SEEING THE ELEPHANT!
CONFIGURATION THEORY-BASED PERFORMANCE ANALYSIS OF MULTIPLE CHANNEL SYSTEMS

by

SERTAN KABADAYI

A dissertation submitted to the Graduate Faculty in Business
in partial fulfillment of the requirements for the degree of
Doctor of Philosophy, The City University of New York

2005

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Abstract

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Adviser: Professor Nermin Eyuboglu

Performance of channel systems plays a critical role in two interrelated ways: in the assessment of a firm's channel structure, and in the improvement of channel design and channel management. Despite its importance, channel performance has received little attention in the marketing literature. Existing work is dominated by the *contingency theory* paradigm, which is characterized by a reductionist perspective that treats the link between channel performance and other phenomena as unidirectional and linear.

By contrast the present study uses an approach based on *configuration theory,* which is characterized by a holistic perspective whereby channel performance is *simultaneously* linked with business environment, organizational and channel structure, and business strategy, and relationships among variables are thought of as *bi-directional* and *nonlinear*.

This dissertation is the first study that applies configuration theory – a complex theoretical and analytical approach developed in the strategic management literature – to the field of marketing channels. Specifically, this study will be able to answer the following question: What combinations of a business level strategy (i.e., differentiation or

cost-leadership), environmental context (i.e., dynamic, complex, or munificent), channel structure are likely to distinguish channels with high performance from those with low performance? This question will be addressed in the context of *multiple channels* because these structures have become the dominant distribution practice in various industries.

Based on existing theoretical considerations, I first identify two types of multiple channel configurations:

- Configuration 1 – *organic-complex multiple channels,* characterized by decentralized, less formalized, and highly specialized structures; composed of greater number of different channels, most of which are integrated; adopted by differentiator firms operating in highly dynamic, highly complex, and highly munificent environments.
- Configuration 2 – *bureaucratic-simple multiple channel systems*, characterized by centralized, formalized and less specialized structures; composed of fewer channels and dominated by independent channels; adopted by cost-leader firms operating in less dynamic, less complex, and less munificent environments.

With data collected from the field, I will first test the hypothesis that these two configurations prevail. I will then test the hypotheses that performance of those multiple channel systems that are close to the proposed ideal configuration profiles will be high.

ACKNOWLEDGEMENTS

I wish to express my sincere appreciation to my committee members for their guidance and support throughout the dissertation process. I want to thank them for their patience, encouragement and helpful suggestions. Professor Nermin Eyuboglu has been a supportive advisor since the first day and I shall never be able to repay her kindness. I am very grateful to Professor Thomas Tellefsen for his tireless support. He not only encouraged me but his suggestions improved and enriched this work. I am also thankful to Professor Andreas Buja for his contribution to my dissertation.

I would like to thank Eleonora Curlo, Nermin Eyuboglu, Stephen Gould, Jack Lee, Gary Soldow, Hirokazu Takada and Gloria Thomas for their teaching and assistance during my doctoral seminars. They have been responsible for my academic formation and are due much of the credit for my ability to complete this dissertation. I also thank Professor Joseph Weintrop for his support as Executive Officer.

Professor Sankar Sen has repeatedly given the support and assistance during the course of the program. He is a great role model and a friend, not only for me but for all my fellow doctoral students. He was there whenever I needed him. I really appreciate his support and friendship.

I would like to thank all Marketing faculty, staff and of course fellow doctoral students. They all contributed as colleagues and as friends to my experience at Baruch. Special thanks to fellow students Nicole, Reetika, Sergio and Nobby. We have been through good times and tough ones together. We have shared much and I believe we are all better scholars and human beings as a result of our close cooperation. I owe them so much.

My deep gratitude, appreciation and continuing respect go to Professor Gloria Thomas. I had the pleasure of working with her in her capacity as Executive Officer in Business Program. In addition, she taught two doctoral seminars I attended and served as a committee member for my dissertation. During the course of my years at Baruch she became my friend as well. Professor Thomas has been an inspiration for me. I admire her professionalism, her dedication to doctoral students and her perfectionism in terms of teaching and research. Without her guidance I would never ever have had the topic of this dissertation. I will forever be in her debt.

Finally, without the support of my family and dear friends in Turkey and New York City I could not have finished this dissertation. They believed in me. Their support enabled me to persevere.

This dissertation is dedicated in gratitude to all of these fine people. They are behind every word and page of this dissertation. I am a lucky man!

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I. INTRODUCTION

Channel performance is a key marketing and organizational issue, given that the success of the manufacturers in meeting their objectives to a large extent depends on how well their channels perform. Firms engage in business relationships with their channels because such businesses are instrumental in achieving the firms' objectives (Kumar, Stern, and Achrol 1992). Performance of channel systems plays a critical role in two interrelated ways: in the assessment of a firm's channel structure, and in the improvement of channel design and channel management. Despite its importance, channel performance has received limited attention in the marketing literature. Existing work is dominated by the *contingency theory* paradigm, which analyzes the pair-wise relationships between different variables and performance, i.e. conflict-performance or satisfaction-performance (e.g. Buvik and John 2000; Yeoh and Jeong 1995). Contingency theory postulates that the effectiveness of the organization depends on the congruence between elements of the organizational subsystem and the demands of the organizational subsystem and the demands of the environment (Zeithaml, Varadajan and Zeithaml 1988). McKee, Varadajan, and Pride (1989) termed the contingency approach a fruitful area for further research in marketing, a characterization that is affirmed by several more recent studies (e.g. Ruekert, Walker, and Roering 1985; Walker and Ruekert 1987). Furthermore, though not always explicitly identified, the contingency approach is inherent in much of marketing theory (see Zeithaml et al. 1988). For example, Ruekert et al. (1985) propose a contingency framework of marketing task structure and performance, in which the performance outcome of marketing activities is viewed as

dependent on the nature of the task, the way in which the task is organized and the nature of its environment.

However, while marketing scholars are in favor of using a contingency approach in their studies, that approach is already being criticized in management literature as being a simplistic, reductionist perspective that treats the link between organizational performance and other phenomena as unidirectional and linear. Due to its inability to investigate complex relationships among multidimensional variables, even the most sophisticated studies within this approach use oversimplifications of the link in terms of intervening or moderating mechanisms. For example, Noordewier, John and Nevin (1990) specify and test a model that simultaneously incorporates five low-order factors that model "relationalism" and show a positive relationship between relationalism and performance in high (but not low) uncertainty conditions.

These same channel performance studies (Please see Table 1) are limited in yet another way: following the major approaches in examining distribution channels, performance-related studies only consider links between channel performance and some economic and behavioral variables. The former focuses on the "efficiency" aspects of the distribution channels, like transaction costs and the nature of decision-making mechanisms used by channel members. For example, by examining such economic processes, researchers have found that centralization and formalization influence functioning and outcomes of channel relationships (e.g. Dwyer and Oh 1987; John 1984).

TABLE 1: Channel Performance Studies

Author(s)	Journal/ Year	Variables	Performance
Claro, Hagelaar, and Omta	IMM, 2003	Relational Governance (joint problem solving, joint planning)	Buyer's performance
Coelho, Easingwood, and Coelho	IJRDN, 2003	Number of channels in a multiple channel system	Entire channel performance
Webb and Hogan	JBIM, 2002	Frequency and intensity of hybrid channel conflict	Entire channel performance
Skarmeas, Katsikeas, and Schlegelmilch	JIBS, 2002	Importer's commitment to overseas supplier	Importer's performance
Hibbard, Kumar, and Stern	JMR, 2001	Dealers' response to supplier's destructive acts	Supplier's evaluation of dealer's performance
Jap and Ganesan	JM, 2000	Retailer's perception of supplier's commitment	Retailer's evaluation of supplier's performance
Buvik and John	JM, 2000	Level of vertical coordination, specific investments, environmental uncertainty	Supplier's performance in the form of transaction costs
Bello and Gilliland	JM 1997	Output and process controls, flexibility	Export channel performance
Lusch and Brown	JM,1996	Wholesaler's dependence, supplier's dependence, relational behavior, contracting	Wholesaler's performance
Yeoh and Jeong	EJM, 1995	Export channel structure, Entrepreneurship, environment	Export channel performance
Mohr and Nevin	JM 1990	Communication strategies, channel structure	Channel performance
Noordewier, John and Nevin	JM, 1990	Relationalism, uncertainty	Buyer performance
Gaski	EJM,1989	Environmental variables (primary task input and output)	Dealer performance
Rosson and Ford	JIBS, 1982	Relationship dimensions, contact, conflict	Export channel performance
Lusch	JM, 1976	Channel conflict	Retailer's performance

The latter concentrates on the behavioral aspects of the relationship between members of the distribution system, such as power, conflict, independence, cooperation and satisfaction (e.g., Webb and Hogan 2002; Jap and Ganesan 2000; Lusch and Brown 1996). However, since these studies focus too much on behavioral and economic factors and thus ignore macro level contexts and decision-making variables, although it is an important input for managerial decisions the knowledge about channel performance and the factors that affect it is limited in scope. Therefore, a simultaneous, holistic analysis of different strategic, structural and environmental variables and their relationship to channel performance is needed. Such a holistic analysis would provide insights to academics to better understand the factors that affect channel performance. It would also help practitioners to structure and design their channel systems that fit into their business level strategy and environmental context.

Given the limitations of the contingency approach to investigate complex multiple dependencies among different variables, this dissertation uses an approach based on *configuration theory,* which is characterized by a holistic perspective whereby channel performance is *simultaneously* linked with business environment, organizational and channel structure, and business strategy, and relationships among variables are thought of as *bi-directional* and *nonlinear*. This configuration theoretic approach allows researchers to avoid oversimplifications and express complicated and interrelated relationships among many multidimensional variables. This dissertation is the first study that applies configuration theory – a complex theoretical and analytical approach developed in the strategic management literature – to the field of marketing channels to simultaneously investigate the relationships among strategic, environmental, structural variables and

overall channel performance. Specifically, this study will be able to answer the following question: What combinations of a business level strategy (i.e., differentiation or cost-leadership), environmental context (i.e., dynamic, complex, or munificent), channel structure are likely to distinguish channels with high performance from those with low performance? This question will be addressed in the context of *multiple channels* for the reasons discussed in the following section.

Multiple channel systems and performance

In recent years, although multiple channel systems have become common practice in various industries (e.g. Moriarty and Moran 1990) and there have been constant calls for the study of multiple channels-related issues (e.g. Frazier 1990), thus far research in this area has remained limited in scope. Researchers have mostly studied channel conflict- related problems, their antecedents and consequences including performance within multiple channel systems (Webb and Didow 1997; Webb and Hogan 2002). However, I know of no attempt to investigate holistically relationships between the structure of multiple channel systems, business strategy, and environmental context and how these relationships affect multiple channel performance. Although the reasons for and even some solutions to the problem of multiple channel conflict have been discussed at length, and it has been shown that conflict might decrease channel performance (Webb and Hogan 2002), researchers and practitioners lack a more detailed understanding of multiple channel performance and how it is related to the structure of multiple channel systems, the firms' business strategy, and the environmental context.

In fact, in the marketing field, organizational issues have been overlooked (Walker and Ruekert 1987). While some researchers propose alternative organizational

structures, they do not offer much detailed analysis of these different alternatives' relative advantages under different environmental or strategic conditions (Ruekert et al. 1985). In their limited attempts, researchers assert that to implement strategies and reach their goals, and thus achieve superior performance, managers should organize marketing activities in different ways depending on their environmental context and business strategy (e.g. Slater and Olson 2000; Vorhies and Morgan 2003; Walker and Ruekert 1987). They usually conclude that to match an organization's structure to its business strategy for its given environmental context is a very important managerial problem. Yet despite its theoretical and managerial importance, researchers know little about how marketing activities in general and distribution activities in particular should be organized to implement various business strategies and how this is related to performance (e.g. Walker and Ruekert 1987; Workman, Homburg, and Gruner 1998).

Only a few attempts have been made by marketing researchers to address organizational problems of marketing activities and their performance implications, and those attempts have remained conceptual, lacking of empirical testing. In one such attempt, Ruekert et al. (1985) developed four archetypal organizational forms – bureaucratic, relational, organic, transactional- relating environmental, structural and performance variables, but they did not include strategic variables. Similarly, Walker and Ruekert (1987) analyzed factors related to the successful implementation of business unit strategies, including marketing structure and policies.

In a recent empirical study, Vorhies and Morgan (2003), based on configuration theory, analyzed the marketing organization's fit with business strategy and performance but they excluded environmental variables. In another study, Bensaou and Venkatraman

(1995) uncovered five configurations of interorganizational relationships based on the fit between information processing needs and information processing capabilities; however, they did not include strategic variables.

The same problem also remains understudied in the distribution channels literature. Although some attempts have been made (e.g. Dwyer and Oh 1987; Dwyer and Welsh 1985) there remain unanswered questions regarding the structure of distribution channels required to enable strategy implementations under different environmental conditions. Especially in recent years, channels of distribution have become a very important marketing tool for firms to achieve their goals. Friedman and Furey (1999) claim that distribution channels offer greater potential for firms to gain sustainable competitive advantage than other marketing mix variables. Therefore, the relationship between distribution channel structure and strategy becomes a more important issue for firms to gain competitive edge over their competitors. This problem poses two questions. First, when should distribution tasks be accomplished through internal organization (integrated channels) versus external organization (independent channels)? This first question has been frequently addressed by transaction-cost researchers (e.g. Anderson 1985). Second, how should either internal or external organization be structured in order to reach performance objectives? The investigation of this second question has been limited. Based on a political-economy framework, Dwyer and Welsh (1985) investigated the relationship between the environment and channel decision structure and complexity without including strategy or performance-related outcomes. Later, Dwyer and Oh (1987) examined specifically the effects of munificence on internal economy of marketing

channels and on bureaucratization but their empirical results did not support or provided only limited support for their hypotheses.

As a summary, performance-related studies in the channels of distribution literature have been limited in terms of their scope, focusing on behavioral and economic variables, excluding simultaneous assessment of strategic, structural and environmental variables. In particular, our knowledge about performance of multiple channel systems – although they are used extensively in various industries- is still lacking of detailed, holistic investigation.

One major reason for the lack of such investigation can be the challenge related to the complex nature of studying multiple dependencies among these variables of interest (Lenz 1980). The organization of marketing activities, channels of distribution in particular, business strategy, environment and performance are each viewed as multidimensional phenomena consisting of many different but interconnected elements (e.g., Walker and Ruekert 1987). Also strategic marketing theory frames relationships between these phenomena in holistic terms. Therefore, evaluating these relationships in these holistic terms requires a simultaneous assessment of the relationships between the many variables making up channel organization, business strategy, environment and performance (e.g. Walker and Ruekert 1987). Although studying many strategic marketing problems involves similar challenges, available research approaches in marketing are not well suited to deal with these problems (Vorhies and Morgan 2003). Fortunately, research developments in organization theory (e.g. Venkatraman and Prescott 1990) and strategic management (e.g., Doty, Glick, and Huber 1993; Ketchen et al. 1997) provide approaches appropriate for assessing such complex theoretical

relationships between various variables and performance. However, those different approaches, especially those using contingency theory, have usually investigated the bivariate relationships between those variables and performance.

Recently, organization theory and strategic management scholars have used configuration theory based approaches to study such complex relationships and simultaneously assess whether organizational activities are organized in ways that enable the implementation of different business strategies and the how this affects organizational performance (e.g. Miller 1996). Configuration theory posits that the combinations of environment, strategy and structure associated with high-performance organizations differ from combinations associated with low-performance organizations. Configuration theorists suggest that performance can be maximized when the fit among environment-strategy-structure is realized and maintained (Miller 1986). Therefore, to address the essential question of this study- given a specific type of business level strategy in a specific environmental context, what structural characteristics are likely to distinguish high performing multiple channel systems from those that are relatively less effective and efficient?- I will use configuration theory. Drawing on configuration theory literature, I will develop and empirically assess a typology of multiple channel systems where certain configurations of strategic, environmental and structural dimensions are proposed to show that the structure of multiple channel systems can enable business strategy implementation in certain environmental contexts with specific performance outcomes.

However, this dissertation's application of configuration theory to multiple channels context will have one necessary difference. Originally organizational theorists and strategic management researchers have used configuration theory in *intra-*

organizational contexts, examining the structure –strategy- environment- performance relationships within the same organization. On the other hand, channels of distribution requires an *inter-organizational* approach, between firms and their channel members, also independent firms most of the time. Therefore, following Alderson's (1957) systems approach, I will apply configuration theory to channels of distribution as an inter-organizational approach, where I will look at the entire channel as a system.

This dissertation aims to make three contributions: first, it provides simultaneous holistic assessment of multiple interrelated variables that affect channel performance. By analyzing the multidimensional variables of business strategy, structure and environment simultaneously within a more complex, holistic perspective, I aim to shed more light on the factors that affect channel performance. Second, I hope to introduce this well-established, widely recognized and used strategic management theory -configuration theory- to the channels of distribution literature as an approach to investigate complex channel issues and constructs. And, finally I aim to provide some fruitful insights to practitioners regarding the design and management of their multiple channel systems to maximize their channel performance.

