed

The results also indicate that as values of analysis dimension ($\beta=0.281$, $p<0.001$), futurity dimension ($\beta=0.184$, $p<0.001$), and proactiveness dimension ($\beta=0.223$, $p<0.001$) increases, and as value of aggressiveness dimension ($\beta=-0.103$, $p<0.05$) decreases business performance of business units increases. The results also indicate that as values of market-leading strategies ($\beta=0.300$, $p<0.001$), market-following/adapting strategies ($\beta=0.124$, $p<0.05$) increases and as market-niching value ($\beta=-0.112$, $p<0.05$) and market-follower/imitating strategies ($\beta=-0.218$, $p<0.001$),

Independent variables entered	Model I			Model II			Model III		
	B	SE B	β	B	SE B	β	B	SE B	β
Industry Characteristics									
CI Competitive intensity	-0.015	0.050	-0.021	-0.047	,043	-0.068	-0.056	0.040	-0.080
MT Market turbulence	0.136	0.055	0.195 **	0.043	,047	0.062	0.046	0.043	0.065
TT Technological turbulence	-0.114	0.052	-0.163**	-0.096	,045	-0.137**	-0.074	0.040	-0.106*
Strategic orientation: STROBE									
STROBE 1 Analysis				0.265	,040	0.380****	0.196	0.037	0.281****
STROBE 2 Defensiveness				0.095	,040	0.135**	0.067	0.037	0.095*
STROBE 3 Aggressiveness				-0.086	,040	-0.122**	-0.073	0.036	-0.103**
STROBE 4 Futurity				0.144	,040	0.206****	0.129	0.036	0.184****
STROBE 5 Proactiveness				0.260	,039	0.374****	0.155	0.038	0.223****
KT Marketing Strategies									
KT1 Market leader strategies							0.211	0.039	0.300****
KT2 Market nicher strategies							-0.078	0.036	-0.112**
KT3 Market follower/imitator strategies							-0.151	0.036	-0.218****
KT4 Market challenger/aggressor strategies							0.045	0.035	0.065
KT5 Market follower/adapter strategies							0.088	0.038	0.124**
KT6 Market challenger/sweeper strategies							-0.094	0.035	-0.136***
R²	,036			,361			,514		
Adjusted R²	,023			,337			,480		
ΔR²	,036			,325			,153		
F for ΔR²	2.657**			21,075****			10,514****		
F for ANOVA	2.657**			14,640****			15,179****		

*p<.10   **p<.05   ***p<.01   ****p<.001   2008

Hierarchical regression analyses of Business Performance model testing (Total Perceived Performance) on study variables with STROBE

Table 5.57 *Hierarchical Regression Analyses of Business Performance-Model Testing (Total Perceive Performance) on Study Variables with STROBE Dimensions*

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market-challenging/sweeper strategies ($\beta=-0.136$, $p<0.01$) decreases, business performance of business units increases.

5.3.3.3.2. Mediated Hierarchical Regression Results for Model C

The model utilizing performance as the dependent variable is broken down into four steps for testing a mediated model. The results of each step are presented with (C) representing the industry characteristics as control variables, (X) representing strategic orientation Venkatraman's STROBE dimensions as independent variable, (Z) representing KT marketing strategies as mediating variable and (Y) representing total perceived performance as dependent variable. The four steps in the hierarchical regression produced statistically significant models as results are presented below:

1. Step 1: Control variables (C) are entered into the model as block 1, independent variables (X) are entered into the model as block 2, and regressed on the dependent variable (Y). See Table 5.58 on page 265 for hierarchical regression results.

   Step 1 {C+X=Y) produced a statistically significant model $p<0.001$, $R^2=0.361$. H_9 is supported

2. Step 2: Control variables (C) are entered into the model as block 1, mediator variable (Z) are entered into the model as block 2, and regressed on the dependent variable (Y). See Table 5.48 for hierarchical regression.

   Step 2 {C+Z=Y} produced a statistically significant model ($P<0.001$), $R^2=0.380$. H_{11} is supported.

3. Step 3: Control variables (C) are entered into the model as block 1, independent variables (X) are entered into the model as block 2 and regressed on mediator variable (Z). See Table 5.59 on page 266 for hierarchical regression results.

   Step 3 {C+X=Z} produced a statistically significant model ($P<0.01$), $R^2=0.134$. H_{12} is supported. Due to the significance of the models in Steps 1 through 3, Step 4 is conducted. . H_{12} is supported.

4. Step 4: Control variables (C) are entered into the model as block 1, mediator variable (Z) are entered into the model as block 2, independent

variables (X) are entered into the model as block 3, and regressed on the dependent variable (Y). See Table 5.60 on page 267 for hierarchical regression results.

Step 4 {C+Z+X=Y} produced a statistically significant model (P<0.001), R^2=0.514

Since a statistically significant model resulted at step 4, existence of partial mediation is concluded, hence there is support for hypothesis H_{10}.

Table 5.58 *Hierarchical Regression Analyses of Total Perceived Performance on STROBE and Industry Characteristics*

Hierarchical regression analyses of Total Perceived Performance on STROBE and Industry Characteristics						
Independent variables entered	**Model I**			**Model II**		
	B	SE B	β	B	SE B	β
Industry Characteristics						
CI Competitive intensity	-,015	,050	-,021	-0.047	0.043	-0.068
MT Market turbulence	,136	,055	,195**	0.043	0.047	0.062
TT Technological turbulence	-,114	,052	-,163**	-0.096	0.045	-0.137**
Strategic orientation: STROBE						
STROBE 1 Analysis				0.265	0.040	0.380****
STROBE 2 Defensiveness				0.095	0.040	0.135**
STROBE 3 Aggressiveness				-0.086	0.040	-0.122**
STROBE 4 Futurity				0.144	0.040	0.206****
STROBE 5 Proactiveness				0.260	0.039	0.374****
R^2	.036			.361		
Adjusted R^2	.023			.337		
ΔR^2	.036			.325		
F for ΔR^2	2,657**			21.075****		
F for ANOVA	2,657**			14.640****		
*p<.10 **p<.05 ***p<.01 ****p<.001						2008

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Table 5.59 *Hierarchical Regression Analyses of KT Strategies*
on Industry Characteristics and STROBE Dimensions

Hierarchical Regression Analyses of KT Strategies on Industry Characteristics and STROBE Dimensions						
Independent variables entered	**Model I**			**Model II**		
	B	SE B	β	B	SE B	β
Industry Characteristics						
CI Competitive intensity	,087	,050	,124	,062	,050	,087
MT Market turbulence	,018	,054	,026**	-,006	,054	-,009
TT Technological turbulence	,064	,052	,090*	,038	,051	,054
Strategic orientation: STROBE						
STROBE 1 Analysis				,043	,046	,061
STROBE 2 Defensiveness				,111	,046	,158**
STROBE 3 Aggressiveness				,130	,045	,185***
STROBE 4 Futurity				,102	,046	,145**
STROBE 5 Proactiveness				,107	,046	,152**
R²	,033			,134		
Adjusted R²	,020			,102		
ΔR²	,033			,101		
F for ΔR²	2,482			4,996****		
F for ANOVA	2,482			4,138****		
*p<.10 **p<.05 ***p<.01 ****p<.001						2008

Independent variables entered	Model I			Model II			Model III		
	B	SE B	β	B	SE B	β	B	SE B	β
Industry Characteristics									
CI Competitive intensity	-0.015	0.050	-0.021	-,036	,043	-,052	-0.056	0.040	-0.080
MT Market turbulence	0.136	0.055	0.195 **	,094	,046	,135**	0.046	0.043	0.065
TT Technological turbulence	-0.114	0.052	-0.163**	-,070	,044	-,101	-0.074	0.040	-0.106*
KT Marketing Strategies									
KT1 Market leader strategies				,321	,039	,457****	0.211	0.039	0.300****
KT2 Market nicher strategies				-,071	,039	-,102*	-0.078	0.036	-0.112**
KT3 Market follower/imitator strategies				-,180	,039	-,260****	-0.151	0.036	-0.218****
KT4 Market challenger/aggressor strategies				,067	,038	,096*	0.045	0.035	0.065
KT5 Market follower/adapter strategies				,125	,040	,177***	0.088	0.038	0.124**
KT6 Market challenger/sweeper strategies				-,104	,038	-,151***	-0.094	0.035	-0.136***
Strategic orientation: STROBE									
STROBE 1 Analysis							0.196	0.037	0.281****
STROBE 2 Defensiveness							0.067	0.037	0.095*
STROBE 3 Aggressiveness							-0.073	0.036	-0.103**
STROBE 4 Futurity							0.129	0.036	0.184****
STROBE 5 Proactiveness							0.155	0.038	0.223****
R^2	,036			,380			,514		
Adjusted R^2	,023			,353			,480		
ΔR^2	,036			,344			,134		
F for ΔR^2	2.657**			19,060****			11,051****		
F for ANOVA	2.657**			14,045****			15,179****		

*p<.10   **p<.05   ***p<.01   ****p<.001   2008

Table 5.60 *Mediated Hierarchical Regression Analyses of Business Performance-Model Testing (Total Perceived Performance) on Study Variables with STROBE Dimensions*

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5.4. RESULTS FOR CORRELATIONAL ANALYSES

This section will present the results of relational hypotheses, correlational analyses conducted to determine direction, strength and significance of the bivariate relationships of the variables for marketing strategies and strategic orientation. The results of association are provided as a group for each model separately. First the tables on Pearson correlation matrix are provided, and then relations are described.

5.4.1. Results for Correlational Analyses for Model A- Strategic Orientation: M&S Typologies in Dimensions

Correlational analyses are conducted between variables of industry characteristics, M&S typologies' dimensions and marketing strategies. Table 5.45 provides the results of intercorrelationals among study variables; the results between M&S typologies' dimensions and marketing strategies will be the focus in this section.

Market-leading strategies are found to be significantly and positively correlated with focus of planning, growth pattern, structure, and negatively correlated only with product mix. First three dimensions of strategic orientation support and increase effectiveness of market-leading strategies in shaping marketing orientation of the firm, while narrow product mix (range) decreases the effectiveness, which conforms to the assertion. The rest of the items of strategic orientation have no correlation with market-leading strategy. H_{41b}, H_{41c}, H_{41f}, and H_{41e} are confirmed.

Market-niching strategies are found to be significantly and positively correlated with focus of planning, growth pattern, product mix, competitive cost. These four dimensions of strategic orientation support and increase the effectiveness of market-niching strategies in shaping marketing orientation of the firm. The narrow product mix (range) as specialization and competitive cost which underlines low cost both support the effectiveness of the strategy conforming to the premises of this strategy. The rest of the items of strategic orientation have no correlation with market-niching strategy. H_{42b}, H_{42c}, H_{42e}, and H_{42g} are confirmed.

Market-following/imitating strategies are found to be significantly and positively correlated with product mix, competitive cost and negatively correlated with competitive edge. First two dimensions of strategic orientation support and increase effectiveness of market-following/imitating strategies in conformity with assertions while taking a competitive stance with a claim does not support this strategy of a follower. The rest of the items of strategic orientation have no correlation with market-following/imitating strategy. H_{43e}, H_{43g}, and H_{43a} are confirmed.

Market-following/adapting strategies are found to have no significant correlations, no hypothesis is confirmed.

Market-challenging/aggressor strategies are found to be significantly and positively correlated only with competitive cost. This conforms to assertions on competition of producing and providing lower cost-better terms as the main strategy of challenger against the leader. It is interesting no note that no other dimension of strategic orientation has correlation with market-following/imitating strategy. H_{45g} is confirmed.

Market-challenging/sweeper strategies are found to be significantly and positively correlated with product mix, performance evaluation, and competitive cost and negatively correlated with competitive edge. . First two dimensions of strategic orientation support and increase effectiveness of market-challenging/sweeping strategies in conformity with assertions while taking a competitive stance with a claim does not support this strategy of a sweeper. The rest of the items of strategic orientation have no correlation with market-challenging/sweeper strategy. H_{46d}, H_{46e}, and H_{46g} are confirmed.

Competitive cost and product mix are among the mostly related dimensions with marketing strategies.

5.4.2. Results for Correlational Analyses for Model B- Strategic Orientation: M&S typologies in Orientations

Correlational analyses are conducted between variables of industry characteristics, M&S typologies' orientations and marketing strategies. Table 5.51 provides the results of intercorrelationals among study variables; the results between M&S typologies' orientations and marketing strategies will be the focus in this section.

Market-leading strategies are found to be significantly and positively correlated with prospector and analyzer orientations, and negatively correlated with defender orientation I while it has no correlation with defender orientation II. This is apparently in full conformity with assertions on behavior of market-leading strategies. H_{81a}, H_{81b} H_{81c}, and H_{81e} are confirmed.

Market-niching strategies are found to be significantly and positively correlated with defender and analyzer orientations. It has no correlation with prospector orientations. This is apparently in full conformity with assertions on behavior of market-niching strategies. H_{82c}, H_{82d}, and H_{82e},

Market-following/imitating strategies are found to be significantly and positively correlated with defender orientation I, and negatively correlated with prospector orientation I and analyzer orientation while it has no correlation with defender orientation II and prospector orientation II. This is apparently in full conformity with assertions on behavior of market-following/imitating strategies. H_{83a}, H_{83c}, and H_{83e} are confirmed.

Market-following/adapting strategies are found to have no significant correlation with any of the strategic orientation variables.

Market-challenging/aggressor strategies are found to be significantly and positively correlated with prospector and analyzer orientations. It has no correlation with rest of the orientations. This is apparently in full conformity with assertions on behavior of market-challenging/aggressor strategies. H_{85a}, H_{85b}, and H_{85e} are confirmed.

Market-challenging/sweeper strategies are found to be significantly and positively correlated with defender orientations. It has no correlation with rest of the orientations. This does not conform to assertions on behavior of market-challenging/sweeper strategies as the qualities of defenders do not reflect challenging approach. H_{86c} and H_{86d} are confirmed.

5.4.3. Results for Correlational Analyses for Model C- Strategic Orientation: Venkatraman's Dimensions

Correlational analyses are conducted between variables of industry characteristics, Venkatraman's dimensions and marketing strategies. Table 5.56 provides the results of intercorrelationals among study variables; the results between Venkatraman's dimensions and marketing strategies will be the focus in this section.

Market-leading strategies are found to be significantly and positively correlated with analysis and defensiveness, and negatively correlated with proactiveness dimensions. This is an interesting result with stance on defensiveness, and prudence in new moves and not being proactive, when pondering on the assertions and through the qualities of the sample. H_{121b}, H_{121c} and H_{121d} are confirmed.

Market-niching strategies are found to be significantly and positively correlated with futurity dimension only. With reference to assertions on the marketing strategy, it has no reflections. Hypothesis H_{122e} is confirmed.

Market-following/imitating strategies are found to be significantly and positively correlated with defensiveness and aggressiveness dimensions. With reference to assertions on the marketing strategy, it has no reflections. Hypotheses H_{123a} and H_{123b} are confirmed.

Market-following/adapting strategies are found to have no significant correlation with any of the strategic orientation variables.

Market-challenging/aggressor strategies are found to be significantly and positively correlated with analysis, aggressiveness and proactiveness orientations. This

appears to reflect assertions on this strategy as per literature. Hypotheses H_{125a}, $H_{125c,}$ and H_{125d} are confirmed.

Market-challenging/sweeper strategies are found to have no significant correlation with any of the strategic orientation variables.

Strategic orientation in Venkatraman's dimensions appears not to correlate well with the marketing strategies.

5.5.   RESULTS FOR INDEPENDENT SAMPLE t-TESTS

The section further investigates if differences in means between distinct groups of the sample exist; independent sample t-tests have been carried out.

5.5.1. Results for Independent Sample t-Test for Company Type

Company type is being inquired. Independent sample t-Test is conducted in order to find out whether different company types are the reason of significant differences in means of variables of the study. The results of t-tests that confirm differences are provided on Table 5.61. The results will be described in categories based on the research models.

The results pertaining to model A where strategic orientation is represented in M&S typologies in dimensions indicate that performance evaluation is more centralized in limited companies and less so in incorporations (t=-3.781, p=0.000; mean limited=3.1341, mean incorporated=2.4606).

The results pertaining to model B where strategic orientation is represented in M&S typologies in orientations indicate that limited companies have higher defender orientation than incorporations, meaning that limited companies prefer to maintain their present market and incorporations have propensity for developing new markets (t=-2.991, p=0.003; mean limited=3.5354, mean incorporated=3.1349).

The results pertaining to model C where strategic orientation is represented in Venkatraman's dimensions indicate that limited companies have higher aggressiveness

Table 5.61 *Independent Samples t-Test Results for Company Types*

	Grouping variable	N	Mean	Std. Dev.	Levene's test for equality of variances		Variance assumed	t	p
					F	Sig			
Independent samples t-Test results for Company Types [Incorporation and Limited Company]									
Performance evaluation MS4	Incorporation	131	2,4606	1,12277	4,191	,042	Equal variance assumed	-3,944	,000
	Limited	87	3,1341	1,38696			Equal variance not assumed	-3,781	,000
Product mix MS5	Incorporation	131	2,4606	1,12277	4,191	,042	Equal variance assumed	-3,944	,000
	Limited	87	3,1341	1,38696			Equal variance not assumed	-3,781	,000
Defender orientation MS	Incorporation	131	3,1349	,95857	,087	,769	Equal variance assumed	-2,991	,003
	Limited	87	3,5354	,98262			Equal variance not assumed	-2,976	,003
Aggressive-ness ST3	Incorporation	131	2,9580	,96783	1,843	,176	Equal variance assumed	-2,317	,021
	Limited	87	3,2931	1,15336			Equal variance not assumed	-2,237	,027
Market niching strategies KT2	Incorporation	131	2,6527	1,28586	,484	,487	Equal variance assumed	-2,516	,013
	Limited	87	3,1149	1,39079			Equal variance not assumed	-2,476	,014
Comparative performance CP	Incorporation	131	4,4744	,79109	1,961	,163	Equal variance assumed	2,573	,011
	Limited	87	4,2034	,69860			Equal variance not assumed	2,642	,009
Total perceived performance TPP	Incorporation	131	4,5890	,71797	2,278	,133	Equal variance assumed	2,280	,024
	Limited	87	4,3662	,65592			Equal variance not assumed	2,325	,021

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in their approach to the market than incorporations (t=-2.317, p=0.021; mean limited=3.5354, mean incorporated=3.1349).

The results pertaining to marketing strategies reveal that limited companies prefer to act with market-niching strategies than incorporations meaning that they are more inclined to focus in segments of markets (t=-2.516, p=0.013; mean limited=3.1149, mean incorporated=2.6527).

The results pertaining to performance reveal that incorporations perform better than limited companies both in total performance (t=2.280, p=0.024; mean limited=4.3662, mean incorporated=4.5890) and comparative performance (t=2.573, p=0.011; mean limited=4.2034, mean incorporated=4.4744).

5.5.2. Results for Independent Sample t-Test for Economic (Business) Sector

Economic (business) sector is being inquired. Independent sample t-Test is conducted in order to find out whether two basic economic sectors are the reason of significant differences in means of variables of the study. The results of t-tests that confirm differences are provided in Table 5.62.

The results pertaining to model A where strategic orientation is represented in M&S typologies in dimensions indicate that competitive edge (competitive orientation) is more developed in services sector companies and less so in manufacturing sector companies (t=-1.989, p=0.049; mean manufacturing=4.9098, mean services=5.1305).

The results pertaining to model C where strategic orientation is represented in Venkatraman's dimensions indicate that manufacturing companies have higher defensiveness character in their approach to the market than services companies (t=-4.778, p=0.000; mean manufacturing=3.8354, mean services=3.1028).

Table 5.62 *Independent Samples t-Test Results for Economic (Business)Sector*

	Grouping variable	N	Mean	Std. Dev.	Levene's test for equality of variances		Variance assumed	t	p
					F	Sig			
Independent samples t-Test results for Business Sector [Industry and Manufacturing]									
Competitive edge MS1	Manufacturing	82	4.9098	0.83276	2,401	,123	Equal variance assumed	-2,053	,041
	Services	141	5.1305	0.73795			Equal variance not assumed	-1,989	,049
Defensiveness ST2	Manufacturing	82	3,8354	1.04025	1,344	,248	Equal variance assumed	4,778	,000
	Services	141	3,1028	1.13903			Equal variance not assumed	4,895	,000

5.5.3. Results for Independent Sample t-Test between High and Low Value Groups

For each variable of study in this section, two groups are created with a cutoff point of 3 on a scale ranging from 1 to 6. To investigate if there is a significant difference of means between these two groups, an independent t-test analysis is carried out. The results of t-tests that confirm differences are provided on Table 5.63.

The results pertaining to Model A where strategic orientation is represented in Miles and Snow typologies in dimensions indicate that companies with high growth pattern score perform better than those with low growth pattern score (t=-2.366, p=0.019; mean [for ≥3.00] 4.5504, mean [for <3.0] 4.2460); companies less centralized on their performance evaluation perform better than those more centralized (t=-4.093, p=0.000; mean [for ≥3.00] 4.2861, mean [for <3.0] 4.6629); companies with low scores in competitive cost perform better than those with high scores (t=-2.619, p=0.009; mean [for ≥3.00] 4.3919, mean [for <3.0] 4.6372).

The results pertaining to model B where strategic orientation is represented in M&S typologies in orientations indicate that low scores in defender orientation perform better than those score high (t=-2.327, p=0.021; mean [for ≥3.00] 4.4228, mean [for <3.0] 4.6510).

The results pertaining to model C where strategic orientation is represented in Venkatraman's dimensions indicate that low scores in defensiveness dimension perform better than those score high (t=-2.619, p=0.009; mean [for ≥3.00] 4.3919, mean [for <3.0] 4.6372), while high scorers in proactiveness dimension perform better than those score low (t=-4.065, p=0.000; mean [for ≥3.00] 4.5840, mean [for <3.0].

The results pertaining to marketing strategies indicate that high scores in market-leading strategies perform better than those score low (t=6.717, p=0.000; mean [for ≥3.00] 4.7259, mean [for <3.0] 4.1280); high scorers in market-following/adapting strategies perform better than those score low (t=3.392, p=0.001; mean [for ≥3.00] 4.7047, mean [for <3.0] 4.4003); while low scorers in market-challenging/sweeper

strategies perform better than those score high (t=-2.473, p=0.014; mean [for ≥3.00] 4.3299, mean [for <3.0] 4.5799) (see Table 5.64).

Table 5.63 *Independent Samples t-Test Results with Cut-off at 3.0 for Various Grouping Variables*

	Grouping variable	N	Mean	Std. Dev.	Levene's test for equality of variances F	Sig	Variance assumed	t	p
Independent samples t-Test results for MS3 Growth pattern [groupings of score >=3.00 and <3.00]									
Total perceived performance TPP	>=3.00	183	4,5504	,67722	,510	,476	Equal variance assumed	2,366	,019
	<3.00	34	4,2460	,74860			Equal variance not assumed	2,209	,033
Independent samples t-Test results for MS4 Performance evaluation [groupings of score >=3.00 and <3.00]									
Total perceived performance TPP	>=3.00	92	4,2851	,67163	,004	,950	Equal variance assumed	-4,093	,000
	<3.00	125	4,6629	,67207			Equal variance not assumed	-4,094	,000
Independent samples t-Test results for MS7 Competitive cost [groupings of score >=3.00 and <3.00]									
Total perceived performance TPP	>=3.00	119	4,3919	,65111	,039	,844	Equal variance assumed	-2,619	,009
	<3.00	98	4,6372	,72766			Equal variance not assumed	-2,591	,010
Independent samples t-Test results for MS defender orientation [groupings of score >=3.00 and <3.00]									
Total perceived performance TPP	>=3.00	141	4,4228	,70419	,577	,449	Equal variance assumed	-2,327	,021
	<3.00	76	4,6510	,65954			Equal variance not assumed	-2,374	,019
Independent samples t-Test results for STROBE 2 Defensiveness [groupings of score >=3.00 and <3.00]									
Total perceived performance TPP	>=3.00	119	4,3919	,65111	,039	,844	Equal variance assumed	-2,619	,009
	<3.00	98	4,6372	,72766			Equal variance not assumed	-2,591	,010
Independent samples t-Test results for STROBE 5 Proactiveness[groupings of score >=3.00 and <3.00]									
Total perceived performance TPP	>=3.00	182	4,5840	,66126	,535	,465	Equal variance assumed	4,065	,000
	<3.00	35	4,0797	,72779			Equal variance not assumed	3,808	,000

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Table 5.64 *Independent Samples t-Test Results with Cut-off at 3.0 for Various Grouping Variables*

	Grouping variable	N	Mean	Std. Dev.	Levene's test for equality of variances		Variance assumed	t	p
					F	Sig			
Independent samples t-Test results for KT1 Market leading strategies [groupings of score >=3.00 and <3.00]									
Total perceived performance TPP	>=3.00	136	4,7259	,60335	1,555	,214	Equal variance assumed	6,717	,000
	<3.00	81	4,1280	,68308			Equal variance not assumed	6,509	,000
Independent samples t-Test results for KT5 Market follower/adapter strategies [groupings of score >=3.00 and <3.00]									
Total perceived performance TPP	>=3.00	73	4,7047	,55934	5,460	,020	Equal variance assumed	3,105	,002
	<3.00	144	4,4003	,73667			Equal variance not assumed	3,392	,001
Independent samples t-Test results for KT6 Market challenger/sweeper strategies [groupings of score >=3.00 and <3.00]									
Total perceived performance TPP	>=3.00	67	4,3299	,71663	,332	,565	Equal variance assumed	-2,473	,014
	<3.00	150	4,5799	,67472			Equal variance not assumed	-2,417	,017

5.6. RESULTS FOR ANOVA TESTS

One-way ANOVA tests are conducted to carry investigations on the sample to identify specific between-group mean differences across the variables being studied. Those analyses that contribute to knowledge on the companies and that may guide further analyses in the future are described. Wherever homogeneity of variance test is not passed Welch test has been utilized to test for the equality of means. When ANOVA is used but the test is carried out with unequal groups, Scheffé or Hochberg' GT 2 is used for post-hoc multiple comparison analyses. Similarly when Welch test is being used but the test is carried out with unequal groups, Games-Howell is used for post-hoc multiple comparison analysis.

5.6.1. Results for ANOVA Tests of Factor: Industry Type

The result of ANOVA test reveals that for defensiveness dimension of strategic orientation there are significant mean differences among groups of industry type. To determine among which groups the true differences are identified for defensiveness, Hochberg's GT2 post hoc multiple comparison analysis designed for unequal groups has been performed. According to the results on Table 5.65, defensiveness character of consumer non-durables industry companies is the highest and is significantly different from those in services sector.

Table 5.65 *ANOVA Test Results for Grouping Variables*

ANOVA results for ST2 Defensiveness and industry type		N	Mean	F Value	Sig.
Industry type	Consumer durables	16	3,4063	2,698	,015
	Consumer non durables	30	3,8750		
	Capital goods	17	3,4412		
	Raw and semi finished materials	25	3,6600		
	Components	16	3,7969		
	Services	93	3,1371		
	Wholesale and retail distribution	24	3,0208		
Scale: 1=Strongly disagree ..... 6=Strongly agree					

Hochberg's GT2 test results for ST2 Defensiveness and industry type						
(I) Industry type	(J) Industry type	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Consumer durables	Consumer non durables	-,46875	,35042	,983	-1,5429	,6054
	Capital goods	-,03493	,39428	1,000	-1,2435	1,1737
	Raw and semi finished materials	-,25375	,36241	1,000	-1,3646	,8571
	Components	-,39063	,40021	1,000	-1,6174	,8361
	Services	,26915	,30637	1,000	,6700	1,2083
	Wholesale and retail distribution	,38542	,36534	,999	-,7345	1,5053
Consumer non durables	Consumer durables	,46875	,35042	,983	-,6054	1,5429
	Capital goods	,43382	,34364	,991	-,6195	1,4872
	Raw and semi finished materials	,21500	,30654	1,000	-,7246	1,1546
	Components	,07813	,35042	1,000	-,9960	1,1523
	Services	,73790*	,23768	,044	,0094	1,4664
	Wholesale and retail distribution	,85417	,31000	,124	-,0961	1,8044
Capital goods	Consumer durables	,03493	,39428	1,000	-1,1737	1,2435
	Consumer non durables	-,43382	,34364	,991	-1,4872	,6195
	Raw and semi finished materials	-,21882	,35585	1,000	-1,3096	,8719
	Components	-,35570	,39428	1,000	-1,5643	,8529
	Services	,30408	,29858	,999	-,6112	1,2193
	Wholesale and retail distribution	,42034	,35884	,997	-,6796	1,5203

		Mean Difference	Std. Error	Sig.	Lower Bound	Upper Bound
Raw and Semi-finished materials	Consumer durables	,25375	,36241	1,000	-,8571	1,3646
	Consumer non durables	-,21500	,30654	1,000	-1,1546	,7246
	Capital goods	,21882	,35585	1,000	-,8719	1,3096
	Components	-,13688	,36241	1,000	-1,2478	,9740
	Services	,52290	,25501	,581	-,2588	1,3046
	Wholesale and retail distribution	,63917	,32349	,646	-,3524	1,6307
Components	Consumer durables	,39063	,40021	1,000	-,8361	1,6174
	Consumer non durables	-,07813	,35042	1,000	-1,1523	,9960
	Capital goods	,35570	,39428	1,000	-,8529	1,5643
	Raw and semi finished materials	,13688	,36241	1,000	-,9740	1,2478
	Services	,65978	,30637	,491	-,2793	1,5989
	Wholesale and retail distribution	,77604	,36534	,517	-,3438	1,8959
Services	Consumer durables	-,26915	,30637	1,000	-1,2083	,6700
	Consumer non durables	-,73790*	,23768	,044	-1,4664	-,0094
	Capital goods	-,30408	,29858	,999	-1,2193	,6112
	Raw and semi finished materials	-,52290	,25501	,581	-1,3046	,2588
	Components	-,65978	,30637	491	-1,5989	,2793
	Wholesale and retail distribution	,11626	,25917	1,000	-,6782	,9107
Wholesale and retail distribution	Consumer durables	-,38542	,36534	,999	-1,5053	,7345
	Consumer non durables	-,85417	,31000	,124	-1,8044	,0961
	Capital goods	-,42034	,35884	,997	-1,5203	,6796
	Raw and semi finished materials	-,63917	,32349	,646	-1,6307	,3524
	Components	-,77604	,36534	,517	-1,8959	,3438
	Services	-,11626	,25917	1,000	-,9107	,6782
* The mean difference is significant at .05 level						

The results of Welch test for unequal variances also reveal that for market-challenging (sweeping) strategies there are significant mean differences among groups of industry type. To determine among which groups the true differences are identified for this strategy orientation, Games-Howell post hoc test designed for unequal groups has been performed. According to the results provided on Table 5.66, market-challenging (sweeping) strategy behavior of capital goods industry companies is of the lowest effectiveness and is significantly different from those in consumer non-durables (which is of the highest effectiveness), wholesale and distribution, and services industries.

Table 5.66 *Welch Test Results for: KT Market-Challenging/Sweeper Strategies*

Robust tests of equality of means (Welch) results for KT6 Market challenger/sweeper strategies and industry type		N	Mean	Statistic [a]	Sig.
Industry type	Consumer durables	16	2,1563		
	Consumer non durables	30	2,4500		
	Capital goods	17	1,3235		
	Raw and semi finished materials	25	1,9800	6,508	,000
	Components	16	1,7188		
	Services	93	2,2688		
	Wholesale and retail distribution	24	2,3750		
[a.] Asymptotically F distributed					
Scale: 1=Strongly disagree . . . . . 6=Strongly agree					

Games-Howell test results for KT6 Market challenger/sweeper strategies and industry type						
(I) Industry type	(J) Industry type	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Consumer durables	Consumer non durables	-,29375	,40521	,990	-1,5782	,9907
	Capital goods	,83272	,35860	,284	-,3465	2,0119
	Raw and semi finished materials	,17625	,41661	,999	-1,1397	1,4922
	Components	,43750	,40489	,928	-,8540	1,7290
	Services	-,11257	,36263	1,000	-1,2979	1,0728
	Wholesale and retail distribution	-,21875	,42997	,999	-1,5716	1,1341
Consumer non durables	Consumer durables	,29375	,40521	,990	-,9907	1,5782
	Capital goods	1,12647*	,25456	,001	,3384	1,9146
	Raw and semi finished materials	,47000	,33131	,789	-,5465	1,4865
	Components	,73125	,31644	,264	-,2512	1,7137
	Services	,18118	,26021	,992	-,6175	,9799
	Wholesale and retail distribution	,07500	,34797	1,000	-,9956	1,1456
Capital goods	Consumer durables	-,83272	,35860	,284	-2,0119	,3465
	Consumer non durables	-1,12647*	,25456	,001	-1,9146	-,3384
	Raw and semi finished materials	-,65647	,27233	,225	-1,5090	,1961
	Components	-,39522	,25403	,710	-1,2134	,4230
	Services	-,94529*	,17917	,000	-1,4913	-,3993
	Wholesale and retail distribution	-1,05147*	,29236	,017	-1,9713	-,1316
	Consumer durables	-,17625	,41661	,999	-1,4922	1,1397

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Raw and Semi-finished materials	Consumer non durables	-,47000	,33131	,789	-1,4865	,5465
	Capital goods	,65647	,27233	,225	-,1961	1,5090
	Components	,26125	,33091	,985	-,7681	1,2906
	Services	-,28882	,27762	,941	-1,1511	,5735
	Wholesale and retail distribution	-,39500	,36117	,927	-1,5078	,7178
Components	Consumer durables	-,43750	,40489	,928	-1,7290	,8540
	Consumer non durables	-,73125	,31644	,264	-1,7137	,2512
	Capital goods	,39522	,25403	,710	-,4230	1,2134
	Raw and semi finished materials	-,26125	,33091	,985	-1,2906	,7681
	Services	-,55007	,25969	,371	-1,3765	,2764
	Wholesale and retail distribution	-,65625	,34758	,500	-1,7378	,4253
Services	Consumer durables	,11257	,36263	1,000	-1,0728	1,2979
	Consumer non durables	-,18118	,26021	,992	-,9799	,6175
	Capital goods	,94529*	,17917	,000	,3993	1,4913
	Raw and semi finished materials	,28882	,27762	,941	-,5735	1,1511
	Components	,55007	,25969	,371	-,2764	1,3765
	Wholesale and retail distribution	-,10618	,29730	1,000	-1,0352	,8228
Wholesale and retail distribution	Consumer durables	,21875	,42997	,999	-1,1341	1,5716
	Consumer non durables	-,07500	,34797	1,000	-1,1456	,9956
	Capital goods	1,05147*	,29236	,017	,1316	1,9713
	Raw and semi finished materials	,39500	,36117	,927	-,7178	1,5078
	Components	,65625	,34758	,500	-,4253	1,7378
	Services	,10618	,29730	1,000	-,8228	1,0352

* The mean difference is significant at .05 level

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5.6.2. Results for ANOVA Tests of Factor: Business Type

The results of ANOVA tests reveal that there are significant mean differences among groups having business types for various dependent variables. To determine among which groups the true differences are identified for different business types, Hochberg's GT2 post hoc tests have been performed.