In the next section, I will define multiple channel systems. Then I will discuss configuration theory in detail, its basic assumptions, approaches and its difference from contingency theory. After developing my research hypotheses regarding the two multiple channel configurations, based on the concept of fit, I will hypothesize that firms that have similar characteristics to ideal types described within each configuration for each strategy will have higher performance.

II. THEORETICAL BACKGROUND

1. MULTIPLE CHANNEL SYSTEMS

1.1. Introduction

In recent years, many firms have adopted new channels in addition to their traditional channels and switched to multiple channel systems to cut their costs and increase their market presence (Webb 2002;Webb and Hogan 2002, Frazier and Antia 1995; Moriarty and Moran 1990). For instance, for years IBM computers were available from only one source, the company's own sales force. When the market for low-cost small computers exploded management realized that the company's single distribution channel was no longer sufficient to take advantage of new market opportunities. Therefore, in the late 1970s, IBM started adding new channels, among them resellers, dealers, catalog operations, direct mail, and telemarketing, to its existing sales force. Today IBM reaches its customers using 18 different channels.

2.2. Definition

Various concepts have been used in the marketing literature to refer to these newly emerging complex channel systems. Examples are: multi-marketing (Weigand 1977), multiple marketing systems (Moriarty and Moran 1990), multiple channels (Cespedes and Corey 1990; Corey, Cespedes, and Rangan 1989), dual distribution (Stern and El-Ansary 1992), hybrid channels (Webb and Didow 1997; Webb and Hogan 2002), plural forms (Bradach and Eccles 1989; Bradach 1997), dual-multiple channels (Frazier 1990), and multichannel marketing systems (Kotler 1994). For example, Moriarty and Moran (1990) use the term "multiple marketing system" to describe a structure that

results when firms add new channels and communication methods to existing ones. Frazier,Gill, and Kale (1989) use the term dual-multiple channels to describe complex channel structures. Kotler (1994) states, "a multichannel marketing system occurs when a single firm uses two or more marketing channels to reach one or more customer segments" (p. 546).

Stern and El-Ansary (1992) use the term dual distribution to describe a wide variety of channel arrangements by which a firm reaches its target markets using two or more different types of distribution channels for the same basic product. For example, dual distribution may arise when a manufacturer markets its products through both vertically integrated and independently owned channels that compete with one another.

In this paper, I will use the term "**multiple channel system**" to refer to a "multichannel arrangement characterized by the sharing of various distribution tasks performed by a combination of distinct channels, direct and indirect" (Webb and Didow 1997, p. 40).

2. CONFIGURATION THEORY

2.1. Configurations: Definition

Like most phenomena – atoms, ants and stars- characteristics of organizations appear to fall into natural clusters (Miller and Friesen 1984, p.7). Configuration theory treats organizations as complex entities whose elements of structure, strategy, and environment have a natural tendency to coalesce into quantum states or *configurations*, and posits that for each set of strategic characteristics, there exists an ideal set of organizational characteristics and environmental conditions that yields superior performance (e.g. Miller 1987a; Van de Ven and Drazin 1985; Miller and Friesen 1984). Configuration theory researchers search for that small number of rich *gestalts* or *configurations* that can account for a large percentage of organizations within any given setting (Bensaou and Venkatraman 1995). Although they may result in infinite combinations, recent studies have argued that the variety of organizational forms is limited and that certain common organizational configurations – alignments among strategy, structure and environment- occur with remarkable frequency and account for a very significant fraction of organizations (e.g. Miller 1990; Miller 1986; Miller and Friesen 1984).Such configurations richly describe organizations, revealing their complex gestalt and systematic nature (Miller and Friesen 1984). According to configurational theory organizational phenomena can be better understood by identifying distinct, internally consistent configurations than by attempting to uncover relationships that hold across all organizations (Ketchen, Thomas, and Snow 1993). In this configurational approach, " a large number of attributes are studied simultaneously in order to yield a detailed, holistic, integrated image of reality" and "where data analysis and theory building are geared to finding those common natural clusters among the attributes

studied" (Miller and Friesen 1984, p.62). This approach involves identifying dominant gestalts or configurations of observable characteristics or behaviors that appear to lead to a particular performance outcome (Ward, Bickford, and Leong 1996). So, then what is a "*configuration*"?

In general, organizational configurations can be defined as commonly occurring clusters of attributes of organizational strategies, structures, and processes (Miller 1987a; Miller and Friesen 1984; Miller and Mintzberg 1983; Mintzberg 1983). Configurations denote tight multidimensional constellations of conceptually distinct but mutually supporting elements -i.e., strategic, environmental and organizational characteristics of a business- that occur together (Meyer, Tsui, and Hinings 1993;Miller and Mintzberg 1988; Miller 1986). At the heart of this configurational perspective is the assumption that variables of strategy, structure and environment interact to form common gestalts, archetypes or configurations and the importance of each element can be best understood by making reference to whole configuration (Hambrick 1984; Miller 1981; Miller and Friesen 1977, 1984; Mintzberg 1973,1979). In other words, configurations are represented by a number of specific and separate attributes that are meaningful collectively rather than individually (Rosenberg 1968; Miller 1987b). Therefore, the presence of certain elements can lead to the reliable prediction of the remaining elements (Miller and Mintzberg 1983). However, although this approach assumes that there is an underlying theme or internal consistency among environmental, structural, and strategic dimensions, it does not specify any causality. It yields a systematic, detailed, and holistic image of reality without attributing causation to any of the individual parts of the model (Hambrick 1984; Miller and Friesen 1977, 1984; Mintzberg 1979). The theory posits that

competitive strategy, environment, and structure are configured or interlinked such that there are natural congruencies between those elements. These dimensions are reciprocal and they reinforce one another.

The existence and quality of configurations may have important normative implications. The competitive advantage may lie not in the possession of specific organizational resources or skills; these can usually be imitated or purchased by others. Rather, competitive advantage may reside in the integrative mechanisms that ensure complementarity among a firm's various aspects: its market domain, its skills, resources, and routines, its technologies (Miller and Whitney 1999). Hence, an organization's competitive advantage may depend on its *configuration*, rather than on any single organizational characteristic or attribute, including its organizational strategies (Doty and Glick 1994; Hambrick 1984). It is the complexity and ambiguity of these relationships that give some organizations unique capacities that are all but impossible to copy (Lippman and Rumelt 1982). In short, configurations are likely to be a far greater source of competitive advantage than any single aspect of strategy (Miller and Whitney 1999).

2.2. Reasons for configurations

Before proceeding further, I must argue for the accuracy of configuration theory's prime assumption -and for its presence in practice- namely, that those elements of strategy, structure, and environment often coalesce or configure into a manageable number of common types that describe large proportion of high-performing organizations (Miller 1987b). There are different but interrelated arguments supporting the existence of configurations. Recent literature on the population ecology of organizations (Aldrich

1979; McKelvey 1982) contends that the environment selects out various common organizational forms (Miller 1986) and formal organizations may be subject to a selection process similar to those of the biological species. Their survival, because of Darwinistic forces, depends on their ability to evolve in ways adapted to their environments (Miller 1986). Hence those Darwinian forces encourage only relatively few organizational forms to survive in the same setting (Miller 1986). In a similar vein, only a limited number of possible combinations of strategies, structures and environmental forces feasible. These favored strategies, structures, and environmental conditions combinations, i.e. configurations, cause the organizations having them to thrive at the expense of competing organizations (Miller, 1986). Competitors must therefore either begin to move toward these superior configurations or perish. This explains why, once reached, a fairly stable set of configurations will exist over a long period (Miller 1986).

A second related argument for the existence of configurations is that organizational features have complex and integral relationships (Miller 1986). In other words, the organization may be driven toward a common configuration to achieve internal harmony among its elements of strategy, structure and context (Miller 1986; Miller and Friesen 1983, 1984). For example, in Miller and Mintzberg's (1983, p.21) description of the machine bureaucracy, standardization, rules and regulations, formal communications, and tight controls are emphasized. These large organizations can only operate in stable and simple environments. Clearly many of these attributes are complementary and mutually reinforcing and they can combine many different ways. However, internally consistent configurations reduce the number of possible ways in

which the elements combine. They make it that much more likely that common configurations will account for a sizeable proportion of organizations (Miller 1986).

Besides those conceptual arguments in favor of configurations, there is also strong empirical evidence to support the existence of configurations. For example, Lawrence and Lorsch (1967) and Burns and Stalker (1961) found structural configurations in their studies. Hambrick (1983b) and Miller and Friesen (1984) have also found configurations among elements of strategy in the PIMS data.

2.3. The Genesis of configurations: Four Imperatives

Miller (1987b) provides theoretical support for the existence of configurations based on what he terms the "*imperatives*". He argues that various forces restrict organizational variety and help give rise to configurations. These are called imperatives because they drive or organize many elements of a configuration, are the most resistant to change, and probably must change before most meaningful transformations can take place (p.686). He defines four major imperatives: environment, organization structure, leadership and strategy. Miller (1987b) selected these imperatives according to three criteria. First, imperatives have to be suggested as fundamental, indeed central, driving forces of organizations in a widely accepted paradigm or branch of organizational analysis. Also imperatives have to be shown empirically to engender integral relationships among strategy, structure, and environment. And finally, imperatives had to have played central roles in generating organizational configurations that occur repeatedly. He claimed that four major imperatives meet these criteria: environmental, structural, strategic, and leadership imperatives.

Environmental imperative implies that the organizations must adapt to their environments. The uncertainty and unpredictability of customers and competitors, the nature and degree of competition and the exigencies of production technologies create important constraints that determine which modes of structure and strategy are viable (Miller 1987b). Indeed, the existence of uncertainty and technology, which are beyond the immediate control of the organization, pose challenges that have to be met by structure and strategy. Best performers adhere to structural norms of their environments, and the firms deviating the most from these norms were the poorest performers (Fry 1982; Perrow 1970). For example, uncertainty prompts the adoption of organic, decentralized, differentiated, and integrated structures and innovative and flexible strategies. According to traditional contingency, population ecology and industrial economics paradigms, firms that do not employ such adaptive structures and innovative strategies might perish in these uncertain and dynamic environments.

In summary, this imperative posits that environment will strongly influence strategy, and both will in turn influence structure. Changes in the former categories of variables will cause changes in the latter categories (Miller 1987b).

The proponents of a *structural imperative* have emphasized the systematic aspects of structure, showing how structure can influence strategy and decision making while hindering adaptation to the external environment (e.g. Crozier 1964; Mintzberg 1979). They believe that the relationships that produce configurations come from inside the firm and structures determine everything else (Miller 1987b). For example, in a rigid, bureaucratic configuration, strategies of innovation or of market/product differentiation are rare. The latter would require too much flexibility and knowledge of customers

(Miller 1986). In contrast, strategies of cost leadership (Porter 1980) are common where norms of efficiency are pursued. Under this imperative, uncertainty is reduced to the minimum as norms of efficiency and stability are pursued through routinization, standardization, specialization and formalization (Mintzberg 1979).

In short, this imperative posits that structure will constrain, and to a large extent determine strategy and it will confine the firm to stable and munificent environments (Miller 1987b).

Strategic imperative claims that structure follows strategy (Chandler 1962; Miles and Snow 1978; Porter 1980). For example, Porter's (1980) cost-leaders pursue efficiency-oriented strategies and as a result, their structures are centralized and bureaucratic. According to this imperative, strategy also can influence the choice of markets. It claims that a firm must choose its environment according to its goals, and the strategic themes it wishes to pursue (Child 1972; Hofer and Schendel 1978).

In short, according to this imperative, strategy will influence both the choice of the environment and the selection of a suitable organization structure (Miller 1987b).

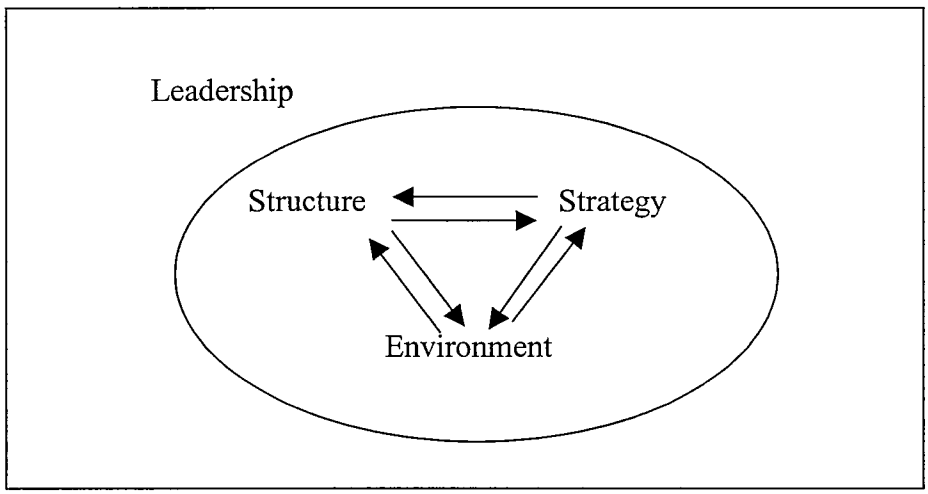
Finally, *leadership imperative* emphasizes the influence that a chief executive officer's (CEO) behavior, goals, talents, drives, emotions can have on his/her organization (Stogdill 1974). These forces give rise to a number of very common organizational configurations (Kets de Vries and Miller 1984). According to this imperative, a leader's personality influences everything ranging from strategy, structure to decision-making style, an even the selection of target markets. For example, Miller and Droge (1986) empirically showed that in small firms, the CEO's need for achievement

was a more important predictor of organizational structure than firm size, technology, or environmental uncertainty.

In summary, this imperative argues that the personality of the CEO can either directly influence strategy, structure, and environment, or it can indirectly influence these through the establishment of an organizational culture (Miller 1987b).

These imperatives are important since Miller (1987b) argues that they are building blocks of configurations and "through their imperatives, configurations have an internal logic, integrity, and evolutionary momentum of their own, as well as a central, enduring theme that unifies and organizes them" (p.697). Please see Figure 1 for the summary of these four imperatives.

FIGURE 1: Four Imperatives of Configurations



As can be clearly seen in Figure 1, no one-way causation exists between imperatives. Each and every one reinforces the others. Miller (1987a) posits that these imperatives are the causes and the configurations are the effects, each one of these imperatives is likely to play some role in various configurations. Most often a single

imperative becomes dominant, underlies and organizes a configuration. However, some other configurations can be product of more than one imperative. In such cases, several imperatives may have equal impact on the configuration of dimensions.

Configurations developed in this study will be based on strategic and environmental imperatives. Since the research question is related to firms' choice of their multiple channel structure it would be more realistic to expect that the structure of distribution channels follows firms' strategic choices adopted within certain environmental contexts.

Another relevant question in configurational studies is related to the number of domains to be used. In the next section, I will discuss the importance of the number of domains used in developing configurations.

2.4. Single- vs. Multiple- Domains:

A majority of the strategic management research literature directed at developing configurations has used the conceptual domains or imperatives of strategy, structure, and environment (Miller 1987b for review). While some have focused their efforts on a single domain (for instance studying the relationship between structure and performance), others have included multiple domains (Dess, Newport, and Rasheed 1993).

In developing and testing theory on configurations, as one moves across a continuum from a single domain, to two domains, to multiple domains, more comprehensive and accurate depictions of organizational reality become possible. Also, one gains more confidence in positing normative implications of empirical findings (Dess et al. 1993). However, such "gains" in accuracy come at an inevitable cost in parsimony. Thus, configurations encompassing multiple domains necessitate "a smaller number of

more encompassing conceptual categories with a broader range of generalizability" (Bourgeois 1980, p.29).

Although investigations of bivariate contingency relationships constitute an improvement over single domain research, they are often criticized for being too general and simplistic (Dess et al. 1993). The restriction of interest to two domains leads the researcher to leave out many relevant parameters, thereby failing to capture the essence of configuration. Also, the choice of just two domains from a multiplicity of domains is problematic since it requires the researcher to prioritize the domains to be studied.

Multiple domain configuration studies enable researchers to examine complex multivariate relationships and establish the relative importance of fit among constructs in multiple domains. Lenz's (1980) conclusion from his multivariate study of fifty savings and loan associations: " neither environment, strategy nor organizational structure is sufficient to explain differences in performance...organizational performance is determined in part, by the particular coalignment administrators are able to achieve" (pp.220-221).

Causation among the variables in a configuration must be approached more carefully than in studies that investigate bivariate relationships. Typically in the context of configuration research, such causal relationships among multiple variables are stipulated as reciprocal and mutually reinforcing (Dess et al. 1993).

When additional domains are added to the research question- a common attribute of configuration research- the difficulty in establishing causal relationships is exacerbated. For example, Miller (1986) posited that environmental "uncertainty prompts the adoption of organic, decentralized, differentiated and integrated structures and

innovative and flexible strategies" (p.688). However, it seems equally plausible to suggest the same relationship among these variables with a different causation. Hence, configurational researchers usually develop configurations using multiple domains but avoiding any specific causation among them (Meyer et al. 1993).

In this study, two configurations of multiple channel systems will be developed using multiple domains, i.e., strategic, environmental and structural domains, to depict the complex nature of channels of distribution and channel performance.

2.5. Why use configurations?

Configurations represent common, thematically driven alignments of elements or dimensions. Therefore, they have predictive power which resides in the fact that most alignments are unlikely while relatively few are far more common (Miller 1996; Miller and Friesen 1984). Hence, the presence of certain elements in a configuration can thus lead to the reliable prediction of the remaining elements of the same configuration (Miller and Mintzberg 1988). What is critical is that a relatively small number of these configurations are believed to encompass quite a large fraction of organizational variety (Miller and Friesen 1984).

In fact, if organizations were complex amalgams of multiple attributes that could vary independently and continuously, the set of possible combinations would be infinite. But for theorists taking the configurational perspective, this potential variety is limited by the attributes' tendency to fall into internally coherent configurations. This patterning occurs because attributes are in fact interdependent and often can change only discretely or intermittently (Meyer et al. 1993). Since they are finite in number and represent a

unique, tightly integrated, and therefore relatively long-lived set of dynamics (Mintzberg 1973; Miller and Mintzberg 1983; Miller 1981, 1986, 1987b), the use of configurations allows researchers to express complicated and interrelated relationships among many variables without resorting to artificial oversimplification of the phenomenon of interest. Configurations provide a means of achieving parsimony while presenting rich, complex descriptions of organizations (Hambrick 1983b; Miller and Friesen 1977, 1984; Mintzberg 1973, 1979).

Another important role of configuration research is the classification of organizations (Dess et al.1993). Configurations allow people to order and make sense out of their worlds by sorting things into discrete and relatively homogeneous groups (Meyer et al. 1993). Classification systems provide a means for defining sets of homogeneous organizations that should significantly increase levels of explained variance of key variables across organizations. Through configurations, researchers classify complex organizational groups into smaller, more homogeneous sets.

A configurational approach is also useful for performance-related predictions. Since the existence of mutually supportive elements of environment, strategy, and structure in a configuration leads, ceteris paribus, to superior performance, it enables predictions about the performance of the organization or other organizations (Birkinshaw and Morrison 1995). For example, once a set of configurations has been identified, the closer the organizations come to matching that ideal profile, the better they will perform.

2.6. CONFIGURATIONAL APPROACHES: Deductive vs. Inductive

The objective of a configuration approach is to discover richly described, revealing configurations by generating typologies or taxonomies- sets of different configurations that collectively exhaust a large fraction of the target population of organizations or situations under consideration (Miller and Friesen 1984). A *typology* refers to theoretical, conceptual classification schemes (Dess et al. 1993). Typologies are a priori in nature; they are generated mentally, not by any replicable empirical analysis (Miller and Friesen 1984). Typologists generally follow the Weberian logic of ideal types, accentuating key characteristics so as to draw a priori distinctions between organizations (Meyer et al. 1993). Among the most prominent of typologies are those of Burns and Stalker (1961), Miles and Snow (1978) and Mintzberg (1979). These scholars differentiated among types of strategies, organizations, or decision- making styles. And with varying success, they showed how and why the attributes in each of their types interrelated the way they did. Burns and Stalker's (1961) distinction between organic and mechanistic forms was based on systemic properties (Meyer et al. 1993). Or, Miles and Snow's (1978) distinctions among defenders, analyzers, prospectors, and reactors are based on dimensions of business-unit strategies, although they also incorporate aspects of environmental and internal organizational characteristics (Meyer et al. 1993). However, many other typologies fail to make any serious attempt to show how and why these components interrelate. It is unfortunate that many typologies are never tested empirically, and those that are tested fail usually to be borne out (Doty et al. 1993).

The most successful typologies are well informed by theory – and thus draw distinctions and relationships of conceptual importance (Burns and Stalker 1961). The elements or variables used to describe each type are shown to cohere in thematic and interesting ways- ways that have important conceptual, evolutionary or normative implications (Miles and Snow 1978, Mintzberg 1979). These interdependencies among the elements within types are the essence of configuration (Miller 1990).

Taxonomy, on the other hand, refers to empirically derived classifications (Dess et al. 1993). Taxonomies are derived from multivariate analyses of empirical data on organizations. Scholars employ methods of numerical taxonomy and an assortment of clustering algorithms and hypothesis testing techniques to identify natural clusters in the data (Miller and Friesen 1980, 1984). One of the taxonomic attempts was that of Miller and Friesen (1984), who used statistical manipulation of large samples of organizations observed over periods of 20 or more years to produce configurations or clusterings of relationships between variables.

Compared to typologies, taxonomies tend to be more firmly based on facts- or at least, on quantitative data. Their large sets of variables and sizeable samples can disclose important empirical regularities (Miller 1996). However, many taxonomies have justly been criticized for their lack of theoretical significance (McGee and Thomas 1986), their arbitrary and narrow selection of variables (Reger and Huff 1993), and their unreliable or unstable results (Hatten and Hatten 1987).

Since configurations are about organizational wholes, more should be done to discover their thematic and systematic aspects – to probe into just why and how their elements interrelate and complement each other to produce the driving character of an

enterprise. It is these themes and relationships that are the most interesting theoretically. However, too many taxonomies are disconnected from theory and therefore, lack stability (Miller 1996). Holdout samples may be employed to establish the stability of a taxonomy – to test whether the same groupings occur in randomly selected sub samples (Miller and Friesen 1984).

Despite this distinction between typologies and taxonomies, Meyer et al. (1993) claim that the dichotomy between typologies and taxonomies is largely artificial. They further argue that although organizational typologies may originate in the concepts and intuitions of theorists, all useful typologies have two common properties: they synthesize configurations from multiple attributes, and their types are grounded in empirical experience. In a similar vein, while taxonomies are constructed by applying quantitative analytical techniques to a formal database, all useful taxonomies are theoretically grounded (Meyer et al. 1993). They suggest that rather than dividing those configurational researchers into opposing camps we should view typology and taxonomy as equally valuable, complementary approaches to representing organizational configurations.

Performance-related configurational studies- generating taxonomies and typologies- are generally of two types: (1) inductive, often industry-specific inquiries that use configurations generated from empirical procedures as the basis for performance comparisons (result in taxonomies) (e.g., Hatten and Schendel 1977), or (2) deductive inquiries that first sort organizations into configurations and then test (or generate) theory-based predictions about their relative performance (result in typologies) (e.g. Zajac and Shortell 1989).

Inductive approach: The majority of configurational studies in strategic management have relied on inductively defined strategic groups to examine a posteriori the configurations- performance relationship (Ketchen, Thomas, and Snow 1993). The historically dominant approach focuses on empirical classification of organizations in order to define inductively the set of configurations appropriate to a given context.

For the inductive approach, configurations are derived on the basis of a comprehensive set of variables that, individually and collectively, have been used in prior studies to define strategic groups (Ketchen et al. 1993). One of the most disappointing aspects of strategic groups research (the flagship of the inductive approach) is its lack of strong evidence for descriptive validity, evidence that groups are in reality internally homogeneous and maximally different from each other (Thomas and Venkatraman 1988). As some have concluded, although the inductive approach might appear to provide a rich description of the configurations in an industry, such description may be just a statistical artifact (e.g., Hatten and Hatten 1987).

The previous mixed results regarding the relationship between this form of configuration and performance may be due to a weakness in the inductive approach stemming from its emphasis on identifying statistical homogeneity (Thomas and Venkatraman 1988). Essentially, the inductive approach concentrates on maximizing internal validity while sacrificing generalizability (Ketchen et al. 1993).

Indeed, the a posteriori nature of the inductive studies suggests that they are not maximally robust tests of the configurations-performance relationship, leading researchers to call for theory-based models (McGee and Thomas 1986) that would permit predictions of performance differences (Thomas and Venkatraman 1988).

The deductive approach to configuration is based on a theoretical framework that incorporates common elements of the ecological and strategic choice perspectives (Zammuto 1988). Scholars taking this approach portray configurations as jointly produced by organizational and environmental attributes that are critical to competition regardless of industry. Structural contingency theorists brought to the study of organizations the notion that fit between structural characteristics and environment is required. For example, Burns and Stalker (1961) identified two types of organization structure, mechanistic and organic, each of which is expected to be more prominent and effective in a particular type of environment. The deductive approach uses a particular theoretical perspective for both defining groups and predicting their relative performance. Given its theoretical foundation, the deductive approach may not only improve descriptions of industry structure but also provide explanations for and predictions about configurations- performance relationships (Ketchen et al. 1993). It has been argued that deductively defined configurations have been able to provide explanations for differentially performing configurations since groupings have been established using long-term strategic decisions that indicate resource commitments and interconnectedness of decision purposes (McGee and Thomas 1986). The inductive approach does not offer a basis for predictions since it offers no a priori expectations concerning how many or what type of configurations will be found in a given industry. In contrast, the deductive approach contains the assumption that it is difficult to shift from one of the expected configurations to another, suggesting that the group (or groups) that occupy lucrative segments of an industry will enjoy superior performance (Ketchen et al. 1993). An implication is that, given specifications of the environmental conditions in a particular

industry, predictions can be made regarding the relative performance of the configuration and the deductive approach helps us predict performance (Ketchen et al. 1993).

Ketchen et al. (1993) compare deductive (theory-based) and inductive (atheoretical) approaches. Their core argument is that theory-based approaches are apt to generate more consistent configurations with stronger relationships to subsequent performance levels. Their results show that the approach used to define configurations affects the number, type and consistency of configurations over time. Also findings indicate that two approaches produce different groupings. While the inductive approach produces inconsistent numbers of configurations over time the deductive approach is able to discriminate consistently between configurations that vary in performance. Therefore, the deductive approach is superior in distinguishing differentially performing configurations (Ketchen et al. 1993).

Configurational approaches appear at least as promising as universalistic approaches for advancing knowledge of organizational phenomena (Miller and Mintzberg 1983). However, some empirical results with respect to the inductive approach support previous assertions that the inductive approach may provide configurations that are merely statistical artifacts (e.g. Thomas and Venkatraman 1988). It is essential that researchers develop valid, parsimonious, theory-based configurations (Snow and Miles 1983) before making attempts to relate configurations to outcome variables such as performance. The configurations defined through deduction might offer a heuristic framework in the form of certain assumptions and constraints to guide further inductive inquiry.

Ketchen et al. (1993) suggest that, in the future, researchers can perhaps best explain the performance implications of organizational configurations by employing deductive approaches to defining configurations and predicting performance.

2.7. CONTINGENCY APPROACH vs. CONFIGURATION APPROACH

The central tenant of configurational approach- the belief that performance differences can be attributed to configurations- is grounded in contingency theory, which posits that firms whose configurations are aligned with their environment should perform better than firms in nonaligned configurations (Ketchen et al. 1993). By synthesizing broad patterns from contingency theory's fragmented concepts and grounding them in rich, multivariate descriptions, the configurational approach benefits from contingency theory. However, the configurational approach makes a clean break from the contingency mainstream, within which researchers have been preoccupied with abstracting a limited set of structural concepts- centralization and formalization, for example- and measuring their relationships with a limited set of abstracted situational concepts, such as size and technological uncertainty. Although they are similar in their search for and rely on interdependencies among different variables there are significant differences between these two approaches.

First of all, contingency research invokes *reductionism* as its dominant mode of inquiry, an approach whereby researchers seek to understand the behavior of a social entity by separately analyzing its constituent parts (Meyer, Tsui, and Hinings 1993). This reductionistic perspective is based on a central assumption that the coalignment between two constructs (such as environment and strategy) can be understood in terms of pairwise

coalignment among the individual dimensions that represent the two constructs. In this tradition, coalignment is typically specified as the interaction among the constituent variables (Venkatraman and Prescott 1990). To date, because of this tendency toward reductionism among contingency researchers, complementary combinations of attributes and/or strategies have not been carefully delineated (Reeves, Duncan, and Ginter 2002). Hence, reductionist approaches cannot answer questions such as: "What combination or configuration of strategic and organizational characteristics defines organizational classifications?" or "What complementary arrangements of environment, organizational attributes, and strategy tend to be found in more successful organizations?" or "What is different about that arrangement in less successful organizations?" (Reeves et al. 2002; Meyer et al. 1993).

Also, in terms of relationships among attributes, contingency approaches favor *unidirectional* and *linear* relationships- the occurrence or presence of one characteristic "causes" the occurrence of another organizational characteristic. The focus is on bivariate or sharply circumscribed multivariate analysis and relationships are generally assumed to be linear and causation unidirectional (Miller and Friesen 1984). Contingency researchers adhere to discover sample-wide linear relationships by totally ignoring nonlinear relationships (Miller and Friesen 1984). Quite simple causal assumptions are usually proposed with external contingencies and internal system attributes often seen as linked by linear relationships involving unidirectional causation (Meyer et al. 1993). Situational contexts are thought to largely determine the organizational characteristics needed for effective performance. Although some contingency theorists endorse the open systems concept of *equifinality* – the idea that different forms can be equally effective- analytical

procedures for demonstrating this empirically have not been developed (Drazin and Van de Ven 1985).

Configurational approaches that simultaneously incorporate many different elements that contribute towards strategic fit are superior to reductionist contingency approaches (Meyer et al. 1993; Miller 1981, 1986). Configurational inquiry represents a *holistic* stance, an assertion that the parts of a social entity take their meaning from the whole and cannot be understood in isolation. In holistic perspectives, a broader, multidimensional conceptualization of coalignment between several characteristics of strategy, structure and environment is adopted (Reeves et al. 2002; Meyer et al. 1993). Rather than trying to explain how order is designed into the parts of an organization, configurational theorists try to explain how order emerges from the interaction of those parts as a whole (Meyer et al. 1993). Configuration researchers suggest that configuration or "gestalt" is "an organized entity or whole in which the parts, though distinguishable, are interdependent; they have certain characteristics produced by their inclusion in the whole, and the whole has some characteristics belonging to none of the parts. Therefore, configurations or gestalts have characteristics that are different from and beyond the characteristics of their individual parts (Miller and Friesen 1984; Miller 1986).

In configuration research, social systems are seen as tightly coupled amalgams entangled in bi-directional causal loops; therefore, no assumptions are made concerning linear relationships or unidirectional causality between variables (Miller 1986, 1990; Miller and Friesen 1984; Venkatraman and Grant 1986). Nonlinearity is acknowledged, so variables found to be causally related in one configuration may be unrelated or even inversely related in another. Each configuration is considered as a system in which each

attribute can influence many of the others by being an indispensable part of an integrated whole. There are no purely dependent or independent variables in a system (Miller and Friesen 1984).

Configurations are multidimensional in the sense that they are complex clusters of elements or variables that describe the structure and technology of an organization, its strategy, structure, and environment (Miller and Friesen 1984). Different from contingency approaches that oversimplify things by assuming that the same relationships exist among variables in different types of organizations (Meyer et al. 1993), the configuration view does not analyze narrow dimensions that comprise variables that are very similar or highly correlated across a broad variety of firms. For instance, the latter approach does not look at the relation between formalization- one dimension of structure- and environmental dynamism – one dimension of environment. Rather, it investigates how environment and structure overall, not only specific dimensions, fit together. It analyzes different constellations of conceptually distinct variables or elements that commonly cluster together to characterize many aspects of organizational states and processes (Meyer et al. 1993).

Another difference between contingency and configuration views lies in their effectiveness assumption. While the contingency view argues in favor of situational context as the determinant of organizational effectiveness (Meyer et al. 1993), the configurational approach, acknowledging that there is more than one way to succeed in each type of setting, explicitly accommodates the important concept of *equifinality* (derived from open systems theory) (Meyer et al. 1993). Equifinality asserts that systems can reach the same final state from different conditions and by different paths of

development (Meyer et al. 1993). Equifinality can be interpreted to mean that either many alternative different configurations (of external environments, different resource patterns, diverse internal transformation processes, and internal organizational arrangements) may be equally appropriate in pursuing a particular outcome or that "there is more than one way to succeed in each type of setting" (Meyer et al. 1993, p.1178). For instance, equifinality might imply that pursuing either technological innovation or a niche strategy could enable a particular organization to thrive in a volatile environment. The configurational twist would be to add that neither strategic approach is liable to work unless it is embedded in an appropriate pattern of coherent organizational processes and structures (Meyer et al. 1993). The idea leads to the holistic nature of organizational phenomena. Miller and Friesen (1984, p.15) argue in favor of the patterning of organizational elements being the focus of inquiry rather than "bivariate or sharply circumscribed multivariate analysis" They further argue that organizational structures and management systems are best understood in terms of overall patterns rather than in terms of analyses or narrowly drawn sets of organizational properties (Miller and Friesen 1984).

As a summary, although it benefits from the tradition of contingency theory, by including the assumptions of holistic approach, nonlinearity and equifinality, the configuration view differentiates itself from its predecessor. Table 2 summarizes the major differences between contingency and configuration approaches.