According to the results provided:

a) Structure of financial services (including banking) and insurance has the best internal fit and is significantly different from those in construction business (See Table 5.67).

b) Defender orientation of health care business has the highest orientation and is significantly different from those in financial services (including banking) and insurance (See Table 5.68).

c) Analyzer orientation of health care business has the highest orientation and is significantly different from those in construction
business; also financial services (including banking) and insurance' orientation is significantly different from those in construction business (See Table 5.69).

d) Defensiveness orientation of textile business is the highest and is significantly different from those in trade (See Table 5.70).

e) Aggressiveness orientation of trade is the highest and is significantly different from those in financial services (including banking) and insurance (See Table 5.71).

The result of Welch test reveals that there are significant mean differences among groups of business type for performance (compared to objectives). To determine among which groups the true differences are identified for performance (compared to objectives), Games-Howell post hoc test has been performed. According to the results in Table 5.72, textile's performance (compared to objectives) is the highest and is significantly different from what it is for construction and automotive businesses.

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Table 5.67 *Welch Test Results for Miles and Snow Dimensions: Structure*

ANOVA results for MS6 structure and business type		N	Mean	F Value	Sig.
Business type	Trade	25	4,5467		
	Chemical	13	4,9487		
	Food and retailing	30	4,5222		
	Automotive	14	4,7857		
	Textile	12	4,4722	2,023	,045
	Financial services (including banking) and insurance	27	4,9877		
	Construction	17	3,9412		
	Health care	16	4,8542		
	Others	68	4,4706		
Scale: 1=Strongly disagree . . . . . 6=Strongly agree					

Hochberg's GT2 test results for MS6 structure and business type						
(I) Business type	(J) Business type	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Trade	Chemical	-,40205	,34067	1,000	-1,5023	,6982
	Food and retailing	,02444	,26980	1,000	-,8469	,8958
	Automotive	-,23905	,33257	1,000	-1,3132	,8351
	Textile	,07444	,34988	1,000	-1,0556	1,2045
	Financial services (including banking) and insurance	-,44099	,27652	,983	-1,3341	,4521
	Construction	,60549	,31319	,855	-,4061	1,6170
	Health care	-,30750	,31897	1,000	-1,3377	,7227
	Others	,07608	,23302	1,000	-,6765	,8287
Chemical	Trade	,40205	,34067	1,000	-,6982	1,5023
	Food and retailing	,42650	,33082	,999	-,6420	1,4950
	Automotive	,16300	,38373	1,000	-1,0764	1,4024
	Textile	,47650	,39883	1,000	-,8116	1,7646
	Financial services (including banking) and insurance	-,03894	,33633	1,000	-1,1252	1,0473
	Construction	1,00754	,36707	,208	-,1780	2,1931
	Health care	,09455	,37201	1,000	-1,1070	1,2961
	Others	,47813	,30158	,984	-,4959	1,4522
	Trade	-,02444	,26980	1,000	-,8958	,8469

Food and retailing	Chemical	-,42650	,33082	,999	-1,4950	,6420
	Automotive	-,26349	,32247	1,000	-1,3050	,7780
	Textile	,05000	,34030	1,000	-1,0491	1,1491
	Financial services (including banking) and insurance	-,46543	,26429	,942	-1,3190	,3882
	Construction	,58105	,30245	,862	-,3958	1,5579
	Health care	-,33194	,30842	1,000	-1,3281	,6642
	Others	,05163	,21836	1,000	-,6536	,7569
Automotive	Trade	,23905	,33257	1,000	-,8351	1,3132
	Chemical	-,16300	,38373	1,000	-1,4024	1,0764
	Food and retailing	,26349	,32247	1,000	-,7780	1,3050
	Textile	,31349	,39194	1,000	-,9524	1,5794
	Financial services (including banking) and insurance	-,20194	,32812	1,000	-1,2617	,8578
	Construction	,84454	,35956	,501	-,3168	2,0059
	Health care	-,06845	,36460	1,000	-1,2460	1,1091
	Others	,31513	,29240	1,000	-,6293	1,2595
Textile	Trade	-,07444	,34988	1,000	-1,2045	1,0556
	Chemical	-,47650	,39883	1,000	-1,7646	,8116
	Food and retailing	-,05000	,34030	1,000	-1,1491	1,0491
	Automotive	-,31349	,39194	1,000	-1,5794	,9524
	Financial services (including banking) and insurance	-,51543	,34566	,994	-1,6318	,6010
	Construction	,53105	,37564	,997	-,6822	1,7443
	Health care	-,38194	,38046	1,000	-1,6108	,8469
	Others	,00163	,31195	1,000	-1,0059	1,0092
Financial services (including banking) and insurance	Trade	,44099	,27652	,983	-,4521	1,3341
	Chemical	,03894	,33633	1,000	-1,0473	1,1252
	Food and retailing	,46543	,26429	,942	-,3882	1,3190
	Automotive	,20194	,32812	1,000	-,8578	1,2617
	Textile	,51543	,34566	,994	-,6010	1,6318
	Construction	1,04648*	,30846	,029	,0502	2,0427
	Health care	,13349	,31432	1,000	-,8817	1,1487
	Others	,51707	,22663	,563	-,2149	1,2490
Construction	Trade	-,60549	,31319	,855	-1,6170	,4061
	Chemical	-1,00754	,36707	,208	-2,1931	,1780
	Food and retailing	-,58105	,30245	,862	-1,5579	,3958
	Automotive	-,84454	,35956	,501	-2,0059	,3168
	Textile	-,53105	,37564	,997	-1,7443	,6822
	Financial services (including banking) and insurance	-1,04648*	,30846	,029	-2,0427	-,0502
	Health care	-,91299	,34702	,276	-2,0338	,2078
	Others	-,52941	,27016	,837	-1,4020	,3431

Health care	Trade	,30750	,31897	1,000	-,7227	1,3377
	Chemical	-,09455	,37201	1,000	-1,2961	1,1070
	Food and retailing	,33194	,30842	1,000	-,6642	1,3281
	Automotive]	,06845	,36460	1,000	-1,1091	1,2460
	Textile	,38194	,38046	1,000	-,8469	1,6108
	Financial services (including banking) and insurance	-,13349	,31432	1,000	-1,1487	,8817
	Construction	,91299	,34702	,276	-,2078	2,0338
	Others	,38358	,27683	,998	-,5105	1,2777
Others	Trade	-,07608	,23302	1,000	-,8287	,6765
	Chemical	-,47813	,30158	,984	-1,4522	,4959
	Food and retailing	-,05163	,21836	1,000	-,7569	,6536
	Automotive	-,31513	,29240	1,000	-1,2595	,6293
	Textile	-,00163	,31195	1,000	-1,0092	1,0059
	Financial services (including banking) and insurance	-,51707	,22663	,563	-1,2490	,2149
	Construction	,52941	,27016	,837	-,3431	1,4020
	Health care	-,38358	,27683	,998	-1,2777	,5105
* The mean difference is significant at .05 level						

Table 5.68 *ANOVA Test Results for Miles and Snow Orientations: Defender*

ANOVA results for MS Defender orientation and business type		N	Mean	F Value	Sig.
	Trade	25	3,5600		
	Chemical	13	3,3974		
	Food and retailing	30	3,2750		
	Automotive	14	3,3155		
Business type	Textile	12	3,0139	2,414	,016
	Financial services (including banking) and insurance	27	2,9043		
	Construction	17	3,6961		
	Health care	16	3,9323		
	Others	68	3,1532		
Scale: 1= Strongly disagree . . . . . 6=Strongly agree					

Hochberg's GT2 test results for MS Defender orientation and business type						
(I) Business type	(J) Business type	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
	Chemical	,16256	,32622	1,000	-,8911	1,2162
	Food and retailing	,28500	,25835	1,000	-,5494	1,1194
	Automotive	,24452	,31846	1,000	-,7840	1,2731
	Textile	,54611	,33504	,977	-,5360	1,6282
Trade	Financial services (including banking) and insurance	,65568	,26480	,391	-,1996	1,5109
	Construction	-,13608	,29991	1,000	-1,1047	,8326
	Health care	-,37229	,30544	1,000	-1,3588	,6142
	Others	,40681	,22314	,916	-,3139	1,1275
	Trade	-,16256	,32622	1,000	-1,2162	,8911
	Food and retailing	,12244	,31678	1,000	-,9007	1,1456
	Automotive	,08196	,36746	1,000	-1,1048	1,2688
	Textile	,38355	,38192	1,000	-,8500	1,6171
Chemical	Financial services (including banking) and insurance	,49311	,32206	,990	-,5471	1,5333
	Construction	-,29864	,35150	1,000	-1,4339	,8366
	Health care	-,53486	,35623	,993	-1,6854	,6157
	Others	,24425	,28879	1,000	-,6885	1,1770

Food and retailing	Trade	-,28500	,25835	1,000	-1,1194	,5494
	Chemical	-,12244	,31678	1,000	-1,1456	,9007
	Automotive	-,04048	,30879	1,000	-1,0378	,9568
	Textile	,26111	,32586	1,000	-,7914	1,3136
	Financial services (including banking) and insurance	,37068	,25308	,995	-,4467	1,1881
	Construction	-,42108	,28962	,996	-1,3565	,5143
	Health care	-,65729	,29534	,615	-1,6112	,2966
	Others	,12181	,20910	1,000	-,5535	,7972
Automotive	Trade	-,24452	,31846	1,000	-1,2731	,7840
	Chemical	-,08196	,36746	1,000	-1,2688	1,1048
	Food and retailing	,04048	,30879	1,000	-,9568	1,0378
	Textile	,30159	,37531	1,000	-,9106	1,5138
	Financial services (including banking) and insurance	,41116	,31420	,999	-,6036	1,4260
	Construction	-,38060	,34431	1,000	-1,4927	,7315
	Health care	-,61682	,34914	,940	-1,7445	,5108
	Others	,16229	,27999	1,000	-,7420	1,0666
Textile	Trade	-,54611	,33504	,977	-1,6282	,5360
	Chemical	-,38355	,38192	1,000	-1,6171	,8500
	Food and retailing	-,26111	,32586	1,000	-1,3136	,7914
	Automotive]	-,30159	,37531	1,000	-1,5138	,9106
	Financial services (including banking) and insurance	,10957	,33099	1,000	-,9595	1,1786
	Construction	-,68219	,35970	,877	-1,8440	,4796
	Health care	-,91840	,36432	,355	-2,0951	,2583
	Others	-,13930	,29872	1,000	-1,1041	,8255
Financial services (including banking) and insurance	Trade	-,65568	,26480	,391	-1,5109	,1996
	Chemical	-,49311	,32206	,990	-1,5333	,5471
	Food and retailing	-,37068	,25308	,995	-1,1881	,4467
	Automotive]	-,41116	,31420	,999	-1,4260	,6036
	Textile	-,10957	,33099	1,000	-1,1786	,9595
	Construction	-,79176	,29538	,245	-1,7458	,1623
	Health care	-1,02797*	,30099	,027	-2,0001	-,0558
	Others	-,24887	,21701	1,000	-,9498	,4520
Construction	Trade	,13608	,29991	1,000	-,8326	1,1047
	Chemical	,29864	,35150	1,000	-,8366	1,4339
	Food and retailing	,42108	,28962	,996	-,5143	1,3565
	Automotive]	,38060	,34431	1,000	-,7315	1,4927
	Textile	,68219	,35970	,877	-,4796	1,8440
	Financial services (including banking) and insurance	79176	,29538	,245	-,1623	1,7458
	Health care	-,23621	,33230	1,000	-1,3095	,8370
	Others	,54289	,25870	,729	-,2926	1,3784

Health care	Trade	,37229	,30544	1,000	-,6142	1,3588
	Chemical	,53486	,35623	,993	-,6157	1,6854
	Food and retailing	,65729	,29534	,615	-,2966	1,6112
	Automotive]	,61682	,34914	,940	-,5108	1,7445
	Textile	,91840	,36432	,355	-,2583	2,0951
	Financial services (including banking) and insurance	1,02797*	,30099	,027	,0558	2,0001
	Construction	,23621	,33230	1,000	-,8370	1,3095
	Others	,77911	,26509	,122	-,0771	1,6353
Others	Trade	-,40681	,22314	,916	-1,1275	,3139
	Chemical	-,24425	,28879	1,000	-1,1770	,6885
	Food and retailing	-,12181	,20910	1,000	-,7972	,5535
	Automotive	-,16229	,27999	1,000	-1,0666	,7420
	Textile	,13930	,29872	1,000	-,8255	1,1041
	Financial services (including banking) and insurance	,24887	,21701	1,000	-,4520	,9498
	Construction	-,54289	,25870	,729	-1,3784	,2926
	Health care	-,77911	,26509	,122	-1,6353	,0771

* The mean difference is significant at .05 level

Table 5.69 *ANOVA Test Results for Miles and Snow Orientations: Analyzer*

ANOVA results for MS analyzer orientation and business type		N	Mean	F Value	Sig.
Business type	Trade	25	4,7733		
	Chemical	13	5,0513		
	Food and retailing	30	4,5389		
	Automotive	14	4,6071		
	Textile	12	4,9444	3,088	,003
	Financial services (including banking) and insurance	27	5,1296		
	Construction	17	4,3529		
	Health care	16	5,1458		
	Others	68	4,7279		
Scale: 1=Strongly disagree ..... 6=Strongly agree					

Hochberg's GT2 test results for MS Analyzer orientation and business type						
(I) Business type	(J) Business type	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Trade	Chemical	-,27795	,24001	1,000	-1,0531	,4972
	Food and retailing	,23444	,19008	1,000	-,3795	,8483
	Automotive	,16619	,23430	1,000	-,5906	,9229
	Textile	-,17111	,24650	1,000	-,9673	,6250
	Financial services (including banking) and insurance	-,35630	,19482	,913	-,9855	,2729
	Construction	,42039	,22065	,872	-,2923	1,1330
	Health care	-,37250	,22472	,971	-1,0983	,3533
	Others	,04539	,16417	1,000	-,4848	,5756
Chemical	Trade	,27795	,24001	1,000	-,4972	1,0531
	Food and retailing	,51239	,23307	,640	-,2404	1,2651
	Automotive	,44414	,27035	,975	-,4290	1,3173
	Textile	,10684	,28099	1,000	-,8007	1,0144
	Financial services (including banking) and insurance	-,07835	,23695	1,000	-,8436	,6869
	Construction	,69834	,25861	,233	-,1369	1,5336
	Health care	-,09455	,26209	1,000	-,9410	,7519
	Others	,32334	,21247	,991	-,3629	1,0096
Food and retailing	Trade	-,23444	,19008	1,000	-,8483	,3795
	Chemical	-,51239	,23307	,640	-1,2651	,2404
	Automotive	-,06825	,22718	1,000	-,8020	,6655
	Textile	-,40556	,23975	,963	-1,1799	,3688
	Financial services (including banking) and insurance	-,59074	,18620	,060	-1,1921	,0106

	Construction	,18595	,21308	1,000	-,5022	,8741
	Health care	-,60694	,21729	,183	-1,3087	,0948
	Others	-,18905	,15384	1,000	-,6859	,3078
Automotive	Trade	-,16619	,23430	1,000	-,9229	,5906
	Chemical	-,44414	,27035	,975	-1,3173	,4290
	Food and retailing	,06825	,22718	1,000	-,6655	,8020
	Textile	-,33730	,27613	1,000	-1,2291	,5545
	Financial services (including banking) and insurance	-,52249	,23117	,583	-1,2691	,2241
	Construction	,25420	,25332	1,000	-,5640	1,0724
	Health care	-,53869	,25687	,730	-1,3683	,2909
	Others	-,12080	,20600	1,000	-,7861	,5445
Textile	Trade	,17111	,24650	1,000	-,6250	,9673
	Chemical	-,10684	,28099	1,000	-1,0144	,8007
	Food and retailing	,40556	,23975	,963	-,3688	1,1799
	Automotive]	,33730	,27613	1,000	-,5545	1,2291
	Financial services (including banking) and insurance	-,18519	,24352	1,000	-,9717	,6013
	Construction	,59150	,26464	,606	-,2632	1,4462
	Health care	-,20139	,26804	1,000	-1,0671	,6643
	Others	,21650	,21977	1,000	-,4933	,9263
Financial services (including banking) and insurance	Trade	,35630	,19482	,913	-,2729	,9855
	Chemical	,07835	,23695	1,000	-,6869	,8436
	Food and retailing	,59074	,18620	,060	-,0106	1,1921
	Automotive]	,52249	,23117	,583	-,2241	1,2691
	Textile	,18519	,24352	1,000	-,6013	,9717
	Construction	,77669*	,21732	,015	,0748	1,4786
	Health care	-,01620	,22145	1,000	-,7314	,6990
	Others	,40169	,15966	,359	-,1140	,9174
Construction	Trade	-,42039	,22065	,872	-1,1330	,2923
	Chemical	-,69834	,25861	,233	-1,5336	,1369
	Food and retailing	-,18595	,21308	1,000	-,8741	,5022
	Automotive]	-,25420	,25332	1,000	-1,0724	,5640
	Textile	-,59150	,26464	,606	-1,4462	,2632
	Financial services (including banking) and insurance	-,77669*	,21732	,015	-1,4786	-,0748
	Health care	-,79289*	,24448	,048	-1,5825	-,0033
	Others	-,37500	,19033	,830	-,9897	,2397

Health care	Trade	,37250	,22472	,971	-,3533	1,0983
	Chemical	,09455	,26209	1,000	-,7519	,9410
	Food and retailing	,60694	,21729	,183	-,0948	1,3087
	Automotive]	,53869	,25687	,730	-,2909	1,3683
	Textile	,20139	,26804	1,000	-,6643	1,0671
	Financial services (including banking) and insurance	,01620	,22145	1,000	-,6990	,7314
	Construction	,79289*	,24448	,048	,0033	1,5825
	Others	,41789	,19503	,690	-,2120	1,0478
Others	Trade	-,04539	,16417	1,000	-,5756	,4848
	Chemical	-,32334	,21247	,991	-1,0096	,3629
	Food and retailing	,18905	,15384	1,000	-,3078	,6859
	Automotive	,12080	,20600	1,000	-,5445	,7861
	Textile	-,21650	,21977	1,000	-,9263	,4933
	Financial services (including banking) and insurance	-,40169	,15966	,359	-,9174	,1140
	Construction	,37500	,19033	,830	-,2397	,9897
	Health care	-,41789	,19503	,690	-1,0478	,2120
* The mean difference is significant at .05 level						

Table 5.70 *ANOVA Test Results for Venkatraman's dimensions: Defensiveness*

ANOVA results for ST2 Defensiveness and business type		N	Mean	F Value	Sig.
Business type	Trade	25	2,9700		
	Chemical	13	3,5000		
	Food and retailing	30	3,4083		
	Automotive	14	4,0893		
	Textile	12	4,2708	2,835	,005
	Financial services (including banking) and insurance	27	3,2037		
	Construction	17	3,7206		
	Health care	16	2,9219		
	Others	68	3,2537		
Scale: 1= Strongly disagree . . . . . 6=Strongly agree					

Hochberg's GT2 test results for ST2 Defensiveness and business type						
(I) Business type	(J) Business type	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Trade	Chemical	-,53000	,38140	,998	-1,7618	,7018
	Food and retailing	-,43833	,30205	,996	-1,4139	,5372
	Automotive	-1,11929	,37233	,100	-2,3218	,0833
	Textile	-1,30083*	,39172	,037	-2,5660	-,0357
	Financial services (including banking) and insurance	-,23370	,30959	1,000	-1,2336	,7662
	Construction	-,75059	,35064	,692	-1,8831	,3819
	Health care	,04813	,35710	1,000	-1,1052	1,2015
	Others	-,28368	,26089	1,000	-1,1263	,5589
Chemical	Trade	,53000	,38140	,998	-,7018	1,7618
	Food and retailing	,09167	,37037	1,000	-1,1045	1,2879
	Automotive	-,58929	,42961	,998	-1,9768	,7983
	Textile	-,77083	,44652	,953	-2,2130	,6713
	Financial services (including banking) and insurance	,29630	,37654	1,000	-,9198	1,5124
	Construction	-,22059	,41096	1,000	-1,5479	1,1067
	Health care	,57813	,41649	,998	-,7670	1,9233
	Others	,24632	,33764	1,000	-,8442	1,3368

Food and retailing	Trade	,43833	,30205	,996	-,5372	1,4139
	Chemical	-,09167	,37037	1,000	-1,2879	1,1045
	Automotive	-,68095	,36102	,883	-1,8470	,4851
	Textile	-,86250	,38098	,579	-2,0930	,3680
	Financial services (including banking) and insurance	,20463	,29589	1,000	-,7510	1,1603
	Construction	-,31225	,33861	1,000	-1,4059	,7814
	Health care	,48646	,34530	,997	-,6288	1,6017
	Others	,15466	,24447	1,000	-,6349	,9443
Automotive	Trade	1,11929	,37233	,100	-,0833	2,3218
	Chemical	,58929	,42961	,998	-,7983	1,9768
	Food and retailing	,68095	,36102	,883	-,4851	1,8470
	Textile	-,18155	,43880	1,000	-1,5988	1,2357
	Financial services (including banking) and insurance	,88558	,36735	,446	-,3009	2,0720
	Construction	,36870	,40256	1,000	-,9315	1,6689
	Health care	1,16741	,40820	,153	-,1510	2,4858
	Others	,83561	,32736	,331	-,2217	1,8929
Textile	Trade	1,30083*	,39172	,037	,0357	2,5660
	Chemical	,77083	,44652	,953	-,6713	2,2130
	Food and retailing	,86250	,38098	,579	-,3680	2,0930
	Automotive	,18155	,43880	1,000	-1,2357	1,5988
	Financial services (including banking) and insurance	1,06713	,38698	,201	-,1827	2,3170
	Construction	,55025	,42055	,999	-,8080	1,9085
	Health care	1,34896	,42595	,061	-,0268	2,7247
	Others	1,01716	,34925	,132	-,1108	2,1451
Financial services (including banking) and insurance	Trade	,23370	,30959	1,000	-,7662	1,2336
	Chemical	-,29630	,37654	1,000	-1,5124	,9198
	Food and retailing	-,20463	,29589	1,000	-1,1603	,7510
	Automotive	-,88558	,36735	,446	-2,0720	,3009
	Textile	-1,06713	,38698	,201	-2,3170	,1827
	Construction	-,51688	,34534	,993	-1,6323	,5985
	Health care	,28183	,35191	1,000	-,8547	1,4184
	Others	-,04997	,25372	1,000	-,8694	,7695
Construction	Trade	,75059	,35064	,692	-,3819	1,8831
	Chemical	,22059	,41096	1,000	-1,1067	1,5479
	Food and retailing	,31225	,33861	1,000	-,7814	1,4059
	Automotive]	-,36870	,40256	1,000	-1,6689	,9315
	Textile	-,55025	,42055	,999	-1,9085	,8080
	Financial services (including banking) and insurance	,51688	,34534	,993	-,5985	1,6323
	Health care	,79871	,38851	,764	-,4561	2,0535
	Others	,46691	,30246	,989	-,5100	1,4438

Health care	Trade	-,04813	,35710	1,000	-1,2015	1,1052
	Chemical	-,57813	,41649	,998	-1,9233	,7670
	Food and retailing	-,48646	,34530	,997	-1,6017	,6288
	Automotive]	-1,16741	,40820	,153	-2,4858	,1510
	Textile	-1,34896	,42595	,061	-2,7247	,0268
	Financial services (including banking) and insurance	-,28183	,35191	1,000	-1,4184	,8547
	Construction	-,79871	,38851	,764	-2,0535	,4561
	Others	-,33180	,30993	1,000	-1,3328	,6692
Others	Trade	,28368	,26089	1,000	-,5589	1,1263
	Chemical	-,24632	,33764	1,000	-1,3368	,8442
	Food and retailing	-,15466	,24447	1,000	-,9443	,6349
	Automotive	-,83561	,32736	,331	-1,8929	,2217
	Textile	-1,01716	,34925	,132	-2,1451	,1108
	Financial services (including banking) and insurance	,04997	,25372	1,000	-,7695	,8694
	Construction	-,46691	,30246	,989	-1,4438	,5100
	Health care	,33180	,30993	1,000	-,6692	1,3328
* The mean difference is significant at .05 level						

Table 5.71 *ANOVA Test Results for Venkatraman's dimensions: Aggressiveness*

ANOVA results for ST3 Aggressiveness and business type		N	Mean	F Value	Sig.
Business type	Trade	25	3,4700		
	Chemical	13	3,5000		
	Food and retailing	30	2,8833		
	Automotive	14	3,3929		
	Textile	12	2,5000	3,284	,001
	Financial services (including banking) and insurance	27	2,4259		
	Construction	17	3,1324		
	Health care	16	3,0313		
	Others	68	3,3125		
Scale: 1=Strongly disagree . . . . 6=Strongly agree					

Hochberg's GT2 test results for ST3 Aggressiveness and business type						
(I) Business type	(J) Business type	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Trade	Chemical	-,03000	,35212	1,000	-1,1673	1,1073
	Food and retailing	,58667	,27886	,724	-,3140	1,4873
	Automotive	,07714	,34375	1,000	-1,0331	1,1874
	Textile	,97000	,36164	,244	-,1980	2,1380
	Financial services (including banking) and insurance	1,04407*	,28582	,012	,1209	1,9672
	Construction	,33765	,32372	1,000	-,7079	1,3832
	Health care	,43875	,32969	,999	-,6261	1,5036
	Others	,15750	,24085	1,000	-,6204	,9354
Chemical	Trade	,03000	,35212	1,000	-1,1073	1,1673
	Food and retailing	,61667	,34193	,925	-,4877	1,7210
	Automotive	,10714	,39663	1,000	-1,1739	1,3882
	Textile	1,00000	,41224	,433	-,3314	2,3314
	Financial services (including banking) and insurance	1,07407	,34763	,078	-,0487	2,1968
	Construction	,36765	,37940	1,000	-,8577	1,5930
	Health care	,46875	,38451	1,000	-,7731	1,7106
	Others	,18750	,31171	1,000	-,8193	1,1943

Food and retailing	Trade	-,58667	,27886	,724	-1,4873	,3140
	Chemical	-,61667	,34193	,925	-1,7210	,4877
	Automotive	-,50952	,33330	,991	-1,5860	,5670
	Textile	,38333	,35173	1,000	-,7527	1,5193
	Financial services (including banking) and insurance	,45741	,27317	,968	-,4249	1,3397
	Construction	-,24902	,31261	1,000	-1,2587	,7606
	Health care	-,14792	,31878	1,000	-1,1775	,8817
	Others	-,42917	,22570	,874	-1,1581	,2998
Automotive	Trade	-,07714	,34375	1,000	-1,1874	1,0331
	Chemical	-,10714	,39663	1,000	-1,3882	1,1739
	Food and retailing	,50952	,33330	,991	-,5670	1,5860
	Textile	,89286	,40511	,634	-,4156	2,2013
	Financial services (including banking) and insurance	,96693	,33914	,156	-,1284	2,0623
	Construction	,26050	,37165	1,000	-,9398	1,4608
	Health care	,36161	,37686	1,000	-,8556	1,5788
	Others	,08036	,30222	1,000	-,8958	1,0565
Textile	Trade	-,97000	,36164	,244	-2,1380	,1980
	Chemical	-1,00000	,41224	,433	-2,3314	,3314
	Food and retailing	-,38333	,35173	1,000	-1,5193	,7527
	Automotive	-,89286	,40511	,634	-2,2013	,4156
	Financial services (including banking) and insurance	,07407	,35727	1,000	-1,0798	1,2280
	Construction	-,63235	,38826	,977	-1,8863	,6216
	Health care	-,53125	,39325	,999	-1,8014	,7389
	Others	-,81250	,32243	,356	-1,8539	,2289
Financial services (including banking) and insurance	Trade	-1,04407*	,28582	,012	-1,9672	-,1209
	Chemical	-1,07407	,34763	,078	-2,1968	,0487
	Food and retailing	-,45741	,27317	,968	-1,3397	,4249
	Automotive]	-,96693	,33914	,156	-2,0623	,1284
	Textile	-,07407	,35727	1,000	-1,2280	1,0798
	Construction	-,70643	,31883	,624	-1,7362	,3233
	Health care	-,60532	,32489	,896	-1,6546	,4440
	Others	-,88657*	,23424	,007	-1,6431	-,1300
Construction	Trade	-,33765	,32372	1,000	-1,3832	,7079
	Chemical	-,36765	,37940	1,000	-1,5930	,8577
	Food and retailing	,24902	,31261	1,000	-,7606	1,2587
	Automotive]	-,26050	,37165	1,000	-1,4608	,9398
	Textile	,63235	,38826	,977	-,6216	1,8863
	Financial services (including banking) and insurance	,70643	,31883	,624	-,3233	1,7362
	Health care	,10110	,35868	1,000	-1,0574	1,2596
	Others	-,18015	,27923	1,000	-1,0820	,7217

Health care	Trade	-,43875	,32969	,999	-1,5036	,6261
	Chemical	-,46875	,38451	1,000	-1,7106	,7731
	Food and retailing	,14792	,31878	1,000	-,8817	1,1775
	Automotive]	-,36161	,37686	1,000	-1,5788	,8556
	Textile	,53125	,39325	,999	-,7389	1,8014
	Financial services (including banking) and insurance	,60532	,32489	,896	-,4440	1,6546
	Construction	-,10110	,35868	1,000	-1,2596	1,0574
	Others	-,28125	,28613	1,000	-1,2054	,6429
Others	Trade	-,15750	,24085	1,000	-,9354	,6204
	Chemical	-,18750	,31171	1,000	-1,1943	,8193
	Food and retailing	,42917	,22570	,874	-,2998	1,1581
	Automotive	-,08036	,30222	1,000	-1,0565	,8958
	Textile	,81250	,32243	,356	-,2289	1,8539
	Financial services (including banking) and insurance	,88657*	,23424	,007	,1300	1,6431
	Construction	,18015	,27923	1,000	-,7217	1,0820
	Health care	,28125	,28613	1,000	-,6429	1,2054
* The mean difference is significant at .05 level						

Table 5.72 *Welch Test Results for Performance Compared to Objectives*

Robust test of equality of means (Welch) results for PO Performance compared to objectives and business type		N	Mean	Statistic [a]	Sig.
Business type	Trade	24	4,3819		
	Chemical	13	4,7244		
	Food and retailing	30	4,4194		
	Automotive	12	4,3611		
	Textile	11	4,9924	2,733	,012
	Financial services (including banking) and insurance	27	4,6173		
	Construction	17	4,2794		
	Health care	16	4,6146		
	Others	66	4,6465		
[a] Asymptotically F distributed.					
Scale: 1=Poor . . . . . 6=Excellent					

Games-Howell test results for PO Performance compared to objectives and business type						
(I) Business type	(J) Business type	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Trade	Chemical	-,34241	,27310	,935	-1,2739	,5891
	Food and retailing	-,03750	,20027	1,000	-,6879	,6129
	Automotive	,02083	,19939	1,000	-,6403	,6819
	Textile	-,61048	,19448	,076	-1,2563	,0354
	Financial services (including banking) and insurance	-,23534	,19390	,949	-,8673	,3966
	Construction	,10253	,21133	1,000	-,5916	,7966
	Health care	-,23264	,24675	,988	-1,0529	,5876
	Others	-,26452	,17862	,858	-,8497	,3207
Chemical	Trade	,34241	,27310	,935	-,5891	1,2739
	Food and retailing	,30491	,25970	,953	-,5933	1,2032
	Automotive	,36325	,25902	,883	-,5399	1,2664
	Textile	-,26807	,25526	,975	-1,1628	,6267
	Financial services (including banking) and insurance	,10708	,25482	1,000	-,7810	,9952
	Construction	,44495	,26832	,764	-,4779	1,3678
	Health care	,10978	,29702	1,000	-,8955	1,1150
	Others	,07789	,24340	1,000	-,7870	,9428

Food and retailing	Trade	,03750	,20027	1,000	-,6129	,6879
	Chemical	-,30491	,25970	,953	-1,2032	,5933
	Automotive	,05833	,18060	1,000	-,5414	,6581
	Textile	-,57298	,17516	,056	-1,1551	,0091
	Financial services (including banking) and insurance	-,19784	,17452	,966	-,7613	,3656
	Construction	,14003	,19369	,998	-,4965	,7766
	Health care	-,19514	,23183	,994	-,9722	,5819
	Others	-,22702	,15737	,876	-,7337	,2797
Automotive	Trade	-,02083	,19939	1,000	-,6819	,6403
	Chemical	-,36325	,25902	,883	-1,2664	,5399
	Food and retailing	-,05833	,18060	1,000	-,6581	,5414
	Textile	-,63131*	,17416	,034	-1,2311	-,0316
	Financial services (including banking) and insurance	-,25617	,17351	,857	-,8366	,3243
	Construction	,08170	,19279	1,000	-,5671	,7305
	Health care	-,25347	,23107	,969	-1,0373	,5304
	Others	-,28535	,15625	,666	-,8162	,2455
Textile	Trade	,61048	,19448	,076	-,0354	1,2563
	Chemical	,26807	,25526	,975	-,6267	1,1628
	Food and retailing	,57298	,17516	,056	-,0091	1,1551
	Automotive	,63131*	,17416	,034	,0316	1,2311
	Financial services (including banking) and insurance	,37514	,16785	,411	-,1869	,9372
	Construction	,71301*	,18771	,019	,0794	1,3466
	Health care	,37784	,22685	,760	-,3947	1,1504
	Others	,34596	,14994	,376	-,1640	,8559
Financial services (including banking) and insurance	Trade	,23534	,19390	,949	-,3966	,8673
	Chemical	-,10708	,25482	1,000	-,9952	,7810
	Food and retailing	,19784	,17452	,966	-,3656	,7613
	Automotive	,25617	,17351	,857	-,3243	,8366
	Textile	-,37514	,16785	,411	-,9372	,1869
	Construction	,33787	,18710	,678	-,2803	,9560
	Health care	,00270	,22635	1,000	-,7607	,7661
	Others	-,02918	,14918	1,000	-,5098	,4515
Construction	Trade	-,10253	,21133	1,000	-,7966	,5916
	Chemical	-,44495	,26832	,764	-1,3678	,4779
	Food and retailing	-,14003	,19369	,998	-,7766	,4965
	Automotive	-,08170	,19279	1,000	-,7305	,5671
	Textile	-,71301*	,18771	,019	-1,3466	-,0794
	Financial services (including banking) and insurance	-,33787	,18710	,678	-,9560	,2803
	Health care	-,33517	,24145	,893	-1,1446	,4743
	Others	-,36705	,17122	,465	-,9386	,2045

Health care	Trade	,23264	,24675	,988	-,5876	1,0529
	Chemical	-,10978	,29702	1,000	-1,1150	,8955
	Food and retailing	,19514	,23183	,994	-,5819	,9722
	Automotive]	,25347	,23107	,969	-,5304	1,0373
	Textile	-,37784	,22685	,760	-1,1504	,3947
	Financial services (including banking) and insurance	-,00270	,22635	1,000	-,7661	,7607
	Construction	,33517	,24145	,893	-,4743	1,1446
	Others	-,03188	,21341	1,000	-,7628	,6990
Others	Trade	,26452	,17862	,858	-,3207	,8497
	Chemical	-,07789	,24340	1,000	-,9428	,7870
	Food and retailing	,22702	,15737	,876	-,2797	,7337
	Automotive	,28535	,15625	,666	-,2455	,8162
	Textile	-,34596	,14994	,376	-,8559	,1640
	Financial services (including banking) and insurance	,02918	,14918	1,000	-,4515	,5098
	Construction	,36705	,17122	,465	-,2045	,9386
	Health care	,03188	,21341	1,000	-,6990	,7628
* The mean difference is significant at .05 level						

5.6.3. Results for ANOVA Tests of Factor: Ratio of Domestic Sales to Foreign Sales

The result of ANOVA test reveals that there are significant mean differences among groups with different ratio of domestic to foreign sales. To determine among which groups the true differences are identified for ratio of domestic to foreign sales, Scheffé post hoc multiple comparison analysis has been performed. According to the results in Table 5.73 and Table 5.74, exporting companies with higher domestic sales have the best growth pattern and the highest defensiveness orientation and are significantly different from what it is in non-exporting companies.

The result of Welch test reveals that there are significant mean differences among groups with different ratio of domestic to foreign sales. To determine among which groups the true differences are identified for ratio of domestic to foreign sales, Games-Howell post hoc test has been performed. According to the results in Table 5.75, exporting companies with higher domestic sales have one of the highest market-leading strategy orientation and is significantly different from what it is for non-exporting companies.

The result of ANOVA test reveals that there are significant mean differences among groups with different ratio of domestic to foreign sales. To determine among which groups the true differences are identified for ratio of domestic to foreign sales, Hochberg's GT2 post hoc test has been performed. According to the results Table 5.76, exporting companies with higher domestic sales have the highest market-niching strategy orientation and is significantly different from what it is for non-exporting companies.

5.6.4. Results for ANOVA Tests of Factor: Years of Export History

The result of ANOVA test reveals that there are significant mean differences among groups having different years of export history. To determine among which groups the true differences are identified for 'years of export history', Scheffé post hoc test has been performed. According to the results in Table 5.77, companies with a

longer period of export history have higher analysis orientation and are significantly different from what it is in companies with shorter period of export history.

Table 5.73 *ANOVA Test Results for Miles and Snow dimensions: Growth Pattern*

ANOVA results for MS3 Growth pattern and Ratio of domestic sales to foreign sales		N	Mean	F Value	Sig.
Ratio of domestic sales to foreign sales	Totally selling to domestic markets	131	3,8874		
	Domestic sales are higher than the foreign sales	61	4,4221		
	Foreign sales are higher than the domestic sales	18	4,3889	3,956	,009
	Sales to foreign markets and domestic markets are almost equal	11	4,4091		
Scale: 1=Strongly disagree . . . . 6=Strongly agree					

Scheffe test results for MS3 Growth pattern and Ratio of domestic sales to foreign sales						
(I) Ratio of domestic sales to foreign sales	(J) Ratio of domestic sales to foreign sales	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Totally selling to domestic markets	Domestic sales are higher than the foreign sales	-,53473*	,17311	,025	-1,0225	-,0470
	Foreign sales are higher than the domestic sales	-,50148	,28074	,365	-1,2925	,2895
	Sales to foreign markets and domestic markets are almost equal	-,52169	,35058	,530	-1,5095	,4661
Domestic sales are higher than the foreign sales	Totally selling to domestic markets	,53473*	,17311	,025	,0470	1,0225
	Foreign sales are higher than the domestic sales	,03324	,29957	1,000	-,8108	,8773
	Sales to foreign markets and domestic markets are almost equal	,01304	,36583	1,000	-1,0177	1,0438
Foreign sales are higher than the domestic sales	Totally selling to domestic markets	,50148	,28074	,365	-,2895	1,2925
	Domestic sales are higher than the foreign sales	-,03324	,29957	1,000	-,8773	,8108
	Sales to foreign markets and domestic markets are almost equal	-,02020	,42741	1,000	-1,2245	1,1841
Sales to foreign markets and domestic markets are almost equal	Totally selling to domestic markets	,52169	,35058	,530	-,4661	1,5095
	Domestic sales are higher than the foreign sales	-,01304	,36583	1,000	-1,0438	1,0177
	Foreign sales are higher than the domestic sales	,02020	,42741	1,000	-1,1841	1,2245
* The mean difference is significant at .05 level						

Table 5.74 *ANOVA Test Results for Venkatraman's dimensions: Defensiveness*

ANOVA results for ST2 Defensiveness and Ratio of domestic sales to foreign sales		N	Mean	F Value	Sig.
Ratio of domestic sales to foreign sales	Totally selling to domestic markets	131	3,0954	7,156	,000
	Domestic sales are higher than the foreign sales	61	3,8361		
	Foreign sales are higher than the domestic sales	18	3,6806		
	Sales to foreign markets and domestic markets are almost equal	11	3,7727		
Scale: 1=Strongly disagree . . . . . 6=Strongly agree					

Scheffe test results for ST2 Defensiveness and Ratio of domestic sales to foreign sales						
(I) Ratio of domestic sales to foreign sales	(J) Ratio of domestic sales to foreign sales	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Totally selling to domestic markets	Domestic sales are higher than the foreign sales	-,74065*	,17261	,001	-1,2270	-,2543
	Foreign sales are higher than the domestic sales	-,58514	,27992	,227	-1,3738	,2035
	Sales to foreign markets and domestic markets are almost equal	-,67731	,34956	,292	-1,6622	,3076
Domestic sales are higher than the foreign sales	Totally selling to domestic markets	,74065*	,17261	,001	,2543	1,2270
	Foreign sales are higher than the domestic sales	,15551	,29869	,965	-,6861	,9971
	Sales to foreign markets and domestic markets are almost equal	,06334	,36476	,999	-,9644	1,0911
Foreign sales are higher than the domestic sales	Totally selling to domestic markets	,58514	,27992	,227	-,2035	1,3738
	Domestic sales are higher than the foreign sales	-,15551	,29869	,965	-,9971	,6861
	Sales to foreign markets and domestic markets are almost equal	-,09217	,42616	,997	-1,2929	1,1086
Sales to foreign markets and domestic markets are almost equal	Totally selling to domestic markets	,67731	,34956	,292	-,3076	1,6622
	Domestic sales are higher than the foreign sales	-,06334	,36476	,999	-1,0911	,9644
	Foreign sales are higher than the domestic sales	,09217	,42616	,997	-1,1086	1,2929
* The mean difference is significant at .05 level						

Table 5.75 *Welch Test Results for KT Market-Leading Strategies*

Robust test of equality of means (Welch) results for KT1 Market leading strategies and Ratio of domestic sales to foreign sales		N	Mean	Statistic [a]	Sig.
Ratio of domestic sales to foreign sales	Totally selling to domestic markets	131	3,0369	3,561	,023
	Domestic sales are higher than the foreign sales	61	3,4891		
	Foreign sales are higher than the domestic sales	18	3,2963		
	Sales to foreign markets and domestic markets are almost equal	11	3,5152		
[a.] Asymptotically F distributed.					
Scale: 1=Strongly disagree . . . . . . 6=Strongly agree					

Games-Howell test results for KT1 Market leading strategies and Ratio of domestic sales to foreign sales						
(I) Ratio of domestic sales to foreign sales	(J) Ratio of domestic sales to foreign sales	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Totally selling to domestic markets	Domestic sales are higher than the foreign sales	-,45218*	,15700	,024	-,8611	-,0432
	Foreign sales are higher than the domestic sales	-,25940	,20414	,589	-,8189	,3001
	Sales to foreign markets and domestic markets are almost equal	-,47826	,20595	,136	-1,0699	,1134
Domestic sales are higher than the foreign sales	Totally selling to domestic markets	,45218*	,15700	,024	,0432	,8611
	Foreign sales are higher than the domestic sales	,19277	,22277	,823	-,4078	,7933
	Sales to foreign markets and domestic markets are almost equal	-,02608	,22443	,999	-,6515	,5993
Foreign sales are higher than the domestic sales	Totally selling to domestic markets	,25940	,20414	,589	-,3001	,8189
	Domestic sales are higher than the foreign sales	-,19277	,22277	,823	-,7933	,4078
	Sales to foreign markets and domestic markets are almost equal	-,21886	,25960	,833	-,9329	,4951
Sales to foreign markets and domestic markets are almost equal	Totally selling to domestic markets	,47826	,20595	,136	-,1134	1,0699
	Domestic sales are higher than the foreign sales	,02608	,22443	,999	-,5993	,6515
	Foreign sales are higher than the domestic sales	,21886	,25960	,833	-,4951	,9329
* The mean difference is significant at .05 level						

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Table 5.76 *ANOVA Test Results for KT Market-Niching Strategies*

ANOVA results for KT2 Market nicher strategies and Ratio of domestic sales to foreign sales		N	Mean	F Value	Sig.
Ratio of domestic sales to foreign sales	Totally selling to domestic markets	131	2,6756		
	Domestic sales are higher than the foreign sales	61	3,2254		
	Foreign sales are higher than the domestic sales	18	2,4306	3,299	,021
	Sales to foreign markets and domestic markets are almost equal	11	3,2045		
Scale: 1=Strongly disagree . . . . . 6=Strongly agree					

Hochberg's GT2 test results for KT2 Market niching strategies and Ratio of domestic sales to foreign sales						
(I) Ratio of domestic sales to foreign sales	(J) Ratio of domestic sales to foreign sales	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Totally selling to domestic markets	Domestic sales are higher than the foreign sales	-,54984*	,20360	,044	-1,0902	-,0094
	Foreign sales are higher than the domestic sales	,24502	,33018	,974	-,6313	1,1214
	Sales to foreign markets and domestic markets are almost equal	-,52897	,41232	,737	-1,6234	,5654
Domestic sales are higher than the foreign sales	Totally selling to domestic markets	,54984*	,20360	,044	,0094	1,0902
	Foreign sales are higher than the domestic sales	,79485	,35232	,141	-,1403	1,7300
	Sales to foreign markets and domestic markets are almost equal	,02086	,43026	1,000	-1,1211	1,1629
Foreign sales are higher than the domestic sales	Totally selling to domestic markets	-,24502	,33018	,974	-1,1214	,6313
	Domestic sales are higher than the foreign sales	-,79485	,35232	,141	-1,7300	,1403
	Sales to foreign markets and domestic markets are almost equal	-,77399	,50268	,549	-2,1082	,5602
Sales to foreign markets and domestic markets are almost equal	Totally selling to domestic markets	,52897	,41232	,737	-,5654	1,6234
	Domestic sales are higher than the foreign sales	-,02086	,43026	1,000	-1,1629	1,1211
	Foreign sales are higher than the domestic sales	,77399	,50268	,549	-,5602	2,1082
* The mean difference is significant at .05 level						

Table 5.77 *ANOVA Test Results for Venkatraman's Dimensions: Analysis*

ANOVA results for ST1 Analysis and Years of export history		N	Mean	F Value	Sig.
Years of export history	0-3 years	21	3,7460		
	4-5years	12	4,1111	3,518	,034
	>5 years	60	4,3389		
Scale: 1=Strongly disagree . . . . . 6=Strongly agree					

Scheffe test results for ST1 Analysis and Years of export history						
(I) Years of export history	(J) Years of export history	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
0-3 years	4-5years	-,36508	,32065	,525	-1,1632	,4330
	>5 years	-,59286*	,22466	,035	-1,1521	-,0337
4-5years	0-3 years	,36508	,32065	,525	-,4330	1,1632
	>5 years	-,22778	,28020	,719	-,9252	,4697
>5 years	0-3 years	,59286*	,22466	,035	,0337	1,1521
	4-5years	,22778	,28020	,719	-,4697	,9252
* The mean difference is significant at .05 level						

5.6.5. Results for ANOVA Tests of Factor (Independent Variable): Ratio of Foreign-Owned Shares

The results of ANOVA tests reveal that there are significant mean differences among groups having different ratio of foreign-owned shares for various dependent variables. To determine among which groups the true differences are identified for different ratio of foreign-owned shares, Scheffé post hoc multiple comparison analyses have been performed.

According to the results provided:

a) Companies having foreign-owned shares of more than 50 percent have the highest analysis orientation and are significantly different from those companies having none (See Table 5.78).

b) Companies having no foreign-owned shares have the highest aggressiveness orientation and are significantly different from those companies having more than 50 percent foreign-owned shares (See Table 5.79).

c) Companies having foreign-owned shares of more than 50 percent have the higher analysis orientation and are significantly different from those companies having none (See Table 5.80).

d) Companies having foreign-owned shares of more than 50 percent have the highest market-leading strategic orientation and are significantly different from those companies having none. (See Table 5.81)

e) Companies having foreign-owned shares of more than 50 percent have the highest comparative performance and are significantly different from those companies having none (See Table 5.82)

f) Companies having foreign-owned shares of more than 50 percent have the highest performance compared to objectives and are significantly different from those companies having none (See Table 5.83).

g) Companies having foreign-owned shares of more than 50 percent have the highest total perceived performance and are significantly different from those companies having none (See Table 5.84).

Table 5.78 *ANOVA Test Results for Venkatraman's Dimensions: Analysis*

ANOVA results for ST1 Analysis and Ratio of foreign-owned shares		N	Mean	F Value	Sig.
Foreign owned shares	None	176	4,1061		
	%1-%50	18	4,3796	4,397	,013
	>%50	30	4,6500		
Scale: 1=Strongly disagree . . . . . 6=Strongly agree					

Scheffe test results for ST1 Analysis and Ratio of foreign-owned shares						
(I) Foreign-owned shares	(J) Foreign-owned shares	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
None	%1-%50	-,27357	,23909	,521	-,8628	,3157
	>%50	-,54394*	,19084	,019	-1,0143	-,0736
%1-%50	None	,27357	,23909	,521	-,3157	,8628
	>%50	-,27037	,28806	,644	-,9803	,4395
>%50	None	,54394*	,19084	,019	,0736	1,0143
	%1-%50	,27037	,28806	,644	-,4395	,9803
* The mean difference is significant at .05 level						

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Table 5.79 *ANOVA Test Results for Venkatraman's Dimensions: Aggressiveness*

ANOVA results for ST3 Aggressiveness and Ratio of foreign-owned shares		N	Mean	F Value	Sig.
Foreign owned shares	None	176	3,2173		
	%1-%50	18	2,9167	5,131	,007
	>%50	30	2,5750		
Scale: 1=Strongly disagree . . . . . 6=Strongly agree					

Scheffe test results for ST3 Aggressiveness and Ratio of foreign-owned shares						
(I) Foreign-owned shares	(J) Foreign-owned shares	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
None	%1-%50	,30066	,25950	,512	-,3388	,9402
	>%50	,64233*	,20713	,009	,1319	1,1528
%1-%50	None	-,30066	,25950	,512	-,9402	,3388
	>%50	,34167	,31264	,551	-,4288	1,1122
>%50	None	-,64233*	,20713	,009	-1,1528	-,1319
	%1-%50	-,34167	,31264	,551	-1,1122	,4288
* The mean difference is significant at .05 level						

Table 5.80 *ANOVA Test Results for Venkatraman's Dimensions: Proactiveness*

ANOVA results for ST5 Proactiveness and Ratio of foreign-owned shares		N	Mean	F Value	Sig.
Foreign owned shares	None	176	3,7273		
	%1-%50	18	4,3889	5,106	,007
	>%50	30	4,3167		
Scale: 1=Strongly disagree . . . . . 6=Strongly agree					

Scheffe test results for ST5 Proactiveness and Ratio of foreign-owned shares						
(I) Foreign-owned shares	(J) Foreign-owned shares	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
None	%1-%50	-,66162	,29376	,081	-1,3856	,0623
	>%50	-,58939*	,23448	,044	-1,1672	-,0115
%1-%50	None	,66162	,29376	,081	-,0623	1,3856
	>%50	,07222	,35392	,979	-,8000	,9444
>%50	None	,58939*	,23448	,044	,0115	1,1672
	%1-%50	-,07222	,35392	,979	-,9444	,8000
* The mean difference is significant at .05 level						

Table 5.81 *ANOVA Test Results for Market-Leading Strategies*

ANOVA results for KT1 Market leader strategies and Ratio of foreign-owned shares		N	Mean	F Value	Sig.
Foreign owned shares	None	176	3,1288	3,060	,049
	%1-%50	18	3,2315		
	>%50	30	3,6167		
Scale: 1=Strongly disagree . . . . . 6=Strongly agree					

Scheffe test results for KT1 Market leader strategies and Ratio of foreign-owned shares						
(I) Foreign-owned shares	(J) Foreign-owned shares	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
None	%1-%50	-,10269	,24742	,918	-,7124	,5071
	>%50	-,48788*	,19749	,049	-,9746	-,0012
%1-%50	None	,10269	,24742	,918	-,5071	,7124
	>%50	-,38519	,29810	,435	-1,1198	,3495
>%50	None	,48788*	,19749	,049	,0012	,9746
	%1-%50	,38519	,29810	,435	-,3495	1,1198
* The mean difference is significant at .05 level						

Table 5.82 *ANOVA Test Results for Comparative Performance*

ANOVA results for Comparative performance and Ratio of foreign-owned shares		N	Mean	F Value	Sig.
Foreign owned shares	None	176	4,2931	4,729	,010
	%1-%50	18	4,5397		
	>%50	30	4,7238		
Scale: 1=Poor . . . . . . 6=Excellent					

Scheffe test results for Comparative performance and Ratio of foreign-owned shares						
(I) Foreign-owned shares	(J) Foreign-owned shares	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
None	%1-%50	-,24654	,18530	,414	-,7032	,2102
	>%50	-,43066*	,14797	,016	-,7954	-,0660
%1-%50	None	,24654	,18530	,414	-,2102	,7032
	>%50	-,18413	,22306	,712	-,7339	,3657
>%50	None	,43066*	,14797	,016	,0660	,7954
	%1-%50	,18413	,22306	,712	-,3657	,7339
* The mean difference is significant at .05 level						

Table 5.83 *ANOVA Test Results for Performance compared to objectives*

ANOVA results for Performance compared to objectives and Ratio of foreign-owned shares		N	Mean	F Value	Sig.
Foreign owned shares	None	176	4,4878		
	%1-%50	18	4,6944	4,318	,014
	>%50	30	4,8736		
Scale: 1=Poor . . . . . 6=Excellent					

Scheffe test results for Performance compared to objectives and Ratio of foreign-owned shares						
(I) Foreign-owned shares	(J) Foreign-owned shares	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
None	%1-%50	-,20663	,16999	,479	-,6256	,2124
	>%50	-,38575*	,13777	,021	-,7253	-,0462
%1-%50	None	,20663	,16999	,479	-,2124	,6256
	>%50	-,17912	,20585	,685	-,6865	,3283
>%50	None	,38575*	,13777	,021	,0462	,7253
	%1-%50	,17912	,20585	,685	-,3283	,6865
* The mean difference is significant at .05 level						

Table 5.84 *ANOVA Test Results for Total Perceived Performance*

ANOVA results for Total perceived performance and Ratio of foreign-owned shares		N	Mean	F Value	Sig.
Foreign owned shares	None	176	4,4391		
	%1-%50	18	4,6243	3,728	,026
	>%50	29	4,8002		
Scale: 1=Poor . . . . . . 6=Excellent					

Scheffe test results for Total perceived performance and Ratio of foreign-owned shares						
(I) Foreign-owned shares	(J) Foreign-owned shares	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
None	%1-%50	-,18529	,17037	,554	-,6052	,2347
	>%50	-,36117*	,13809	,035	-,7016	-,0208
%1-%50	None	,18529	,17037	,554	-,2347	,6052
	>%50	-,17588	,20624	,696	-,6843	,3325
>%50	None	,36117*	,13809	,035	,0208	,7016
	%1-%50	,17588	,20624	,696	-,3325	,6843
* The mean difference is significant at .05 level						

5.6.6. Results for ANOVA Tests of Factor (Independent Variable): Number of Employees

The results of ANOVA tests reveal that there are significant mean differences among groups having different number of employees for various dependent variables. To determine among which groups the true differences are identified for different number of employees, Scheffé post hoc multiple comparison analyses have been performed.

According to the results provided:

a) Companies having more than 500 employees are much less-centralized in performance evaluation and are significantly different from those companies having less than 100 employees (See Table 5.85).

b) Companies having more than 500 employees have the highest proactiveness orientation and are significantly different from those companies having 50-100 employees (See Table 5.86).

c) Companies having more than 500 employees have the highest market-leading strategic orientation and are significantly different from those companies having less than 50 employees (See Table 5.87).

d) Companies having less than 50 employees have the highest market-niching strategic orientation and are significantly different from those companies having more than 500 employees (See Table 5.88).

e) Companies having more than 500 employees have the highest overall performance and are significantly different from those companies having less than 50 employees (See Table 5.89).

f) Companies having more than 500 employees have the highest comparative performance and are significantly different from those companies having less than 100 employees (See Table 5.90).

g) Companies having more than 500 employees have the highest performance compared to objectives and are significantly different from those companies having less than 50 employees (See Table 5.91).

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h) Companies having more than 500 employees have the highest total perceived performance and are significantly different from those companies having less than 100 employees See Table 5.92).

Table 5.85 *ANOVA Test Results for Miles and Snow's Performance evaluation*

ANOVA results for MS4 Performance evaluation and Number of employees		N	Mean	F Value	Sig.
Number of employees	<50 50-100 101-250 251-500 >500	92 30 43 25 34	2,9783 3,4222 2,3101 2,4000 2,1373	7,275	,000
Scale: 1=Strongly disagree . . . . . 6=Strongly agree					

Scheffe test results for MS4 Performance evaluation and Number of employees						
(I) Number of employees	(J) Number of employees	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
<50	50-100 101-250 251-500 >500	-,44396 ,66818 ,57826 ,84101*	,25337 ,22262 ,27181 ,24187	,547 ,064 ,342 ,019	-1,2311 -,0234 -,2662 ,0896	,3432 1,3598 1,4227 1,5924
50-100	<50 101-250 251-500 >500	,44396 1,11214* 1,02222* 1,28497*	,25337 ,28668 ,32635 ,30187	,547 ,006 ,047 ,002	-,3432 ,2215 ,0084 ,3472	1,2311 2,0028 2,0361 2,2228
101-250	<50 50-100 251-500 >500	-,66818 -1,11214* -,08992 ,17282	,22262 ,28668 ,30310 ,27657	,064 ,006 ,999 ,983	-1,3598 -2,0028 -1,0315 -,6864	,0234 -,2215 ,8517 1,0320
251-500	<50 50-100 101-250 >500	-,57826 -1,02222* ,08992 ,26275	,27181 ,32635 ,30310 ,31750	,342 ,047 ,999 ,953	-1,4227 -2,0361 -,8517 -,7236	,2662 -,0084 1,0315 1,2491
>500	<50 50-100 101-250 251-500	-,84101* -1,28497* -,17282 -,26275	,24187 ,30187 ,27657 ,31750	,019 ,002 ,983 ,953	-1,5924 -2,2228 -1,0320 -1,2491	-,0896 -,3472 ,6864 ,7236
* The mean difference is significant at .05 level						

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Table 5.86 *ANOVA Test Results for Venkatraman's Proactiveness Dimension*

ANOVA results for ST5 Proactiveness and Number of employees		N	Mean	F Value	Sig.
Number of employees	<50	92	3,7717		
	50-100	30	3,3000		
	101-250	43	3,9070	3,675	,006
	251-500	25	4,0600		
	>500	34	4,3824		
Scale: 1=Strongly disagree . . . . . 6=Strongly agree					

Scheffe test results for ST5 Proactiveness and Number of employees					95% Confidence Interval	
(I) Number of employees	(J) Number of employees	Mean Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
<50	50-100	,47174	,24825	,463	-,2995	1,2430
	101-250	-,13524	,21812	,984	-,8129	,5424
	251-500	-,28826	,26631	,882	-1,1156	,5391
	>500	-,61061	,23698	,160	-1,3468	,1256
50-100	<50	-,47174	,24825	,463	-1,2430	,2995
	101-250	-,60698	,28088	,326	-1,4796	,2656
	251-500	-,76000	,31975	,231	-1,7534	,2334
	>500	-1,08235*	,29577	,011	-2,0012	-,1635
101-250	<50	,13524	,21812	,984	-,5424	,8129
	50-100	,60698	,28088	,326	-,2656	1,4796
	251-500	-,15302	,29697	,992	-1,0756	,7696
	>500	-,47538	,27098	,546	-1,3172	,3665
251-500	<50	,28826	,26631	,882	-,5391	1,1156
	50-100	,76000	,31975	,231	-,2334	1,7534
	101-250	,15302	,29697	,992	-,7696	1,0756
	>500	-,32235	,31108	,898	-1,2888	,6441
>500	<50	,61061	,23698	,160	-,1256	1,3468
	50-100	1,08235*	,29577	,011	,1635	2,0012
	101-250	,47538	,27098	,546	-,3665	1,3172
	251-500	,32235	,31108	,898	-,6441	1,2888
* The mean difference is significant at .05 level						

Table 5.87 *ANOVA Test Results for KT Market-Leading Strategies*

ANOVA results for KT1 Market leading strategies and Number of employees		N	Mean	F Value	Sig.
Number of employees	<50 50-100 101-250 251-500 >500	92 30 43 25 34	2,9855 3,3000 3,1938 3,1933 3,7206	3,529	,008
Scale: 1=Strongly disagree ..... 6=Strongly agree					

Scheffe test results for KT1 Market leading strategies and Number of employees						
(I) Number of employees	(J) Number of employees	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
<50	50-100 101-250 251-500 >500	-,31449 -,20829 -,20783 -,73508*	,20749 ,18231 ,22259 ,19807	,682 ,860 ,928 ,009	-,9591 -,7747 -,8993 -1,3504	,3301 ,3581 ,4837 -,1197
50-100	<50 101-250 251-500 >500	,31449 ,10620 ,10667 -,42059	,20749 ,23477 ,26725 ,24721	,682 ,995 ,997 ,577	-,3301 -,6231 -,7236 -1,1886	,9591 ,8356 ,9369 ,3474
101-250	<50 50-100 251-500 >500	,20829 -,10620 ,00047 -,52679	,18231 ,23477 ,24821 ,22649	,860 ,995 1,000 ,252	-,3581 -,8356 -,7707 -1,2304	,7747 ,6231 ,7716 ,1768
251-500	<50 50-100 101-250 >500	,20783 -,10667 -,00047 -,52725	,22259 ,26725 ,24821 ,26001	,928 ,997 1,000 ,394	-,4837 -,9369 -,7716 -1,3350	,8993 ,7236 ,7707 ,2805
>500	<50 50-100 101-250 251-500	,73508* ,42059 ,52679 ,52725	,19807 ,24721 ,22649 ,26001	,009 ,577 ,252 ,394	,1197 -,3474 -,1768 -,2805	1,3504 1,1886 1,2304 1,3350
* The mean difference is significant at .05 level						

Table 5.88 *ANOVA Test Results for KT Market-Niching Strategies*

ANOVA results for KT2 Market nicher strategies and Number of employees		N	Mean	F Value	Sig.
Number of employees	<50 50-100 101-250 251-500 >500	92 30 43 25 34	3,2147 2,8583 2,6105 2,6400 2,1618	4,691	,001
Scale: 1=Strongly disagree . . . . . 6=Strongly agree					

Scheffe test results for KT2 Market niching strategies and Number of employees						
(I) Number of employees	(J) Number of employees	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
<50	50-100 101-250 251-500 >500	,35634 ,60421 ,57467 1,05291*	,27367 ,24046 ,29358 ,26125	,791 ,181 ,432 ,003	-,4939 -,1428 -,3374 ,2413	1,2066 1,3512 1,4867 1,8645
50-100	<50 101-250 251-500 >500	-,35634 ,24787 ,21833 ,69657	,27367 ,30965 ,35250 ,32606	,791 ,958 ,984 ,338	-1,2066 -,7141 -,8768 -,3164	,4939 1,2099 1,3134 1,7095
101-250	<50 50-100 251-500 >500	-,60421 -,24787 -,02953 ,44870	,24046 ,30965 ,32738 ,29873	,181 ,958 1,000 ,689	-1,3512 -1,2099 -1,0466 -,4794	,1428 ,7141 ,9875 1,3768
251-500	<50 50-100 101-250 >500	-,57467 -,21833 ,02953 ,47824	,29358 ,35250 ,32738 ,34294	,432 ,984 1,000 ,746	-1,4867 -1,3134 -,9875 -,5872	,3374 ,8768 1,0466 1,5436
>500	<50 50-100 101-250 251-500	-1,05291* -,69657 -,44870 -,47824	,26125 ,32606 ,29873 ,34294	,003 ,338 ,689 ,746	-1,8645 -1,7095 -1,3768 -1,5436	-,2413 ,3164 ,4794 ,5872
* The mean difference is significant at .05 level						

Table 5.89 *ANOVA Test Results for Overall Performance*

ANOVA results for Overall performance and Number of employees		N	Mean	F Value	Sig.
Number of employees	<50	92	4,4185	3,224	,013
	50-100	30	4,4333		
	101-250	43	4,6395		
	251-500	25	4,4800		
	>500	34	4,9853		
Scale: 1= Poor . . . . . 6=Excellent					

Scheffe test results for Overall performance and Number of employees						
(I) Number of employees	(J) Number of employees	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
<50	50-100	-,01486	,17467	1,000	-,5575	,5278
	101-250	-,22106	,15347	,722	-,6978	,2557
	251-500	-,06152	,18738	,999	-,6436	,5206
	>500	-,56682*	,16674	,023	-1,0848	-,0488
50-100	<50	,01486	,17467	1,000	-,5278	,5575
	101-250	-,20620	,19763	,896	-,8202	,4078
	251-500	-,04667	,22497	1,000	-,7456	,6523
	>500	-,55196	,20810	,138	-1,1985	,0945
101-250	<50	,22106	,15347	,722	-,2557	,6978
	50-100	,20620	,19763	,896	-,4078	,8202
	251-500	,15953	,20895	,965	-,4896	,8087
	>500	-,34576	,19066	,512	-,9381	,2466
251-500	<50	,06152	,18738	,999	-,5206	,6436
	50-100	,04667	,22497	1,000	-,6523	,7456
	101-250	-,15953	,20895	,965	-,8087	,4896
	>500	-,50529	,21888	,259	-1,1853	,1747
>500	<50	,56682*	,16674	,023	,0488	1,0848
	50-100	,55196	,20810	,138	-,0945	1,1985
	101-250	,34576	,19066	,512	-,2466	,9381
	251-500	,50529	,21888	,259	-,1747	1,1853
* The mean difference is significant at .05 level						

Table 5.90 *ANOVA Test Results for Comparative Performance*

ANOVA results for Comparative performance and Number of employees		N	Mean	F Value	Sig.
Number of employees	<50	92	4,1429	7,591	,000
	50-100	30	4,2333		
	101-250	43	4,4898		
	251-500	25	4,4524		
	>500	34	4,9034		
Scale: 1=Poor . . . . . 6=Excellent					

Scheffe test results for Comparative performance and Number of employees					95% Confidence Interval	
(I) Number of employees	(J) Number of employees	Mean Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
<50	50-100	-,09048	,15135	,986	-,5607	,3798
	101-250	-,34694	,13411	,157	-,7636	,0697
	251-500	-,30952	,16497	,477	-,8221	,2030
	>500	-,76050*	,14450	,000	-1,2095	-,3115
50-100	<50	,09048	,15135	,986	-,3798	,5607
	101-250	-,25646	,17185	,694	-,7904	,2775
	251-500	-,21905	,19688	,871	-,8308	,3927
	>500	-,67003*	,18008	,009	-1,2295	-,1105
101-250	<50	,34694	,13411	,157	-,0697	,7636
	50-100	,25646	,17185	,694	-,2775	,7904
	251-500	,03741	,18395	1,000	-,5341	,6090
	>500	-,41357	,16585	,188	-,9289	,1017
251-500	<50	,30952	,16497	,477	-,2030	,8221
	50-100	,21905	,19688	,871	-,3927	,8308
	101-250	-,03741	,18395	1,000	-,6090	,5341
	>500	-,45098	,19166	,240	-1,0465	,1445
>500	<50	,76050*	,14450	,000	,3115	1,2095
	50-100	,67003*	,18008	,009	,1105	1,2295
	101-250	,41357	,16585	,188	-,1017	,9289
	251-500	,45098	,19166	,240	-,1445	1,0465
* The mean difference is significant at .05 level						

Table 5.91 *ANOVA Test Results for Performance Compared to Objectives*

ANOVA results for Performance compared to objectives and Number of employees		N	Mean	F Value	Sig.
Number of employees	<50 50-100 101-250 251-500 >500	90 30 40 24 34	4,3741 4,5028 4,6875 4,4549 5,0025	6,075	,000
Scale: 1=Poor . . . . . 6=Excellent					

Scheffe test results for Performance compared to objectives and Number of employees						
(I) Number of employees	(J) Number of employees	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
<50	50-100 101-250 251-500 >500	-,12870 -,31343 -,08079 -,62838*	,14040 ,12656 ,15300 ,13406	,933 ,194 ,991 ,000	-,5650 -,7067 -,5562 -1,0450	,3076 ,0798 ,3946 -,2118
50-100	<50 101-250 251-500 >500	,12870 -,18472 ,04792 -,49967	,14040 ,16085 ,18239 ,16682	,933 ,858 ,999 ,066	-,3076 -,6846 -,5188 -1,0181	,5650 ,3151 ,6147 ,0187
101-250	<50 50-100 251-500 >500	,31343 ,18472 ,23264 -,31495	,12656 ,16085 ,17195 ,15535	,194 ,858 ,767 ,394	-,0798 -,3151 -,3017 -,7977	,7067 ,6846 ,7670 ,1678
251-500	<50 50-100 101-250 >500	,08079 -,04792 -,23264 -,54759	,15300 ,18239 ,17195 ,17755	,991 ,999 ,767 ,053	-,3946 -,6147 -,7670 -1,0993	,5562 ,5188 ,3017 ,0041
>500	<50 50-100 101-250 251-500	,62838* ,49967 ,31495 ,54759	,13406 ,16682 ,15535 ,17755	,000 ,066 ,394 ,053	,2118 -,0187 -,1678 -,0041	1,0450 1,0181 ,7977 1,0993
* The mean difference is significant at .05 level						

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Table 5.92 *ANOVA Test Results for Total Perceived Performance*

ANOVA results for Total perceived performance and Number of employees		N	Mean	F Value	Sig.
Number of employees	<50 50-100 101-250 251-500 >500	90 30 40 24 34	4,3192 4,3898 4,6238 4,4691 4,9637	6,365	,000
Scale: 1=Poor . . . . . 6=Excellent					

Scheffe test results for Total perceived performance and Number of employees						
(I) Number of employees	(J) Number of employees	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
<50	50-100 101-250 251-500 >500	-,07057 -,30457 -,14984 -,64446*	,14013 ,12635 ,15267 ,13382	,993 ,218 ,915 ,000	-,5060 -,6972 -,6243 -1,0603	,3649 ,0881 ,3246 -,2286
50-100	<50 101-250 251-500 >500	,07057 -,23399 -,07927 -,57389*	,14013 ,16031 ,18178 ,16627	,993 ,712 ,996 ,020	-,3649 -,7322 -,6442 -1,0906	,5060 ,2642 ,4856 -,0572
101-250	<50 50-100 251-500 >500	,30457 ,23399 ,15473 -,33989	,12635 ,16031 ,17138 ,15483	,218 ,712 ,936 ,310	-,0881 -,2642 -,3779 -,8210	,6972 ,7322 ,6873 ,1413
251-500	<50 50-100 101-250 >500	,14984 ,07927 -,15473 -,49462	,15267 ,18178 ,17138 ,17696	,915 ,996 ,936 ,103	-,3246 -,4856 -,6873 -1,0445	,6243 ,6442 ,3779 ,0553
>500	<50 50-100 101-250 251-500	,64446* ,57389* ,33989 ,49462	,13382 ,16627 ,15483 ,17696	,000 ,020 ,310 ,103	,2286 ,0572 -,1413 -,0553	1,0603 1,0906 ,8210 1,0445
* The mean difference is significant at .05 level						

VI. SUMMARY, DISCUSSION AND CONCLUSION

This chapter presents summary of the overall research findings and discussion on these findings and conclusions, and delivers implications of these findings and conclusions for the academics and managers.