TABLE 2: Contingency and Configuration Approaches Compared

	Contingency Approach	**Configuration Approach**
Dominant mode of inquiry	Reductionist analysis	Holistic synthesis
Relationships among Attributes	Unidirectional and linear	Bidirectional and Nonlinear
Effectiveness assumption	Determined by situational Context	Equifinality

2.8. SUMMARY

In this study, based on the above discussions, I will use a configuration theory approach to theoretically (deductively) develop and empirically assess a typology of multiple channel systems. Unlike classification systems, typologies do not provide decision rules for classifying organizations. Instead, they identify multiple ideal types, each of which represents a unique combination of the organizational attributes that are believed to determine the relevant outcomes (Doty and Glick 1994). Typologies contain ideal types that are complex constructs and can be used to represent holistic configurations of multiple unidimensional constructs. However, unlike most traditional theories or classification types, typologies do not highlight the hypothesized relationships between the unidimensional constructs and the dependent variable (Miller and Friesen 1984). Instead, typologies highlight the internal consistency among the variables within an ideal type, and they explain why this internally consistent pattern results in the specified level of the dependent variables. Thus, typologies hypothesize relationships between the similarity of an actual organization to an ideal type and the dependent variable. For example, in many typologies (e.g. Miles and Snow 1978; Mintzberg

1979,1983) greater similarity to an ideal type is posited to result in greater effectiveness because the relevant contextual, structural or strategic factors are thought to be consistent within each ideal type (Doty and Glick 1994).

In the literature to assess the similarity of firms to ideal types and predict their performance based on this similarity, the concept of fit has been introduced and used. In the next section, I will define and discuss different conceptualizations of fit.

3. THE CONCEPT OF FIT

3.1. Introduction

The concept of fit (also termed coalignment, match, consistency) has served as an important building block for theory construction in several areas of research including organizational research (Aldrich 1979; Van de Ven and Drazin 1985) including strategic management (e.g. Miles and Snow 1978), and marketing (e.g. Vorhies and Morgan 2003). In simple terms the proposition is that the "fit" or "match" or "coalignment" between strategy and its context- whether it is the external environment (e.g. Anderson and Zeithaml 1984; Bourgeois 1980; Hambrick 1983a; Hofer 1975; Ruekert et al. 1985), or organizational characteristics such as structure (Chandler 1962; Vorhies and Morgan 2003;Walker and Ruekert 1987), administrative systems (Lorange and Vancil 1976) has significant positive implications for performance. The four main elements described as involved in strategic fit (or coalignment) are the organization's external environment [literature has typically characterized the external environment in terms of dynamism, complexity, and munificence (Aldrich 1979; Dess and Beard 1984; Khandwalla 1976), internal organizational arrangements (typically the organization's structure, degree of

bureaucratization or organicness), the organization's strategic choices (usually either Miles and Snow's or Porter's generic strategies) and organizational outcomes (i.e. performance).

It has been empirically supported that the fit or match between strategy, structure and environment can influence organizational performance (e.g., Miles and Snow 1978; Porter 1980, Snow and Hrebiniak 1980; Kim and Lim 1988; Miller 1988, 1991; Lee 1989). Therefore, the central tenet in strategic management and marketing is that fit between environmental conditions and organizational capabilities and resources is critical to performance and that a strategist's job is to find or create this match (Bourgeois 1985).

Drawing upon the well-developed literature regarding the fit among various variables, especially the contingency theory which generally holds that the better the fit between strategy and environment, the more successful a firm will be (Lawless and Finch 1989; Miles and Snow 1978), configuration theory-based studies utilize the concept of fit to make performance- related evaluations and predictions. It should be noted that although they borrow the concept of fit from contingency theory, configurational studies that simultaneously incorporate many different elements that contribute towards strategic fit are considered as superior to reductionist or contingency approaches (Meyer et al. 1993; Miller 1981,1980). However, since fit has many different definitions, each of which with specific implications for how relationships between variables are conceptualized and tested (Venkatraman and Camillus 1984) it has been used in different ways in different studies. Therefore, strategic management and marketing scholars have specified the different conceptualizations and technical specifications of alternative

definitions of fit (e.g., Venkatraman 1989). Below I will briefly describe these different conceptualizations of fit.

3.2. Different conceptualizations of fit:

One classification of different fit conceptualizations is offered by contingency theorists. Van de Ven and Drazin (1985) indicated that in the development of contingency theory, at least three different conceptual approaches to fit have emerged- the selection, interaction, and systems approach- and each significantly alters the essential meaning of contingency theory and the expected empirical results (Drazin and Van de Ven 1985).

In the *selection* argument, fit is considered as the result of an evolutionary process of adaptation that ensures that only best performing organizations survive. This approach examines the fit between different variables, i.e., context and structure, and performance separately. On the other hand, in the *interaction* approach fit is an interaction effect of the context and structure of an organization on performance. The focus here is not so much on understanding the separate matches between variables as in the selection approach, but rather on explaining variations in organizational performance from their interaction, for example the interaction of organizational structure and context (Drazin and Van de Ven 1985). However, since studies that adopt these two conceptualizations of fit tend to focus on how single contextual factors affect single structural characteristics and how these pairs of contextual and structural factors interact to explain performance, these two approaches have been criticized as being reductionist, and the *systems* approach emerged as a reaction (Drazin and Van de Ven 1985). This approach asserts that the understanding of context-structure performance relationships can only advance by

addressing simultaneously the many contingencies, structural alternatives, and performance criteria that must be considered holistically to understand organization design (Miller 1981; Van de Ven and Drazin 1985). Also, the system approach emphasizes the need to adopt multivariate analysis to examine patterns of consistency among dimensions of organizational context, structure, and performance (Miller 1981). The tasks for researchers adopting this definition of fit are to identify the feasible set of organizational structures and processes that are effective for different context configurations and to understand which patterns of organizational structure and process are internally consistent and inconsistent (Drazin and Van de Ven 1985; Van de Ven and Ferry 1979).

Venkatraman (1989) offers another classificatory framework for mapping the six conceptualizations of fit in strategy research according to the dimensions of *degree of specificity* and *anchoring.* Specificity indicates the level of precision in the relationships between variables of interest, i.e., the specification of the directness, direction and strength of the relationship; while anchoring refers to whether the concept of fit is anchored to a particular criterion (e.g., performance) or adopts a criterion-free specification.

3.2. a. Fit as moderation: This conceptualization is similar to the idea of interaction in the contingency perspective. According to this perspective, a predictor variable's impact on a criterion variable is dependent on the level of a third variable, termed here as the moderator (Venkatraman 1989). For instance, the impact that differentiation strategy (predictor variable) has on performance (criterion variable) changes based on the different levels of environmental uncertainty (moderator variable). The fit between the

predictor and the moderator is the primary determinant of the criterion variable. Therefore, the different types or levels of environmental uncertainty affect the direction or the strength of the relation between strategy and performance (Venkatraman 1989).

3.2. b. Fit as Mediation: The mediation conceptualization of fit acknowledges the existence of a significant intervening mechanism (e.g., organizational structure) between an antecedent variable (e.g. strategy) and the consequent variable (e.g., performance) (Venkatraman 1989). For example, the differentiation strategy may result in higher performance through an appropriate organic structure (mediator variable). While moderation specifies varying effects of an independent variable on a dependent variable as a function of the moderating variable, this perspective specifies the existence of intervening (indirect) effects between an antecedent variable and its consequent variable (Venkatraman 1989).

Both moderation and mediation perspectives are anchored to a particular criterion variable, i.e., performance or efficiency. However, since in mediation perspective fit is viewed as an indirect effect of one antecedent variable on the other variable, it is less precise than the moderation perspective where the relationship between predictor and criterion variables is more direct.

3.2. c. Fit as Matching: In this perspective fit is conceptualized as a theoretically defined match between two related variables. However, as a difference from the previous two perspectives, here fit is specified without reference to a criterion variable, although, subsequently, its effect on a set of criterion variables could be examined (Venkatraman

1989). An example of this perspective is found in Chandler's (1962) classical thesis that a diversification strategy requires a multidivisional structure, whereas a geographical expansion strategy requires field units. Thus, the measure of strategy-structure fit can be derived based on the underlying theory without reference to performance (Venkatraman 1989).

3.2. d. Fit as Gestalts: In this perspective, fit is defined in terms of the degree of internal coherence among a set of theoretical attributes without reference to any specific criterion like performance (Venkatraman 1989). Miller (1981) underlined the importance of gestalts: "Instead of looking at a few variables or at linear associations among such variables we should be trying to find frequently recurring clusters of attributes or gestalts (p.5). There is something holistic and ordered about the pattern of attributes (Miller and Friesen 1977, p.264). The richness of this approach stems from the fact that it includes many variables and analyzes their relations in a holistic way, superior to some other more precise perspectives that use only two variables.

3.2. e. Fit as a Profile Deviation: In this conceptualization, fit is specified as the degree of adherence to an externally specified profile. If an ideal strategy profile is specified for a particular environment, a business unit's degree of adherence to such a multidimensional profile will be positively related to performance if it has a high level of environment-strategy coalignment (Venkatraman 1989). Conversely, a deviation from this profile implies a weakness in environment-strategy coalignment, resulting in a negative effect on performance.

This perspective is different from the gestalt perspective because the referent profile is anchored to a specific criterion (typically, performance), and thus it is positioned differently in the classificatory framework. Therefore, in contrast to an exploratory development of multivariate profiles of coherence, this perspective allows a researcher to specify an ideal profile and to demonstrate that adherence to such a profile has systematic implications for effectiveness.

3.2. f. Fit as covariation: In this perspective, fit is a pattern of covariation or internal consistency among a set of underlying theoretically related variables (Venkatraman 1989).

3.3. Fit as profile deviation

The literature suggests that when researchers simultaneously consider the fit among multiple variables (as in holistic study of the relationship between organization structure, environment and strategy) and assess its impact on dependent variables (e.g. performance), they should conceptualize and assess fit as "profile-deviation" (e.g., Doty,

Glick, and Huber 1993; Venkatraman 1990). Vorhies and Morgan (2003) also adopt this conceptualization of fit in their study of marketing organization's fit with business strategy. In this study, since I will analyze the fit among strategic-structural-environmental dimensions and assess its relationship with performance following the related literature I will utilize the "fit as profile deviation" conceptualization of fit.

A profile deviation approach views the fit between organization, its environment and its strategy in terms of the degree to which the organization's characteristics differ from those of a specified profile identified as ideal for implementing a particular strategy (e.g. Venkatraman 1989; Zajac, Kraatz, and Bresser 2000). Ideal profiles are defined as configurations of organizational characteristics that fit with the environmental context and implementation requirements of a particular strategy and thus produce high performance (Venkataraman and Prescott 1990). From this perspective, a distribution channel organization's fit (or misfit) with business strategy and environment can be defined as the degree to which distribution channel profile differs from that of the ideal organization that achieves superior performance by arranging its structure in a way that enables the implementation of a given business strategy that is appropriate for environmental context.

The reductionist (contingency theory) perspective of fit or coalignment is based on a central assumption that the coalignment between two constructs (such as environment and strategy) can be understood in terms of pairwise coalignment among the individual dimensions that represent the two constructs. In this tradition, coalignment is typically specified as the interaction among the constituent variables. On the other hand, from a holistic (configuration theory) perspective, a broader conceptualization of

coalignment between several characteristics of strategy, structure and several characteristics of environment is considered. This holistic perspective is based on a central premise that it is important to retain the holistic (i.e. systemic, gestalt) nature of the environment-strategy- structure coalignment. Thus, tests of the performance effects of coalignment should reflect the simultaneous and holistic pattern of interlinkages between strategy and environment.

The common analytic approaches to test fit-performance relationships within this perspective are: cluster analysis (Hambrick 1984) and q-factor analysis (Miller and Friesen 1984). However, an alternative to this inductive, cluster-analytic route has been developed: the deductive approach (Drazin and Van de Ven 1985; Van de Ven and Drazin 1985) that serves as a more direct test of the central proposition in this study – namely, that the degree of adherence of the organizational structure to the specific requirements of the environment in resource deployments will be significantly related to performance. This scheme retains the holistic, systemic nature of the environment-strategy coalignment, and it overcomes the subjectivity that underlies the interpretation of clusters in terms of the language of coalignment. Its attractiveness lies in its capacity to recognize the multivariate deviation in the pattern of a business unit's resource allocation profile from an "ideal" profile. The basic thesis is that if a profile of strategic dimensions can be obtained for a set of high-performing units (within an environment), then any deviations from this profile lead to negative performance. The test for the performance impact of coalignment is provided by the correlation between the degree of deviation from the ideal profile and performance. A deviation from the ideal pattern of resource allocation represents a misalignment between environment, structure and strategy. This

misalignment should be significantly and negatively related to performance. A negative and statistically significant correlation provides a systematic test of the population within this perspective (Venkatraman 1989; Venkatraman and Prescott 1990).

Testing this specific conceptualization of fit is fundamentally dependent on the development and justification of the ideal profile against which fit can be assessed. Ideal points can be derived either theoretically or empirically (Ferry 1979; Venkatraman 1990; Zajac et al. 2000).

Developing theoretically derived ideal profiles requires that the relevant theoretical literature be sufficiently detailed to enable precise numerical scores to be estimated for the appropriate set of dimensions in the ideal profile (e.g. Drazin and Van de Ven 1985).In the marketing domain, existing theory indicates some marketing organization characteristics that may be appropriate for firms pursuing certain types of strategy (e.g. Ruekert and Walker 1987). However, from an ideal profile perspective, the specifications provided by marketing theory are not sufficiently detailed to enable estimation of numerical scores, nor do these specifications consider many of the organizational characteristics and types of strategy as important in assessing structural fit with business strategy (Vorhies and Morgan 2003). In this common circumstance, when ideal profiles cannot be precisely specified from existing theory, the configuration literature advocates assessing fit with empirically derived ideal profiles (e.g. Gresov 1989; Ketchen et al. 1993).

When developing ideal points empirically, the approach to specifying the ideal profiles for each strategy or environment is through a 'calibration sample' of best-performing businesses within each strategic group or environment. For instance,

structural characteristics of firms that have the maximum performance among other firms pursuing the same strategy, differentiation or cost-leadership- in similar environmental contexts are calibrated as "ideal profiles". Then, fit is conceptualized in terms of the degree of adherence to this 'ideal' profile specified for a given environment and it is operationalized as a weighted Euclidean distance from the ideal profile along those variables considered significant within an environment. This distance is an indication of the degree of misalignment between the structures and strategies of each business unit in the study sample and the structures and strategies of the high-performing business units within the same environment (Venkatraman, 1989; Venkatraman and Prescott 1990). This measure, more appropriately conceptualized as misalignment (rather than as coalignment) is termed as MISALIGN and is calculated as follows:

$$\mathbf{MISALIGN} = \Sigma[b_j\,(X_{sj} - X_{cj})]^2$$

X_{sj} = the score for the business unit in the study sample for the j^{th} variable

X_{cj} = the mean score for the calibration sample (or the ideal type)

b_j = standardized beta weight of the OLS regression equation for the j^{th} variable in the environment. It denotes the importance of each variable for each firm to reach to its performance objectives. In the cases where all variables are equally important for firms' performance, it drops out.

This calculation provides a profile deviation score that represents the degree to which the strategy-structure-environment profile of each firm is similar to ideal profile for its strategic type.

In the context of distribution channel organization fit with business strategy and environment, this approach requires the identification of high-performing channel organizations implementing a given strategy in a given environment and a calibration of their organizational characteristics as an ideal profile for implementing that strategy in a specific environment (e.g. Drazin and Van de Ven 1985; Venkataraman and Prescott 1990). These businesses are considered to have ideal profiles because their superior performance indicates that they have configured their channel organization in a way that enables superior implementation of their business strategies in their environments (e.g. Van de Ven and Drazin 1985). For instance, at a more concrete level, we can use the example of firms that follow differentiation or cost-leadership strategies in specific environmental contexts. A differentiator firm in a highly uncertain environment needs to adopt a more organic channel decision structure characterized by less formalization and centralization to maximize its channel performance. Among those firms that adopt such structure, the ones with the highest performance are chosen as the calibration sample, and their channel organization characteristics are defined as "ideal" for firms pursuing the same strategy in same or similar environments. The characteristics of other firms are compared to these ideal points. It can be predicted that the closer their characteristics to these 'ideal points" the higher are their performances.

4. CONFIGURATION DIMENSIONS

4.1. STRATEGIC DIMENSIONS

4.1.1. Introduction

Strategy is not just a choice of where to compete, in which business, industries and geographic areas and how to allocate resources across those businesses– that is the corporate strategy problem; it also involves choices about how to compete within a given industry- the business strategy problem (White 1986). Before defining various strategic alternatives, one important problem should be addressed first: the level of analysis (Pecotich and Purdie 2003). Scholars from both the strategic marketing and management literature argue that since specific issues are more or less relevant at the different levels – corporate or business- any research intending to explore the content of strategy should define which level of strategy formulation is being considered (Doty and Glick 1994; Hofer and Schendel 1978; Porter 1980, 1985). In this study, I will focus on strategies at the business or SBU level for three reasons: (1) the business level has been the focus of much previous research, (2) competitive strategies are formulated and implemented at this level (e.g. Capon et al. 1987); and (3) it allows comparison across different-sized companies, like a dominant or single business company and the SBU of a highly diversified company (Hofer 1975).