The purpose of this research is to study relationship between strategic orientation and business performance, and to investigate how business performance varies across different approaches, distinct typologies and dimensions of strategic orientation and marketing strategies, and if marketing strategies mediate this relationship and if this relationship is affected by the dynamics of industry characteristics, as surveyed on Turkish enterprises at SBU level.

In this study, marketing strategy stands as being representative for functional strategies comprising also human resources strategy, financial strategies, and manufacturing strategies and similar.

The design of theoretical framework has been based on structural contingency theory which basically underlines that there is no best strategy for all of the business units and posits that the optimal option of strategy depends on certain conditions, termed contingency factors.

The conceptual models of the study developed within the contingency theory have followed the systems model to involve the main contingency factors that have been included in Ginsberg and Venkatraman's (1985) contingency review. As the study includes two distinct approaches with three different settings of the construct "strategic orientation", there are in fact in this study three models being studied simultaneously and separately: (a) Venkatraman's (1989) STROBE model, (b) Miles and Snow's (1978) adaptive cycle model on typological dimensions, (c) Miles and Snow's adaptive cycle model on typological orientations.

The research models include marketing strategies also as mediator in the relationship (Baron and Kelly, 1986; Venkatraman, 1989a) between strategic orientation and performance, and it corresponds to the process (functional) element of the systems

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model as a contingency factor in this context as positioned in Figure 3.1. The concept of marketing behavior to be incorporated in this study has been based on the roles firms play in their target market (Biggadike, 1981) and are viewed not across their strategic roles but along parsimonious classificatory dimensions based on Kotler's marketing strategies: market-leading strategies, market-niching strategies, market-challenging/ aggressor strategies, market-challenger/ sweeping strategies, market-follower/imitating strategies, market-follower/adapting strategies.

The models accommodate industrial characteristics of competitive intensity, market turbulence, and technological turbulence as environmental variables reflecting industrial organization theory (Porter, 1981) that has enriched the environmental (industrial) dimensions by stressing the importance of external factors. Performance is based on managerial perception of the key informants as compared to levels achieved by competitors and business objectives targeted.

The study is carried out with Turkish enterprises and the sample framework is intended to represent as wide a range as possible. The enterprises that are registered with Chambers associated with TOBB Union of Turkish Chambers and Bourses is the population of the study and the purposive sample has been formed to serve as the data base for the research. The author has intended to include a broad mix of organizations in size, region and export orientation to insure generalizability with as wide coverage as possible in business sectors-industries such as services and manufacturing sectors, regional representation, ownership (domestic and foreign capital), old and new generations. A list of the firms in the sample is provided in Appendix 3.

In the following sections, findings on the frequencies for key informants and company characteristics, on the central tendencies for items of strategic orientation with classificatory approach in dimensions, for items of classificatory approach in orientations together with items of Venkatraman's dimensions, for items of performance, marketing strategies, and industry characteristics are specified and discussed. Findings on the factor and reliability analyses are reviewed and discussed. Findings on multiple regression analyses, on independent sample t-Tests and on ANOVA tests are submitted and discussed. Discussion and conclusions on hierarchical

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regression analyses to test the models followed by mediated hierarchical analyses to test mediation effect of marketing strategies on the strategic orientation-performance relationship are presented. Overall discussion and conclusion are provided and implications for the academics and managers are conveyed.

6.1. Summary of the Findings

This section presents summary of the overall research findings and complementary discussion on these findings wherever their immediate contribution is more appropriate.

6.1.1. Findings on Turkish Enterprises

The result of categorizing the enterprises on *company type* reveals that 97.3 percent of enterprises are corporations; 98 percent of the participants are private corporations. The *company age* appears to crowd between 6-25 years with an average of fourteen years while 58.1 percent is a mix of companies very young (1-5 years) and very old (56-150 years).

About a quarter of private companies have foreign-shares in their *capital structure*. More than two-thirds of the companies having foreign shares has fifty percent or more of the shares and are expected to be controlled by these majorities. This is also in agreement with the increase in foreign-capital investments in Turkey during past several years. A company's receipt of foreign investment is perceived as a sign of well-managed business. Results on *the geographical distribution* where companies operate captures the focus of economic activities being in Istanbul with 91.5 percent of the companies operating in Istanbul region, irrespective of where else they operate. About forty-five percent of the companies operate in Istanbul region only, reflecting economic activity map of Turkish enterprises.

With respect to *their core businesses,* the findings reveal that about sixty-three percent are service companies and thirty-seven percent are manufacturers. This is also in parallel with general acceptance of economic activities being concentrated more in services sector and less in manufacturing sector in terms of GDP. In general, the higher

growth of service sector compared to manufacturing sector is a good indication of economic wealth, and in more developed countries it accounts for more than seventy-five per cent of the GDP (Gray and Hooley, 2002).

The business activity types that the companies are involved indicate a wide distribution with the major share of about thirty percent being the others. With respect to *industry type,* about forty-two percent of the companies deal with services, followed by 13.4 percent of companies that deal in providing FMCG fast moving consumer goods. These results do reiterate findings of preceding results of services sector having the largest share of businesses. Putting together 10.7 percent share of wholesale and distribution activities and 41.5 percent share of services and considering parts of other activities being services activities, the total share reaches sixty-three percent for services that equals the corresponding share obtained in the study of business sectors.

Regarding *number of employees,* also a reliable indicator of organization size (Smith *et* al, 1989), about forty percent of the companies have employees less than fifty; about thirty percent of the companies have employees more than seven hundred-fifty; however, number of employees in the second group is at least more than five times the number of employees in the first group.

Export orientation of companies in terms of export history, export intensity, relative share of exports and administrative structuring in export operations is a valuable measure in assessing how companies' behavior is modified when faced with global competition. About two thirds of companies involved in export have more than five years of export history. Regarding *export intensity,* about seventy percent of those forty-three percent who are involved in exports, is regularly involved in export activities. This is in congruence with the increasing levels of export activities in Turkey.

With respect to *ratio of domestic sales to export sales,* the ratios of those companies who are totally selling to foreign market are relatively low. About two thirds of exporting companies are mainly trading in domestic markets and exporting in lesser ratios. Only about twelve percent of exporting companies are doing larger amount of business in foreign markets than in domestic markets.

About half of the export-oriented companies have an *export department* and a quarter of the companies' export is handled by their marketing departments and the rest is being managed by their general managers or company owners themselves. The administrative structuring is a sign of company policy in export and reveals a good sign on its standing (Kotler, 1975); it appears that export operations of these companies receive at large dedicated attention.

Descriptive statistics do not indicate any troublesome anomalies associated with the sample, and findings are of much interest and value. Observing the sample as a whole, there is a great deal of variability between the respondents. It is concluded that descriptive findings on the company characteristics are in general quite agreeable with the research design.

6.1.2. Findings on Key Informants/Managers

Titles of key informants are quite diverse and qualified. About thirty-two percent of respondents are of top management while twenty-two percent of the respondents hold senior management post for functional divisions/departments. Eighteen percent of respondents are managers for functional departments while about thirteen percent of the respondents are Owner-managers and Share Holder-Managers. The majority of respondents were chief administrators. In smaller companies, high ranking executives often assume leadership for the strategy/marketing functions, which explains their participation in the survey. This is a good result of participation level from companies for a survey of strategy. Most of the respondents hold key posts as to strategy formation and/or implementation. Only four key respondents have a position as strategy manager.

About forty-one percent of the *respondents* have marketing-sales expertise, a good sign of being market-oriented company and a quite appropriate mix for a business and marketing research survey. About twenty-two percent of the respondents have production-technology background while seventeen percent of the respondents have expertise in finance and accounting. *The responding manager's area of expertise* gives an indication of his mental model used for evaluation.

It was required that key informant should hold college *education* as a minimum. The results are quite appropriate for this survey with a high level of education. About 25 percent of respondents have a post-graduate education while a total of about 85 percent have post-graduate or graduate education. Only 2.6 percent of respondents hold lower levels of education

In summary, majority of respondents hold qualified positions indicating that they should have the broad knowledge required to answer the survey questions. It is concluded that descriptive findings on characteristics of the key informants are in general quite agreeable with the research design.

6.1.3. Findings for Descriptives of Strategic Orientation

This section summarizes the descriptives for independent variable 'strategic orientation construct'. The construct has been operationalized with both of classificatory approach (Miles and Snow, 1978) and comparative approach (Venkatraman, 1989). The following part will recapitulate on Miles and Snow typologies that will be followed by Venkatraman's comparative approach.

6.1.3.1. Findings for Strategic Orientation: Miles and Snow's Typologies

Miles and Snow's (1978) typologies in classificatory approach for strategic orientation have been operationalized with three key dimensions (entrepreneurial, engineering, and administrative). Miles and Snow's model has four typologies: prospector orientation, defender orientation, analyzer orientation and reactor orientation. Overall responses reveal higher prospector orientation and lower defender, analyzer and reactor orientation for the sample. The enterprises in general are watchful for new products and market development; they give importance to examine changes in their environment and do not agree with either keeping a limited line of products or matching competitors' innovation by offering similar but low-cost products. This is an impressive finding as it appears that the Turkish businesses have in general preferred orientations for business success and again contrary to expectations do not display mimetic behavior.

	Average Score	Entrepreneurial Dimension	Engineering Dimension	Administrative Dimension	Environmental Monitoring
Prospector	4.32	4.24	4.71	4.17	5.17
Analyzer	4.13	4.23	4.43	3.87	4.43
Defender	3.92	3.74	4.49	4.20	2.65
Reactor	3.68	3.60	4.17	3.60	3.61

Table 6.1 *A Comparison Summary for Miles and Snow's Typological Orientations*

Table 6.1 also reveals important results confirming Miles and Snow's typologies' stated behaviors in the literature. Miles and Snow confirm that the typologies are on a continuum, and average scores, in this study as shown in the above table, are in a row highest with prospector orientation and lowest with the reactor orientation, and therefore the proposition is confirmed here as well.

Entrepreneurial dimension score high with prospector and analyzer while low for both defender and reactor orientations. This is the major dimension and demonstrates the qualities of prospectors with being the first to develop new products/markets. Results for environmental monitoring reveal that prospectors are always in search of inventiveness, very attentive to market moves versus defenders who are more like being in a closed system having not much interest in events outside of their narrow market.

6.1.3.2. Findings for Strategic Orientation: Venkatraman's STROBE Dimensions

Venkatraman has modeled six dimensions to operationalize strategic orientation: aggressiveness, analysis, defensiveness, proactiveness, futurity, riskiness. It is a robust model with high empirical value in literature and differs from Miles and Snow's model as it is not attached to any particular theory. The findings reflect similar results obtained in Miles and Snow model. The sample' orientation is positive with analysis, futurity, and proactiveness while negative with aggressiveness, defensiveness, and riskiness. It is also concluded that descriptive findings on the strategic orientation here reveal an impressive finding as it appears that the Turkish businesses have in

general preferred orientations for business success. Congruence in findings from both approaches noted.

6.1.4. Findings for Descriptives of Business Performance

Overall performance with respect to comparative performance and performance compared to objectives score high. The companies participating in survey are generally satisfied with their performance. Being an average, this may be taken as to represent good performance. Comparative performance comprises of market share and growth in market share, sales' volume and growth in sales' volume, return rate on assets and return rate on investment, and product or service quality compared to competitors and its scores confirm good performance; 'product/service quality' is especially high, revealing how sectors have raised quality standards. Performance compared to objectives comprises of customer satisfaction and customer retention, market share and growth in market, sales volume and growth in sales volume, return rate on assets and return rate on investment compared to objectives. Again performance compared to objectives confirm good performance; 'customer satisfaction' and 'customer retention' have higher scores emphasizing better customer orientation in the sample.

Performance items over the past three years reveal impressive positive gains reflecting high GDP growth in the country. Along years 2004, 2005, 2006 performance increase has been at record levels.

It is concluded that rates in both perceived performance and objective performance (with limited measure) in general are high. The values of performance compared to objectives, performance compared to competitors, and overall performance values have similar average scores as may be observed in following Table 6.2.

Performance scale	Average score
Performance compared to competitors	4.38
Performance compared to objectives	4.43
Overall performance compared to competitors	4.58
Overall performance compared to objectives	4.54

Table 6.2 *A Comparison Summary for Performance Scores*

6.1.5. Findings for Descriptives of Marketing Strategies

It is concluded that no marketing strategy as per *a priori* premises is a dominant orientation of the sample; this reveals that orientations are spread and not concentrated at any one. Market-leading strategies with a score of 3.44 and market-niching strategy of 3.09 indicates firms' tendencies.

Marketing Strategies	Market share position	Marketing objectives	Strategic focus	Average score
Market-Leading Strategies (L)	3.14	3.23	3.53	3.44
Market-Challenging Strategies (C)	2.21	2.07	2.70	2.47
Market-Following Strategies (F)	2.40	1.75	1.79	1.91
Market-Niching Strategies (N)	2.16	5.08	2.83	3.09

Table 6.3 *A Comparison Summary for Kotler's Marketing Strategies*

Table 6.3 also reveals important results confirming Kotler's typologies' stated behaviors in the literature (Kotler, 1984). While market-leading (L) has the highest market share orientation as expected, market-niching (N) has the lowest market share as it is focused in a narrow segment of the market; market-challenging (C), and market-following have low market-share orientations as also stated in the literature. Market-niching (N) orientation has the highest focus in marketing objectives, illustrative of its character; while again market-follower (F) and market-challenging (C) orientations have relatively lower marketing objectives' score. Market-leading (L) and market-niching (N) strategies have higher strategic focus than the others. Higher average scores for market-leading (L) and market-niching (N) strategies reveal determination in their marketing strategies.

6.1.6. Findings for Descriptives of Environmental Variables

For the key environmental variables, *competitive intensity* results reveal that the markets in general are competitive; *market turbulence* results indicate market volatility and *technological turbulence* results reflect presence of higher than average dynamism.

6.1.7. Findings for Factor and Reliability Analyses

This section discusses results of factor analysis of the scales used in the research.

6.1.7.1. Findings for Factor and Reliability Analyses of Strategic Orientation

The scale for Miles and Snow's typologies has been developed on basis of organizational adaptation theory. Since no *a priori* single or fixed classification scheme has been imposed on the design, contrary to self-typing paragraph approach (McKee *et al*, 1989; James and Hatten, 1995; Matsuno and Mentzer, 2000; Slater and Olson, 2000), it has been most inclusive to contain those existing variables in the literature plus other elements produced as a result of further operationalization by the author.

For Miles and Snow typologies in dimensions, variables have been developed for each typology separately; the analysis has eliminated reoccurring themes around key concepts of entrepreneurial, engineering and administrative for each of the typologies by reduction. The analysis produced seven factors that have been labeled:

a) Factor 1- *Competitive edge (competitive stance)*
b) Factor 2- *Focus of planning (effective planning)*
c) Factor 3- *Growth pattern (positive)*
d) Factor 4- *Product mix (limited range)*
e) Factor 5- *Performance evaluation (centralized)*
f) Factor 6- *Structure (classical but prospective)*
g) Factor 7- *Competitive cost (low cost)*

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The scale has ended up with lesser number of variables.

The scale for Miles and Snow's typologies in orientations has taken a typological approach and focus on determining dimensions (factors) not across all the typologies together but instead within each typology as a group separately, each typology representing an orientation: prospector orientation, defender orientation, analyzer orientation, reactor orientation. For every orientation, a different factor analysis is carried out.

For prospector orientation, two factors have been produced:

a) Factor 1-*Prospector orientation 1* and
b) Factor 2- *Prospector orientation 2*.

For defender orientation, two factors have been produced:

a) Factor 1- *Defender orientation 1* and
b) Factor 2- *Defender orientation 2*.

For analyzer orientation one factor remained with six variables.

Factor analysis for reactor orientation has ended with exclusion of the dimension.

This scale has resulted as per findings in the literature. In agreement with findings in descriptive results, reactor orientation has been excluded. This is an interesting result for a sample of Turkish enterprises.

The scale for Venkatraman's dimensional approach has six key dimensions. It is a robust model and differs from Miles and Snow typologies as it is not attached to any particular theory but eclectic in source, grounding on empirical works in the literature. Venkatraman divided the body of strategy research in two *interrelated streams the substantive* (e.g. Miles and Snow model) and *the measurement i.e. construct validation* (STROBE model). His model has a strong empirical backing.

Venkatraman's original scale has six dimensions of aggressiveness, analysis, defensiveness, futurity, proactiveness, and riskiness; factor analysis has eliminated riskiness dimension leaving five dimensions. Riskiness dimension has been known as controversial in the literature as to whether it should be replaced by risk awareness. Otherwise, the dimensions have proved to be in congruence with reported findings in the literature. The results appear to yield better support for the dimensions than Morgan and Strong' study (1998) where only analysis dimension, futurity dimension, and proactiveness dimension are found to be related with performance and Morgan and Strong' study (2003) where only analysis dimension, defensiveness dimension and futurity dimension are found to be related with performance.

6.1.7.2. Findings for Factor and Reliability Analyses of Industry Characteristics

Key dimensions of industrial characteristics have been well tested in the literature. However, findings on the descriptive results have revealed some peculiarities. The author has decided to carry out factor and reliability analysis for environmental variables as well.

This scale has three key dimensions eighteen items adapted from DeSarbo (2005) who was particularly concerned how the changes in the environment would effect Miles and Snow's (1978) typological behaviors. It is similar to Jaworski and Kohli's (1993) dimensions. The analyses will focus on determining divergences described in the foregoing paragraph. For each of key dimensions, separate factor and reliability analyses are carried out.

Factor and reliability analyses have restructured the key dimensions of competitive intensity, market turbulence, and technological turbulence by extracting one of the elements for each dimension and so have eliminated the peculiarities.

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6.1.7.3. Findings for Factor and Reliability Analyses of Kotler's Marketing Strategies

This scale has four parsimonious typological orientations based on Kotler's marketing strategies: market leading strategies, market challenging strategies, market following strategies, market niching strategies developed by the author. All the dimensions have resulted as preconceived with market-following strategies and market-challenging strategies ending with expansion in two orientations each:

a) Factor 1: *Market-leading strategies*
b) Factor 2: *Market-niching strategies*;
c) Factor 3: *Market-follower/imitating strategies*
d) Factor 4: *Market-follower/adapting strategies*
e) Factor 5: *Market-challenging/aggressor strategies*
f) Factor 6: *Market-challenger/sweeping strategies*

6.1.8. Findings for Regression Results

To determine whether the proposed fundamental analysis model (s) have exploratory power, multiple regression analyses and mediated regression analyses are performed for each of three models separately and presented below in following parts.

6.1.8.1. Findings for Hierarchical Regression and Mediation Results for Model A (M&S Typologies in Dimensions)

The hierarchical multiple regression analysis has been carried out to test the model on predictive power of strategic orientation construct in Miles and Snow's typologies in dimensions in explaining variance in business performance. This methodology allows to sequentially introduce different blocks of variables and to check their respective explanatory capacities. The results indicate that environmental variables have lesser degree of predictive contribution 3.6 percent to business performance while strategic orientation has 39.1 percent and KT marketing strategies has 14.1 percent with total of 56.8 percent contribution to total exploratory power of the model. This supports the major hypothesis H_1 of the study that there is a positive relationship between strategic orientation (Miles and Snow's typologies in dimensions) and business

performance. This result also supports the fit of the newly developed dimensions for Miles and Snow's typologies and newly developed KT marketing strategies and its role as intervening variable.

For strategic orientation construct in Miles and Snow's typologies in dimensions' model, mediation analysis for marketing strategies has been carried out. Regression of business performance on strategic orientation has produced statistically significant model; regression of business performance on marketing strategies has produced statistically significant model supporting H_3; regression of marketing strategies on strategic orientation has produced statistically significant model supporting H_4; regression of business performance on strategic orientation and marketing strategies has produced statistically significant model supporting H_2 concluding existence of partial mediation of marketing strategies.

6.1.8.2. Findings for Hierarchical Regression and Mediation Results for Model B (M&S Typologies in Orientations)

The hierarchical multiple regression analysis has been carried out to test the model on predictive power of strategic orientation construct in Miles and Snow's typologies in orientations in explaining variance in business performance. The results indicate that environmental variables have lesser degree of predictive contribution of 3.6 percent to business performance while strategic orientation has 35.7 percent and KT marketing strategies has 16.1 percent with total of 55.4 percent contribution to total exploratory power of the model. This supports the major hypothesis H_5 of the study that there is a positive relationship between strategic orientation (Miles and Snow's typologies in orientations) and business performance. This result also supports the fit of the newly developed dimensions for Miles and Snow's typologies and newly developed KT marketing strategies and its role as intervening variable.

For strategic orientation construct in Miles and Snow's typologies in orientations' model, mediation analysis for marketing strategies has been carried out. Regression of business performance on strategic orientation has produced statistically significant model; regression of business performance on marketing strategies has

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produced statistically significant model supporting H_7; regression of marketing strategies on strategic orientation has produced statistically significant model supporting H_8; regression of business performance on strategic orientation and marketing strategies has produced statistically significant model supporting H_6 concluding existence of partial mediation of marketing strategies.

6.1.8.3. Findings for Hierarchical Regression and Mediation Results for Model C (Venkatraman's STROBE)

The hierarchical multiple regression analysis has been carried out to test the model on predictive power of strategic orientation construct in Venkatraman's STROBE dimensions' in explaining variance in business performance. The results indicate that environmental variables have lesser degree of predictive contribution 3.6 percent to business performance while strategic orientation has 32.5 percent and KT marketing strategies has 15.3 percent with total of 51.4 percent contribution to total exploratory power of the model. This supports the major hypothesis H_9 of the study that there is a positive relationship between strategic orientation (Venkatraman's STROBE dimensions) and business performance.

This result being in congruence with newly developed Miles and Snow's typologies both in dimensions and orientations also supports the fit of the Model A and Model B and newly developed KT marketing strategies and its role as mediating variable.

For strategic orientation construct in Venkatraman's STROBE dimensions, mediation analysis for marketing strategies has been carried out. Regression of business performance on strategic orientation has produced statistically significant model; regression of business performance on marketing strategies has produced statistically significant model supporting H_{11}; regression of marketing strategies on strategic orientation has produced statistically significant model supporting H_{12}; regression of business performance on strategic orientation and marketing strategies has produced statistically significant model supporting H_{10} concluding existence of partial mediation of marketing strategies.

6.1.8.4. Findings for Correlational Analyses

Overall research findings of correlational analyses are provided in this part. Correlational analyses' results with dependent variable 'performance' in each of the Model A, Model B, and Model C are in congruence with respect to industry characteristics where only market turbulence has some correlation with performance. This is in parallel with the findings obtained in hierarchical regression analyses where only market turbulence has a positive impact and technological turbulence has a negative impact in the analyses in models I and none survived in models III. The results pertaining to marketing strategies obtained in Model A, Model B, Model C are also in congruence with each other, where market-leading strategy orientation, market-challenging/aggressor strategy orientation are in positive correlation with performance, and market-follower/imitating strategy orientation and market-challenger/ sweeping strategy orientation are in negative correlation with performance.

Miles and Snow's dimensions appear to vary across marketing strategy orientations as expected. While for market-follower/adapting strategy reveals no significant relationship with strategic orientation, market-follower/imitating strategy has significant relationship with three variables of product mix, competitive cost, and competitive edge.

Similarly, the variables of Miles and Snow' orientations appear to vary across marketing strategy orientations as expected. While for market-follower/adapting strategy reveals no significant relationship with strategic orientation, market-follower/imitating strategy has significant relationship with three variables of defender orientation I, prospector orientation I, and analyzer orientation.

The variables of Venkatraman's dimensions appear to vary across marketing strategy orientations as expected, and not correlated well with the marketing strategies. Market-follower/adapting strategy, market-challenger/sweeping strategy, market-challenging/ aggressor strategy have no significant relationship with Venkatraman's dimensions. Market-follower/imitating strategy has significant relationship with defensiveness dimension and aggressiveness dimension, market-niching strategy has

significant relationship with futurity dimension, market-leading strategy has significant relationship with analysis dimension, defensiveness dimension, and proactiveness dimension.

It is interesting to note that market-follower/adapting strategy appears to have significant relationship with none of the strategic orientation variables.

6.1.9. Findings for Independent Sample t-Tests

The section further investigates if differences in means between distinct groups of the sample exist; independent sample t-tests have been carried out.

6.1.9.1. Findings for Independent Sample t-Test between Groups for Company Types and Economic Sector

Company type is being inquired; corporations, being investment oriented, usually correspond to higher grade of formalization in Turkey. Also, economic sector is being inquired in order to find out whether two basic economic sectors are the reason of significant differences in means of variables of the study. The results reveal that incorporations perform better than limited companies both in total performance and comparative performance while limited companies have higher defender orientation than incorporations, meaning that limited companies prefer to maintain their present market, and incorporations have propensity for developing new markets. Limited companies have higher aggressiveness in their approach to the market than incorporations have; also, limited companies prefer to act with market-niching strategies more than incorporations do, indicating that limited companies are more inclined to use focus strategy (Porter, 1980). Performance evaluation appears to be more centralized in limited companies and less so in incorporations.

The competitive edge (competitive orientation) is more developed in services sector companies and less so in manufacturing sector companies while manufacturing companies have higher defensiveness character in their approach to the market than services companies.

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6.1.9.2. Findings for Independent Sample t-Tests within the Groups

For each variable of study in this section, two groups are created with a cutoff point of 3.0 on a scale ranging from 1 to 6 to investigate if there is a significant difference of means between these two groups. The results reveal that companies with high growth pattern perform better than those with low growth pattern while companies who score low in defender orientation or defensiveness dimension perform better than those who score high. Further, companies with high proactiveness perform better than those with low. Performance of companies which are focused in competitive cost score less than those which are not, while companies less centralized on their performance evaluation perform better than those more centralized.

The results indicate that high scorers in market-leading strategies and market-follower/adapting strategies perform better than those score low while low scorers market-challenger/sweeping strategies perform better than those score high.

6.1.10. Findings for ANOVA Test Results

One-way ANOVA tests for industry type, business type, ratio of domestic sales to foreign sale, years of export history, ratio of foreign-owned shares, and number of employees are conducted to carry investigations on the sample to identify specific between-group mean differences across the variables being studied. Those analyses that contribute to knowledge on the companies and that may guide further analyses in the future are described.

The result of ANOVA and Welch tests reveal:

1. Defensiveness character of consumer non-durables industry companies is the highest among others and is significantly different from those in services sector.

2. Companies in capital goods industry has the lowest effectiveness in market-challenging (sweeping) strategy behavior and is significantly different from those in consumer non-durables (which are of the highest effectiveness), wholesale and distribution, and services industries.

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3. Structure of financial services (including banking) and insurance has the best internal fit and is significantly different from those in construction business.

4. Defender orientation of health care business has the highest orientation and is significantly different from those in financial services (including banking) and insurance.

5. Analyzer orientation of health care business has the highest orientation and is significantly different from those in construction business; also financial services (including banking) and insurance' orientation is significantly different from those in construction business.

6. Defensiveness orientation of textile business is the highest and is significantly different from those in trade.

7. Aggressiveness orientation of trade is the highest and is significantly different from those in financial services (including banking) and insurance.

8. Textile's performance (compared to objectives) is the highest and is significantly different from what it is for construction and automotive businesses.

9. Exporting companies with higher domestic sales have the best growth pattern and the highest defensiveness orientation and are significantly different from what it is for non-exporting companies.

10. Exporting companies with higher domestic sales have one of the highest market-leading strategy orientations and is significantly different from what it is for non-exporting companies.

11. Exporting companies with higher domestic sales have the highest market-niching strategy orientation and is significantly different from what it is for non-exporting companies.

12. Companies with a longer period of export history have higher analysis orientation and are significantly different from what it is in companies with shorter period of export history.

13. Companies having foreign-owned shares of more than fifty percent have the highest analysis orientation and are significantly different from those companies having none.

14. Companies having no foreign-owned shares have the highest aggressiveness orientation and are significantly different from those companies having more than 50 percent foreign-owned shares.

15. Companies having foreign-owned shares of more than fifty percent have the higher analysis orientation and are significantly different from those companies having none.

16. Companies having foreign-owned shares of more than fifty percent have the highest market-leading strategic orientation and are significantly different from those companies having none.

17. Companies having foreign-owned shares of more than fifty percent have 'the highest total perceived performance', 'the highest comparative performance', and 'the highest performance compared to objectives' and are significantly different from those companies having none.

18. Companies having more than 500 employees are much less-centralized in performance evaluation and are significantly different from those companies having less than 100 employees.

19. Companies having more than 500 employees have the highest proactiveness orientation and are significantly different from those companies having 50-100 employees.

20. Companies having more than 500 employees have the highest market-leading strategic orientation and are significantly different from those companies having less than 50 employees.

21. Companies having less than 50 employees have the highest market-niching strategic orientation and are significantly different from those companies having more than 500 employees.

22. Companies having more than 500 employees have the highest overall performance and are significantly different from those companies having less than 50 employees.

23. Companies having more than 500 employees have the highest total perceived performance and the highest comparative performance and are significantly different from those companies having less than 100 employees.

24. Companies having more than 500 employees have the highest performance compared to objectives and are significantly different from those companies having less than 50 employees.

The results fully conform to findings in literature as also described in this study. The conclusions are factor specific. Number of employees, also a reliable indicator of organization size (Smith *et* al, 1989), has been a source of differentiation in seven statements above. It appears that companies having more than five hundred employees and/or companies with more than fifty percent foreign shares perform better in all respects than having otherwise.

6.2. Discussion and Conclusions on the Models

In this section, discussion and conclusions on the models based on overall study findings will be presented. The association between organizational configurations and performance has become a central and controversial focus of research in the strategic management literature (Ketchen *et al*, 1997). Recently there are various calls for methodological triangulation approaches (Dahlstrom *et al*, 2008; Nwokah, 2008), and in this investigation Miles and Snow's typological approach has been facilitated in dual methods and it appears to be the first study facilitating both methods in utilizing Miles and Snow typologies simultaneously on the same sample. Using both methods of Miles and Snow typological approach together with Venkatraman's STROBE comparative approach simultaneously provides means of comparison which is of considerable interest. This arrangement in present investigation scheduled in 2004 is partially in response to calls for some consensus on the strategic orientation-business performance relationship by some authors like Morgan and Strong (2003) who have contended that debates were basically due to *conflicting theoretical perspectives, contrasting basis for operationalization, measurement, and associated methodological*

considerations. Following discussions will also review these aspects as necessary in subsequent parts.

The discussion and conclusion will be presented for each model separately and there will be a part following them with an overview and comments including comparison between the models. In the first model A, discussions pertaining to repeating issues common to all models will be presented and they shall not be repeated in subsequent models B and C.

6.2.1. Discussion and Conclusions on Model A (M&S Typologies in Dimensions)

One of the inquiries of this investigation lies with how the impact of strategic orientation on business performance varies with different approaches interpreted from existing literature and developed in this study. Classificatory approach of Model A has been built upon Miles and Snow's (1978) adaptive model based on organizational theory with typologies in dimensions: entrepreneurial dimension, engineering dimension and administrative dimension. After comparing with Etzioni (1961), Blau and Scott (1962), Chandler (1962), Anderson and Paine (1975), Snow and Hrebiniak (1980) identifies Miles and Snow's typology as "… the only one that characterizes an organization as a complete system, especially its strategic orientation". Snow and Hrebiniak (1980) also appears to be the first study where self-typing paragraph approach has been used where top managers assessed the strategies of their own organizations using descriptions of the four strategies provided. Authors of the studies involving strategic orientation of organizations as one of the constructs in the literature have mostly employed self-typing approach and descriptive paragraphs of Snow and Hrebiniak (McDaniel and Kolari, 1987; Zajac and Shortell, 1989; McKee *et al*, 1989; Golden, 1992; James and Hatten, 1995; Slater and Olson, 2000; Matsuno and Mentzer, 2000; O'Regan and Ghobadian, 2006). There were several authors (Segev, 1987; Smith *et al*, 1989; Conant *et al*, 1993; Morgan and Strong, 1998; Desarbo *et al*, 2004; Moore, 2005) who were not satisfied with this single variable approach and still opt to employ M&S typologies with multiple variables in their studies; Segev (1987), Conant *et al* (1990), DeSarbo *et al* (2005) seem to be the only authors who have developed their

scales of strategic orientation based on M&S typologies that rest of the authors have used as multiple variable scale for the typologies. The variables of Segev (1987), Conant *et al* (1990) and DeSarbo (2005) have been incorporated in scale building in this study simultaneously as to develop one combination of scale together with variables developed by the author adapted from Miles and Snow model. For example, mean reliability result in Segev's (1987) study with nine-item scale was Cronbach's alpha 0.69, and Conant *et al*'s (1990) most extensive study with eleven dimensions was Cronbach's alpha 0.63 while reliability in this study with seven dimensions is 0.807. The scale has been developed with fifty-three variables (fifty-five statements in Turkish version of the instrument) after factor and reliability analyses finalized with twenty-six variables and seven factors. Hence, the scale developed in this study appears to be most comprehensive multiple-variable scale developed for the typology.

The hierarchical multiple regression model explains 56.8 percent of variance with only four dimensions. The major share of strategic orientation's positive contribution (β=0.336) belongs to *competitive edge* that includes those variables of reflecting how the company monitors the competition and intends to be successful versus competitors representing key concept of *entrepreneurial orientation* of the firm. This is in accordance with literature where entrepreneurial orientation items have been major concern of study. Self-typing paragraph descriptions are mainly focused on entrepreneurial characteristics of the enterprises with the complete exclusion of the two other dimensions of the adaptive cycle (Snow and Hrebiniak, 1980; Slater and Olson, 2001). Structure (with respect to internal alignment) and focus of planning (characteristics of company's propensity in making plans related to where its focus and effectiveness are), being representative of administrative dimension, have also considerable share of contribution together in total (β=0.395). Poor product mix has a minor negative contribution (β=-0.104). This result indicates that single item scales may not be capable of producing satisfactory results as they neglect this dimension. Engineering dimension appears not to have any effect in the variance of business performance.

Hierarchical regression analysis has a quality of integrating more than one construct in explaining variance in dependent variable similar to Structural Equation

Modeling analysis. The approach of including all the constructs involved together is also substantiated with the findings of James and Hatten (1994) whose study highlights *… it is not the main effects of ... strategy or environment that explains the performance ... but the interactions between them.* The model has integrated both independent variables of business strategies (strategic orientation) and marketing strategies (marketing orientation) as intervening variable together with environmental variables as controlling variables in explaining variance in business performance.

Marketing strategy (marketing orientation), the other independent variable in this study, is the most commonly employed concept in explaining how marketing management functions; it lacks deserved empirical study (Biggadike, 1981; Slater and Olson, 2001), when compared e.g. with business strategy which has Miles and Snow (1978) and Porter (1980) strategy typologies. El-Ansary (2006) has similar findings: *the marketing literature is replete with normative and positive theoretical and empirical research-based papers and articles ... albeit ... marketing strategy did not rise to the status of a sub-discipline of marketing ... the concept of marketing strategy lacks clarity* ... Hence, the typology of marketing strategies has received little attention till now. The existing ones have been mostly borrowed from management as in the examples of Miles and Snow (1978), Porter(1980) or have been produced without enough replication as in the examples of Slater and Olson (2000), Treacy and Wiersema (1993). Extensive literature review does not reveal any study neither in operationalization of Kotler's marketing strategies, nor in studies involving multivariate analysis of the same. The development and design of a new battery of dimensions of Kotler's marketing strategies by the author based on definitions and descriptions of Kotler's (1984, 1997), Dibb *et al* (1997), Kotler and Armstrong (1999) fills this gap recognized for a long time. It appears to be the first time that Kotler's marketing strategies are operationalized and empirically tested.

The scale of marketing strategies for this study has been developed by the author with twenty-eight questions. There are four typological orientations (dimensions) of this construct: market-leading strategies, market-challenging strategies, market-following strategies, market-niching strategies similar to prospector-defender-analyzer-reactor orientations of Snow and Miles's (1978) typologies and aggressiveness-

defensiveness-analysis-proactiveness-futurity-riskiness dimensions of Venkatraman's (1989) model.

Market-leading strategies is a dimension representing leader's orientation in marketing management operationalized as being number one with the largest share in the market. Market-challenging strategies is a dimension representing aggressor's orientation who are not the market leaders, operationalized as being a runner-up or trailing firm, keen to fight hard to increase market share. Market-following strategies is a dimension representing follower's orientation (following the market leader) operationalized as being an imitator and a low-share competitor with no intention to overtake the leader. Market-niching strategies is a dimension representing nicher's orientation (target segments within segments) operationalized as being a player targeting a smaller customer base with distinct needs of goods or services.

As per regression analysis results, marketing strategies in totality contributes 0.141 percent to explain variance in business performance. Market-leading strategies is the major positive contributor with ($\beta=0.343$). This reflects market leader strategic orientation receiving the major market share and better overall performance as confirmed with results of descriptive analysis. Market-follower/adapting strategies also contribute positively with minor shares whereas market-niching strategies and market-follower/imitating strategies have little and negative contribution in business performance.

With respect to environmental variables, contrary to researchers' postulation that the different environmental circumstances may be conducive to certain strategic orientation (e.g. Hambrick, 1983), industry characteristics in this study appear to have no impact in explaining performance. This may appear to be surprising at first sight; however this finding is no exception. Jaworski and Kohli (1993), being cited as the originators of environmental variables of market turbulence, competitive intensity, and technological turbulence have found out in their study that these environmental variables appear to have no moderating effect on market orientation and performance relationship; the results appear to reflect no change in the results due to industry variables. In resemblance, McKee *et al* (1989) has concluded that market environment

in more volatile market conditions appears to have less evidence for its impact on strategy-performance relationship. Zahra and Pearce (1990) on the basis of their extensive review of the studies have results indicating "…a lack of overall association between the characteristics of the industry and the representation of different strategic types". James and Hatten's (1994) study in evaluating the performance effects of typologies in banking has also demonstrated that the theory supporting Miles and Snow (1978) is inadequate in turbulent environment. DeSarbo (2005) has also concluded that low statistical associations exist between Miles and Snow taxonomy and environmental conditions. Miller and Friesen (1983) have also studied the linkage between strategy-making and the environment; the findings reveal partial and tentative support in the successful companies while support has been missing at large in the unsuccessful firms. On basis of findings of Zajac and Shortell (1989), the author of this study conjectures that the environmental impact on performance should be studied over a longitudinal time-frame.

Mediated hierarchical regression analysis in this study has provided the means to validate whether marketing strategies are in fact mediating the impact of strategic behavior of the enterprise on its business performance. This relationship represents the generative mechanism through which the focal independent variable influences the dependent variable. As per findings of extensive literature survey carried out for this study, the long time accepted proposition of fit as per contingency theory (Segev, 1987; Venkatraman, 1989) involving business strategies and marketing strategies, as functional strategies to serve the implementation of business strategies, has not been empirically tested previously. Morgan and Strong (1998) have also found out that studies have tended to adopt a *ceteris paribus* approach and neglect the potential mediating effects. The example that may be sighted as coming nearest to studying the relationship between these variables is Slater and Olson's (2001) works where they have studied match of business strategies and marketing strategies in connection with best performance results with ANOVA analysis at a much simpler level. The results in this study confirm partial mediation of newly developed marketing strategies' variable as a mediator of strategic orientation of M&S's typologies in dimensions with impact on business performance. Partial mediation raises thoughts on the possibility that other

functional strategies such as human resources management strategies and manufacturing strategies may be sharing rest of the mediation.

6.2.2. Discussion and Conclusions on Model B (M&S Typologies in Orientations)

Classificatory approach of Model B similar to Model A has been built upon Miles and Snow's (1978) model based on organizational theory however with typologies in orientations. The basic introduction of Miles and Snow model is also shared here with Model A. The analysis in this section takes a typological approach and focus on determining dimensions (factors) not across all the typologies together but instead within each typology as a group separately, each typology representing an orientation as such prospector orientation, defender orientation, analyzer orientation, and reactor orientation. For every orientation, a different factor analysis is carried out.

Out of fifty-three variables (fifty-five statements), for prospector orientation two factors survived factor and reliability analysis, for defender orientation two factors, for analyzer orientation one factor has survived while reactor orientation has exhausted itself resulting in its exclusion.

The hierarchical multiple regression model explains 55.4 percent of variance with only two dimensions. The share of strategic orientation's positive contribution belongs to *prospective orientation-1* and *analyzer orientation* of strategic orientation, total contribution of which is 39.3 percent. As per regression analysis results, marketing strategies in totality contributes 16.1 percent to explain variance in business performance. Market-leading strategies is the major positive contributor with (β=0.349). This reflects market leader strategic orientation receiving the major market share and better overall performance as confirmed with results of descriptive analysis. Market-follower/adapting strategies also contribute positively with minor shares whereas market-niching strategies and market-follower/imitating strategies have little and negative contribution in business performance.

A similar study has been undertaken by Moore (2005) where the applicability of Miles and Snow strategic typology in retail organizations in U.S. was investigated on

empiric basis. A two stage structural equation model reveals that two pure types (prospector orientation with positive contribution and reactor orientation with negative contribution) and a hybrid type analyzer/defender orientation with positive contribution have been supported in the model. The hybrid choice has been imposed because each orientation on its own has collapsed during the analyses. Prospector orientation carries the same type of contribution in both models while reactor strategy has been totally dismissed in Turkish experience.

Industry characteristics in this study appear to have no impact in explaining performance.

The results confirm partial mediation of newly developed marketing strategies' variable as a mediator of strategic orientation of M&S's typologies in dimensions with impact on business performance.

6.2.3. Discussion and Conclusions on Model C (Venkatraman's STROBE Dimensional Model)

The comparative approach has been often associated with Venkatraman (1985)'s theoretical framework of conceptualizing strategic orientation. Its basic tenet is identifying the key traits (dimensions) of the strategic orientation common to all firms. Versus the typological approach, the scope is less on typologies and more on variations along characteristics (dimensions) that jointly identify between strategies. Strategy is assessed on the basis of relative emphasis placed by the firm along each strategic orientation dimension (Morgan and Strong (2003),

Five dimensions with twenty variables out of twenty-six variables have been produced excluding riskiness dimension only. The model explains 51.4 percent of variance with the major share of positive contribution belonging to *analysis* and *proactiveness* dimensions. *Futurity* has also positive contribution while aggressiveness has a negative contribution and defensiveness is not significant. The contribution of strategic orientation only in this study is (R^2=0.325 and F=14.640). Morgan and Strong (2003) has carried out a similar study however without a mediator on a total of 149 medium and large, high technology, industrial manufacturing firms in U.K. and their

study revealed significant results for *analysis* and *defensiveness* and no significant result for aggressiveness, futurity, proactiveness and riskiness with (R^2=0.11and F=4.48). Apparently, this study has stronger results in comparison with Morgan and Strong (2003). Analysis is a strong predictor of business performance in both researches. The Turkish sample has significant results for proactiveness for a developing economy while U.K. as most developed economy has significant results for defensiveness. Another study carried out by Morgan and Strong (1998) is on market orientation's relationship with strategic orientation that has been operationalized on Venkatraman's (1989) model utilized in this study. Interestingly, they have found support for relationships for analysis dimensions, futurity dimension and proactiveness dimension while relationship for aggressiveness dimension, defensiveness dimension and riskiness dimension have not been supported, in total resemblance to findings in this study. It was not possible to compare reliability findings with Venkatraman's (1989) study because he utilized an alternate conceptualization of reliability following Werts, Linn and Jorekog's (1974) ρ_c instead of Cronbach's α coefficient (Cronbach, 1951) and the analyses have been focused on relationships between the dimensions and on simpler performance findings on profitability (Chakravarthy, 1986) without regression tests. Otherwise, no similar type of research in the literature has been located.

Venkatraman (1989) has recommended that all six dimensions comprise strategic orientation construct in overall although each may have different contributions. Hence hierarchical multiple regression analysis was used and the results indicate that marketing strategies in totality contributes 0.153 percent to explain variance in business performance.

Market-leading strategy is the major positive contributor while market-follower/imitating strategies contribute mostly negatively. This reflects market leader strategic orientation receiving the major market share and better overall performance as confirmed with results of descriptive analysis. Market-follower/adapting strategies also contribute positively with minor shares whereas market-nicher strategies have a negative contribution in business performance.

With respect to environmental variables, industry characteristics in this study appear to have no impact in explaining performance.

The results confirm partial mediation of newly developed marketing strategies' variable as a mediator of strategic orientation of M&S's typologies in dimensions with impact on business performance.

6.2.4. Overall Discussion and Conclusions on Models A, B and C

In this part, regression results of the models are compared with respect to implications of their strength and other recognitions first, and then findings of mediation analyses in models on a comparative basis and their impacts on the theory are discussed.

In connection with regression findings in model A, Miles and Snow typologies in seven dimensions have predicted business performance with $R^2=0.568$ whereas in Model C, Venkatraman's STROBE dimensions with five dimensions have predicted business performance in the same questionnaire with $R^2=0.514$. On the basis of this comparison, it may be concluded that newly developed Miles and Snow typologies have a higher explanatory power than Venkatraman's STROBE model well-established in literature for this study.

In Model B, Miles and Snow typologies in three orientations (five dimensions) have predicted business performance with $R^2=0.554$ whereas in Model C, Venkatraman's STROBE dimensions with five dimensions have predicted business performance in the same questionnaire and simultaneously with $R^2=0.514$. On the basis of this comparison, it may be concluded that newly developed Miles and Snow typologies have a higher explanatory power than Venkatraman's STROBE model well-established in literature for this study.

Regression analyses' results with dependent variable 'performance' in each of the Model A, Model B, and Model C are in congruence with respect to industry characteristics where market turbulence has a positive impact in the regression and technological turbulence has a negative impact in the regression analyses in models I and none survived in models III. It is concluded that industry environment has not

survived in the regression analyses in all three models. This is an interesting result that industry environment appears to have no impact on strategic orientation with respect to its performance as Porter (1980) within the context of theory of firm has found that performance is a function of firm conduct and industry structure. According to James and Hatten (1994), *a popular theory postulates that performance is a function of strategy and environment*. However, this finding is no exception as explained preceding parts.

Regression analyses' results with dependent variable performance in each of the Model A, Model B, and Model C are in congruence with respect to marketing strategy orientations where market-leading strategy orientation, and market-follower/adapting strategy orientation have positive contribution and at about the same level in all models, and market-niching strategy orientation and market-follower/imitating strategy orientation have all negative contribution in all models. Therefore, the impact of marketing strategies in the models is concluded.

In each of the research models, mediation effects of marketing strategies have been concluded with partial mediation. Partial mediation indicates that the effect of X (strategic orientation) on Y (business performance) has not decreased to zero (Preacher and Hayes, 2004). The author finds this result in agreement with theory; it is the assertion of the author that the remaining unmediated effect of X (strategic orientation) on dependent variable Y (business performance) may be due to other functional strategies discussed previously such as human resources strategies, manufacturing strategies and similar. The presence of mediation effect of marketing strategies explains how strategic orientation places impact on business performance through functional strategies. Hence, it is concluded that generative mechanism of strategic orientation's impact on business performance is partially served by marketing strategies and may be postulated that other functional strategies also will have mediating effects in a similar way.

Hierarchical multiple regression analyses and mediation analyses in three distinct models in this study have provided dual mechanisms on the inter-relationships. Matear *et al* (2002) have carried out a similar study utilizing the inter-relationship

between market orientation and innovation in order to examine three mechanisms of direct, mediated and moderated through which market orientation contributes to service firm performance. They have utilized regression and structural equation modeling and have found out that the interaction between marketing orientation and business performance is supported on direct relation and also supported with innovation acting as mediators resulting in dual mechanism, other alternatives have not been supported.

6.3. Conclusion

This study was inspired on how business strategies and marketing strategies interact and how they and their interaction affect performance. The premise that business strategies and functional strategies are at different layers of management appears to have caused the studies to be undertaken separately by many authors in the literature (Varadarajan and Clarke, 1994). Configurations of their association and performance implications have been mostly remained untapped. With the advent of customer orientation and marketing oriented companies, the relationship of business strategies and marketing strategies has become even more important. A marketing oriented company is built upon the strength of marketing implementation and can no longer remain in less than total congruence with business strategies. The present study has served this purpose well in empirically supporting the relationship between business strategies and marketing strategies.

When the study was initiated, marketing strategies were hypothesized to intervene between strategic orientation and business performance however the impact was not clear and has remained axiomatic. Hierarchical type of regression analysis has contributed much to disclosure of the effect of marketing strategies on the relationship of strategic orientation-business performance. The contribution of marketing strategies has been identified empirically and study's intentions have been fully realized.

With support of hierarchical regression analysis, the contribution of the marketing strategies combined with strategic orientation on performance have been verified, still it was not clear in which role this has taken place in terms of the intervention and its methodology. Mediation analysis has contributed at large in disclosing the latent effect of marketing strategies as mediator in implementing business

strategies. This recognition has added much to our knowledge of interaction between business and marketing strategies. It is now possible to confirm on empiric basis that marketing strategies is the generative mechanism of business strategies in its implementation on performance.

When the study was initiated, one of the hurdles has been to determine an established typology of orientation for marketing strategies. Extensive literature review has resulted with none. Similar to Slater and Olson (2001), the author of the current study had to develop marketing strategies based on Kotler's teachings for more than three decades. The resulting marketing strategies have contributed much to the analyses and of much value to the literature in marketing strategies.

Strategic orientation as the construct housing business strategy has been explained with different theories and operationalized with different approaches. One of sources of inspiration of this study was to compare different approaches taken in operationalizing the construct in the same study with the same sample and with the same instrument; the results of this triangulation methodology was hoped to provide empirical base of comparison and pave the way for new studies to develop the theory of strategic orientation. One of the apparent options for a choice of approach has been Porter's (1980) methodology of competitive strategy which has been well known in explaining how some firms' strategic orientation provide better performance than others on basis of low cost or differentiation versus competition. This approach is at large based on comparison and implementation; it lacks the holistic view of the total enterprise and a basic theory. Miles and Snow (1978) being the other established model has been an unchallenged option with basis on organization theory encompassing the whole enterprise with entrepreneurial, administrative and engineering dimensions. Therefore Miles and Snow model has been used as the classificatory approach in explaining the strategic orientation of the enterprise. A totally new multi dimensional set of variables have been developed for Miles and Snow typologies, and this achievement has fully awarded the choice made and satisfied expectations from this research. Miles and Snow typologies have been operationalized both in dimensional approach and orientation approach resulting with similar results in the analyses supporting equifinality of the techniques. Orientation approach was intended to satisfy

the needs of typology seekers while trying to meet arguments of those critics like Venkatraman (1985) who have rightfully claimed that … *for example, while prospectors may be considered as being different from defenders in the Miles and Snow's (1978) typology, it may not be reasonable to treat all organizations classified as prospectors as being similar in their postures*. With the orientation approach taken in this study, typologies have been allowed to run in combinations similar to dimensions as per contingency theory. After studying and criticizing previous operationalization and measures, Venkatraman (1985) has developed his own STROBE model that has arisen on the shoulders of Chandler, Mintzberg, Miles and Snow, Hambrick; Venkatraman divided the body of strategy research in two *interrelated streams the substantive* (e.g. Miles and Snow model) and *the measurement* i.e. *construct validation* (STROBE model). In this study, his model has been taken as a robust model representing comparative approach and the findings of the comparative approach has been used as a measure of comparison for the findings of newly developed dimensions of Miles and Snow's typological approach. The results of both approaches have agreed providing support for the achievement of the study.

For a review of conclusions on objectives of this research, the research questions that have guided this study are discussed in following part. Some of the objectives have already been examined above but has been shortly revisited for the sake of compilation.

Research question 1: Does significant relationship exist between strategic orientation and business performance in Turkish business context?

As per the discussions carried out, the results of Model A, Model B, and Model C testing revealed that significant relationships exist between each mode of strategic orientation in Miles and Snow's typologies in dimensions, in Miles and Snow's typologies in orientations, in Venkatraman's STROBE dimensions and business performance.

Research question 2: A new set of typological dimensions in operationalizing Miles and Snow's business typologies is developed by the author.

(a) Do newly developed dimensions prove to have predictive power as good as Venkatraman's STROBE dimensional model?

(b) Which dimensions have more contributions to the prediction in explaining variance in performance?

(a) It has been concluded as per findings that newly developed Miles and Snow's typology in dimensions has demonstrated to have, within the context of this study, higher predictive power (R^2=0.419) than Venkatraman's dimensional model (R^2=0.344).

(b) As far as dimensions are concerned, competitive edge has the highest contribution to prediction {β=0.413 p<0.001} followed by structure which has the next highest contribution to prediction {β=0.349 p<0.001}.

Research question 3: A new set of typological orientations in operationalizing Miles and Snow's business typologies is developed by the author.

(a) Do newly developed dimensions confirm to have predictive power as good as Venkatraman's STROBE dimensional model?

(b) Which orientations have more contribution to the prediction in explaining variance in performance?

(a) It has been concluded as per findings that newly developed Miles and Snow's typology in orientations has demonstrated to have within the context of this study higher predictive power (R^2=0.379) than Venkatraman's dimensional model (R^2=0.344).

(b) As far as orientations are concerned, analyzer orientation has the highest contribution to prediction {β=0.316 p<0.001} followed by prospector orientation-I which has the next highest contribution to prediction {β=0.295 p<0.001}.

Research question 4: A new set of typological orientations in operationalizing Kotler' marketing strategies are developed by the author.

(a)   Does this new set of dimensions of marketing strategies have any role as independent variable in relationship between strategic orientation and performance?

(b)   Which orientation has more contribution to the prediction in explaining variance in performance in the regression model?

(a) It has been concluded as per findings that newly developed Kotler's marketing strategies has been demonstrated to serve well as intervening variable in the relationship between strategic orientation and performance in each of Model A, Model B, Model C.

(b) As far as marketing strategy orientations are concerned, market-leading strategy has the highest contribution to prediction at a level of $\beta \geq 0.300$ at $p < 0.001$.

Research question 5: A new set of typological orientations in operationalizing Kotler' marketing strategies have been developed by the author. As per organizational theory, this multidimensional variable is expected to demonstrate functional strategies' role in implementing business strategies. How well does this new set of dimensions serve as mediating variable in relationship between strategic orientation and performance and hence confirm this proposition empirically?

The research inquiry in this respect has been what lies beneath the relationship between strategic orientation and business performance both in conceptual and empirical perspectives, what are the mechanisms by which strategic orientation contributes to performance, how are they related? The conceptual inquiry has been satisfied by many works and textbooks on strategy that functional strategies serve as operational strategies to implement the business strategies; however, empirical evidence of the proposition is missing at large especially for marketing strategies. This study is believed to have served well to this end by demonstrating mediational capacity of newly developed marketing strategies. Marketing strategy by itself is partially responsible for the impact on business performance directed by strategic orientation and generated by functional strategies.

Research question 6: Do typological orientations show differences according to the type of industry (business) that the firms engage in?

Typological orientations, as strategic configurations, of the companies reveal variance according to the industry or business type that they are exercised in. Services companies are more competitively oriented than manufacturing companies, health care business have higher analysis orientation while trade is more aggressiveness-oriented than other businesses. Some of the ANOVA and independent t-Tests had several conclusions in this respect.

Research question 7: Do exporting firms have different strategic orientations relative to non-exporting companies?

Exporting companies have the best growth pattern. They are good performers in market-leading strategies and good performers in market-niching strategies as well. They also reveal high defensiveness character.

Research question 8: Do firms with a higher number of employees have strategic orientation different from those with a lower number of employees?

Companies having more than five-hundred employees have the highest proactiveness and market-leading strategic orientations which are deemed as being prospects for good performance. On the Turkish sample, the findings for companies having more than five-hundred employees reveal better performance than the companies having fewer employees based on this study' findings.

Research question 9: As environmental variables, what effects do market turbulence, technological turbulence, and competitive intensity have on performance?

This study has revealed no considerable effect of environmental variables on performance.

6.4. Implications

Implications of this research study in strategic management are provided here both for academia and management professionals. The study is of more theoretical nature and significance, and therefore managerial implications are to be inferred also with support from descriptives.

6.4.1. Academic Implications and Contributions

The strategic behavior (orientation) of the firm has been a central issue in management theory. This study has advanced the knowledge, in strategic orientation of the firm, by building Miles and Snow's adaptive cycle model with comparative (dimensional) approach anew and tested it in Turkish environment and also applied the same model in terms of Miles and Snow typological orientations with multivariate analysis techniques as Zahra and Pearce (1990) have strongly suggested to be accomplished. Additionally, in the same study with the same instrument, Venkatraman's much cited STROBE comparative model has been applied as a third model and also to test confirm the strength of newly developed M&S comparative (dimensions) and orientations' models, which have produced better results than Venkatraman's model did. Researchers in strategic orientation with different approaches have examined how best to operationalize the construct; three approaches of narrative, classificatory and comparative have well categorized the research ambition as gathered in the literature. Narrative approach concerning and being applied in case studies left out, the remaining two approaches have been demonstrated in this study based on a systems' model as elucidated above. It appears to be the first study using a trio of models in a strategy research study with triangulation methodology.

The study has served well to contribute to the operationalization of the strategy construct within the context of strategic orientation covering most of the variables used in the literature and developed anew in this study; it appears to be most extensive dimensional approach undertaking for M&S typologies. This study's intention has been to respond to the need of seeking relationship between the strategic behavior of the firm with multiple variables and its performance; by operationalizing the construct with multiple variables, closer we have arrived at the axis of the relationship with better

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powered prediction in performance. However, there still remains wonder on whether it is close and directly enough and how these variables of the construct of strategic orientation are having impact on the performance, to put it in another perspective how do the business strategies get functional. This issue has been resolved conceptually by relating business strategies to functional (operational) strategies and having these functional strategies such as marketing strategies having impact on performance as market interface; the impact is relayed through the functional strategies (Biggadike, 1981; Stathakopoulos, 1998; Wright *et al,* 1998; Wheelen and Hunger, 2002; El-Ansary, 2006). This contention of business strategies directing functional strategies which then has exercise to affect performance is research modeled in this study with a mediated hierarchical regression investigation whereby marketing strategies' contribution to the prediction of performance in the model is identified and the latent effect of the marketing strategies (functional strategies) as mediators have been empirically demonstrated as positive. Hence, the conceptual model reaching a more observable relationship of strategic orientation and performance, with the help of mediated hierarchical regression analysis, has been test confirmed in this study as an original contribution.

The findings of this study on relationship between business strategies and marketing strategies are also valuable due to its implications of internal fit. In contingency theory, an assertion of fit implies a relationship between two variables (strategic orientation and marketing strategies in this study) which in turn predicts a third variable (Schoonhoven, 1981; Venkatraman, 1989a) as depicted in the study model. Also, in strategy research the concept of fit is an important building construct in the interaction between different levels of strategy in organizations, as designed between business strategies and marketing strategies in the study model. With the setup in the model and the findings on the relationships between strategies with impact on performance, this study has contributed to fill in this gap in research on internal fit requirement as set determined by Zahra and Pearce (1990) as a short coming of Miles and Snow's typologies. Zahra and Pierce have asserted that *despite its central importance as a theoretical construct in strategic management, the strategic fit has been ignored widely within research on Miles and Snow typology.*

Literature review reveals no well established, empirically tested marketing strategies *per se*. The available ones were all in and for case specific studies like Hooleys *et al*'s (1992) and Slater and Olson's (2001) model or configurations adopted from Porter's model which is based on industrial analysis, or like McDaniel and Kolari's (1987) model or configurations adopted from Miles and Snow's model which is based on adaptive cycle at business level. Hence, it was necessary and has been one of the contributions of this study to operationalize conceptually-well-established Kotler's marketing strategies as a marketing strategy construct in the model, originated in marketing itself and based on a theory of marketing *per se*, which performed well in this study. Marketing strategy very much like business strategy and strategic orientation relationship has been developed as marketing orientation as a single construct with dimensions of distinct types of orientations (strategies).

Methodology used in this research is also of original value where hierarchical regression analysis is practiced with marketing strategy together with strategic orientation. It also appears to be the first study where mediated hierarchical regression analysis has served to establish the mediation effect of marketing strategy with multiple variables. Marketing strategies as being representative for functional strategies as a layer of strategy in organizations, its implications in this study may be extended to cover the strategy group of functional strategies as a whole.

6.4.2. Managerial Implications

Managers should be aware that that the implementation of strategies are just as important as their formation. It is usually the case that strategy formulation takes the precedence and importance it deserves from managers who are however reluctant to pursue them. This study is hoped to raise the motivation in favor of strategy implementation within the context of theoretical underpinnings. It is concluded on theoretical basis that good strategies are as good as they are implemented via their conjoint functional strategies such as marketing strategies. It is now possible to confirm that marketing strategies is the generative mechanism of business strategies in its implementation on performance. This conclusion may be rephrased for managers to mean that the strategy types are significant determinants of marketing behavior and

hence the relative emphasis on each marketing element of the marketing mix depends on the particular strategy. The managers therefore are recommended to attend to functional strategies as much as they attend to their business strategies for the impact they have targeted in their firms' performance.

The findings reveal that M&S reactor strategies, meaning no intended strategy available, are failures due to inconsistencies that exist among their solutions to entrepreneurial, engineering and administrative problems. The rest of the typologies are on a continuum and depending on the fit with environment they all have equal chances of success as per *a priori* conceptualization (Miles and Snow 1978). The managers must take caution also on internal fit between business and marketing strategies.

There are other case specific implications for the managers that must be recommended for the appropriate industry and according to life cycle of the businesses. Companies appear to be performing better when they reach a level of employment more than five-hundred. Appropriate foreign capital investment injection accompanied with management aide appears to be supporting better performance; however, this relationship must be further investigated for other relevant variables involved. The findings reveal that exporting companies have the best growth pattern. Managers must strive to become involved with export marketing and sales as much as possible and must set this target as their priority. Market-leading strategies appear to be positively related with superior performance. Findings confirm that higher analysis, proactiveness and futurity orientations versus competitors, prospector and analyzer orientation characteristics, competitive positioning appear to be winning characteristics that the managers may take policy decisions to make them their companies' learned behaviors. Dissemination of strategic management knowledge with this study is expected to bring awareness to Turkish businesses for further progress in performance.

VII. LIMITATIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

This chapter reviews limitations recognized in the present study, and also considering these limitations extend recommendations for the academics for future research.

As discussed, this study uses a cross-sectional design to assess the relationships between strategic orientation and business performance. However, as of its inherent nature, this design does not allow investigating the phenomenon of interest over a longitudinal time-frame and therefore it is not possible to examine the variables under focus in temporal extent and dynamics (Zajac and Shortell, 1989). One of the consequences of using longitudinal time-frame is expected to reveal the effects of environmental variables. It is recommended to the academics that the whole or part of the study to be replicated along time frame. For this, it may be recommended to the Turkish Government and TOBB Turkish Chambers of Trade, Industry and Bourses to establish an institute for strategic research similar to SPI Strategic Planning Institute under the auspices of TOBB, DPT State Planning Organization and SPI and to undertake strategic studies similar to PIMS profit impact of marketing strategies on continuous basis. Considering that SPI has associated itself with similar organizations in Europe, DPT and TOBB are recommended to initiate such a move.

The newly developed dimensions should be extensively replicated in Turkish environments and other Western environments and comparisons should be made between themselves and against SPI findings. The new Miles and Snow's typological dimensions and orientations are recommended for replication in future studies. As these newly developed dimensions have been produced on basis of Turkish environment, it is expected to be most convenient to replicate them in other Turkish environments especially in different industries to produce knowledge that may have more managerial implications. The same is true for newly developed Kotler's competitive marketing strategies; it appears to be the most fundamental marketing strategy typology also empirically supported in the literature. It will be most interesting to carry out investigations with these newly developed M&S dimensions and orientations and

Kotler's marketing strategies in U.S. and E.U. and also compare findings of this dissertation and findings of similar studies to be carried out with the corresponding findings of PIMS program. There are examples of EU initiatives that fund to examine the state of art of marketing in candidate countries, and it may be recommended to develop such arrangements.

Miles and Snow's typological self-typing paragraph approach with single variable is not as robust as dimensional approach with multiple variables; however it is being widely used to identify the firms in one of the typologies. It is possible to suggest deployment of this approach in order to reach more pragmatic results for its managerial implications together with dimensional approach.

There are few studies in the literature seeking knowledge on congruence of business and marketing strategies to guide managers on which marketing strategy or combination of marketing strategies serve best for the implementation of certain business strategies. One of those studies well known is Slater and Olson's (2001) study that has developed a set of marketing strategies and tried to match them with Miles and Snow's typologies based on self-typing paragraph approach which contains shortcomings discussed in this study. Furthermore marketing strategies developed in that study appears to be case bound. It is recommended that based on findings of this study, further research is undertaken to empirically test on which business strategies are best conveyed with which or combinations of which marketing strategies.

Mediation effects of marketing strategies and other functional strategies such as manufacturing, human resources and similar should be investigated extensively. It is also recommended that marketing strategies and human resources management strategies should be studied in the same mediational model with dual mediators. It will be a much promising area of strategy research within strategic management based on contingency theory.

One of the limitations of this study has been performance measurement based on perceived performance and no result has been obtained from objective performance measures. It is recommended that future research should be also carried out on objective

measurement even if it means to carry the research in narrower business sectors such as banking or insurance businesses. Newly developed marketing strategies should be extensively replicated to seek support so that a truly marketing based strategy model may be developed.

BIBLIOGRAPHY

Aaker, D.A. (1984). "How to Select a Business Strategy". *California Business Review*. Vol. 26, No.3 (Spring), 167-175.