The prime objective of strategy at the business level (e.g. marketing strategy) is to achieve sustainable competitive advantage over competitors. Scholars, consultants and practitioners have all attempted to enumerate a list of strategic alternatives – generic strategies- on which managers can base their strategic decisions (e.g. Mintzberg 1983; Porter 1980, 1985). A "generic strategy" can be defined as a broad categorization of

strategic choice that would apply regardless of industry, organization type or size (Herbert and Deresky 1987; Porter 1980, 1985). Pecotich and Purdie (2003, p.503) list four typologies of generic business strategies:

(1) the strategic alternatives of retrenchment versus growth implicit in much of the strategic marketing and management literature (Mintzberg 1988);

(2) the product/market mix (Ansoff 1965; Mintzberg 1988);

(3) the four grand strategic alternatives of stability, internal growth, external growth and retrenchment; and

(4) Porter's (1980) three generic competitive strategies.

Although many others include Miles and Snow's (1978) classification of defenders, reactors, analyzers, and prospectors into generic strategies, Pecotich and Purdie (2003) exclude Miles and Snow's (1978) arguing that their classification is a classification of firms, while others, for example, Porter's (1980) differentiation, focus and cost leadership, are classifications of strategies.

Among those different alternatives, in this study I will use the dimensions of Porter's (1980) generic business strategies based on the criteria for the selection of strategic dimensions as offered by Miller (1986). First, he argues that dimensions have to pertain to the content of strategy rather than the process of strategy making. Second, the dimensions have to be successfully specific to be both identifiable and controllable by managers, and general enough to apply to most industries. Third, dimensions have to exhibit broad coverage in two respects: they have collectively to exhaust a considerable

range of possible strategies; and they have to encompass many specific elements that can richly characterize the strategies of most businesses (Miller 1986). And, finally dimensions have to have strong theoretical underpinnings (White 1986). Porter's generic dimensions- the classification scheme that has received the most attention and empirical support- meet all these criteria (Lee and Miller,1996; Miller 1986; Walker and Ruekert 1987; White 1986). They are also well known among academics and managers. Even Homburg, Workman, and Krohmer (1999) found with their interviews that Porter's generic strategies reflect the way managers think about competitive strategies. And finally there are existing scales for measuring these dimensions (Dess and Davis 1984; Kim and Lim 1988).

4.1.2. Porter's Generic Business Strategies

Porter (1980) described three internally consistent generic strategies for creating competitive advantage in the long run and outperforming competitors in an industry: differentiation, cost leadership, and focus. While cost leadership and differentiation are industry-wide strategies, focus is the application of the first two strategies focused on a particular buyer group, segment of the product line, or geographic market (Porter 1980). He argues that focus strategy is really a minor variant or the other two strategies in a smaller scale. Furthermore, Porter postulated no unique organizational requirements for the focus strategy (White 1986). Also, Dess and Davis (1984) did not find "distinct strategic orientations on the part of managers' indicative of a focus strategy, although they did find such indications for differentiation and cost strategies. Therefore, this study will exclude the focus strategy and examine only Porter's differentiation and cost leadership strategies.

4.1.3. Differentiation

Porter's differentiation strategy has firms developing a competitive advantage and gaining customer loyalty through innovative designs or via the uniquely attractive image conferred upon their products by superior marketing (Porter 1980). Differentiation aims to create a product that is perceived as uniquely attractive. It emphasizes strong marketing capabilities, creative, well-designed products, a reputation for quality, a good corporate image, and strong cooperation from marketing channels (Miller 1986). Approaches to differentiating can take many forms: design or brand image, technology, customer service, dealer network or other dimensions (Porter 1980).

For instance, the product and allied services must be designed to meet unique customer needs; distribution and delivery systems must be tailored to the changing requirements of the market; new technical features added to the product must anticipate and define customer needs (Porter 1980; White 1986). Therefore, a business with a pure differentiation strategy attempts to enhance the price component of the profit equation by offering customers something they perceive as unique and for which they are willing to pay a higher price (White 1986).

Porter (1980) presents requirements of his generic strategies. According to Porter (1980), differentiation strategy's commonly required skills and resources are:

- Strong marketing abilities
- Product engineering
- Creative flair
- Strong capability in basic research
- Corporate reputation for quality or technological leadership
- Strong cooperation from channels

Also, Porter (1980) offers common organizational requirements for a differentiation strategy:

- Strong coordination among functions in R&D, product development, and marketing
- Amenities to attract highly skilled labor, scientists, or creative people.

4.1.4. Cost Leadership

Cost leadership is a strategy that strives to produce goods and services more cheaply than competitors. The final product/ service bundle is offered at a lower price than comparable offerings by competitors (Miller 1986; Porter 1980; Wright 1987). It stresses efficient scale facilities, the pursuit of cost reductions in manufacturing, and the minimization of expenses of product R&D services, selling and advertising. Cost leaders typically try to supply standard, stable, no-frills, high volume mature products at the most competitive possible price (Hambrick 1983; Miller 1986). Therefore, successful cost leaders have to develop effective well-refined systems for purchasing logistics and manufacturing as well as efficient marketing channels by stressing scale economies and product, rather than service, attributes (Hambrick 1983).

According to Porter (1980), cost leadership emphasizes producing a standardized product at very low per-unit costs for many buyers who are price sensitive. Firms pursuing Porter's cost leadership strategy are constantly improving their ability to manufacture at costs lower than the competition, thereby earning ample profit margins at prices rivals would find punishing (Porter 1980). A great deal of managerial attention to cost control is necessary to achieve these aims. Fundamentally, cost leadership strategies focus on those variables that will allow the firms to achieve and maintain a low cost

position. For example, firms accept the competitive price set by the market place. Or, they focus mostly upon the internal operations of the business, emphasizing the productive employment of capital and human resources (White 1986). They pursue aggressive construction of efficient-scale facilities, vigorous cost reductions from experience, tight cost and overhead control, avoidance of marginal customer accounts, and cost minimization in areas like R&D, service, sales force, advertising and so on (White 1986). In short, low cost relative to competitors becomes the theme running through the entire strategy, though quality, service, and other areas cannot be ignored (Porter 1980).

It often requires a high relative market share or other advantages, such as favorable access to raw materials. It may well require designing products for ease in manufacturing, maintaining a wide line of related products to spread costs. It is possible to summarize the skill, resource and organizational requirements of cost leadership strategy as follow (Porter 1980):

Cost Leadership's commonly required skills and resources:

- Sustained capital investment and access to capital
- Process engineering skills
- Intense supervision of labor
- Products designed for ease in manufacture
- Low cost distribution system

Cost Leadership's Common organizational requirements

- Tight cost control
- Frequent, detailed control reports
- Structured organization and responsibilities
- Incentives based on meeting strict quantitative targets

4.2. ENVIRONMENTAL DIMENSIONS

4.2.1. Introduction

The formulation of strategy is both a sociopolitical and economic process. Zald's (1970) political economy framework recognizes this duality of the process integrating the interplay between political and economic forces by linking external and internal structures and processes (Dwyer and Oh 1987; Dwyer and Welsh 1985). Different channel researchers have applied a political economy framework consisting of four basic elements, the external polity, external economy, internal polity, and internal economy (Zaid 1970) to marketing channels (cf. Achrol, Reve, and Stern 1983; Dwyer and Oh 1987; Dwyer and Welsh 1985). While the external political economy refers to the interaction of environmental characteristics as they combine to influence channel members' perceptions of opportunity in the environment and represent constraints on their actions (Dwyer and Welsh 1985; Stern and Reve 1980), the internal political economy consists of the structures and processes of the marketing channels (Dwyer and Oh 1987; Dwyer and Welsh 1985; Stern and Reve 1980), and behavioral processes among channel members.

The political economy approach considers the environment as opportunities and constraints posed for internal decision makers who typically interpret the environment as representing either (1) a source of information or (2) a stock of resources (Arndt 1983; Dwyer and Welsh 1985). This classification of environmental impact represents two fundamental problems posed by the environment for internal decision makers (Dwyer and Welsh 1985): dependence and uncertainty (cf. Brown, Lusch, and Koenig 1984). The

importance of dependence comes from the fact that firms are dependent on the markets and their environments for the necessary resources (Pfeffer and Salancik 1978). The availability of such resources and the level of firms' dependence pose threats or opportunities for firms. On the other hand, since uncertainty is related to the availability of information or the level of predictability in the environment, it is another key factor affecting organizations' decision-making structure. In the marketing channels literature, different factors that contribute to these two conceptions of environment have been discussed.

Munificence is one such factor considered in channels research as contributing to firms' dependence. Pfeffer and Salancik (1978) define munificence as the availability and abundance of critical resources and consider it as one of the key characteristics of environment.

Environment uncertainty has received much more attention and played an important role in formal analytical frameworks and empirical investigations for channels of distribution (e.g. Achrol et al. 1983; Achrol and Stern 1988; Etgar 1977; Noordeweier et al. 1990; Stern and Reve 1980; Williamson 1975, 1985). It can be defined as the inability to predict relevant contingencies external to the firm (Klein et al. 1990). An organization feels uncertainty when it does not have relevant information (Argote 1982) or when the relevant contingencies are too numerous or unpredictable to be specified (Stump and Heide 1996). Uncertainty makes it difficult for a firm to make accurate predictions about the state of environments (Frazier and Antia 1995; Jaworski 1988, Achrol and Stern 1988). Achrol et al. (1983) argue that "there is ample support in the organization and institutional economics literature that uncertainty is a key environmental

dimension affecting organizational structures and internal processes)." Researchers have proposed several dimensions of environmental uncertainty (e.g. Achrol and Stern 1988; Achrol et al. 1983; Aldrich 1979; Pfeffer and Salancik 1978; Scott 1992; Stern and Reve 1980): environmental homogeneity/ heterogeneity (complexity), environmental dynamism (volatility), and environmental concentration.

Out of those different uncertainty- and dependence- related environmental dimensions, two dimensions of uncertainty-dynamism (volatility), complexity (diversity, heterogeneity/homogeneity), and one dimension of dependence- munificence- will be used in this study for the following reasons. First of all, regarding salient dimensions of environments, Dess and Beard (1984) integrated strategic management and organization theory literature and provided theoretical and empirical support for three dimensions: munificence (i.e. available resources with which the environment can support sustained growth), dynamism (i.e. extent of unpredictable change in environmental elements), and complexity (i.e., heterogeneity of and range of environmental activities). They argued that Aldrich's (1979) classification of environmental dimensions can be represented in a more parsimonious set as follows:

Munificence: capacity
Dynamism: stability-instability, volatility
Complexity: diversity, homogeneity-heterogeneity

Dess and Beard (1984) further argued that these three dimensions are more inclusive than other simpler dimensions and also conceptually similar to those proposed by other researchers (Child 1972; Jurkovich 1974; Mintzberg 1979; Pfeffer and Salancik 1978; Scott 1992). Also, they are the most frequently discussed sources of environmental

uncertainty by channel researchers (e.g. Achrol et al. 1983; Achrol and Stern 1988; Dwyer and Welsh 1985; Klein et al. 1990). Furthermore, in identifying organizational configurations, researchers regularly use environmental complexity, dynamism and munificence as environmental dimensions (Dess and Beard 1984; Duncan 1972; Miller and Friesen 1983; Miller 1988). Therefore, in this paper, following the extant strategic management and marketing literature, dynamism, complexity and munificence are selected as the three dimensions of environment.

4.2.2. Environmental dynamism (volatility)

Dynamism is the amount and frequency of change and unpredictability of market factors in an environment (Homburg, Workman, and Krohmer 1999). It refers to the extent to which environments change frequently: do environmental factors remain basically the same over time or are they in a continual process of change (Achrol et al. 1983; Aldrich 1979; Duncan 1972; Klein et al. 1990)? Dess and Beard (1984) and Homburg et al. (1999) suggest that frequency and unpredictability of market-related changes are the best measures of this dimension. In environments characterized by dynamism the rate and frequency of change in the environment results in unpredictability of the actions of competitors and customers which heightens uncertainty for decision makers (Burns and Stalker 1961; Lawrence and Lorsch 1967; Thompson 1967).

4.2.3. Environmental complexity (diversity):

Complexity refers to the number of and diversity- degree of similarity- of competitors, suppliers, buyers, and other environmental actors that firm decision makers need to consider in formulating strategy (Bourgeois 1980). It is the number and variety of organizations with which a firm must interact: whether the factors in the environment are few in number and similar to one another (Duncan 1972). The larger the interaction set, the higher is complexity (Aldrich 1979). Some researchers use the term "heterogeneity" to describe the same environmental dimension (Child 1972; Dess and Beard 1984; Miller and Friesen 1984). Based on the previous literature (Child 1972; Jurkovich 1974; Scott 1981; Thompson 1967) Dwyer and Welsh (1985) defined heterogeneity as the extent to which the environmental entities facing a channel are dissimilar to one another. They further argued that heterogeneous environments represent greater uncertainty for channel members as a result of the greater difficulty in obtaining information about diverse environmental entities and greater information-processing requirements (Dess and Beard 1984; Dwyer and Welsh 1985).

4.2.4. Environmental munificence (capacity):

The concept of munificence has its roots in the concept of "capacity" introduced by Aldrich (1979), according to which capacity refers to the resource-carrying capacity of firms, and the extent to which environmental resources are available and accessible to firms (Aldrich 1979; Pfeffer and Salancik 1978). Achrol and Stern (1988) added one more dimension to munificence or capacity: the state of demand. Starbuck's (1976) definition of environmental munificence as the extent to which the environments can

support sustained growth is quite similar to Aldrich's (1979) concept of capacity (Dess and Beard 1984). Both state that organizations seek out rich environments in terms of resources and demand that permit organizational growth and stability since such growth may provide the firms with the slack resources which can be used during the periods of relative scarcity (Dess and Beard 1984). Therefore, munificence can be measured in terms of scarcity of resources and the growth potential of the market. It is the extent to which an organization has to expand its area of operation to obtain the resources it requires (Aldrich 1979). Low munificence means scarce resources while higher munificence implies abundance of resources (Lawless and Finch 1989).

4.3. STRUCTURAL DIMENSIONS

4.3.1. Introduction

Structure refers to an organization's internal pattern of relationships, authority, and communication (Thompson 1967). Organizational structure has been characterized by a variety of dimensions like size, level of hierarchy, and decision-making structure (e.g. Aston studies by Pugh, Hickson, Hinings, and Turner 1968, 1969; Child 1972). Campbell, Bownas, Peterson and Dunnette (1974) classified these different dimensions into two groups and suggested a useful distinction between "structural" and "structuring" characteristics of organizations. The "*structural*" dimensions of an organization are its physical characteristics including size, span of control, flat/tall hierarchy and administrative intensity. The "*structuring*" dimension, on the other hand, refers to policies and decision-making related activities occurring within the organization that

prescribe or restrict the behavior of organization members. It includes specialization, formalization and centralization (Dalton et al. 1980).

Originally, researchers considered organizational structure at the level of the overall organization (e.g. Pugh et al. 1968), but the recent work suggests that, instead of monolithic structure, different organizational structures can be present within individual organizations (John and Martin 1984). In other words, organizations may have units whose structures are different from that which characterizes the organization as a whole (e.g. while the organization is generally decentralized, some units may be very centralized) (Fredrickson 1986). Since this study focuses on channels of distribution as an organization, and takes as the level of those activities associated with distribution channels, it considers the structure of channels of distribution. Therefore, dimensions used here are defined with respect to these activities and results and implications should be considered as related to channel structure, not organization/ company structure.

When organizing distribution channel activities, managers are faced with one fundamental question: how should their organization be structured in order to reach performance objectives? Based on the above distinction this "channel structure" question in fact has two dimensions: (1) How to organize physical channel structure, and (2) how to organize channel decision-structure.

Channel researchers have tried to answer the first question with channel design studies where the questions about the number of different channels, their length or intensity (e.g. Stern, El-Ansary, and Coughlan 1996) or issues of adopting integrated or independent channels (e.g. Anderson 1985; Anderson and Coughlan 1987) have been addressed. On the other hand, organization theory, with its emphasis on power, authority

and control, has been applied to the second question (Ruekert et al. 1985). While organization theory is a mosaic of different theoretical approaches, perhaps the most commonly accepted conceptual framework is the system structural view of organizational design and performance. Within this perspective, the structural dimensions of centralization, formalization, and specialization are considered to be of central importance in understanding the functioning of social systems (Dalton et al. 1980; Hage and Aiken 1969; Pugh et al. 1968; Van de Ven 1976). In a similar vein, recent empirical research in marketing channels has considered bureaucratic structuring or decision structure (cf. John 1984; Dwyer and Welsh 1985) which often is described in four dimensions: formalization, participation, specialization, and centralization. Strategic management researchers have also supported a similar approach. Van de Ven (1976), Hall (1977) and Frederickson (1984) all indicated that the composite dimensions of formalization, centralization, specialization emerged most consistently in studies of the components of organization structure (Miller and Droge 1986).