Aaker, D.A. (2001). *Strategic Market Management*. 6th Ed. New York: John Wiley & Sons, Inc.

Aaker, D.A, V. Kumar, and G.S. Day, (2000). *Marketing Research.* 7th Ed. New York: John Willey and Sons, Inc.

Adcock, D. (2000). *Marketing Strategies for Competitive Advantage*. New York: John Wiley & Sons.

Adler, L. (1967). "Systems Approach to Marketing". *Harvard Business Review.* May-June Vol. 45, No.3.

Agnew, H.E., R.B. Jenkins, and J.C. Drury (1936). *Outlines of Marketing*. New York: McGraw-Hill Book Company.

Akhter, H.S. (2003). "Strategic Planning, Hypercompetition, and Knowledge Management". *Business Horizons.* January-February, 19-24.

Akimova, I. (2000). "Development of Market Orientation and Competitiveness of Ukrainian Firms". *European Journal of Marketing.* Vol. 34, Iss. 9/10, 1128.

Anderson, C.R. and C.P. Zeithaml (1984). "Stage of the Product Life Cycle, Business Strategy, and Business Performance". *Academy of Management Journal*. Vol. 27, No. 1, 5-24.

Anderson, C.R. and F.T. Paine (1975). "Managerial Perceptions and Strategic Behavior". *Academy of Management Journal.* Vol. 18, 811-8123 as cited in Snow, C.C. and L.G. Hrebiniak (1980). "Strategy, Distinctive Competence and Organizational Performance". *Administrative Science Quarterly*. Vol. 25, 317-335.

Anderson, V. and L. Johnson (1997). *Systems Thinking Basics*. Waltham: Pegasus Communications, Inc.

Ansoff, H.I. (1965). *Corporate Strategy-An Analytical Approach to Business Policy for Growth and Expansion*. New York: McGraw Hill.

Ansoff, H.I. (1987). "The Emerging Paradigm of Strategic Behavior". *Strategic Management Journal.* Vol. 8, 501-515.

Argyris, Chris and, D. A. Schön (1996). *Organizational Learning II: Theory, Method and Practice*. Reading: Addison-Wesley Publishing Company.

Arias, J.T.G. and L.B. Acebròn (2001). "Postmodern Approaches in Business-to-Business Market and Marketing Research". *Journal of Business & Industrial Marketing.* Vol. 16, No. 1, 7-21.

Ariyawardana, A. (2003). "Sources of Competitive Advantage and Firm Performance: The Case of Sri Lankan Value-Added Tea Producers". *Asia Pacific Journal of Management".* Vol. 20, 73-90.

Arnold, D.J. and J.A. Quelch, (1998). "New Strategies in Emerging Markets". *Sloan Management Review".* Fall, 7-20.

Bahaee, M.S. (1992). "Strategy-Comprehensiveness: Fit and Performance". *Australian Journal of Management.* Vol. 1, No. 2, 196-215.

Baker, M.J. (2000). *Marketing Strategy and Management*. 3rd Ed. Hound Mills: MacMillan Press.

Baron, R.M. and D.A. Kenny, (1986). "The Mediator-Moderator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations". *Journal of Personality and Social Psychology.* Vol. 51, No.6, 1173-1182.

Barney, J. B. (1986). "Types of Competition and the Theory of Strategy: Toward an Integrative Framework". *Academy of Management Review*. Vol. 11, No. 4, 791-800.

Bartels, R. (1951). "Can Marketing be a Science?" *Journal of Marketing*. Vol. 15, No. 3, 19-28.

Bartels, R. (1968). "The General Theory of Marketing". *Journal of Marketing*. Vol. 32 (Jan), 29-33.

Bengtsson, M. (1998). *Climates of Competition*. Umea: Harwood Academic Publishers.

Bennett, R. (1999). *Corporate Strategy*. 2nd Ed. Harlow: Pearson Education.

Bertalanffy, L. (1972). "The History and Status of General Systems Theory". *Academy of Management Journal.* Vol. 15, No. 3, 407-426.

Biggadike, E.R. (1981). The Contributions of Marketing to Strategic Management. *The Academy of Management Review.* Vol. 9, No. 4, 621-632.

Bird, A. and S. Beechler (1995). "Links between Business Strategy and Human Resource Management Strategies". *Journal of International Business Studies*. Vol. 26, No. 1, 23-47.

Blau, P.M. and W.R. Scott (1962). *Formal Organizations: A Comparative Approach.* San Francisco: Chandler as cited in Snow, C.C. and L.G. Hrebiniak (1980). "Strategy, Distinctive Competence and Organizational Performance". *Administrative Science Quarterly*. Vol. 25, 317-335.

Bloom, P.N. and P. Kotler (1965). "Strategies for High Market-Share Companies". *Harvard Business Review*. November-December, 63-72.

Borden, N.H. (1964). "The Concept of the Marketing Mix". *The Journal of Advertising Research*. June, 2-7.

Bourassa, A., H.C. Peggy and J.M. Handelman (2007). "How Philip Kotler has Helped to Shape the Field of Marketing". *European Business Review.* Vol. 19, No.2, 174-192.

Brian, R. G. (1992). "SBU Strategy and Performance: The Moderating Effects of the Corporate-SBU Relationship". *Strategic Management Journal.* New York: John Willey and Sons Ltd.

Brock, D.M. (1997). "Strategy, Autonomy, Planning Mode and Effectiveness: A Contingency Study of Business Schools". *International Journal of Educational Management.* Vol. 11, No. 6, 248-259.

Bryman, A. (1989). *Research Methods and Organization Studies*. London: Unwin Hyman.

Buzzell, R.D. and B.T. Gale (1987). *The PIMS Principles*. New York: The Free Press.

Campbell-Hunt, C. (2000). "What we have Learned about Generic Competitive Strategy: A Meta-Analysis. *Strategic Management Journal*. No. 21, 127-154.

Capon, N, J.U. Farley, S. Hoenig, (1990). "Determinants of Financial Performance: A Meta-Analysis". *Management Science*. Vol. 36, No. 10.

Carper, W.B. and W.E. Snizek (1980). "The Nature and Types of Organizational Taxonomies: An Overview". *Academy of Management, The Academy of Management Review.* Vol. 5, No. 65.

Carter, N.M., T.M. Stearns, P.D. Reynolds and B. A. Miller (1994). "New Venture Strategies: Theory Development with an Empirical Base". *Strategic Management Journal*. Vol. 15, 21-41.

Cattell, R.B. (1966). "The Scree Test for the Number of Factors". *Multivariate Behavioral Research.* Vol. 1 (April), 245-276 as cited in Hair Jr, J.F., R.E. Anderson, R.L. Tatham and W.C. Black (1998). *Multivariate Data Analysis.* 5th Ed. Upper Saddle River, NJ: Prentice Hall.

Cavuslugil, S.T. and S. Zou (1994). "Marketing Strategy-Performance Relationship: An Investigation of the Empirical Link in Export Market Ventures". *Journal of Marketing"*. Vol. 58 (January), 479-506.

Certo, S.C. (2000). *Modern Management*. 8th Ed. New Jersey: Prentice Hall.

Chaffee, E.E. (1985). "Three Models of Strategy". *Academy of Management Review*. Vol. 10, No. 1, 89-98.

Chakravarthy, B.S. (1986). "Measuring Strategic Performance". *Strategic Management Journal*. Vol. 7, 437-458.

Chandler, A. Jr. (1962). *Strategy and Structure: Chapters in the History of the Industrial Enterprise*. Cambridge: The M.I.T. Press.

Chandler, A. Jr. (1977). *The Visible Hand*: *The Managerial Revolution in American Business.* Cambridge: The Belknap Press.

Chang, W.A. and T.C. Huang (2005). "Relationship between Strategic Human Resource Management and Firm Performance." *International Journal of Manpower.* Vol. 26, No. 5, 434-449.

Child, J. (1972), "Organizational Structure, Environment, and Performance-The Role of Strategic Choice". *Sociology*. Vol. 6 (January), 1-22.

Chiquan, G. (2002). "Market Orientation and Business Performance: A Framework for Service Organizations". *European Journal of Marketing*. Vol. 36, No.9/10, 1154-1163.

Chrisman, J.J., C.W. Hofer and W.R. Boulton, (1988). "Towards a System for Classifying Business Strategies". *The Academy of Management Review*. Vol. 13, No. 3, 413-428.

Clark, F. E. (1933). *Principles of Marketing*. New York: The MacMillan Company.

Cohen, J., P. Cohen, S.G. West and L.S. Aiken (2003). *Applied Multiple Regression/Correlation Analysis fort the Behavioral Sciences*. 3rd Ed. Mahwah, NJ: Lawrence Erlbaum Associates Inc.

Cohen, W.A. (1995). *The Marketing Plan*. New York: John Wiley and Sons, Inc.

Collis, D.J. and C A. Montgomery (2005). "Competing in Resource Strategy in the 1990s". *Harvard Business Review.* July-August, 119-128.

Conant, J.S., M.P. Mokwa, and P.R. Varadarajan (1990). "Strategic Types, Distinctive Marketing Competencies and Organizational Performance: A Multiple Measures-Based Study". *Strategic Management Journal*. Vol. 11, 365-383.

Converse, P.D. (1951). "Development of Marketing Theory: Fifty Years of Progress". In: Walters, C. G. and D.P. Robin (1978). *Classics in Marketing*. Santa Monica: Goodyear Publishing Co., Inc.

Corey, R.E. (1991). "Pricing: The Strategy and Process". In: Dolan, R. J. (Ed.), *Strategic Marketing Management*: 253-269. Boston: Harvard Business School.

Couchen, W. and W. Shwu-Ing (1998). "A Proposed Method for the Development of Marketing Mix of the Tea Drink Market". *Asia Pacific Journal of Marketing and Logistics*. Vol. 10, No.1.

Cravens, D.W. (1982). *Strategic Marketing*. 5th Ed. Chicago: Irwin Book Team.

Cronbach, L.J. (1951). "Coefficient Alpha and Internal Structure of Test". *Psychometrika.* Vol. 16, 297-334 as cited in Venkatraman, N. (1989). "Strategic Orientation of Business Enterprises: The Construct and its Measurement". *Management Science*. Vol. 35, No. 8.

Dabb, S., L. Simkin, W.M. Pride and O.C. Ferrell (1997). *Marketing, Concepts and Strategies.* Boston: Houghton Mifflin.

Daft, R.L. (2000). *Management*. Fort Worth: The Dryden Press.

Daft, R.L. (2000). *Essentials of Organization Theory & Design*. 2nd Ed. Cincinnati: The South-Western College Publishing.

Dahlstrom, R., A. Nygaard and J.L. Crosno (2008). "Strategic, Metric, and Methodological Trends in Marketing Research and their Implications for Future Theory and Practice". *Journal of Marketing Theory and Practice.* Vol. 16, No. 2, 139-152

Dan-Shang, W. and C. Shyu (2008). "Will the Strategic Fit between Business HRM Strategy Influence HRM Effectiveness and Organizational Performance?" *International Journal of Manpower*. Vol. 29, No. 2, 92-110

D'Aveni, R.A. (1999). "Strategic Supremacy through Disruption and Dominance". *Sloan Management Review*. Spring, 127-135.

David, F.R. (2001). *Strategic Management: Concepts and Cases*. New Jersey: Prentice Hall.

Davig, W. (1986). "Business Strategies in Smaller Manufacturing Firms". *Journal of Small Business Management.* Vol. 24, No. 1, 38-46.

Day, G. (1992). "Marketing's Contribution to the Strategy Dialogue". *Academy of Marketing Science*. Vol. 20, No. 4, 323-329.

Day, G. and R. Wensley, (1983). "Marketing Theory with a Strategic Orientation". *Journal of Marketing.* Vol. 47, Fall, 79-89.

Deng, S. and J. Dart (1994). "Measuring Market Orientation: A Multi-Factor and Multi-Item Approach". *Journal of Marketing Management*. Vol. 10, 725-742.

Dervis, K., D. Gros, F. Oztrak, F. Bayar and Y. Isik, (2004). "Relative Income Growth and Convergence". *EU-Turkey Working Papers* No.4/September.

De Sarbo, W.S., C.A. Di Benedetto, M. Song and I. Sinha (2005). "Revisiting the Miles and Snow Strategic Framework: Uncovering Interrelationships between Strategic Types, Capabilities, Environmental Uncertainty, and Firm Performance". *Strategic Management Journal*. Vol. 26, 47-74.

Dess, G.G. and P.S Davis (1984). Porter's (1980) Generic Strategies as Determinants of Strategic Group Membership and Organizational Performance. *Academy of Management Journal*. Vol. 27, No. 3, 467-488.

Dess, G.G. and R.B. Robinson, Jr. (1984). "Measuring Organizational Performance in the Absence of Objective Measures: The Case of Privately Held Firm and Conglomerate Business Unit". *Strategic Management Journal*. Vol. 5, No. 3 (Jul.-Sep.), 265-273.

Dibb, S., L. Simkin, W.M. Pride and O.C. Ferrell (1997). *Marketing: Concepts and Strategies.* Boston: Houghton Mifflin.

Digman, L.A. (1990). *Strategic Management.* 2nd Ed. Homewood: Richard D. Irwin, Inc.

Dobni, B. (2003). "Creating a Strategy Implementation Environment". *Business Horizons*. March-April, 43-46.

Doty, D.H. and W.H Glick (1994). "Typologies as a Unique Form of Theory Building toward Improved Understanding and Modeling". *Academy of Management Review.* Vol. 19, No. 2, 230-251.

Douglas, S.P. and D.K. Rhee, (1989). "Examining Generic Competitive Strategy Types in U.S. and European Markets". *Journal of International Business Studies.* Fall 1989, Vol. 20, No. 3, 437-463.

Doyle, P. (1998). *Marketing Management and Strategy*. 2nd Ed. Harlow: Prentice Hall.

Doyle, P. and G.J. Hooley (1992). "Strategic Orientation and Corporate Performance". *International Journal of Research in Marketing*. Vol. 9, 59-73.

Drucker, P.F. (1994). "The Theory of the Business". *Harvard Business Review.* September-October, 95-104.

Dvir, D., E. Segev and A. Shenhar (1993). "Technology's Varying Impact on the Success of Strategic Business Units within The Miles and Snow Typology". *Strategic Management Journal.* Vol. 14, No. 2, 155-162.

Eisenhardt, K.M. and D.N. Sull (2001). "Strategy as Simple Rules". *Harvard Business Review*. January, 107-116.

El-Ansary, A.I. (2006). "Marketing Strategy: Taxonomy and Frameworks". *European Business Review.* Vol. 18, No. 4, 266-293.

Elfring, T. and H.K. Volberda (2001). "New Directions in Strategy: Ways to Synthesize". In: Volberda, H.K. and T. Elfring, (Ed.). *Rethinking Strategy*. 245-285. London: Sage Publications Ltd.

Enis, B.M., K.K. Cox and M.P. Mokwa (Ed.) (1991). *Marketing Classics: A Selection of Influential Articles*. New Jersey: Prentice-Hall, Inc.

Eren, E.(2002). *Stratejik Yönetim ve İşletme Politikası.* 6th Ed. Kırklareli: Beta Basım A.Ş.

Eren, E. (2003). *Yönetim ve Organizasyon: Çağdaş ve Küresel Yaklaşımlar*. Kırklareli: Beta Basım A.Ş.

Etzioni, A. (1961). *A Comparative Analysis of Complex Organizations*. New York: Holt, Rinehart, and Winston as cited in Snow, C.C. and L.G. Hrebiniak (1980). "Strategy, Distinctive Competence and Organizational Performance". *Administrative Science Quarterly*. Vol. 25, 317-335.

Fırat, A. F. and C.J. Shultz II (1997). "From Segmentation to Fragmentation: Markets and Marketing Strategy in the Postmodern Era". *European Journal of Marketing*. Vol. 31, No. 3/4, 183-207.

Ford, J.D. and D.A. Schellenberg (1982). "Conceptual Issue of Linkage in the Assessment of Organizational Performance". *Academy of Management Review*. 49-58.

Foster, D. (1984). *Mastering Marketing*. 2nd Ed. London: MacMillan Education Ltd.

Fowler, A. (2003). Systems Modeling, Simulation, and the Dynamics of Strategy. *Journal of Business Research*. Vol. 56, 135-144.

Fry, L. W. and D.A. Smith (1987). "Congruence, Contingency, and Theory Building". *Academy of Management Review.* Vol. 12, No. 1, 117-132.

Galbraith, C. and D. Schendel (1983). "An Empirical Analysis of Strategy Types". *Strategic Management Journal*. Vol. 4, 153-173.

Garrigòs-Simòn, F.J. and D.P. Marquès (2005). "Competitive Strategies and Performance in Spanish Hospitals". *International Journal of Contemporary Hospital Management.* Vol. 17, No. 1, 22-38.

Gatignon, H. and J. Xuereb (1997). "Strategic Orientation of the Firm and New Product Performance". *Journal of Marketing Research*. Vol. 34, 77-80.

Ghemawat, P. (2002). "Competition and Business Strategy in Historical Perspective". *Business History Review 76*. Spring, 37-74.

Gimenez, F.A.P. (2000). "The Benefits of a Coherent Strategy for Innovation and Corporate Change: A Study Applying Miles and Snow's Model in the Context of Small Firms". *Strategy and Innovation in SME's.* Vol. 9, No. 4, 235-244.

Ginsberg, A. (1984). "Operationalizing Organizational Strategy: Toward an Integrative Framework". *The Academy of Management Review*. July, Vol. 9, Iss. 3.

Ginsberg, A. and N. Venkatraman (1985). "Contingency Perspectives of Organizational Strategy: A Critical Review of the Empirical Research". *The Academy of Management Review*. Vol. 10, No.1, Jan, 421-434.

Glueck, W.F. (1980). *Business Policy and Strategic Management*. London: McGraw-Hill International.

Golden, B.R. (1992). "SBU Strategy and Performance: The Moderating Effects of the Corporate-SBU Relationship". *Strategic Management Journal*. Vol. 13, 143-58.

Grant, R.M. and A.P. Jammine (1988). "Performance Differences between the Wrigley/Rumelt Strategic Categories". *Strategic Marketing Management*. Vol. 9, 333-346.

Gray, B.J. and G.J. Hooley, (2002). "Market Orientation and Service Firm Performance- A Research Agenda". *European Journal of Marketing*. Vol. 36 No.9/10, 980-988.

Greenly, G.E. (1995). "Market Orientation and Company Performance: Empirical Evidence from U.K. Companies". *British Journal of Management.* Vol. 6, 1-13.

Grinstein, A. (2008). The Relationships between Market Orientation and Alternate Strategic Orientations: A Meta-Analysis. *European Journal of Marketing.* Vol. 42, No. 1/2, 115-134.

Gupta, A.K. and V. Govindarajan (1984). "Business Unit Strategy, Managerial Characteristics, and Business Unit Effectiveness at Strategy Implementation". *Academy of Management Journal*. Vol. 27, No. 1, 25-41.

Guo, C. (2002). "Market Orientation and Business Performance: A Framework for Service Organizations". *European Journal of Marketing*. Vol. 39, No. 9/10, 1154-1163.

Hair Jr, J.F., R.E. Anderson, R.L. Tatham and W.C. Black (1998). *Multivariate Data Analysis*. 5th Ed. Upper Saddle River, NJ: Prentice Hall.

Hall, R.H. (1972). *Organizations: Structure and Process*. Englewood Cliffs: Prentice-Hall, Inc.

Hall, R.H. (1987). *Organizations: Structures, Processes, and Outcomes.* 4th Ed. Upper Saddle River, NJ: Prentice Hall.

Hambrick, D.C. (1980). Operationalizing the Concept of Business-Level Strategy in Research. *The Academy of Management Review.* Vol. 5, No. 000004, 567-573.

Hambrick, D.C. (1983). "Some Tests of the Effectiveness and Functional Attributes of Miles and Snow's Strategic Types". *Academy of Management Journal*. Vol. 26, No. 1, 5-26.

Hambrick, D.C. (1984). "Taxonomic Approaches to Studying Strategy: Some Conceptual and Methodological Issues". *Journal of Management*. 1984 Vol. 10, No. 1, 27-42.

Hambrick, D. (1987). The Top Management Team. *California Management Review.* Fall, Vol. 30, No. 1.

Hambrick, D.C., I.C. MacMillan and R.R. Batbosa, (1983). "Business Unit Strategy and Changes in the Product R&D Budget". *Management Science.* July 1983, Vol. 29, No. 7.

Hannagan, T. (2002). *Management: Concepts & Practices*. Edinburgh Gate: Pearson Education Limited.

Hansen, F. (2003). "Crisis in Corporate America: The Role of Strategy". *Business Horizons.* January-February, 7-18.

Hansen, E., C. Dibrell and J. Down, (2006). "Market Orientation, Strategy, and Performance in The primary Forest Industry". *Forest Science.* June, Vol. 52, No. 3.

Hatch, M.J. (1997). *Organization Theory: Modern, Symbolic and Postmodern Perspectives.* Oxford: Oxford University Press.

Hatten, K., W.L. James and D.G. Meyer (2004). "The Longevity of Performance Effects of the Miles and Snow Strategic Archetypes: A Ten Year Perspective in US Banking". *International Journal of Management and Decision Making*. Vol. 5, Nos. 2-3, 196-215.

Hax, A.C. and N.S. Majluf (1996). *The Strategy Concept and Process: A Pragmatic Approach*. New Jersey: Prentice Hall.

Henderson, B.D. (1970). "The Product Portfolio". In Stern, C.W. and G. Stalk, Jr. (Ed.) (1998). *The Boston Consulting Group.* New York: John Wiley and Sons, Inc.

Herbert, T.T. and H. Deresky (1987). "Generic Strategies: An Empirical Investigation of Typology Validity and Strategy Content". *Strategic Management Journal.* March/April.

Hitt, A.M. and R.D. Ireland, (1985). "Corporate Distinctive Competence, Strategy, Industry and Performance". *Strategic Management Journal.* Vol. 6, 273-293.

Hofer, C.W. and D. Schendel (1978). *Strategy Formulation: Analytical Concepts*. St. Paul: West Publishing.

Hooley, G.J., J. Beracs and K. Kolos (1993). "Marketing Strategy Typologies in Hungary". *European Journal of Marketing*. Vol. 27, Nos. 11/12, 80-101.

Hooley, G.J., J.E. Lynch and D. Jobber (1992). "Generic Marketing Strategies". *International Journal of Research in Marketing*. Vol. 9, 75-89.

Hooley, G.J., J.A. Saunders and N.F. Piercy (1998). *Marketing Strategy and Competitive Positioning*. London: Prentice Hall Europe.

Hunt, S.D. and R.M. Morgan (1995). "The Comparative Advantage: Theory of Competition". *Journal of Marketing.* Vol. 59, April, 1-15.

Islamoglu, H. (2000). *Pazarlama Yönetimi*. 2nd Ed. İstanbul: Beta Basım Yayım Dağıtım A.Ş.

Jauch, L.R. and K.L. Kraft (1986). "Strategic Management of Uncertainty. *Academy of Management Review"*. Vol. 11, No. 14, 777-790.

Jaffe, D. (2001). *Organization Theory: Tension and Change*. Boston: McGraw Hill.

Jain, S.C. (2000). *Marketing Planning and Strategy*. 6th Ed. Cincinnati: South-Western College Publishing.

James, W.L. and K.J. Hatten (1994). "Evaluating the Performance Effects of Miles and Snow's Strategic Archetypes in Banking, 1983 to 1987: Big or Small?" *Journal of Business Research*. Vol. 31, 145-154.

James, W.L. and K.J. Hatten, (1995). "Further Evidence on the Validity of the Self-Typing Paragraph Approach: Miles and Snow Strategic Archetypes in Banking". *Strategic Management Journal.* Vol. 16, 161-168.

Jauch, L.R. and R.N. Osborn (1981). Toward an Integrated Theory of Strategy. *The Academy of Management Review.* Vol. 6, No. 3, 491-495.

Jaworski, B.J. and A.K. Kohli (1993). "Market Orientation: Antecedents and Consequences". *Journal of Marketing*. Vol. 57 (July), 53-70.

Jennings, D.F. and S.E. Seaman (1994). "High and Low Levels of Adaptation: An Empirical Analysis of Strategy, Structure, and Performance". *Strategic Management Journal*. Vol. 15, 459-75.

Johnson, G. and K. Scholes (1993). *Exploring Corporate Strategy: Text and Cases*. 3rd Ed . Hertfordshire: Prentice Hall.

Jones, G.R. (2001). *Organizational Theory*. 3rd Ed. New Jersey: Prentice Hall.

Kabanoff, B. and S. Brown (2008). "Knowledge Structures of Prospectors, Analyzers, and Defenders: Content, Structure, Stability, and Performance". *Strategic Management Journal.* Vol. 29, 149-171.

Kald,M., F. Nilson and B. Rapp (2000). "On Strategy and Management Control: The Importance of Classifying the Strategy of the Business". *British Journal of Management.* Vol. 11, No. 3, 197-212.

Kamara, J.M. (2002). "A Clever Approach to Selecting a Knowledge Management Strategy". *International Journal of Project Management*. Vol. 20, 205-211.

Kaplan, R.S. and D.P. Norton (2001). *The Strategy-Focused Organization: How Balanced Score Card Companies Thrive in the New Business Environment.* Boston: Harvard Business School Press.

Kast, F.E. and J.E. Rosenzweig (1972). "General Systems Theory: Applications for Organization and Management". *Academy of Management Journal.* Vol. 15, No. 4, 447-465

Kast, F.E. and J.E. Rosenzweig, (1985). *Organization and Management: A Systems and Contingency Approach*. New York: McGraw-Hill.

Kast, F.E., J.E. Rosenzweig and A. Keene (2000). "Complexity Theory: The Changing Role of Leadership. *Industrial and Commercial Training*. Vol. 32, No. 1, 15-18.

Kenichi, O. (1983). *The Mind of the Strategist*. New York: Penguin Books.

Kerin, R.A., E.N. Berkowitz, W.S. Hartley and W. Rudelius (2002). *Marketing*. 7th Ed. Boston: McGraw-Hill Irwin.

Kernan, J.B. and M.S. Sommers (1968). *Perspectives in Marketing Theory*. New York: Appleton-Century-Crofts.

Ketchen, D. Jr., J.G. Combs, G.J. Russell, C. Shook, M.A. Dean, J. Runge, F.T. Lohtke, S.E. Naumann, D.E. Haptonstahl, R. Baker, B.A. Beckstein, C. Handler, H. Honig and S. Amoureux (1997). "Organizational Configurations and Performance: A Meta-Analysis". *Academy of Management Journal.* Vol. 40, No. 1, 223-240.

Kim, W.C. and R. Mauborgne (1999). "Strategy, Value Innovation, and the Knowledge Economy". *Sloan Management Review*. Spring, 41-54.

Koch, R. (1995). *Strategy: How to Create and Deliver a Useful Strategy*. London: Pitman Publishing.

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

Kohli, A.K. and B.J. Jaworski, (1993). "MARKOR: A Measure of Market Orientation". *Journal of Marketing Research*. Vol. 30, November, 467-77.

Kotabe, M. and D.F. Duhan (1993). "Strategy Clusters in Japanese Markets: Firm Performance Implications". *Journal of the Academy of Marketing Sciences*. Vol. 21, No. 1, 21-31.

Kotha, S. and B.L Vadlamani (1995). "Assessing Generic Strategies: An Empirical Investigation of Two Competing Typologies in Discrete Manufacturing Industries". *Strategic Management Journal*. Vol. 16, 75-83.

Kotler, P. (1965). "Competitive Strategies for New Product Marketing over the Life-Cycle". *Management Science.* December 1965, Vol. 12, No. 4.

Kotler, P. (1975). *Marketing for Non-Profit Organizations*. Englewood Cliffs, N.J.: Prentice-Hall Inc.

Kotler, P. (1980). *Principles of Marketing.* Englewood Cliffs: Prentice Hall.

Kotler, P. (1984). *Marketing Management.* 5th Ed. Englewood Cliffs: Prentice-Hall Inc.

Kotler, P. (1991). *Marketing Management*. Englewoods Cliff: Prentice Hall.

Kotler, P. (1997). *Marketing Management*. 9th Ed. Upper Saddle River: Prentice Hall.

Kotler, P. and G. Armstrong, (1999). *Principles of Marketing*. 8th Ed. Upper Saddle River: Prentice Hall.

Kotler, P. (2000). *Marketing Management*. Upper Saddle River: Prentice Hall.

Kotler, P. (2006). *Marketing Management*. Upper Saddle River: Prentice Hall.

Kotler, P. and G. Armstrong (1999). *Principles of Marketing.* 8th Ed. Saddle River: Prentice Hall.

Kotler, P. and G. Armstrong (2001). *Principles of Marketing.* 9th Ed. Saddle River: Prentice Hall.

Kotler, P. and G. Armstrong (2006). *Principles of Marketing.* 9th Ed. Saddle River: Prentice Hall.

Kotler, P. and Keller, K.L. (2006). *Marketing Management*. 12th Ed. Saddle River: Prentice Hall.

Kotler, P. and Singh, R. (1981). "Marketing Warfare in the 1980s". *Journal of Business Strategy.* Vol. 1, No. 3, 30-34.

Kumar, K., R. Subramanian and C. Yauger (1998). "Examining the Market Orientation-Performance Relationship: A Context-Specific Study". *Journal of Management*. Vol. 24, No. 2, 201-233.

Langreak, F. (2002). "What is the Predictive Power of Market Orientation". Erasmus Research Institute of Management. Rotterdam available at http://ssr.com/abstract_id=371031.

Laugen, B.T., H. Boer and N. Acur (2006). "The New Product Development Improvement Motives and Practices of Miles and Snow's Prospectors, Analyzers and Defenders". *Creativity and Innovation Management*. Vol. 15, No. 1.

Levitt, T. (1975). "Marketing Myopia". *Harvard Business Review.* Vol. 53, No. 5, 26-181.

Levitt, T. (1980). "Marketing Success through Differentiation- If Anything". *Harvard Business Review*. (J-F), 83-91.

Liao, Y. (2005). "Business Strategy and Performance: The Role of Human Resource Management Control". *Personal Review*. Vol. 34, No. 3, 294-309.

Littler, D. and D. Wilson (1995). *Marketing Strategy*. Oxford: Butterworth-Heinemann Ltd.

Lynch, R. (2003). *Corporate Strategy*. 3rd Ed. Harlow: Prentice Hall.

Longman, A. and J. Mullins (2004). "Project Management: Key Tool for Implementing Strategy". *Journal of Business Strategy*. Vol. 25, No. 5, 54-61.

MacKinnon, D.P. (2008). *Introduction to Statistical Mediation Analysis.* New York: Lawrence Erlbaum Associates.

Manu, F.A. and V. Srinam (1996). "Innovation, Marketing Strategy, Environment, and Performance." *Journal of Business Research*. Vol. 35, 79-51.

Matear, S., P. Osborne, T. Garrett and B.J. Gray (2002). "How does Market Orientation Contribute to Service Firm Performance". *European Journal of Marketing.* Vol. 36, No. 9/10, 1058-1075.

Matsuno, K. and J.T. Mentzer (2000). "The Effects of Strategy Type on the Market Orientation-Performance Relationship". *Journal of Marketing.* October, 1-16.

McDaniel, S.W. and J.W. Kolari (1987). "Marketing Strategy Implications of the Miles and Snow Strategic Typology". *Journal of Marketing*. Vol. 51 (October), 19-31.

McKee, D.O., P. R. Varadarajan, W.M. Pride (1989). "Strategic Adaptability and Firm Performance: A Market-Contingent Perspective". *Journal of Marketing*. Vol. 53, 21-35.

Megicks, P. (2007). Levels of Strategy and Performance in UK- Small Retail Businesses. *Management Decision.* Vol. 45, No. 3, 484-502.

Miles, R. and C.C. Snow (1978). *Organizational Strategy, Structure, and Process*. McGraw-Hill: New York.

Miles, R.E., C.C. Snow, A.D. Meyer and H.J. Coleman, Jr. (1978). "Organizational Strategy, Structure, and Process". *Academy of Management.* Vol. 3, No. 3, 546-562.

Miller, D. (1988). "Relating Porter's Business Strategies to Environment and Structure: Analysis and Performance Implications". *Academy of Management Journal*. June, Vol. 3, No. 2, 280-308.

Miller, D. and P.H. Friesen (1982). "Innovation in Conservative and Entrepreneurial Firms: Two Models of Strategic Momentum". *Strategic Management Journal.* Vol. 3, No. 1 (Jan.-March 1982), 1-25.

Miller, D. and P.H. Friesen (1983). "Strategy-Making and Environment: The Third Link". *Strategic Management Journal.* July-Sep, Vol. 4, 221-235.

Mintzberg, H. (1987). "The Strategy Concept I: Five Ps for Strategy". *California Management Review".* Vol. 30, No. 1, 11-24.

Mintzberg, H. (1987a). "The Strategy Concept II: Another Look at Why Organizations Need Strategies". *California Management Review.* Vol. 30, No. 1, 25-32.

Mintzberg, H. (1989). *Mintzberg on Management: Inside our Strange World of Organizations*. New York: The Free Press.

Mintzberg, H. (1990). "The Design School: Reconsidering the Basic Premises of Strategic Management". *Strategic Management Journal*. Vol. 11 (March/April), 171-195.

Mintzberg, H (1994). "The Fall and Rise of Strategic Planning". *Harvard Business Review*. (J-F), 107-114.

Mintzberg, H. and B. Ahlstrand and J. Lampel (1998). *Strategy Safari: A Guided Tour through the Wilds of Strategic Management*. Hampstead: Prentice Hall Europe.

Mintzberg, H and J. Lampel (1999). "Reflecting on Strategy Process". *Sloan Management Review*. Spring, 21-30.

Montgomery, C.A. and M.E. Porter (1991). "Introduction" in *Strategy: Seeking and Securing Competitive Advantage*. Boston: Harvard Business Review Book.

Moore, M. (2005). "Towards a Confirmatory Model of Retail Strategy Types: An Empirical Test of Miles and Snow". *Journal of Business Research*. Vol. 58, 696-704.

Morgan, R.E. and C.A. Strong (1998). "Marketing Orientation and Dimensions of Strategic Orientation". *European Journal of Marketing*. Vol. 32, No. 11-12, 1051-1073.

Morgan, R.E. and C.A. Strong (2003). "Business Performance and Dimensions of Strategic Orientation". *Journal of Business Research*. Vol. 56, 163-176.

Murphy, P. and B. Enis (1986). "Classifying Products Strategically". *Journal of Marketing*. Vol. 50, No. 3, 24-42.

Namiki, N. (1989). "Miles and Snow's Typology of Strategy, Perceived Environmental Uncertainty, and Organizational Performance". *Akron Business and Economic Review*. Vol. 20 (Summer), No. 2, 72-88.

Namiki, N. (1989a). "Different Types of Reactors in High-Technology Industries: An Empirical Study". *Akron Business and Economic Review*. Vol. 20 (Winter), No. 4.

Narver, J.C. and S.F. Slater (1990). "The Effects of Market Orientation on Business Profitability". *Journal of Marketing*. Vol. 54 (October), 20-35.

Ngai, J.C.H. and P. Ellis (1998). "Market Orientation and Business Performance: Some Evidence from Hong Kong". *International Marketing Review*. Vol. 15, No. 2, 119-39.

Nonaka, I. (1991). "The Knowledge-Creating Company". *Harvard Business Review*. November-December, 96-104.

Nonaka, I and H. Takeuchi (1995). *The Knowledge-Creating Company*. New York: Oxford University Press.

Nwokah, N.G. (2008). "Strategic Market Orientation and Business Performance". *European Journal of Marketing*. Vol. 42, No. 3/4, 279-286.

Ohmae, K. (1983). *The Mind of the Strategist*. New York: Penguin Books.

Ohmae, K. (1991). "Getting Back to Strategy". In: Dolan, Robert J. (Ed), *Strategic Marketing Management*: 55-66. Boston: Harvard Business School.

Olson, E.M. and S.F. Slater (2002). "The Balanced Scorecard, Competitive Strategy, and Performance". *Business Horizons*. May-June, 11-16.

Olson, E.M., S.F Slater, G. Hull, and M. Thomas (2005). "The Importance of Structure and Process to Strategy Implementation". *Business Horizons*. Vol. 48 (Jan/Feb), Iss. 1, 47.

O'Regan, N. and A. Ghobadian (2006). "Perceptions of Generic Strategies of Small and Medium Sized Engineering and Electronics Manufacturers in the UK: The Applicability of the Miles and Snow Typology". *Journal of Manufacturing Technology Management.* Vol. 17, No. 5, 603-620.

O'Shaughnessy, J. (1995). *Competitive Marketing: A Strategic Approach*. 3rd Ed. London: Rutledge.

Panitz, E. (1995). "Strategic Types and Growth Strategies Used by Public Accounting Firms". *Journal of Professional Services Marketing*. Vol. 13, No. 1, 135-143.

Parnell, J.A. (1997). "New Evidence in the Generic Strategy and Business Performance Debate: A Research Note". *British Journal of Management.* Vol. 8, 175-181.

Parnell, J. and L. Hershey (2005). "The Strategy-Performance Relationship Revisited: The Blessing and Curse of The Combination Strategy". *International Journal of Commerce and Management*. Vol. 15, No. 1, 17-33.

Pascale, R.T. (1999). "Surfing the Edge of Chaos". *Sloan Management Review*. Spring, 83-94.

Pearson, G. (1999). *Strategy in Action: Strategic Thinking, Understanding and Practice*. Harlow: Pearson Education Ltd.

Pelham, A.M. and D.T. Wilson (1996). "A Longitudinal Study of the Impact of Market Structure, Firm Structure, Strategy, and Market Orientation Culture on Dimensions of Small-Firm Performance". *Journal of the Academy of Marketing Science*. Winter, 27-43.

Pitt, L., A. Caruana and P.R. Berthon (1996). "Market Orientation and Business Performance: Some European Evidence". *International Marketing Review*. Vol. 13, No. 1, 5-18.

Porter, M.E. (1980). *Competitive Strategy: Techniques for Analyzing Industries and Competitors.* New York: The Free Press.

Porter, M.E. (1981). "The Contributions of Industrial Organization to Strategic Management". *The Academy of Management Review.* Vol. 6, No. 4, 609-620.

Porter, M.E. (1991). "Towards a Dynamic Theory of Strategy". *Strategic Management Journal*. Vol. 12, 95-117.

Porter, M.E. (1985). *Competitive Advantage.* New York: The Free Press.

Porter, M (1996). "What is Strategy?". *Harvard Business Review.* Nov-Dec, 61-78.

Preacher, K. J. and A.F. Hayes (2004). "SPSS and SAS Procedures for Estimating Indirect Effects in Simple Mediation Models". *Behavior Research Methods, Instruments, & Computers.* Vol. 36, No. 4, 717-731.

Quelch, J.A. and D.J. Arnold (1998). "New Strategies in Emerging Markets". *Sloan Management Review*. Fall 7-20.

Quinn, J.B. (1980). "Managing Strategic Change". *Sloan Management Review.* Summer Vol. 21, No. 4.

Quinn, J.B., H. Mintzberg and R.M. James (1988). *The Strategy Process: Concepts, Contexts, and Cases*. Englewood Cliffs, N.J.: Prentice-Hall.

Robbins, S.P. and M. Coulter (1996). *Management.* New Jersey: Prentice Hall.

Rodrigues, J.N. (2002). "Strategy and Structure Redux". *Business Strategy Review.* Vol. 13, No. 3, 20-27.

Rodriguez-Pinto, J., J. Gutiérrez-Cillan and A.I. Rodriquez-Escudero (2007). "Order and Scale of Market Entry, Firm Resources, and Performance". *European Journal of Marketing.* Vol. 41, No. 5/6, 590-607.

Rubinstein, M.F. and I.R. Firstenberg (1999). *The Minding Organization*. New York: John Wiley and Sons.

Ruekert, R. W. (1992). "Developing a Market Orientation: An Organizational Strategy Perspective". *International Journal of Research in Marketing*. Vol. 9, 225-245.

Rue, L.W. and P.G. Holland (1989). *Strategic Management.* 2nd Ed. New York: McGraw-Hill Publishing Company.

Rumelt, R.P., D.E. Schendel and D.J. Teece (1994) (Ed). *Fundamental Issues in Strategy: A Research Agenda*. Boston: Harvard Business School Press.

Sanchez, J.C. (1993). "The Long and Thorny Way to an Organizational Taxonomy". *Organization Studies*. Vol. 14, No. 1, 73-92.

Schendel, D. (1997). "The Interactions of Organizational and Competitive Influences on Strategy and Performance". *Strategic Management Journal*. Vol. 18, 1-3.

Schlegelmilch, B.B. and R. Sundoresan (2000). "The Impact of Organizational and Environmental Variables on Strategic Market Orientation: An Empirical Investigation". *Journal of Global Marketing*. Vol. 13, No. 3.

Segev, E. (1987). "Strategy and Strategy-Making, and Performance in a Business Game". *Strategic Management Journal*. Vol. 8, 565-577.

Segev, E. (1987). "Strategy and Strategy Making, and Performance- An Empirical Investigation. *Management Science*. Vol. 33, No. 2.

Segev, E. (1989). "A Systematic Comparative Analysis and Synthesis of Two Business-Level Strategic Typologies". *Strategic Management Journal*. Vol. 10, 487-505.

Shapiro, B.P. (1991). "The Marketing Mix". In: Dolan, Robert J. (Ed), *Strategic Marketing Management*: 176-182. Boston: HBS.

Shortell, S.M. and E.J. Zajac, (1990). "Perceptual and Archival Measures of Miles and Snow's Strategic Types: A Comprehensive Assessment of Reliability and Validity". *Academy of Management Journal*. Vol. 33, No. 4, 817-832.

Skinner, W. (1969). "Manufacturing-Missing Link in Corporate Strategy". *Harvard Business Review*. May-June, 136-145.

Skinner, W. (1974). "The Focused Factory". *Harvard Business Review*. May-June, 113-121.

Slater, S.F. and J.C. Narver (1993). "Product-Market Strategy and Performance: An Analysis of the Miles and Snow Strategy Types". *European Journal of Marketing*. Vol. 27, No. 10, 33-51.

Slater, S.F. and J.C. Narver (1995). "Market Orientation and The Learning Organization." *Journal of Marketing*. July Vol. 59, Iss. 3, 63-74.

Slater, S.F. and E.M. Olson (2000). "Strategy Type and Performance: The Influence of Sales Force Management". *Strategic Management Journal*. Vol. 21, 813-829.

Slater, S.F. and E.M. Olson (2001). "Marketing's Contribution to the Implementation of Business Strategy: An Empirical Analysis". *Strategic Management Journal*. Vol. 22, 1055-67.

Slater, S.F., E.M. Olson and G.T.M. Hult (2006). "The Moderating Influence of Strategic Orientation on the Strategy Formation Capability-Performance Relationship". *Strategic Management Journal.* Vol. 27, 1221-1231.

Smith, P.L. (1988). "The Linkage between Research, Business Strategy and Marketing". *Research Technology Management*. Vol. 31, No. 2 (Mar/Apr), 6-8.

Smith, K.G., J.P. Guthrie and M. Chen (1986). "Miles and Snow's Typology of Strategy, Organizational Size and Organizational Performance". *Academy of Management Proceedings*. 45-49.

Smith, K.G., J.P Guthrie and M. Chen, (1989). "Strategy, Size and Performance". *Organization Studies.* Vol. 10/1, 63-81.

Smothers, N.P. (1990). "Patterns of Japanese Strategy: Strategic Combinations of Strategies". *Strategic Management Journal*. Vol. 11, 521-533.

Snow, C.C. and D.C. Hambrick (1980), "Measuring Organizational Strategies: Some Theoretical and Methodological Problems". *Academy of Management Review.* Vol. 5, No. 4, 527-38.

Snow, C.C. and L.G. Hrebiniak (1980). "Strategy, Distinctive Competence and Organizational Performance". *Administrative Science Quarterly*. Vol. 25, 317-335.

SPI Strategic Planning Institute (2005). http://www.pimsonline.com (02.02.2005).

Stanton, W.J. (1978). *Fundamentals of Marketing*. New York: McGraw-Hill.

Stathakopoulos, V. (1998). "Enhancing the Performance of Marketing Managers: Aligning Strategy, Structure and Evaluation Systems". *European Journal of Marketing.* Vol. 32, No. 56, 536-558.

Stern, C.W. and G. Stalk, Jr. (Eds) (1998). *Perspectives on Strategy from The Boston Consulting Group*. New York: John Wiley and Sons.

Stoner, J., A.F. Freeman and D.R. Gilbert, Jr. (1995). *Management*. 6th Ed. New Jersey: Prentice Hall.

Sun-Tzu, W. (ca. B.C.500). *The Art of War.* Available at http//:www.sonshi.com. (12.8.2007).

Taylor, J.W. (1985). *Competitive Marketing strategies*. Maywood: Alexander Hamilton Institute.

Tek, O.B. (1999). *Pazarlama İlkeleri*. 8th Ed. İstanbul: Beta Basım Yayım Dağıtım A.Ş.

The American Heritage Dictionary of the English Language (1973). Boston: Houghton Mifflin Co.

Thesaurus: *MS Bookshelf-British Reference Collection-Encyclopedia.*

Thompson, J. and M. Cole (1997). "Strategic Competency- The Learning Challenge". *Journal of Workplace Learning.* Vol. 9, No. 5, 153-162.

Thompson Jr., A.A. and A. J. Strickland III (2001). *Strategic Management: Concepts and Cases*. 12th Ed. Boston: McGraw-Hill Irwin.

Torres, A.M. and J.A. Murray (2000). "Diversity and Marketing Practice". *Irish Marketing Review*. Vol. 12, No. 2, 3-18.

Treacy, M. and F. Wiersema (1993). "Customer Intimacy and Other Value Disciplines". *Harvard Business Review*. J-F, 84-93.

Treacy, M. and F. Wiersema (1995). *The Disciplines of Market Leaders*. Cambridge: Perseus Books.

Tse, A.C.B., L.Y.M. Sin, O.H.M. Yau, J.S.Y. Lee and R. Chow (2003). "Market Orientation and Business Performance in a Chinese Business Environment". *Journal of Business Research.* Vol. 56, 227-239.

Udell, J.G. (1968). "The Perceived Importance of the Elements of Strategy". *Journal of Marketing*. Vol. 32 (Jan), 34-40.

Utkulu, U. and D. Seymen (2004). "Revealed Comparative Advantage and Competitiveness: Evidence for Turkey *vis-à-vis* the EU/15". Paper presentation at the European Trade Study Group 6th Annual Conference in September.

Varadarajan, P. R. and T. Clark (1994). "Delineating the Scope of Corporate, Business, and Marketing Strategy". *Journal of Business Research*. Vol. 31, 93-105.

Venkatraman, N. and J.C. Camillus (1984). "Exploring Concept of Fit in Strategic Management". *Academy of Management Review.* Vol. 9 (July), Iss. 3, 513-523.

Venkatraman, N. (1985). *Strategic Orientation of Business Enterprises: The Construct, Dimensionality and Measurement"*. Unpublished doctoral dissertation, University of Pittsburgh.

Venkatraman, N. (1989). "Strategic Orientation of Business Enterprises: The Construct and its Measurement". *Management Science*. Vol. 35, No. 8.

Venkatraman, N (1989a). "The Concept of Fit in Strategy Research: Towards Verbal and Statistical Correspondence". *Academy of Management Review.* Vol. 14, No. 3, 423-444.

Venkatraman, N. and J.H. Grant (1986). "Construct Measurement in Organizational Strategy Research: A Critique and Proposal". *Academy of Management Review.* Vol. 11, No. 1, 71-87.

Venkatraman, N. and J.E. Prescott, (1990). "Environment-Strategy Coalignment: An Empirical Test of its Performance Implications". *Strategic Management Journal.* Vol. 11, 1-23.

Venkatraman, N. and V. Ramanujam (1986). "Measurement of Business Performance in Strategy Research: A Comparison of Approaches". *Academy of Managerial Review*. Vol. 11, No. 4, 801-814.

Volberda, H.W. and T. Elfring, (2001) (Ed.) *Rethinking Strategy.* London: Saga Publications.

Von Eijnetten, F.M. and G.D. Putnik (2004). "Chaos, Complexity, Learning, and The Learning Organization". *The Learning Organization*. Vol. 11, No. 6, 418-429.

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

Walker, Jr., C.O. and H. W. Boyd, Jr., and J. C. Larréché, (1999). *Marketing Strategy: Planning and Implementation*. 3rd Ed. Boston: Irwin McGraw Hill.

Walker Jr, C.O. and W.R. Ruekert, (1987). "Marketing's Role in the Implementation of Business Strategies: A Critical Review and Conceptual Framework". *Journal of Marketing*. Vol. 51, July, 15-33.

Wang, D. and C. Shyu (2008). "Will the Strategic Fit between Business and HRM Strategy Influence HRM Effectiveness and Organizational Performance?" *International Journal of Manpower.* Vol. 29, No. 2, 92-110

Weber, M. (1947). *The Theory of Social and Economic Organization.* New York: Oxford University Press.

Werts, C.E., R.L. Linn and K.G. Joreskog (1974). "Interclass Reliability Estimates: Testing Structural Assumptions". *Educational and Psychological Measurement.* Vol. 34, 25-33 cited in Venkatraman, N. (1989). "Strategic Orientation of Business Enterprises: The Construct and its Measurement". *Management Science*. Vol. 35, No. 8.

Wheelen, T. L. and D. J. Hunger (2002). *Strategic Management and Business Policy".* 8th Ed. New Jersey: Prentice Hall.

White, R.E. and R.G. Hamermesh (1981). "Toward a Model of Business Unit Performance: An Integrative Approach. *The Academy of Management Review.* Vol. 6, No. 2, 213-223

Wilkinson, I. and L. Young (2002). "Marketing Theory in the Next Millennium: Looking Backwards and Forwards". *Journal of Business Research*. Vol. 55, 81-85.

Williams, C.E. and E.C.Y. Tse (1995). "The Relationship between Strategy and Entrepreneurship; The US Restaurant Sector". *International Journal of Contemporary Hospitality Management.* Vol. 7, No. 1, 22-26.

Williams, H.A. (2003). *A Mediated Hierarchical Regression Analysis of Factors Related to Research Productivity of Human Resource Education and Workforce Development Postsecondary Faculty*. Unpublished doctoral dissertation. Louisiana State University.

Wind, Y. and T.S. Robertson, (1983). "Marketing Strategy: New Directions for Theory and Research". *Journal of Marketing.* Vol. 47, Spring, 12-25.

Wissema, J.G., H.W. Van der Pol and H.M. Meser (1980). "Strategic Management Archetypes". *Strategic Management Journal*. Vol. 1, No. 1 (Jan.-Mar), 37-47.

Wong, V. and J. Saunders (1993). "Business Orientations and Corporate Success". *Journal of Strategic* Marketing. Vol. 1, 20-40.

Woo, C. and A.C. Cooper (1981). "Strategies of Effective Low Share Businesses". *Strategic Management Journal*. Vol. 2, 301-318.

World Bank Report No.33549-TR. (2006). Turkey: Country Economic Memorandum. *Poverty Reduction and Economic Management Unit-Europe and Central Asia Region.*

Wright, P.M. and R.A. Noe (1996). *Management of Organizations*. Chicago: Irwin.

Wright, P., M.J. Kroll and J.A. Parnell (1998). *Strategic Management: Concepts and Cases*. Upper Saddle River: Prentice Hall.

Yeomans, K.A. and P.A. Golder (1982). "The Guttman-Kaiser Criterion as a Predictor of the Number of Common Factors". *The Statistician.* Vol. 31, No. 3, 221-229

Zahra, S.A. and J.A. Pearce III (1990). "Research Evidence on the Miles-Snow Typology". *Journal of Management.* Vol. 16, No. 1, 22-26.

Zajac, E.J. and S.M. Shortell (1989). "Changing Generic Strategies: Likelihood, Direction, and Performance Implications". *Strategic Management Journal*. Vol. 10, September/October, 413-430.

Zehir, C., Z.A. Acar and H. Tanrıverdi (2006). "Identifying Organizational Capabilities as Predictors of Growth and Business Performance". *The Business Review, Cambridge.* Summer, Vol. 5, No. 2, 109-116.

Zhu, Z. and C. Nakata (2007). "Reexamining the Link between Customer Orientation and Business Performance: The Role of Information Systems". *Journal of Marketing Theory and Practice.* Vol. 15 (Summer), No. 3, 187-203.

Zott, C. and R. Amit (2008). "The Fit between Product Market Strategy and Business Model: Implications for Firm Performance". *Strategic Management Journal.* Vol. 29, 1-26.

Appendix 1: Survey Instrument (Adapted) in Turkish

1.1. Firmanızın unvanı:

2. Firmanızın kuruluş yılı:

3. Üretim veya hizmetlerin büyük bölümünün yapıldığı il(ler):

2a. **Stratejik iş biriminiz (yönetiminiz) ile ilgili olarak aşağıdaki açıklamalara ne derece katılıyorsunuz.**	Hiç katılmı yorum (1)	Çok az katılıyo rum (2)	Az katılıyo rum (3)	Oldukça katılıyo rum (4)	Çok katılıyo rum (5)	Tamamen katılıyo rum (6)
4. Pazar istikrarlı ise, güvenilir bir pazar dilimi bulmaya çalışırız.						
5. Sektörde, yenilikçilikte lideriz.						
6. Pazarımızı korumak için rakiplerimize nazaran daha saldırgan davranırız.						
7. Pazar istikrarlı ise, elimizdeki güvenilir pazar dilimini tutmaya çalışırız.						
8. Kârımızın büyük bölümünü geleneksel ürün/hizmet ve müşterilerimizden sağlarız.						
9. Pazarın oldukça dar bir diliminde en iyi performansı sağlamaya çalışırız.						
10. Rakiplere kıyasla daha az ürün çeşidi ile çalışırız.						
11. Sınırlı sayıda ürün/hizmet çeşidi ile çalışırız.						
12. Geniş bir ürün/hizmet çeşidimiz vardır.						
13. Ürün çeşidinde istikrara önem veririz.						
14. Ürün/hizmet çeşitlerimizi dönemsel olarak değerlendirip tekrar düzenleriz.						
15. Pazar payımızı korumak için rakiplere nazaran yüksek kaliteye daha çok önem veririz.						
16. Sektördeki yeniliklere hızla uyum sağlarız.						
17. Tespit ettiğimiz yeniliklerin uygulanabilirliğini dikkatlice inceleriz.						
18. Pazar payımızı korumak için rakiplere kıyasla daha düşük fiyat uygularız.						
19. Rakiplerin geliştirdiği yeni ürünlere düşük maliyetli ve benzer ürünlerle karşılık veririz.						
20. Bizi doğrudan etkilemeyen sektördeki değişiklikler bizim için önemli değildir.						
21. Yeni ürünleri ve pazardaki diğer gelişmeleri sürekli izleriz.						
22. Rakiplerimizin davranışlarını dikkatlice gözlemleriz.						
23. Çevremizden hangi alanlarda baskı görürsek, onlara karşılık veririz.						
24. Pazara dikkatli bir şekilde ve azar azar nüfuz ederek büyürüz.						
25. Büyümeyi, bulunduğumuz pazarlara daha derinlemesine nüfuz ederek sağlarız.						
26. Pazarda dikkatli bir şekilde, az sayıda ürün (hizmet) geliştirerek büyürüz.						
27. Sektörde (pazarda) yeni ürün geliştirerek büyürüz.						
28. Sektörde yeni pazarlar oluşturarak büyürüz.						
29. Büyümeyi, yüksek potansiyelli yeni ürün geliştirerek sağlarız.						
30. Yeni ürün geliştirmede daima "ilk yapan" olmaya önem veririz.						

2b. **Stratejik iş biriminiz (yönetiminiz) ile ilgili olarak aşağıdaki açıklamalara ne derece katılıyorsunuz.**	Hiç katılmı yorum (1)	Çok az katılıyo rum (2)	Az katılıyo rum (3)	Oldukça katılıyo rum (4)	Çok katılıyo rum (5)	Tamamen katılıyo rum (6)
31. Risk almaktan çekinmeyiz.						
32.Sektörde "ilk yapan" olmak adına yeni ürün geliştirilmesi için sarf edilen gayretlerimizin hepsi başarılı değildir.						
33.Çevremizdeki en küçük fırsat sinyallerini bile en seri şekilde değerlendiririz.						
34. Yenilikçi uygulamalarımız, sektörde, rekabet hareketine neden olur.						
35.Kabiliyetlerimizi bir veya bir kaç alanda odaklanmış uzmanlık olarak tanımlayabiliriz.						
36.Yapımız değişimlere uyum sağlayacak kabiliyettedir.						
37.Geniş bakış açılı ve girişimciyiz.						
38.Değişik uzmanlıklara ve birçok teknolojiye sahibiz.						
39.Kabiliyetlerimiz pazardaki eğilimleri teşhis etmeye ve yeni çözümler üretmeye yöneliktir.						
40.Pazarın kısa vadeli taleplerine cevap vermede çok becerikliyiz						
41.Organizasyon yapımız esas itibari ile fonksiyoneldir. (Şöyle ki pazarlama, muhasebe personel gibi birimler itibari ile yapılanmıştır.)						
42.Örgüt yapımız ürün (hizmet)/pazar odaklıdır.						
43.Örgüt yapımız matriks yapıdır. (Fonksiyonel bölümler dikey ilişki içinde iken yatay ilişkide fonksiyonel bölümlerden belli kişiler bir yöneticisi eşliğinde proje ekibi olarak bir ürün/ veya pazarı geliştirmeye odaklanırlar)						
44.Örgüt yapımız fırsatları değerlendirmek ve problemlerle baş edebilmek için devamlı değişmektedir.						
45.Planlamamız, ürün/hizmet çeşitlerimizin piyasadaki konumunu korumaya odaklıdır.						
46.Planlamamız, ürün/hizmet çeşitlerimizin piyasadaki konumunu güçlendirmeye odaklıdır.						
47.Planlamamız, sektördeki fırsat ve eğilimleri teşhis etmeye odaklıdır.						
48.Planlamamız, rakiplerin başarılı uygulamalarını teşhis etmeye odaklıdır.						
49.Planlamamız, mevcut ürün/hizmet müşterilere ilişkin sorunları gidermeye odaklıdır.						
50.Planlamamız, acil çözüm bekleyen sorun ve meydan okumalara odaklıdır.						
51.Performans değerlendirme süreçlerimiz merkeziyetçidir.						
52.Performans değerlendirme süreçlerimiz üst yönetimin sorumluluk alanına girmektedir.						
53.Performans değerlendirme süreçlerimiz merkeziyetçi olmayıp geniş katılımı özendirir.						
54.Performans değerlendirme süreçlerimiz, eski ürünler/ hizmetler söz konusu olduğunda merkeziyetçidir.						
55.Performans değerlendirme süreçlerimiz, yeni ürünler/ hizmetler söz konusu olduğunda katılımcıdır.						
56.Performans değerlendirme süreçlerimiz, esasen acil taleplere cevap verecek şekilde yapılandırılmıştır.						

3. Stratejik iş biriminiz (yönetiminiz) ile ilgili olarak aşağıdaki açıklamalara ne derece katılıyorsunuz.

	Hiç katılmı yorum (1)	Çok az katılıyo rum (2	Az katılıyo rum (3)	Oldukça katılıyo rum (4)	Çok katılıyo rum (5)	Tamamen katılıyo rum (6)
57.Genelde, pazar payı kazanmak için kârlılıktan ödün veririz.						
58.Genelde, pazar payını arttırmak için fiyat kırarız.						
59.Genelde, fiyatlarımız rakiplere kıyasla düşüktür.						
60.Genelde, nakit akışı ve kârlılık aleyhine de olsa pazar payımızı korumak için ne gerekiyor ise yaparız.						
61.Farklı fonksiyonel birimler arasındaki etkin koordinasyonu vurgularız.						
62.Karar verme süreçlerinde bilgi sistemlerimizden faydalanırız.						
63.Ana konularda ilgili karar verme sürecinde detaylı bir analiz geliştirmeye çalışırız.						
64.Birçok planlama tekniği kullanırız.						
65.Kullandığımız veriler yönetim bilgi ve kontrol sistemlerinden sağlanmaktadır.						
66.Üst düzey yöneticiler için insan kaynakları planlaması ve performans değerlendirme sistemleri kullanırız.						
67.Ara sıra imalat teknolojilerinde önemli değişiklikler gerçekleştiririz.						
68.Performans değerlendirmelerinde sıklıkla kontrol sistemleri kullanırız.						
69.Sık sık üretim yönetimi tekniklerini kullanırız.						
70.Çoğunlukla, ürün kalitesine verdiğimiz önemi gönüllüğe dayalı kalite gruplarını oluşturarak (kalite çemberleri ile) vurgularız.						
71.Rekabet üstünlüğü sağlayacak temel araştırmalara ağırlık veririz.						
72.Operasyonların başarısını önceden belirlenen hedeflere göre ölçeriz.						
73.Genel akımları sistemli olarak izleriz.						
74.Kritik hususlarda çoğunlukla 'eğer şöyle olsaydı' analizlerini gerçekleştiririz.						
75.Mevcut operasyonlarımıza etkisi olacak yeni fırsatları sürekli kollarız						
76.Pazara giren yeni markaları veya ürün/hizmet çeşitlerini genellikle biz geliştiririz.						
77.Sürekli olarak yeni işler peşindeyiz.						
78.İleride meydana gelebilecek olumsuzluklar için önceden tedbir alırız.						
79.Esasa yönelik kararlar verirken muhafazakâr bir duruş sergileriz. (rev.)						
80.Yeni projeleri "bütünü" onay yönteminden çok "kısım kısım" onay yöntemi ile değerlendiririz. (rev.)						
81.Geri dönüşleri belli olan projeleri destekleriz. (rev.)						
82.Operasyonlarımız genellikle denenmiş ve doğrulanmış yöntemleri takip eder. (rev.)						

4. Geçen yıl itibari ile iş biriminizin (yönetiminizin) aşağıdaki alanlardaki performansı nasıldı?

	Çok zayıf (1)	Olduk-ça zayıf (2)	Zayıf (3)	İyi (4)	Olduk-ça iyi (5)	Çok iyi (6)
83.Hedeflerle karşılaştırıldığında toplamdaki performansımız						
84.Ana rakiplerle karşılaştırıldığında toplamdaki performansımız						

5. Geçen yıl itibari ile iş biriminizi (yönetiminizi) *büyük rakiplerinizle karşılaştırdığınızda* **aşağıdaki alanlardaki performansınız nasıldı?**

	Çok zayıf (1)	Olduk-ça zayıf (2)	Zayıf (3)	İyi (4)	Olduk-ça iyi (5)	Çok iyi (6)
85.Pazar payımız						
86.Pazar payında büyümemiz						
87.Toplam satış hacmimiz						
88.YTL büyüme oranımız						
89.Aktif (mali varlıklar) getirimiz						
90.Yatırım getirimiz						
91.Ürün/hizmet kalitemiz						

6. Aşağıdaki kavramlar itibari ile iş biriminizin (yönetiminizin) *önceden belirlenen hedeflere kıyasla* **performansı nasıldı?**

	Çok zayıf (1)	Olduk-ça zayıf (2)	Zayıf (3)	İyi (4)	Olduk-ça iyi (5)	Çok iyi (6)
92.Müşteri memnuniyeti						
93.Müşterileri elde tutma						
94.Pazar payı						
95.Pazar payında büyüme						
96.Toplam satış hacmi YTL						
97.Oransal satış (YTL) büyümesi						
98.Aktif (mali varlıklar) getirisi						
99.Yatırım getirisi						

7. İş biriminiz (yönetimimiz) ile ilgili olarak aşağıdaki soruları yanıtlayınız.

100.Aşağıdaki yıllara ilişkin aktif getirilerini (mali varlıklarının getirilerini) belirtiniz. PP18   a. 2006 % ...   b. 2005 % ...   c. 2004 % ...
101.Aşağıdaki yıllara ilişkin yatırım getirilerini belirtiniz. PP19   a. 2006 % ...   b. 2005 % ...   c. 2004 % ...
102.Aşağıdaki yıllara ilişkin pazar paylarını belirtiniz. PP20   a. 2006 % ...   b. 2005 % ...   c. 2004 % ...
103.Aşağıdaki yıllara ilişkin pazar payındaki büyüme oranlarını belirtiniz. PP21   a. 2006 % ...   b. 2005 % ...   c. 2004 % ...
104.Aşağıdaki yıllara ilişkin satış gelirlerindeki büyüme oranlarını belirtiniz. PP22   a. 2006 % ...   b. 2005 % ...   c. 2004 %

8a. İş biriminiz (yönetiminiz) ile ilgili olarak aşağıdaki açıklamalara ne derece katılıyorsunuz?

	Hiç katılmı yorum (1)	Çok az katılıyo rum (2)	Az katılıyo rum (3)	Oldukça katılıyo rum (4)	Çok katılıyo rum (5)	Tamamen katılıyo rum (6)
105.En büyük pazar payı ile pazarda bir numarayız.	L1					
106.Pazar lideri değiliz. En büyük pazar payına sahip değiliz.	C1					
107.Pazar payımız düşüktür.	F1a					

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8b. İş biriminiz (yönetiminiz) ile ilgili olarak aşağıdaki açıklamalara ne derece katılıyorsunuz?	Hiç katılmı yorum (1)	Çok az katılıyo rum (2)	Az katılıyo rum (3)	Oldukça katılıyo rum (4)	Çok katılıyo rum (5)	Tamamen katılıyo rum (6)
108.Pazar lideri ile çatışmaktan sakınırız.						
109.Hedef pazarımız, rakiplerimizin önemsemediği nişlerdir (küçük pazar dilimleri).						
110.Fiyat geçişlerinde öncüyüz						
111.En yüksek dağılım (bulunurluk) oranına sahibiz.						
112.Tutundurma (promosyon) harcamalarında bütün firmaların önündeyiz.						
113.Pazar payını arttırmak için rakiplere saldırırız.						
114.Pazar liderinin ürünlerini taklit ederek veya uyarlayarak pazar payımızı koruruz.						
115.Bizim için müşterilerimizi diğer firmalardan daha iyi tanımak ve hizmet etmek önemlidir.						
116.Pazar lideri olarak, satışlarımızı arttırmak amacı ile toplam pazar hacminin büyütülmesi için çalışırız.						
117.Pazar lideri olarak saldırılara karşı pazar payımızı korumada hassasız.						
118.Pazar payımızı arttırmak için, pazar liderine şiddetli bir şekilde saldırırız.						
119.Rakiplerin her zaman önünde yer almak için tedbir olarak devamlı yenilikler yaparız.						
120.Pazar payımızı arttırmak için zayıf rakiplerimizin pazar payını kapmaya çalışırız.						
121.Pazar payımızı arttırmak için, pazar liderine saldırmayız. Bize yakın büyüklükte, finansman sıkıntısı çeken ve başarılı olamayan rakiplere saldırırız.						
122.Pazar payımızı arttırmak için, pazar liderine saldırmayız. Küçük veya bölgesel çalışan, finansman sıkıntısı çeken, başarılı olamayan rakiplere saldırırız.						
123.Pazar liderinin ürünlerini/hizmetlerini ve/veya ambalajlarını aynen taklit edip kendimiz piyasalara doğrudan satış yaparız.						
124.Taklit ettiğimiz pazar liderine ait ürünleri/hizmetleri, kendimiz veya bu tip ticaret yapan kimi dağıtıcılar aracılığı ile satarız.						
125.Adını ve ambalajını küçük değişikliklerle kopyaladığımız pazar liderine ait ürünleri, pazarın mümkün olan her dilimine yaymaya çalışırız.						
126.Bazı unsurları pazar liderinden kopyalasak da ambalaj, reklâm, fiyatlandırma ve satış yeri unsurlarında farklılaşmamızı koruruz.						
127.Pazar liderine ait ürünleri geliştirerek ayni pazara satarız.						
128.Pazar liderine ait ürünleri geliştirerek değişik pazarlara satarız.						
129.Belirli pazarlarda ve coğrafyada uzmanlaşma ile oluşmuş bir nişte (küçük pazar diliminde) hizmet veririz.						
130.Niş pazara (küçük pazar dilimi) hizmet vermekte uzmanız.						
131.Niş (küçük pazar dilimi) pazarın özel ürün talebini karşılarız.						
132.Çok sayıda niş (küçük pazar dilimi) pazara bir veya birkaç alandaki uzmanlığımız ile hizmet veririz.						

9. **Cevabınızı ilgili satırdaki sayıyı daire içine alarak belirtiniz.**

133.Yönetiminiz hangi tip ekonomik sektörde faaliyette bulunmaktadır? IT1   1.__ İmalat 2.__Hizmet 3.__Diğerleri. Hangileri olduğunu lütfen belirtiniz ....