Following the literature, in this study the structure of multiple channels of distribution will be analyzed in terms of two sub-dimensions: channel decision-structure and channel physical-structure.

4.3.2. Channel decision-structure

Bureaucratic structuring or decision structure in channels of distribution describes the coordination systems and the structure of how, where and by whom decisions and policies are made within an organization (John 1984). The decision structure of a channel is conceived as having three primary dimensions: Formalization,

centralization and specialization (Dwyer and Welsh 1985; John 1984). Together these dimensions indicate whether channel activities are arranged in a bureaucratic or an organic manner (Ruekert et al. 1985).

4.3.2 .a. Formalization

Formalization is the degree to which standardized rules and procedures proscribe how marketing activities are performed (Olson, Walker, and Ruekert 1995; Workman, Homburg, and Gruner 1998). It represents the degree to which norms of a social system are explicit and activities and relationships are governed by rules, procedures and contracts (John and Martin 1984; Ruekert et al. 1985). Formalization is often made up of variables such as the use of specialized positions, formal policies, job descriptions, organization charts, and cost and quality controls (Miller and Droge 1986).

Formalization in channels of distribution would be represented by strictly defined and written rules, procedures and instructions what describe the specific roles and responsibilities of channel members, adherence to a time schedule of activities, the conduct of regular meeting with channel members or documentation of channel activities. Therefore, in channels of distribution system, formalized structure can be defined as the emphasis placed on following specific rules and procedures in carrying out strategies, including documentation of distribution activities and adherence to job descriptions.

The system-structural perspective suggests that in a distribution channel system, formalization of internal organization structures (i.e., integrated channels) can be increased through the development and enforcement of rules and standard operating procedures, while in external structures (i.e., independent channels) formalization

increases as the procedures to be followed and the performance to be accomplished by the supplier are spelled out in more detail, such as through a legal contract (Ruekert et al. 1985).

4.3.2. b. Centralization

Centralization reflects the hierarchical nature of organizations and is one of the fundamental attributes of an organization (Pugh et al. 1968). Decision-making authority and input tend to be concentrated in organizations with a pronounced hierarchical structure and to be more dispersed in other organizations (John and Martin 1984). Centralization is concerned with the locus of authority to make decisions affecting the organization and reflects the degree of this concentration of decision-making authority at higher levels of the business's hierarchy (Jaworski and Kohli 1993; Mooorman, Deshpande, and Zaltman 1993; Pugh et al. 1968). It refers to the extent to which decisions are shared within the social system: while in decentralized structures decisions are made at the lower levels of hierarchy, in centralized structures the right to make decisions affecting the entire organization is confined to the higher levels of hierarchy (Child 1972).

In channels of distribution, centralization of the structure can be defined as the extent to which distribution-related activities and decisions are concentrated within certain members of the channel system. In a centralized structure, for example, one member, mostly manufacturers, has the authority to make the decisions regarding the entire distribution system.

4.3.2. c. Specialization

Specialization is concerned with the division of labor within the organization and/or the distribution of tasks among a number of positions (Pugh et al. 1968). It is the extent to which activities are narrowly divided into unique elements that are performed by those with specialized knowledge (e.g. Walker and Ruekert 1987). Increased specialization in both internal and external systems is evidenced by relatively narrow job descriptions with different members focusing on limited ranges of activities (Ruekert et al. 1985).

In distribution channels contexts, specialization refers to the degree of allocation of functions and tasks and decisions about those functions and tasks among different channel systems. There are several functions that need to be performed by different channels. In a highly specialized structure, certain functions and the decision-making authority regarding those functions and tasks are assigned to different channel systems and those channel members in each system are expected to make these decisions and perform these functions.

4.3.3. Multiple Channel Physical- Structure

Multiple channel physical-structure refers to the physical characteristics of the channel system. In the distribution channel literature, three dimensions of physical structure have been typically discussed:

(1) Channel number: the number of different and intact channel systems that are used by firms to satisfy their customers,

(2) Length: number of levels of intermediaries in the channel, which can range from two levels – the most direct manufacturer-customer- up to five levels or even higher, and

(3) Intensity: the number of intermediaries at each level of the channel – intensive, selective, exclusive channel.

In multiple channel contexts, two concepts can be considered when examining channel physical structure: number of channels and channel directness.

4.3.3. a. Channel number

Channel number in multiple channel systems refers to the total number of different channels used by manufacturers as part of their multiple channels. For example, a multiple channel system where the manufacturer uses five different channels to reach its customers can be considered as having a higher channel number than another such system consisting of only three different channels. IBM with 19 different channels within its distribution system is a good example of a company with high channel number.

4.3.3. b. Channel Directness

Directness in multiple channel systems refers to the proportion of integrated (direct) channels to independent (indirect) channels used within the system. It simply reflects the channel's physical structure by providing the proportion of direct and indirect channels.

Multiple channel systems by definition contain both direct and indirect channels (e.g. Webb and Hogan 2002). Therefore, complete directness or indirectness within these

systems is not possible. However, while some multiple channel systems are characterized by more manufacturer-owned direct (integrated) channels, others may contain more independent (indirect) channels than direct channels. Multiple channel directness reflects that proportion.

5. CHANNEL PERFORMANCE DIMENSIONS

Configuration theory is concerned with the impact of the fit among strategic, environmental and structural dimensions on the performance of organizations. Since the objective of this study is to develop multiple channel configurations that maximize channel performance, this construct and its different dimensions should be explained in detailed.

Channel performance is a key marketing and organizational issue, given that the success of the manufacturers in meeting their objectives to a large extent depends on how well their channels perform. Firms engage in business relationships with their channels because such businesses are instrumental in achieving the firms' objectives (Kumar et al. 1992). Like many other critical constructs in the marketing field, channel performance is a multi-dimensional construct that can be measured on a number of different dimensions (Stern et al. 1996). In order to tap its various facets, both quantitative and qualitative measures have been used (e.g., Gaski and Nevin 1985; Heide and John 1988; Noordewier, John, and Nevin 1990). However, among all other studies, Kumar et al. (1992) conceptualization of reseller performance and its dimensions (and eventual measurement scale developed in this study) has been a widely accepted and used channel performance conceptualization in the channels literature (e.g. Webb and Hogan 2002). In

that study, following other authors in the organizational effectiveness literature (e.g. Cameron and Whettern 1983) Kumar et al. (1992) use the terms "performance" and "effectiveness" interchangeably and argue that the dimensions used to assess performance should be derived from four different models of organizational effectiveness. In this study, I will follow Kumar et al. (1992) conceptualization of channel performance with one difference. In their channel performance conceptualization and scale development, Kumar et al. (1992) only referred to assessing reseller performance from the supplier's perspective. However, in this study, since I analyze the performance of the distribution channel as a system: the channel system as a whole will be the unit of analysis.

Kumar et al. (1992) state that four different models of organizational effectiveness as identified by Quinn and Rohrbaugh (1983) imply the effectiveness criteria for organizations. Therefore, the specific constructs that can be used in assessing channel performance should be derived from these models. These models are the rational goal model, the human relations model, the internal process model and the open system model. I will adopt their reseller-based performance conceptualization to the study of entire multiple channel systems that consist of both integrated and independent channel members.

The rational goal model views organizations as logical both in their selection of goals and in their choice of actions to reach those predetermined goals with maximum efficiency (Scott 1992). According to this model, the main objectives of an organization are productivity and efficiency, or stated in a different way, maximizing outputs relative to inputs and costs (Quinn and Rohrbaugh 1983). On the basis of this model, a channel

system's performance should be evaluated through its contribution to the manufacturer's objectives of efficiency and productivity. *Contribution to profits* can be conceptualized as the profits that the channel system generates for the manufacturer in comparison with the its investment in the channel system (Kumar et al. 1992). On the other hand, *contribution to sales* is conceptualized as the sales the entire channel generates for the manufacturer.

The human relations model views organizations as a collection of participants behaving as members of social groups that have commitments and loyalties to each other (Kumar et al. 1992). When adapted to distribution channels, this model asserts that the manufacturers must be concerned with the social aspects of their relationships with their channels. Their ability to build trust and satisfaction on behalf of their channels may help entire channel system become quality partners. For that reason, *channel's competence* that includes the experience, business skills and knowledge channels have in the manufacturer's product implies the value of the human resources of the channel organization and becomes an important the channel performance dimension (Kumar et al. 1992).

The internal process model views an organization as a system being composed of interdependent parts. Organizational effectiveness in this model is related to having adequate control over the interdependent parts of the organization. Thus stability and control are viewed as organizational ends (Quinn and Rohrbaugh 1983). Following this reasoning, a manufacturer must strive to build channel loyalty and channel compliance to achieve stability and control over its channel system (Kumar et al. 1992). *Channel loyalty* can be conceptualized as the channel's commitment to and motivation for the

manufacturer, while channel compliance can be defined as the reception the channel gives to the manufacturer's channel policies and programs (Kumar et al. 1992).

The open system model views organizations as actively engaging in managing their environment, expanding the system through growth, learning and differentiation (Buckley 1967; Pfeffer and Salancik 1978). Within this perspective, the emphasis is on flexibility or adaptation (Quinn and Rohrbaugh 1983), and three organizational ends are growth, external legitimacy, and adaptation. Kumar et al. (1992) expanded the original conceptualization of effectiveness as defined by this model and proposed that channel performance can be assessed through three facets – contribution to growth, customer satisfaction, and channel adaptation. While *contribution to growth* can be conceptualized as the increase in sales generated by the channel, *customer satisfaction* represents the level and quality of services the channels provide to the manufacturer's customers. The last facet, *channel adaptation*, refers to the ability of the channel to change its standard operating procedures for distributing the manufacturer's products in innovative ways as a response to changes in the environment (Kumar et al. 1992).

The eight dimensions of channel performance derived from the four organizational effectiveness models mentioned above are summarized in Table 3. In this study, when assessing multiple channels' performance, those eight dimensions will be used in a combined way.

TABLE 3: Dimensions of Channel Performance*

Effectiveness model	*Manufacturer's objective*	*Channel's contribution*
Rational goal model	Efficiency Productivity	Contribution to profits Contribution to sales
Human relations model	Human resource development	Channel competence
Internal process model	Stability Control	Channel loyalty Channel compliance
Open systems model	Growth Adaptation External legitimacy	Contribution to growth Channel adaptability Customer satisfaction

* Adopted from Kumar, Stern, and Achrol 1992, p. 241.

III. RESEARCH HYPOTHESES

Configuration theory posits that the combinations of environment, strategy and structure associated with high-performance organizations differ from combinations associated with low-performance organizations. This study seeks to identify and describe configurations of multiple channel systems associated with high-performance firms and empirically show that multiple channel systems whose profiles are closer to ideal profiles of those in proposed configurations will perform better.

Prior research adopting a configurational approach falls into two major streams as described above: one that is deductive in nature, theory-driven and focuses on empirical verifications of conceptual typologies and another that is inductive and seeks empirically to uncover a set of configurations within a given data set (Bensaou and Venkatraman 1995). Although each approach has its advantages and disadvantages, typologies have been criticized by some researchers as lacking of enough theoretical support or empirical testing of developed configurations (Doty et al. 1993). Some other configuration researchers argue that useful typologies synthesize configurations using multiple dimensions and theoretically support how and why these various dimensions interrelate in a configuration (Meyer et al. 1993).

In this study I will follow a *typology* approach to develop two multiple channel system configurations by integrating relevant theoretical concepts from the literature, and then empirically verify these configurations. Based on the extant marketing, management, and organizational literatures – both theoretical propositions and empirical findings- I will show how and why environmental, strategic and structural dimensions come together in a specific configuration and result in better performance.

CONFIGURATION 1: ORGANIC-COMPLEX MULTIPLE CHANNELS

Firms that adopt differentiation as their competitive strategy aim to gain customer loyalty by differentiating themselves from their competitors via unique images of their products and their superior marketing (Porter 1980). They come up with new products, specifically designed to meet changing customer needs. The success of differentiation strategies depends on the creation of added value and the firms' reputation for innovativeness, high quality, good image and superior marketing skills (Miller 1986).

In the literature, empirical evidence shows that a differentiation strategy is not suitable for all environments: in environments characterized by high complexity, high dynamism and high munificence, differentiation is a better strategic choice (Homburg et al. 1999; Miller 1986, 1987b, 1988, 1991; Ward, Bickford, and Leong 1996). In environments characterized by high complexity and high dynamism, there are many different customer groups with diverse needs. Therefore, innovation and customization become more desirable (Porter 1980). Miller (1988,1991) has demonstrated that the more uncertain the environment, that is, the more dynamic and unpredictable it is, the more useful it is to employ differentiation strategies based on well-planned marketing activities or product-market innovation. Frequent changes in customers' tastes and competitors' offerings demand that firms stay up to date by innovating a good deal and/or by marketing aggressively to continually convince customers of the advantages of new or existing products. In other words, uncertainty demands a differentiation strategy that keeps offerings relevant and attractive in a changing setting. Related arguments have been made by the likes of Miles and Snow (1978), Snow and Hrebiniak (1980), Hambrick (1983), White (1986) and Venkatraman and Prescott (1990). Firms can

implement differentiation strategies by offering new products or customize their existing products for heterogeneous customer groups. They can provide a wide range of products to a variety of markets while striving to develop and maintain a large share in each market on the basis of quality or service as opposed to price (Miller 1986; Porter 1980). Also, in highly munificent environments where resources are not scarce, firms may find resources needed for innovation and differentiation (Porter 1980; Ward et al. 1996). Therefore, based on extant research, theoretical and empirical, it is possible to conclude that differentiation strategy can be implemented more successfully when adopted by firms operating in highly dynamic, complex and munificent environments.

Different from business policy research, which argues that fit between strategy and environment is enough for higher performance, configuration theory postulates that organizational structure should also fit strategy and environment to maximize the organizational performance. The literature points to the same structure for firms that adopt differentiation strategy and/or operate in highly complex, highly dynamic and highly munificent environments.

Differentiation strategies adopted in complex and dynamic environments requires considerable flexibility and knowledge of different customer groups and complex tasks which tend to change continually (Miller 1986,1987). Rigid bureaucratic structures characterized by centralized decision making and formal rules and regulations cannot meet the requirements of differentiators for this flexibility. Hence, adhocracy (Mintzberg 1979) or organic structures (Burns and Stalker 1961) have been offered as the most suitable structures to implement differentiation strategies successfully. These decentralized, less formalized and more specialized structures support differentiators'

need for being close to a variety of customers and aware of competitors' actions in various, heterogeneous market segments (Miller 1986). Also, the higher specialization dimension of such structures can be needed to maintain skills required to serve diverse markets well and respond quickly to new developments in the environment (Burns and Stalker 1961; Miller 1986; Mintzberg 1979; Ward et al. 1996). Especially, since this strategy relies on the creation of value that is perceived by the markets as unique and the value attached to the product involves marketing activities such as brand image advertising, customer service or extensive dealer networks developed for different customer segments, this requires greater specialization in structures (Ruekert et al. 1985). Furthermore, achieving these required goals in implementing a differentiation strategy involves performing many complex activities (e.g. McKee et al. 1989) and therefore, highly specialized structures enhance the performance because they empower specialists with access to wide-ranging capabilities and provide the decision-making freedom and work routine flexibility to use these capabilities to provide timely and innovative response in dynamic product markets (e.g. Walker and Ruekert 1987). In summary, the adaptiveness and innovation requirements of differentiation strategies are met when (1) decision making authority is extended down to or at least shared with lower level managers within the organization, (2) rigid rules and policies are supplemented by discretion and informal coordination mechanisms, and (3) more specialists with more detailed knowledge about particular techniques, products or customers are incorporated within the organization (Walker and Ruekert 1987).

Some specific environmental conditions also necessitate particular organizational structures. For example, as environments become more complex and dynamic, there is a

greater need for operating flexibility, for closer interaction and communication among managers, for reliance upon expertise-based rather than position-based power, and this calls for less centralized, formalized and more specialized structures (Hambrick 1980; Miller 1986, 1987a; Miller and Friesen 1983). The unpredictability of dynamic environments can negate any benefit that would be derived through the adoption of centralized and formalized structures. In these dynamic contexts, firms must have the ability to rapidly respond to changing conditions (Miles, Covin, and Heeley 2000). Mintzberg (1979) indicated that an organic structure, with its low degree of formality and high degree of information sharing and decentralization, improves an organization's flexibility and ability to adapt to continual environment change. Also to cope with environmental diversity, channel decision structures are likely to be relatively decentralized and informal and with a high level of specialization (Guiltinan 1974; Lawrence and Lorsch 1967). Such a structure affords the flexibility necessary to cope with a complex and diverse environment. Simple environmental entities, in contrast, promote channel decision structures that are centralized, formalized and less specialized (Miller and Friesen 1984).