134.Yönetiminiz hangi tip endüstriyel segmentte (dilimde) yer almaktadır? IT2

1.__Dayanıklı tüketim malları 2.__Hızlı tüketim malları 3.__Yatırım malları 4.__Ham ve yarı mamul malzemeler

5.__Komponentler (yan sanayi) 6.__İkmaller 7.__Hizmetler 8.__Toptan ve perakende dağıtım

135.Yönetiminiz hangi tip faaliyet alanında çalışmaktadır? IT3

1.__Ticaret 2.__Kimyasal 3.__Gıda ve perakende 4.__Otomotiv 5.__Tekstil 6.__Enerji 7.__Finansal hizmetler (bankacılık dâhil) ve sigortacılık 8.__İnşaat 9.__Sağlık 10.__Ev bakım ürünleri 11.__Diğerleri. Lütfen belirtiniz

136.Bu iş yönetiminin belli başlı ürünlerini/markalarını belirtiniz. IT4

137.İç ve dış pazara yaptığınız satışların durumunu belirtiniz X6

1. __ Tamamen iç pazara satış yaparız.
2. __ Tamamen dış pazara satış yaparız.
3. __ İç pazara yaptığımız satışlar daha fazladır.
4. __ Dış pazara yaptığımız satışlar daha fazladır.
5. __ İç ve dış parlara yaptığımız satışlar hemen hemen eşittir.

138.Kaç yıldır ihracat yapıyorsunuz? 1.__ 0–1 yıldır. 2.__1–3 yıldır. 3.__3–5 yıldır. 4.__5 ve daha fazla yıldır. X7

139.İhracat sıklığınız nedir? 1. __Düzenli 2. __Ara sıra X8

140.Firmanızın ihracat faaliyetlerini hangi bölüm yürütür? X9

1.__ İhracat bölümü 2.__ Pazarlama bölümü 3.__ Genel Müdür 4.__ Firma sahibi

141.Şirket ortaklığınızda yabancı sermaye var mı, varsa oranı nedir? FC10

1. __ Yok 2. __ %1-%25 arası 3. __ %26-%50 arası 4. __ %51-%67 arası 5. __ %68 ve fazlası

142.Bu şirkette tam zamanlı olarak çalışan personel sayısını işaretleyiniz. IT5

1. __ < 50 2. __ 50-100 3. __ 101 – 250 4. __ 251 – 500 5. __ 501 – 750 6. __ > 750

143.Bu iş biriminde görev unvanınız nedir: . . . DG11

Adınız . . . Adresiniz: . . .

144.Uzmanlık alanınız: DG12

1. __Üretim-teknik 2. __Finansman-muhasebe 3. __ Pazarlama-satış 4.__İnsan kaynakları 5. __Diğerleri

145.Öğrenim durumunuz: DG13

1.__İlköğretim 2.__Orta öğretim 3.__Yüksek okul (iki yıllık) 4.__Lisans (üniversite) 5. __ Lisansüstü

10. Aşağıdaki açıklamalara ne derece katılıyorsunuz?

	Hiç katılmı yorum (1)	Çok az katılıyo rum (2)	Az katılıyo rum (3)	Oldukça katılıyo rum (4)	Çok katılıyo rum (5)	Tamamen katılıyo rum (6)
146. İşimizde (sektörümüzde) kıyasıya rekabet vardır.						
İ147. İşimizde (sektörümüzde) yoğun promosyon savaşları görülmektedir.						
148. Rakibin sunduğuna diğerleri de hemen aynısı ile cevap verir.						
149. Fiyat rekabeti işimizin (sektörümüzün) esas özelliklerindendir.						
150. Hemen her gün yeni bir rakip hamlesinin haberini almaktayız.						
151. Rakiplerimiz nispeten zayıftır.						

11. İş biriminizin (yönetiminizin) ait olduğu sektörle ilgili olarak aşağıdaki açıklamalara ne derece katılıyorsunuz?

	Hiç katılmı yorum (1)	Çok az katılıyo rum (2)	Az katılıyo rum (3)	Oldukça katılıyo rum (4)	Çok katılıyo rum (5)	Tamamen katılıyo rum (6)
152. Müşteri tercihleri zamanla çok değişmektedir.						
153. Müşteriler sürekli yeni ürünlerle ilgilenirler.						
154. Müşteriler bazen fiyat konusunda çok hassasken, bazı durumlarda fiyat nispeten önemsiz hale gelir.						
155. Yeni müşterilerin ürünlerle ilgili ihtiyaçları mevcut müşterilerinkinden farklıdır.						
156. Geçmişte hizmet verdiğimiz müşterilerimizden çoğuna hizmet vermeye devam ediyoruz.						
157. Pazardaki değişimleri tahmin etmek çok zordur.						
158. Teknolojimiz çok hızlı değişmektedir.						
159. Teknolojik değişimler büyük fırsatlar yaratmaktadır.						
160. Gelecek iki-üç yıl içerisinde teknolojinin nerede olacağını tahmin etmek çok zordur.						
161. Teknolojik buluşlar sayesinde çok sayıda yeni ürün geliştirilebilmiştir.						
162. Sektörümüzde teknolojik gelişmeler sınırlıdır.						
163. Sektörümüzde teknolojik değişiklikler sıklıkla oluşmaktadır.						

12. Şirketinizde/Kurumunuzda/Organizasyonunuzda birden fazla stratejik iş birimi (işiniz) var ise, her birim için ayrı bir anket doldurunuz.

Birden fazla stratejik iş biriminiz var ise, bu anket hangi iş biriminiz ile ilgilidir?

Appendix 2: Survey Instrument (Original) in English

1.1. Title of your firm (organization):

2. The year of foundation of your firm (organization):

3. The city (cities) where major production or services are carried out:

2a. Please indicate how strongly you agree or disagree with the following statements regarding your strategic business unit.	Strongly disagree (1)	Dis-agree (2)	Disagree some what (3)	Agree some what (4)	Agree (5)	Strongly agree (6)
4. Our strategic business unit tries to locate a safe niche in a relatively stable products domain.						
5. Our strategic business unit leads in innovation in its industry.						
6. Compared to its competitors in the industry, our strategic business unit is aggressive in maintaining its product/market domain.						
7. Our strategic business unit tries to maintain a safe niche in a relatively stable products domain.						
8. Our strategic business unit accrues most of its profit from its firm base of traditional products and customers.						
9. Our strategic business unit concentrates on trying to achieve the best performance in a relatively narrow product-market domain.						
10. Our strategic business unit tends to offer a narrower set of products than its competitors.						
11. Our strategic business unit tries to maintain a limited line of products.						
12. Our strategic business unit operates in a broad product domain.						
13. Our strategic business unit tries to maintain a stable line of products.						
14. Our strategic business unit's product domain is periodically redefined.						
15. Our strategic business unit tries to protect the environment domain in which it operates by stressing higher quality than its competitors.						
16. Our strategic business unit adopts promising innovations in the industry quickly.						
17. The innovations which are chosen by our strategic business unit are carefully examined.						
18. Our strategic business unit tries to protect the environment domain in which it operates by stressing lower prices than its competitors.						
19. Our strategic business unit often reacts to innovations in the industry by offering similar, lower-cost products						
20. Our strategic business unit places less stress on the examination of changes in the industry that is not directly relevant to our strategic business unit.						
21. Our strategic business unit continuously monitors the marketplace for new product and market development.						
22. Our strategic business unit carefully monitors competitors' actions in the industry.						
23. Our strategic business unit responds to areas in which pressure is made on it by its environment.						
24. Our strategic business unit's cautious and incremental growth is realized through market penetration.						
25. Our strategic business unit's growth is achieved through assertively penetrating more deeply into markets that are currently served.						
26. Our strategic business unit's cautious and incremental growth is sometimes realized through some product development.						
27. Our strategic business unit's growth is achieved through product development.						

2b. Please indicate how strongly you agree or disagree with the following statements regarding your strategic business unit.	Strongly disagree (1)	Dis-agree (2	Disagree some what (3)	Agree some what (4)	Agree (5)	Strongly agree (6)
28. Our strategic business unit's growth is achieved through market diversification.						
29. Our strategic business unit's growth is achieved through adopting new products only after a very careful review of their potential.						
30. Our strategic business unit believes in being the 'first-in' in the industry in development of new products.						
31. Our strategic business unit takes many risks.						
32. Not all the efforts invested in being 'first-in' in the industry in development of new products prove to be profitable.						
33. Our strategic business unit responds rapidly to early signals of opportunities in the environment.						
34. Our strategic business unit's actions often lead to a new round of competitive activity in the industry.						
35. Our strategic business unit has competencies that can be characterized as specialization concentrated into one or few specific areas.						
36. 37. 38. Our strategic business unit has competencies that can be characterized as broad and entrepreneurial with skills diverse, with multiple technologies, flexible enabling change to be created.						
39. Our strategic business unit has competencies that can be characterized as analytical with skills enabling them to both identify trends and then develop new offerings or markets.						
40.Our strategic business unit has competencies that can be characterized as fluid with skills related to the near-term demands of the market-place.						
41.Our strategic business unit's organizational structure is functional in nature (i.e. organized by department- marketing, accounting, personnel, etc.).						
42. Our strategic business unit's organizational structure is product or market oriented.						
43. Our strategic business unit's organizational structure is matrix combining both functional divisions and product-market divisions.						
44. Our strategic business unit's organizational structure is continuously changing to enable us to meet opportunities and solve problems as they arise.						
45. 46. Our strategic business unit's planning is concentrated in identifying those problems, which if solved, will maintain and then improve its current product offerings and market position.						
47. Our strategic business unit's planning is concentrated in identifying trends and opportunities in the marketplace which can result in the creation of offerings or programs which are new to the market or reach new markets.						
48. 49. Our strategic business unit's planning is concentrated in identifying those trends in the industry which other competitors have proven possess long-term potential while also solving problems related to our current offerings and our current customer needs.						
50. Our strategic business unit's planning is concentrated in identifying the best possible solutions to those problems or challenges which require immediate attention.						
51. 52. Our strategic business unit's procedures to evaluate performance are highly centralized and primarily the responsibility of senior management.						
53. Our strategic business unit's procedures to evaluate performance are decentralized and participatory encouraging many organizational members to be involved, to retain flexibility.						
54. 55. Our strategic business unit's procedures to evaluate performance are centralized in established products' areas and more participatory in newer products' areas.						
56. Our strategic business unit's procedures to evaluate performance are heavily oriented towards those reporting requirements which demand immediate attention.						

3. Please indicate how strongly you agree or disagree with the following statements regarding your strategic business unit.	Strongly disagree (1)	Dis-agree (2)	Disagree some what (3)	Agree some what (4)	Agree (5)	Strongly agree (6)
57. We often sacrifice profitability to gain market share.						
58. We often cut prices to increase market share.						
59. We often set prices below competition.						
60. We often seek market share position at the expense of cash flow and profitability.						
61. We emphasize effective coordination among different functional areas.						
62. Our information systems provide support for decision making						
63. When confronted with a major decision, we usually try to develop through analysis.						
64. We use several planning techniques.						
65. We use the outputs of management information and control systems.						
66. We commonly use manpower planning and performance appraisal of senior managers.						
67. We occasionally conduct significant modifications to manufacturing technology.						
68. We often use control systems for monitoring performance.						
69. We often use production management techniques.						
70. We often emphasize product quality through the use of quality circles.						
71. We emphasize basic research to provide us with future competitive edge.						
72. Forecasting key indicators of operations is common.						
73. Formal tracking of significant general trends is common.						
74. We often conduct 'what if' analyses of critical issues.						
75. We are constantly seeking new opportunities related to present operations.						
76. We are usually the first ones to introduce new brands or products/services on the market..						
77. We are constantly on the look for businesses that can be acquired.						
78. Operations in later stages of the life cycle are strategically eliminated.						
79. We seem to adopt a rather conservative view when making major decisions.						
80. New projects are approved on a 'stage by stage' basis rather than with "blanket" approval						
81. We have a tendency to support projects where the expected returns are certain.						
82. Our operations have generally followed 'the tried and true' paths.						

4. Please indicate the overall performance of your business unit last year	Poor (1)	Lower (2)	Slightly lower (3)	Slightly higher (4)	Higher (5)	Excellent (6)
83. Overall performance of the business unit compared to objectives is						
84. Overall performance compared to major competitors is						

5. Please indicate the specific comparative performance of your business unit when compared with the major competitors over the past year.

	Poor (1)	Lower (2)	Slightly lower (3)	Slightly higher (4)	Higher (5)	Excellent (6)
85. Our business unit's market share						
86. Our business unit's market share growth						
87. Our business unit's total sales volume in YTL						
88. Our business unit's sales growth (in YTL) in percentage						
89. Our business unit 's ROA						
90. Our business unit's ROI						
91. Our business unit's product/service) quality						

6. Please indicate how your strategic business unit is performing relative to its stated SBU objectives in following terms:

	Poor (1)	Lower (2)	Slightly lower (3)	Slightly higher (4)	Higher (5)	Excellent (6)
92. Customer satisfaction						
93. Customer retention						
94. Market share						
95. Market share growth						
96. Total sales volume in YTL						
97. Sales growth (in YTL) in percentage						
98. ROA						
99. ROI						

7. Please answer the following questions regarding your business unit.

100. For your SBU, please indicate ROA for each of the following years.   a.   2006   % ...   b.   2005   % ...   c.   2004   % ...
101. For your SBU, please indicate ROI for each of following years.   a.   2006   % ...   b.   2005   % ...   c.   2004   % ...
102. For your SBU, please indicate market share for each of following years.   a.   2006   % ...   b.   2005   % ...   c.   2004   % ...
103. For your SBU, please indicate market share growth for each of following years.   a.   2006   % ...   b.   2005   % ...   c.   2004   % ...
104. For your SBU, please indicate sales revenue growth for each of following years.   a.   2006   % ...   b.   2005   % ...   c.   2004   %

8a. Please indicate how strongly you agree or disagree with the following statements regarding your strategic business unit.

	Strongly disagree (1)	Dis-agree (2)	Disagree some what (3)	Agree some what (4)	Agree (5)	Strongly agree (6)
105. Our business unit is number one with the largest market share.						

	Strongly disagree (1)	Dis-agree (2)	Disagree some what (3)	Agree some what (4)	Agree (5)	Strongly agree (6)
106. Our business unit is not number one and we do not have the largest market share.						
107. 108. Our business unit has a low market share, and we avoid confrontation with the market leader.						

8b. Please indicate how strongly you agree or disagree with the following statements regarding your strategic business unit.

	Strongly disagree (1)	Dis-agree (2)	Disagree some what (3)	Agree some what (4)	Agree (5)	Strongly agree (6)
109. Our business unit targets segments within segments or niches that other firms overlook or ignore.						
110. Our business unit leads other firms in price changes.						
111. Our business unit leads other firms in distribution coverage.						
112. Our business unit leads other firms in promotion spending.						
113. Our business unit is keen to fight aggressively to gain shares from its competitors.						
114. Our business unit prefers to imitate or adopt leader's products and hold share without rocking the boat.						
115. It is crucial for our business unit to specialize to know its customers better and to serve them better than any other firm.						
116. As the market leader, our business unit tries and supports to expand the total market to gain more sales.						
117. As the market leader, our business unit's major concern is to protect our market share against attacks.						
118. To gain more market shares, our business unit attacks the market leader aggressively.						
119. Our business unit takes proactive measures with continuous innovation to be always ahead of competition.						
120. To expand market share, our business unit builds up to gain more shares from weaker competitors						
121. To gain more market shares, our business leader attacks not the market leader but those of its size who are underfinanced and not so successful.						
122. Our business unit attacks not the market leader but those of smaller or regional size who are underfinanced and not so successful.						
123. 124. Our business leader duplicates leader's products and/or packages and sells on the black market or through some distributors dealing with duplicated products.						
125. Our business unit emulates leader's products, name and packaging with slight variations, as extensively as possible.						
126. Our business unit copies some things from the leader but maintains differentiation in terms of packaging, advertising, pricing, or location.						
127. 128. Our business unit takes the leader's products and adapts or improves them to sell to same or different markets.						
129. Our business unit serves one niche with specialization in specific/geographic market.						
130. Our business unit's specialization is on serving a niche customer base.						
131. Our business unit provides a specialized product required by a small market segment.						
132. Our business unit serves multiple niches with specialization in one or more areas.						

9. Please indicate your reply by circling the appropriate number.

---

133. Which type of economic sector does this business unit operate in?

1__Manufacturing   2__Service   3__Others. Please specify. .   . . . . .

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134. Which type of industrial segment does this business operate in?

1__Consumer durables 2__Consumer non-durables 3__Capital goods 4__Raw and semi-finished materials 5__Components
6__Supplies   7__Services   8__Wholesale and retail distribution

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135. Which type of operation area is this business unit involved in?

1__Trade 2__Chemical 3__Food and retailing 4__Automotive 5__Textile 6__Energy 7__Financial services (including banking) and

insurance 8__Construction 9__Health care 10__Household goods 11__Others. Please specify. . . . .

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136. Please specify the products/brands of this business unit?

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137. What is the ratio of your domestic sale to foreign sales?

1. __   Totally selling to domestic markets.
2. __   Totally selling to foreign markets.
3. __   Domestic sales are higher than the foreign sales
4. __   Foreign sales are higher than the domestic sales
5. __   Sales to foreign markets and domestic markets are almost equal.

---

138. For how many years have you been exporting?   1.__ 0–1 years   2.__1–3 years 3.__3–5 years 4.-5 and even more years

---

139. What is the export intensity of your Firm   1. __Regular   2. __Sporadic

---

140. Which department of your firm carries out the export activities of your firm?

1.__ Export department   2.__ Marketing department   3.__ General Manager   4.__ Company owner

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141. Are there any foreign owned shares in your company, if so what is the percentage?

1. __   None   2. __ %1-%25 3. __ %26-%50   4. __ %51-%67 5. __ %68 and more

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142. Please indicate number of full-time employees working in this company.
1. __   < 50   2. __   50-100   3. __   101 – 250   4. __   251 – 500   5. __   501 – 750   6. __   > 750

---

143. What is your job title in this company: . . .

Name: . . .   Address: . .

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144. What is your profession (main area of expertise):

1. __Production-technology 2. __Finance-accounting   3. __ Marketing-sales   4.__Human resources   5. __Others

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145. Level of education:

1.__ Primary school 2.__High school   3.__College (2 years)   4.__College(4years)   5.__ Graduate School

10. Please indicate how strongly you agree or disagree with the following statements	Strongly disagree (1)	Dis-agree (2)	Disagree some what (3)	Agree some what (4)	Agree (5)	Strongly agree (6)
146. Competition in our industry is cutthroat.						
147. There are many promotion wars in our industry.						
148. Anything that one competitor can offer others can match readily.						
149. Price competition is a hallmark of our Industry.						
150. One hears of a new competitive move almost every day.						
151. Our competitors are relatively weak						

11. Please indicate how strongly you agree or disagree with the following statements regarding business sector that your strategic business unit belongs.	Strongly disagree (1)	Dis-agree (2)	Disagree some what (3)	Agree some what (4)	Agree (5)	Strongly agree (6)
152. In our kind of business, customers' product preferences change quite a bit over time.						
153. Our customers tend to look for new products all the time						
154. Sometimes our customers are very price-sensitive, but on the other occasions, price is relatively unimportant.						
155. New customers tend to have product-related needs that are different form those of our existing customers.						
156. We cater to many of the same customers that we used to in the past.						
157. It is very difficult to predict any changes in this marketplace.						
158. The technology in our industry is changing rapidly.						
159. Technological changes provide big opportunities in our industry.						
160. It is very difficult to forecast where the technology in our industry will be in the next two to three years.						
161. A large number of new product ideas have been made possible through technological breakthroughs in our industry.						
162. Technological developments in our industry are rather minor.						
163. The technological changes in this industry are frequent.						

12. If there is more than one strategic business unit in your company/establishment/organization please fill in separate

   questionnaire for each one of them. If you do have more than one strategic business unit, please specify which one this

   questionnaire refers to.

Appendix 3: List of Firms in the Sample

No	Firma adı	No	Firma adı
1	Uzel Corporation	2	ABM Mühendislik Müşavirlik Sondaj Paz. Ltd. Şti.
3	Saber Endüstriyel Ürünler A.Ş.	4	Armada Mühendislik ve Asansör Tic. Ltd. Şti.
5	Misbis Gıda San. ve Tic. A.Ş.	6	Gepa Gemi Pazarlama Ltd. şti.
7	MKE Kurumu Genel Müdürlüğü	8	Çevre İlaç Makine Sanayi ve Tic. Ltd. Şti.
9	Çelik Tekne San. ve Tic. Ltd. Şti.	10	Tekkaynak Teknik Kaynak Malzemeleri San. Tic. Ltd. Şti.
11	Üçyıldız Otomotiv Ltd. şti. (Voltran)	12	Yeni dünya Sağlık Hizmetleri A.Ş. (K. Central Hospital)
13	Canka denizcilik ve Tic. Ltd. Şti.	14	ISS Tesis ve Yönetim Hizmetleri A.Ş.
15	Mercansoy Dış Tic. Ve Turizm San. A.Ş.	16	Söz Bilişim Teknolojileri
17	Malkan Makine San. ve Tic. Ltd. Şti.	18	Cihan Haber Ajansı .
19	Anadolu Deniz İnşaat Kızakları San. ve Tic. A.Ş.	20	AYZ Yönetim Bilim Sistemleri Ltd. Şti.
21	Erna-Mas Makine San. ve Tic. A.Ş.	22	Çavuşoğlu İnşaat San. Tic. Ltd. Şti. (otomotiv grubu)
23	Garanti Emeklilik ve Hayat A.Ş.	24	Inn Cnea Ltd. Şti.
25	Server Poliklinijk Sağlık Hizmetleri A.Ş.	26	Belinda Şirketler Grubu
27	FR Grup Özel Güvenlik ve Koruma A.Ş.	28	Lazerofset Matbaa Tesisleri San. ve Tic. Ltd. Şti.
29	Enes Tüketim Ürünleri Turizm ve İnşaat San. Tic. Ltd. Şti.	30	Koç Allianz Sigorta A.Ş.
31	Ersa Sakız Şekerleme ve Gıda San. tic. Ltd. Şti.	32	İksir Gıda Ltd. Şti.
33	Sulatanlar Pazarlama A.Ş.	34	Medgen Medikal Gereçler San. Tic. Ltd. Şti.
35	Kapra İnşaat San. ve Tic. Ltd. Şti.	36	Güngen Denizcilik ve Tic. A.Ş.

No	Firma adı	No	Firma adı
37	Çavuşoğlu İnşaat ve Otomotiv San. Tic. Ltd. Şti.	38	Keçeci Profil Plastik Ltd. Şti.
39	Haşema Tekstil Ltd. Şti.	40	Asya otomotiv A.Ş.
43	Al Baraka Türk Katılım Bankası A.Ş.	44	Sarıgözoğlu A.Ş.
45	Euroscientific Müh. Taah. ve Tic. Ltd. Şti.	46	Bora Dış Ticaret A.Ş.
47	Strateji Sigorta ve Reasürans Brokerliği A.Ş.	48	Anadolu Anonim Türk Sigorta Şirketi
49	Yurtbay Seramik Pazarlama A.Ş:	50	Medya Ege Ajans Reklam ve Production Hizmetleri
51	Aksan Metal San. Ve Tic. A.Ş.	52	Asel Madeni Eşya San. ve Tic. A.Ş:
53	LB Elektrik Elektronik Dış Tic. Ltd. Şti.	54	Kaan Katering Yemek ve İşletmecilik A.Ş.
55	Teknokon Makine İmalat ve Montaj A.Ş.	56	Vakıf Emeklilik A.Ş.
57	Proser Koruma ve Güvenlik Hizmetleri A.Ş.	58	Orva İlaç A.Ş.
59	Erten Tekstil Üretim San. Ltd. Şti.	60	Asya Katılım Bankası A.Ş. [Bank Asya]
61	Genel Yaşam Sigorta	62	Matilek Dış Tc. Ltd. Şti.
63	Tunanet Ağ San. Ve Tic. A.Ş.	64	Saruhan İç Dış Tic. A.Ş.
65	Sonkar Otomotiv San. Tic. A.Ş.	66	Neomed Sağlık Ürünleri Pazarlama A.Ş.
67	Anadolu Hayat Emeklilik A.Ş.	68	Kozmoklinik Koz.ve Med. Ürünler Paz. ve Tic. Ltd. Şti.
69	Baran Uluslararası Taş.Tekstil Gıda San. ve Dış Tic. Ltd. Şti.	70	Johnson&Johnson Sıhhi Malzeme San. ve Tic. Ltd. Şti.
71	Eker Süt Ürünleri A.Ş.	72	New Life Yaşam Sigorta A.Ş.
73	Bilge End. Mutfak Üretim ve Paz. Ltd. Şti.	74	Özalp İnşaat ve Paz. Tic Ltd. Şti.

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No	Firma adı	No	Firma adı
75	Medi Zinde Sağlık Hizmetleri A.Ş.	76	Sesan Silivri Sentetik Dokuma San. ve Tic. A.Ş.
77	Sun-Genç Sigorta	78	Acıbadem Sağlık ve Hayat Sigorta A.Ş.
79	A.T.S. Advanced Technology Suppliers	80	Filiz Gıda Sanç ve Tic. A.Ş.
81	Emlak Konut GYO A.Ş.	82	Tel34 Telekomünikasyon Ltd. Şti.
85	Hidrodinamik Gemi San. Ve Tic. A.Ş.	86	Rodgün Enerji Teknik San. Tic. Ltd. Şti.
87	Ray Sigorta A.Ş.	88	Boğaziçi Hediyelik Eşya ve El Sanatları San. Tic. A.Ş.
89	Metal ve Yapı Sistemleri Tic. A.Ş.	90	Haksağ Sağlık Hizmetleri A.Ş.
91	Er Elektronik San. Tic. A.Ş.	91	Artworks/Hayalevi Reklamcılık İletişim Tic. Ltd. Şti.
93	Can Atar Sigorta Ltd. Şti	94	Tekno Türk İletişim Hizmetleri Ltd. Şti.
95	Değişim Sigorta Ltd. Şti.	96	Üçel Denizcilik ve Tic. A.Ş.
97	Remat Reklam ve Tnıtım Hizmetleri Ltd. Şti.	98	Tadsan Tabldot Tic. San. Ltd. Şti.
99	Nursan Madeni eşya Sanayi Ltd. şti.	100	Şeker Sigorta A.Ş.
101	Doğangül Sigorta Aracılık Hizmetleri Ltd. şti.	102	Markadaş Patent Fikri ve Sınai Haklar D. Tic. Ltd. Şti.
103	MAST MPI Reklamcılık A.Ş.	104	Aysan Bisküvi San. A.Ş.
105	Lotus Pazarlama A.Ş.	106	Ten Pazarlama Tekstil Ltd. Şti.
107	Garanti Sigorta A.Ş.	108	Altınfiliz Çay Sanayi A.Ş.
109	Atasay Kuyumculuk San. Ve Tic. Ltd. Şti.	110	Masit A.Ş. (Kınık Maden Suları)
111	Zepa Pazarlama A.Ş. (Fora Zeytinleri)	112	Soyyiğit Gıda Pazarlama Ltd. Şti.

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No	Firma adı	No	Firma adı
113	Parıltı Hazır yemek ve Üretim ve Hizmet A.Ş.	114	Heinen Hopman Mühendislik A.Ş.
115	Kibar Dış Tic. A.Ş.	116	Selecta A.Ş. (Compass Group World Wide)
117	Uçkan Medikal San. Tic. Ltd. Şti.	118	Universal Medikal Araçlar San. Ve Tic. Ltd. Şti.
119	Sardunya Hazır Yemek Üretim ve Hizmet A.Ş.	120	Makine Optik Tic. Ltd. Şti.
121	HSBC Bank A.Ş.	122	Metal Servis Dan. San. Tic. Ltd. Şti.
123	MAG Mühendislik Hizmetleri ve Tic. Ltd. şti.	124	Trakya Et ve Süt Ürünleri San. ve Tic. Ltd. Şti.
127	Özel Efes KBB Hizmetleri Ltd. Şti.	128	Ten Çamaşır Sanayii A.Ş.
129	Model Bilgi İşlem Hiz. Tic. ve San. Ltd. şti.	130	Birlik Mobilya Doğrama Dekorasyon Ürünleri Ltd. Şti.
131	Nokta Kırtasiye Gıda Malzemeleri Ltd. Şti.	132	Elkasan Kimyevi Maddeler Pazarlama A.Ş.
133	Yapı Kredi Emeklilik A.Ş.	134	Suominen Nonwovens Ltd
135	Keskinoğlu Tavukçuluk Dam. İşl. San. Tic. A.Ş.	136	Akınal Sentetik Tekstil San. Tic. A.Ş.
137	Şifa Sağlık Tesisleri A.Ş.	138	Osmanlı Grup Sigorta Acenteliği Ltd. şti.
139	Generali Sigorta A.Ş.	140	Çağdaş Gemi San. ve Tic. Ltd. Şti.
141	Merkür Makine San. ve Tic. Ltd. Şti.	142	Ataköy otomotiv San. tic. Ltd. Şti.
143	Yönetim Danışmanları Derneği	144	ISS Tesis Yönetim Hizmetleri A.Ş. (Şile Bölgesi)
145	Gökçen Kimya San. Tic. Ltd. Şti	146	GSPL Bilgisayar Yazılım Donanım İthalat ve Tic. Ltd. Şti.
147	Şedele Matbaacılık Ltd. şti.	148	Service Group Hizmet ve İşletmecilik A.Ş.
149	Aydoğan Plastik Amb. San. Tic. Ltd. şti.	150	Ten Mağazacılık Ltd. Şti.

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No	Firma adı	No	Firma adı
151	Karadeniz Çay Pazarlama (Çaykur Bayii)	152	Napal Tekstil Tela ve Elyaf Üretim
153	İhsan Gıda Ltd. Şti.	154	Begtuğ Otomotiv Turizm İnşaat San. Tic. Ltd. Şti.
155	Özsay Deniz Nakliyatı A.Ş.	156	Arkas Denizcilik A.Ş.
157	ISS Haşere Kontrol Hizmetleri A.Ş.	158	Yıldırım Tic. Tekstil Mak.Yed. Parça Paz. San. Ltd. Şti.
159	Çelik Motor Ticaret A.Ş.	160	Canan Kozmetik San. ve Tic. A.Ş.
161	Fabeks Dış Ticaret A.Ş.	162	Alfa Gıda İth. İhr. San. ve Tic. Ltd. Şti.
163	PlanetGıda ve Ambalaj Makinaları San. Tic. A.Ş.	164	Grupaj Seri Uluslar arası Nakliye ve Tic. Ltd. Şti.
165	Efe Galvano Sanayi ve Tic. Ltd. Şti.	166	Securinet Güvenlik ve Koruma A.Ş.
169	Ana Gıda otomotiv San. ve İhtiyaç Maddeleri A.Ş. (İstanbul Şb.)	170	Ekol Aktaş Gıda Paz. Ltd. Şti.
171	Dört U Haşere Kontrol Hizmetleri A.Ş.	172	ISS-Proser (Temizlik Hizmetleri)
173	HOB Boya A.Ş.	174	Demir Hayat Sigorta A.Ş.
175	Torgem Gemi İnşaat San. ve Tic. A.Ş.	176	SPS Etiket Baskı ve Amb. San. ve Tic. Ltd. Şti.
177	Parkim Parfüm Plastik ve Kimya San. A.Ş.	178	Aviva Sigorta A.Ş.
179	Cognis Kimya A.Ş.	180	Tempo Uluslararası End. Tem. ve Tic. Ltd. Şti.
181	Kimpaz Kimyevi Maddeler San. ve Tic. A.Ş.	182	Bohçam Tekstil Itriyat Ürünleri Tic. Paz. Ltd. Şti.
183	Bayraktar Otomotiv İnşaat ve Petrol ürünleri San. Tic. A.Ş.	184	Denet Cıvata San. A.Ş.
185	Esteks Makine ve Yedek Parça San. İth. İhr. Ve Tic. Ltd. Şti.	186	Mey içki San. ve Tic. A.Ş.
187	Ak Sigorta A.Ş.	188	Mövenpick Hotel

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No	Firma adı	No	Firma adı
189	Ulusal A.Ş.	190	Parkoteks Kimya San. Tic. Ltd. Şti.
191	Yapı Kredi Sigorta a.Ş.	192	Arsan Kimya A.Ş.
193	Hamburg SUD Gemicilik Acentalığı ve Nak. Ltd. Şti.	194	TEB Sigorta A.Ş.
195	Kalekimya Kimyasal Maddeler San. tic. A.Ş.	196	Yenidoğan Gıda Pazarlama ve Tic. A.Ş.
197	Petroyağ ve Kimyasallar San. Tic. A.Ş.	198	Dört U Haşere Kontrol Hizmetleri A.Ş. (İstanbul Bölge)
199	Astor Asansör San. ve Tic. Ltd. Şti.	200	Altın Emlak A.Ş.
201	Özel Çapa Hastanesi A.Ş.	202	Tetra Pazarlama ve Dış tic. A.Ş.
203	ISS Tesis Yön. Hiz. A.Ş.	204	Karahancı Gıda San. ve Tic. Ld. Şti.
205	Damak Hazır Yemek ve üretim ve Hizmet A.Ş.	206	Apack Ltd. Şti.
207	Beslem Gıda San. ve Tic. A.Ş.	208	Kale Balata A.Ş.
211	Sapro Temizlik ürünleri San. ve Tic. A.Ş.	212	Sofra Yemek Üretim ve Hizmet A.Ş.
213	Teknik Metal Endüstri Malzemeleri İnşaat San. Tic. A.Ş.	214	Ankara Emeklilik A.Ş.
215	Euroserve A.Ş.	216	Bilgitek-Pozitif Büro Makineleri Ltd. Şti.
217	Astaş Gayrimenkul Yatırım ve Turizm A.Ş. (Kempinski Otelleri)	218	Gimas International Ship Supply
219	Art Aksesuar ve Mobilya San. Tic. Ltd. Şti.	220	ISS
221	Simtur Sigorta Acenteliği Trz. Ve Tic Ltd. Şti.	222	Çaykur Çay İşletmeleri Genel Müdürlüğü
223	Dört U Haşere Kontrol Hizmetleri A.Ş. (Ankara Şubesi)	224	Elso Kimya San. Tic. A.Ş.