Dwyer and Oh (1987) argue that greater environmental munificence necessitates less centralized and less formalized structures. According to them, the high level of munificence might affect channel decision structure through the power structure. Munificent environments have abundant resources, good growth prospects and high spending levels and provide channels with sales and profit opportunities. Such rich markets leads to a downstream shift in the distribution of power in the channel, and in the context of an asymmetrical power system generally favoring manufacturers, channel

members are likely to share authority, jointly formulate rules and procedures, and make decisions with bilateral participation. Dwyer and Oh (1987) empirically support their hypothesis that greater levels of munificence in the output environments foster exchange relationships characterized by less formalization in procedures, more participation of channel members and less centralized manufacturer authority.

Based on the literature, we may expect that firms that pursue differentiation strategies in highly complex, highly dynamic and munificent environments adopt Organic-Complex Multiple Channel (OCMC) systems.

OCMCs are characterized by decentralized, less formalized and highly specialized decision structures and higher complexity, i.e., a higher number of different channels most of which are integrated (direct) channels. In this structure in terms of channel decision-making, the authority to make decisions regarding the entire channel system is decentralized, i.e., shared between the manufacturer and channels. In such structures, there is no hierarchy in terms of decision-making. Besides the manufacturer, various other channel members may also participate in the decision-making process. Also, the less formalized aspect of this structure implies that the relations between manufacturer and other channel members are not carried out by formal written rules and regulations. The planning and coordination of distribution activities are made in an informal way. The exchange between manufacturer and channel members takes the form of an ongoing relationship where joint decisions are made and a few specific rules in terms of channel mechanisms are imposed.

The high-specialization dimension of OCMC means that different channels within the system have different responsibilities with different task specifications.

Manufacturers can allocate distribution tasks and functions to those channel members that can perform them most efficiently. For instance, while one channel performs lead generation or promotion functions and becomes specialized in those functions, some others are solely responsible for selling or physical distribution. The rationale is that such specialized units may become more familiar with specific functions that need to be performed, or have more discretion to adapt to the unique customer problems and needs encountered by the firm.

In terms of physical channel structure, OCMC first implies higher number of channels, i.e., utilization of many different integrated and independent channels by the manufacturer. Such multiple channel systems have a wide structure, meaning that large number of different channels is employed simultaneously. And, this variety and high number of channels creates complexity for manufacturers who employ them in terms of channel management, strategy or design.

In terms of multiple channel directness, OCMCs have a "more direct" channel systems, i.e., the proportion of integrated channels to independent channels is high. The literature posits that firms pursuing differentiation strategies usually use more integrated channels because of the requirement for giving a consistent unique image (Aulakh and Kotabe 1997; Porter 1986). They may compensate for their limited control over their channels due to the non-formalized and decentralized structure required by their business strategy and environmental conditions, by having more integrated channels in their distribution system. In a similar vein, transaction cost theory argues in favor of more integrated channels under high environmental uncertainty (e.g. Anderson 1985; Heide 1994). Although cost reduction is not the primary objective for firms pursuing

differentiation strategies, they may still choose to use more integrated channels under high environmental dynamism and complexity to limit the opportunistic behavior of independent channels that may damage the overall company image required by differentiation.

In multiple channel systems, by definition, firms cannot integrate their distribution system totally. However, when required by strategy or environmental conditions, they may increase the directness by adopting more integrated channels than independent channels. Therefore, for firms pursuing differentiation strategies in highly complex, highly dynamic and munificent environments, adopting multiple channels consisting of many different channels where integrated channels outnumber independent ones results in higher channel performance.

In summary, OCMCs are best suitable for firms that pursue differentiation strategies in highly complex, dynamic and munificent environments, and having many different channels most of which are integrated channels with a decentralized and non-formalized decision structure presents higher complexity for firms in terms of management and control of their multiple channel systems.

The characteristics of the first configuration, OCMC can be summarized as follows:

TABLE 4: Configuration 1 Organic-Complex Multiple Channel (OCMC)

Strategy	
Differentiation	+
Environment	
Dynamism	high
Complexity	high
Munificence	high
Structure	
Channel Decision- Structure	
Formalization	low
Centralization	low
Specialization	high
Channel Physical Structure	
Number of Channels	high
Multiple channel directness	high

In configuration theory, each of the configurations also represents a hypothesis that can be tested empirically. Simply put, such a hypothesis suggests that firms pursuing a particular competitive strategy should adhere to the other dimensions of the configuration to improve their performance. Therefore, my first hypothesis is as follows:

HYPOTHESIS 1: Firms with the combination of differentiation strategy with organic and complex channel structure existing within highly uncertain and highly munificent environments have a higher channel performance than those lacking such fit in their combinations.

CONFIGURATION 2: BUREACRATIC-SIMPLE MULTIPLE CHANNELS

Firms that adopt cost leadership as their competitive strategy strive to produce, sell and distribute goods and services more cheaply than competitors (Porter, 1980). This strategy necessitates efficient scale facilities, the pursuit of cost minimization in manufacturing, new product development, R&D, services, distribution, selling and advertising. Therefore, successful cost leaders have to develop effective systems for purchasing, logistics and manufacturing as well as efficient marketing channels by stressing scale economies (Hambrick 1983a; Wright 1987).

Like differentiation strategies, cost leadership strategies are associated with certain environmental characteristics in the literature. After having defined this strategy, Porter (1980) argues that since routinized and formalized operating procedures (requirements for the implementation of cost leadership) can be enabled in stable environments, cost leadership strategies come to be favored in such environments. In a similar vein, Miller (1986, 1988) comes to the support of Porter's initial environmental description for cost-leaders by contending that environments characterized by low complexity and low dynamism minimize the risks associated with the large fixed investments needed to sustain low unit costs. Since in such environments, neither customers nor competitors substantively alter their behaviors or strategies, firms do not need to stay up to date by innovating new products or modifying their offerings. Therefore, this predictability and lack of change enable cost-leader firms to follow marketing practices that can appeal to larger segments without changing their manufacturing and other sales-related facilities and thus maximize efficiency over time (Miller 1988, 1991). On the other hand, changing and dynamic environments would

require too many alterations in products and marketing methods and practices to allow for the efficiency required to attain cost leadership (Hambrick 1983a; Miller 1988). To summarize, the literature theoretically and empirically supports the argument that cost leadership strategies are more appropriate in stable, unchanging, less munificent environments. In such environments where resources for growth are limited firms can focus on improving efficiency and thus lowering their costs using their limited resources to provide the same products to unchanging customer groups without tailoring products to the changing needs of customers and avoiding new product developments and innovative marketing practices required for dynamic and complex environments (Hambrick 1983b; Lee and Miller 1996; Miller 1988, 1991; Ward et al. 1996).

Researchers in the strategic management and marketing literature also suggest organizational structures for different generic strategies. Porter (1980) lists tight cost control, frequent and detailed reporting systems, and structured responsibilities as common organizational requirements for cost-leaders. Since cost-leadership strategies emphasize providing standard, unchanging, low-priced products (Porter 1980), the activities to implement that strategy should be organized to maximize efficiency. It is agreed upon that organizational structures consisting of high levels of formalization and centralization and low levels of specialization are likely to be associated with higher efficiency and, hence, ideal for cost-leaders (Hambrick 1980; Ruekert et al. 1985; Walker and Ruekert 1987; Ward et al. 1996; White 1986). In such structures, the managers at the top use their centralized decision making authority to set a common direction and strategies for their firms and use formal rules and procedures to implement them. These formal rules and procedures help routinize activities and hold down risk and

administrative costs (Walker and Ruekert 1987). Also, specialized structures with teams and functional allocation that develop a wide range of strong marketing capabilities are not likely to be efficient ways to achieve efficiency when pursuing this strategy (Ruekert and Walker 1987). Since the main objective is cost reduction, available resources can be more productively deployed in simplifying structures, increasing structural formalization and centralization, and developing a narrow range of capabilities (e.g. Slater and Narver 1993). Also, White (1986) empirically show that when business units have low autonomy in terms of decision making and share functional responsibilities (i.e. less specialization), the performance of cost- leadership strategies increases. Hence, higher levels of centralization and formalization and lower levels of specialization in the structure may increase firms' efficiency, and thus are more suitable for cost-leaders.

In the literature, additional suggestions have been made regarding the environment- structure relationship. The common theme in these different suggestions is that more highly formalized and centralized structures can perform better in stable and less complex and less munificent environments (Miles, Covin, and Heeley 2000; Miller 1986, 1988, 1991; Ward et al. 1996).

In stable environments, since firms can often accurately predict such factors as raw material supplies, customer demand, and the requirements of operations, structures that stress formalization and centralization are often associated with superior performance (Burns and Stalker 1961; Lawrence and Lorsch 1967). For example, the system-structural perspective suggests that centralization of either internal or external organization structures can lead to better coordination and control of the activities that, in turn, can lead to higher performance However, this positive relationship only holds in stable,

noncomplex environments (Ruekert et al. 1985). On the other hand, in highly uncertain environments that require too much flexibility and knowledge of different customers and competitors, those bureaucratic or mechanistic structures, which are unable to adopt to changing conditions, cannot meet these requirements. Therefore, they do not fit complex or dynamic environments.

Bureaucratic-Simple Multiple Channel (BSMC) systems denote centralized, formalized, non-specialized channel decision structures and a smaller number of different channel members, most of which are independent. The centralized aspect of this structure implies that the manufacturer has the sole authority to make decisions regarding the entire channel. It can use its centralized decision-making authority to set goals and direction for the channel. Also, high formalization in this system is represented by strictly defined and written formal rules, procedures and instructions that describe the specific roles and responsibilities of channel members, adherence to a time schedule of activities, the conduct of regular meeting with channel members or documentation of channel activities. Manufacturers carry out their distribution activities with integrated channels through the development and enforcement of rules and standard operating procedures on those channels, while with independent channels they follow legal contracts.
BSMC's are also characterized by less specialization of channel members. Channel members perform variety of tasks and functions at the same time, without getting specialized in performing specific tasks. This system does not have a greater number of "specialist" members that direct their efforts to a relatively narrow defined set of activities or customer groups.

Since the main objective of firms pursuing cost-leadership strategies is to cut overall costs, and since they operate in stable and less munificent environments without many opportunities regarding different and changing customer groups BSMCs adopt fewer number of channels. Although still there are both integrated and independent channels operating as part of the system, their number is lower implying simplicity for the manufacture to manage its distribution system. Also, as required by environmental stability (based on transaction cost theory) to minimize their costs, such systems have more independent channels than integrated channels. Hence, those firms can minimize their costs taking advantage of the opportunities offered by the market structure. Moreover, since their decision-making structure is centralized and formalized, regarding channel management or control, it would not create any problem for firms to have more independent channels. They can still control independent channels through their centralized and formalized decision structure.

To summarize, BSMCs are best suitable for firms that pursue cost-leadership strategy in less complex, dynamic and munificent environments.

The characteristics of the second configuration, BSMC can be summarized as follows:

TABLE 5: Configuration 2 Bureaucratic- Simple Multiple Channel (BSMC)

Strategy

Cost Leadership	+

Environment

Dynamism	low
Complexity	low
Munificence	low

Structure

Channel Decision- Structure

Formalization	high
Centralization	high
Specialization	low

Channel Physical- Structure

Number of channels	low
Multiple channel directness	low

My second hypothesis is as follows:

HYPOTHESIS 2: Firms with the combination of cost-leadership strategy with bureaucratic and simple channel structure existing within less uncertain and less munificent environments have a higher channel performance than those lacking such fit in their combinations.

Profile Deviation and Performance

Configuration theory depends on the premise that fit among a firm's strategy, its environment and its organizational characteristics is what distinguishes poor performers from good performers. Fit represents an ideal state that leads to superior performance (e.g. Miles and Snow 1978; Miller 1988, 1991). Marketing researchers suggest that organizing marketing-related activities in ways that fit the firms' business strategy and environment is an important antecedent of higher performance (e.g. Walker and Ruekert 1987). Moreover, different researchers from different fields have often illustrated that firms can enhance their performance as long as they have a fit among structural, strategic and environmental dimensions, while low performing firms usually have "misfits" among those dimensions (e.g. Van de Ven and Drazin 1985; Miles and Snow 1978; Vorhies and Morgan 2003).

"Profile deviation" conceptualization of fit as adopted in this study defines fit in terms of the degree to which profiles of firms differ from those of firms with ideal configurations: the more similar the firms' profiles are to those ideal profiles, the higher are their performances. However, deviations from those ideal profiles lead to poor performance (e.g. Venkatraman 1989).

In this study, I expect a multiple channel system's performance to be higher when its structure is similar to those of the performance-maximizing ideal profile in which the channel is structured to fit the implementation requirements of the firm's strategy and its environmental context. My third hypothesis is as follows:

HYPOTHESIS 3: The better the fit between a multiple channel system's profile and that of the ideal configuration, the greater is its performance.

All three hypotheses are summarized in Table 6.

TABLE 6: SUMMARY OF HYPOTHESES

High complexity High dynamism High munificence	**FIT** **OCMC**	MISFIT	MISFIT	MISFIT
Low complexity Low dynamism Low munificence	MISFIT	MISFIT	MISFIT	**FIT** **BSMC**
	Low centralization Low formalization High Specialization High channel number High channel directness	High centralization High formalization Low Specialization Low Channel Number Low channel directness	Low centralization Low formalization High Specialization High channel number High channel directness	High Centralization High ormalization Low Specialization Low Channel Number Low channel directness
	DIFFERENTIATION		**COST-LEADERSHIP**	

IV. RESEARCH METHODOLOGY

The empirical context for this dissertation is electronic component manufacturers that use multiple channel systems. The research design called for each manufacturer to describe its business strategy, environment and channel structure and evaluate its channel system's performance.

1. DATA COLLECTION

1.1. Industry

In examining configurations of various interrelated variables and the fit-performance relationship, the configuration theory literature advocates the use of single industry in empirical studies. Since various industry-specific factors may confound the configurations, to control for such factors and isolate the relationships of interest more effectively, configuration researchers favor single-industry studies (e.g. Dess, Newport and Kasheed 1993; Ketchen et al. 1997; Vorhies and Morgan 2003). Specifically, I focus on manufacturers in one Standard Industrial Classification code (SIC): 3679 Electronic components manufacturers. A national sample of manufacturers with a 3679 SIC code was drawn from Dun and Bradstreet's online directory. Since this industry is relatively fragmented with many sub-industries and sub SIC codes, it provided a large and sufficiently diverse population of firms for sampling purposes. Furthermore, those various sub-industries within the electronic component manufacturer industry enabled the results to have variance in terms of business strategies, environmental context and channel structure within a single industry.

1.2.Preliminary Interviews

To better understand the distribution channel practice and adapt questionnaire items a series of in-depth field interviews was conducted with 9 executives from the industry. The profile of those executives is as follows: 5 marketing managers, 3 sales managers and 1 logistics manager. Average year of their experience in the industry is 9 years. The interviews lasted between 25-40 minutes.

In these interviews, the executives were first probed regarding the use of multiple channel systems and the preliminary operationalizations of the constructs. The subjects were asked about the importance of channel design, structure and performance for the overall success of their firms. All executives agreed upon the importance of distribution channels for their overall company performance. Two executives independently accepted that given the uniform nature of their products, lack of promotional activities and lower margins, they have to depend more and more upon their distribution channels to distinguish themselves from their competitors.

When they were asked to describe their firms' channel systems, their descriptions fit into multiple channel systems of one form or another, supporting the dominance of multiple channel practice within that industry. The channels that they use range from company sales forces to catalogs to independent agents to wholesalers. Their descriptions also helped us finalize various channel system alternatives used in that industry.

Furthermore, these interviews with practitioners, along with an extensive review of the relevant literature, were used to finalize the questionnaire items. For instance, based on these interviews, environmental volatility was operationalized both as a frequency of changes in the environment as well as the predictability of those changes.

These interviews also revealed that marketing/ sales managers, the executives mostly in charge of distribution channel design and strategies, are the ideal key informants for this study.

Another interesting finding of those interviews was that executives defined the channel system that their firms use for their highest selling product as the most important channel. Since most of their products are similar in nature, they adapt the same channel design to other products as well (with some minor changes if necessary). Therefore, although there is a concern in the literature about positive evaluation bias when the first or second highest selling product is referred to when answering questions (e.g. Anderson and Narus 1990) based on those interviews, I decided to ask the questionnaire respondents about their channel that their firms use for the business unit responsible for their most important product.

1.3. Key Informants

Data for this dissertation were collected by the key informant method. The key informant for this dissertation was defined as "the person who is responsible for channel design, strategies and other channel related decisions." Since preliminary interviews and other similar studies (e.g. Bello and Gilliland 1997; Noordewier, John, and Nevin 1990) suggested that the key informant for this study should be the sales and/or marketing manager of each firm who has primary responsibility for the firm's distribution channel-related strategies, the potential key informants consisted of sales/marketing managers of 925 companies.

The research design of this dissertation also called for multiple informants from each firm to assess channel performance. Although initial interviews confirmed that middle level managers (e.g. sales, marketing, logistics) are usually in charge of channel design and strategies, the same interviews also revealed that when it comes to evaluating overall channel performance, top-level executives also get involved. Therefore, while for the entire questionnaire, including strategy, structure, environment and channel performance related items, middle level executives were chosen as key informant within each firm, for the channel performance-related part, one top-level executive from the same firm was also chosen as the second informant. To identify the top-level informants, a *snowballing* method was used. Middle level executives were informed about the importance of having the second informant for the study and asked to give the enclosed channel performance-only questionnaire to a top-level executive of the firm with an envelope provided. Then those middle-level executives returned the questionnaires-both the ones they completed and the performance part they got from top executives in a closed envelope- in an envelope addressed to the researcher.

A critical assumption in using multiple informants in an empirical study is that random measurement errors across informants' responses are uncorrelated (Anderson and Narus 1990). This assumption holds if the multiple informants independently answer the questionnaire. If there is collusion in answering the questionnaire items or if only one individual answers all questionnaires, then the errors are likely to be highly correlated. To ensure this independence assumption, a correlation between two informants – middle-level manager and top-level executive- in each firm was computed across responses to channel-performance related items in the questionnaire. The correlations ranged from .74

to .88, high enough to ensure the compatibility of responses between respondents for each item, but not too high to endanger the independence assumption.

1.4. Key Informant Competency Checks

The survey questionnaire included post hoc checks on the informants' knowledge about and experience with the company and its channels of distribution, consistent with Campbell's (1955) criteria. Key informants' experience was assessed by asking informants how long they had 1) worked for their firm, and 2) occupied their current position. Table 7 shows that the mean scores for the informants were 10.96 (s.d. 3.34) and 8.10 (s.d. 2.72) respectively. Also they were asked to evaluate their level of knowledge about their company in general and their company's channels of distribution in particular by giving a score out of 10. The mean scores for those responses were 9.05 (s.d. 1.01) and 9.34 (0.84) respectively.

These results confirm the knowledge and experience of key informants used in this study to answer the questions.

TABLE 7: Descriptive Statistics for Key Informant Check

	Minimum	Maximum	Mean	Std. Dev.
Years at company	2	24	10.96	3.34
Years in current position	1	17	8.10	2.72
Knowledge about company (out of 10)	6	10	9.05	1.01
Knowledge about channels (out of 10)	5	10	9.34	0.84

1.5. Sample

A random selection method was used to draw a sample of 925 firms (electronic components manufacturers with SIC code 3679) from the directory. For each of the 925 firms a telephone prenotification methodology was used. If a marketing or sales manager's phone number was listed in the directory, they were contacted directly using their numbers. In other cases, the contact number given in the directory was called and the contact information for the marketing or sales manager was obtained.

This prenotification procedure entailed contacting each company's sales or marketing manager (in some cases logistics or product managers) listed in the directory for two purposes. First, since the context of this study is manufacturers that employ multiple channel systems, the executives contacted were asked to briefly describe the channel systems that their firms use. Based on their descriptions, 913 firms were identified by the primary researcher as those using multiple channel systems, with the remaining 12 firms not using any form of multiple channels. Second, the executives were asked to verify their responsibilities for the design and management of their firms' distribution channels and were informed about the purpose of the study and incoming questionnaire.

The data collection procedure for this dissertation was designed based on the guidelines suggested by Anderson and Narus (1990) to maximize the response rate. Each respondent received three contacts. First, after questionnaires were finalized based on interviews and pretest, the study packages, including a cover letter explaining the instructions, two sets of questionnaires and two envelopes, were mailed to the executives of the 913 firms. Two weeks after the initial mailing a reminder post card was mailed out

to all of the firms. And, two weeks following reminder post card mailing, a follow up phone call was made to randomly chosen 300 companies asking those informants who had not yet responded to do so.

This procedure yielded a total of 305 questionnaires. Fourteen questionnaires completed by mid-level executives, not accompanied by questionnaires completed by top-level executives, were eliminated. Therefore, 291 matched questionnaires, matched in the sense that one from a mid- level executive and one from a top-level executive- were included in the study, representing a 31.8 overall response rate.

The respondents were asked to answer questions based on the entire distribution system of their business unit. A business unit was defined as a division or subsidiary of their companies that operate independently. In case their companies had different business units for different markets or products, the respondents were asked to refer only to the distribution channels their company use for the business unit responsible for the most important market or product.

1.6. Non-response bias

To evaluate a possible non-response bias, an extrapolation method suggested by Armstrong and Overton (1977) was conducted. This method entails comparison of early and later survey respondents in the sample on the study variables and several company characteristics. In this study, the respondents who returned the completed questionnaires in the first three weeks of the study were considered as early respondents (n= 195), while those questionnaires obtained after the first three weeks were considered as coming from the late respondent group (n=96). The mean values for each scale were compared across early and late respondent groups. T-test results indicated no significant differences

relevant to the study, which suggested that non-response bias was not a problem (please see Table 8).

TABLE 8: Comparison of mean values across early and late respondents

Variables	Mean of Early Respondents	Mean of Late Respondents	Difference (Mlr- Mer)	t-value
Differentiation	3.83	3.94	.11	.204
Cost Leadership	4.12	4.06	-.06	.385
Formalization	3.88	3.97	.09	.298
Centralization	4.01	4.06	.05	.465
Specialization	4.02	3.93	-.09	.378
# of Channels	4.40	4.25	-.15	.160
% Directness	2.28	2.33	.05	.486
EC	4.27	4.34	.07	.315
EDC	3.94	3.90	-.04	.226
EDP	4.01	4.07	.06	.352
EM	3.76	3.81	.05	.245
PCS	4.01	4.07	.06	.445
PCP	3.52	3.48	-.04	.368
PCC	4.52	4.55	.03	.411
PCM	4.12	4.07	-.05	.501
PCA	4.33	4.41	.08	.274
PCL	4.29	4.33	.04	.342
PCG	3.89	3.96	.07	.312
PCSa	3.96	3.93	-.03	.215
GP	4.18	4.25	.07	.511
PCS	4.41	4.44	.03	.701

TABLE 8: Comparison of mean values across early and late respondents (Cont.)

Variables	Mean of Early Respondents	Mean of Late Respondents	Difference (Mlr- Mer)	t-value
PCL	4.37	4.44	.07	.721
PCA	4.20	4.29	.09	.247
PCG	3.97	4.03	.06	.455
PCSa	4.35	4.30	-.05	.613
CONF	3.71	3.75	.04	.477
SATIS	4.05	4.11	.06	.536
# years for company	10.75	10.98	.23	.191
# years in position	8.04	8.18	.14	.336
# of employees	72.85	76.84	3.99	.247

2. SCALE DEVELOPMENT OF MEASURES

2.1. Scales

In the subsequent section, I describe the measures used for the variables of interest (Please see Appendix for the questionnaire). Operationalizations of each construct are discussed first, and then reliability coefficients, factor loadings and descriptive statistics are provided. While reliability of each scale is tested by using Cronbach alphas, scale dimensionality is assured using principal component factor analysis. A scale is considered unidimensional if factor analysis results support one factor solution for each scale. Finally, the discriminant validity of each scale is checked by comparing the scale's alpha with its correlations with other scales (Ruekert and Churchill 1984). Discriminant validity for each scale is confirmed if the alpha of a scale is substantially larger than its correlations with other scales.

2.1. a. Formalization: Formalization, the extent to which firms rely on fixed rules and written contracts in handling their channels of distribution was measured by five items adapted from Dwyer and Oh (1984), Dwyer and Welsh (1985), Jaworski and Kohli (1993), and John (1984). Informants were asked to indicate the extent to which their firms' dealings with their distribution channels are based on rules and procedures. The coefficient alpha of the formalization scale, .89, assures the reliability of this scale. Since the alpha value is higher than its correlations with all other constructs, this gives support for the discriminant validity of the scale (please see Table 9). In terms of unidimensionality, factor analysis results indicate a one-factor solution, explaining 70.6% of the variance (please see Table 11).

TABLE 9: Correlation Table*

	STR	FT	CT	ST	EC	ED1	ED2	EM
STR	.870 (alpha)							
FT	-.186	.890 (alpha)						
CT	-.293	.397	.940 (alpha)					
ST	.230	-.418	-.398	.880 (alpha)				
EC	.217	-.312	-.533	.329	.910 (alpha)			
ED1	.165	-.408	-.458	.271	.429	.900 (alpha)		
ED2	.176	-.447	-.547	.313	.491	.657	.860 (alpha)	
EM	.276	-.404	-.464	.411	.467	.483	.457	.920 (alpha)

* All correlations are significant at the 0.01 level

TABLE 10: Formalization Scale Properties

Formalization (1= strongly disagree, 7= strongly agree) Alpha: .89

Items	Mean	Std. Dev.	Factor Loadings
F1: Our relations with our channels are subject to a lot of rules and procedures stating how various aspects of the relationship are to be handled.*	3.98	1.71	.875
F2: Our channels follow standard rules and procedures in their relationships with us. **	3.92	1.51	.779
F3: Our contacts with our channels are on a formal, preplanned basis.*	3.95	1.75	.846
F4: There are standard procedures and rules to be followed by every channel members. **	3.91	1.57	.845
F5: Our channel members have to conform to written rules and formal guidelines. ***	3.98	1.59	.855

*** Dwyer and Oh (1984) and John (1984), ** Dwyer and Welsh (1985), *** Jaworski and Kohli (1993).**

TABLE 11: Unidimensionality of Formalization Construct

Components	Eigenvalues	% of Variance	Cumulative %
1	3.534	70.672	70.672
2	.505	10.093	80.764
3	.367	7.340	88.104
4	.335	6.699	94.803
5	.260	5.197	100.000

2.1.b. Centralization: Centralization, the degree to which decision-making is concentrated, was measured by five items adapted from Dwyer and Welsh (1985) and Jaworski and Kohli (1993). The informants were asked about the concentration of decision-making authority in their distribution channels organization. As shown by Table 12, the high coefficient alpha, 0.94, is an indicator of reliability of the scale, and since

this value is higher than the centralization's correlations with other constructs, ranging from 0.29 to 0.54, it also supports discriminant validity for centralization scale. One factor solution yielded by factor analysis serves as the support for unidimensionality of the scale (please see Table 13).

TABLE 12: Centralization Scale Properties

Centralization (1= strongly disagree, 7= strongly agree) Alpha: .94

Items	Mean	Std. Dev.	Factor Loadings
C1: There can be little action taken in our distribution organization until we make decisions.*	3.99	1.56	.893
C2: Channel members who want to make their decisions concerning our products are discouraged in our distribution organization.*	4.07	1.63	.885
C3: In our distribution organization, even small matters have to be referred to us for a final decision.*	3.98	1.57	.909
C4: Any decision a channel member makes regarding our product has to have our approval.*	4.08	1.58	.927
C5: Our channel members cannot go ahead with actions without checking with us. **	3.90	1.61	.910

*** Jaworski and Kohli 1993, ** Dwyer and Welsh (1985)**

TABLE 13: Unidimensionality of Centralization Construct

Components	Eigenvalues	% of Variance	Cumulative %
1	4.095	81.891	81.891
2	.292	5.846	87.737
3	.265	5.295	93.031
4	.200	3.991	97.022
5	.149	2.978	100.000

2.1.c. Specialization: Specialization refers to the degree of allocation of functions and tasks and decisions about those functions and tasks among different channel systems (Pugh et al. 1968). Three items adapted from Doty, Glick and Huber (1993) and Dwyer and Welsh (1985) were used to measure specialization. Those items concern the functions and job responsibilities and skills within channels of distribution. Coefficient alpha, 0.88 as shown in Table 14, ensures reliability of the scale. All other correlations with other constructs (ranging from .23 to .41) are sufficiently lower than coefficient alpha and thus provide evidence for discriminant validity of the construct. One factor solution that explains 80.3% of the variance indicates unidimensionality of the specialization items.

TABLE 14: Specialization Scale Properties

Specialization (1= strongly disagree, 7= strongly agree) Alpha: .88

Items	Mean	Std. Dev.	Factor Loadings
S1: Different channel members in our distribution system perform specific functions.*	4.01	1.59	.887
S2: Most channels are responsible for making decisions about functions that require special skills.**	3.89	1.50	.902
S3: Different channels are responsible for making decisions regarding different functions.*	4.00	1.47	.901

*** Doty, Glick, and Huber (1993) ** Dwyer and Welsh (1985)**

TABLE 15: Unidimensionality of Specialization Construct

Components	Eigenvalues	% of Variance	Cumulative %
1	2.411	80.381	80.381
2	.316	10.520	90.901
3	.273	9.099	100.000

2.1.d. Environmental Complexity

Environmental complexity, the number and diversity of different factors that a company may face in its environment, was measured by six items as used by Homburg et al. (1999) (They had adapted those items from Achrol and Stern 1988). These six items ask about the number and variety of products, customers and competitors in firms' environment. Reliability of the scale was ensured by high (0.91) alpha score as shown in Table 16. Evidence for discriminant validity is observed when one compares the item's coefficient alpha (0.91) and correlations of environmental complexity with other constructs (ranging from 0.21 to 0.53). One factor solution that explains 72.0% of the variance confirms unidimensionality of the construct (please see Table 17).

TABLE 16: Environmental Complexity Scale Properties

Environmental Complexity (1= strongly disagree, 7= strongly agree) Alpha: .91

Items	Mean	Std. Dev.	Factor Loadings
EC1: The number of products/brands sold in our market is very high.	4.30	1.51	.876
EC2: The number of different customer segments in our market is very high.	4.06	1.63	.827
EC3: The number of companies competing in our market is very high.	4.19	1.50	.823

TABLE 16: Environmental Complexity Scale Properties (cont.)

Items	Mean	Std. Dev.	Factor Loadings
EC4: Customer requirements vary very much across different customer segments.	4.05	1.50	.833
EC5: There is a lot of variety in products for sale.	3.99	1.51	.844
EC6: There is a lot of variety in terms of customers involved in our market.	4.09	1.55	.886

TABLE 17: Unidimensionality of Environmental Complexity Construct

Components	Eigenvalues	% of Variance	Cumulative %
1	4.321	72.014	72.014
2	.416	6.932	78.946
3	.386	6.441	85.387
4	.348	5.804	91.191
5	.277	4.619	95.810
6	.251	4.190	100.000

2.1.e. Environmental Dynamism

Based on the literature and interviews with the executives, environmental dynamism was operationalized with two dimensions: frequency of changes and predictability of changes (Achrol et al. 1983; Homburg et al. 1999). Very frequent and/or highly unpredictable changes denote high environmental uncertainty for firms.

A factor analysis was run for all items representing two dimensions together. This analysis yields two-factor solution that explains 68.3% of the variance. Frequency of change items

and predictability items were loaded on separate factors as expected, supporting two dimensionality of environmental dynamism construct.

TABLE 18: Environmental Dynamism Factor Analysis Results after Varimax Rotation

Component			
	Total	**% of Variance**	**Cumulative %**
1	6.761	56.341	56.341
2	1.431	11.924	68.265
3	.568	4.731	72.996
4	.515	4.290	77.287
5	.442	3.687	80.973
6	.394	3.286	84.260
7	.387	3.222	87.481
8	.332	2.767	90.248
9	.328	2.731	92.979
10	.305	2.546	95.525
11	.277	2.309	97.834
12	.260	2.166	100.000

TABLE 19: Environmental Dynamism Factor Loadings after Varimax Rotation

	Factors	
	Frequency	**Predictability**
EDC1	**.797**	.310
EDC2	**.773**	.222
EDC3	**.744**	.232
EDC4	**.777**	.296
EDC5	**.780**	.273
EDC6	**.784**	.345
EDP1N	.442	**.708**
EDP2N	.191	**.782**
EDP3N	.202	**.770**
EDP4N	.276	**.788**
EDP5N	.334	**.785**
EDP6N	.345	**.758**

Frequency of changes and predictability of changes each was measured by 6 items adapted from Homburg et al. (1999). Table 20 and Table 21 show that both scales have high alpha values (.90 for frequency of changes, and .86 for predictability of changes), assuring us about the reliability of the scales. Since the frequency of changes scale's correlations with

other constructs range from 0.16 to 0.66, much lower than the scale's alpha, this provides support for discriminant validity of this scale. Similarly, discriminant validity of predictability of changes scale is assured since its correlations with other constructs (ranging from 0.17 to 0.66) is much lower than its coefficient alpha. Furthermore, factor analysis results indicate unidimensionality of each scale (please see Table 19 and Table 21).

TABLE 20: Environmental Dynamism (frequency of changes) Scale Properties

Environmental Dynamism 1 (1= very few changes, 7= very frequent changes) Alpha: .90

Items	Mean	Std. Dev.	Factor Loadings
EDC1: Changes in products offered by your business unit and your competitors.	3.87	1.58	.855
EDC2: Changes in sales strategies by your business unit and your competitors	3.89	1.52	.803
EDC3: Changes in customer preferences and expectations about product features.	4.01	1.55	.777
EDC4: Changes in distribution arrangements and strategies.	3.87	1.57	.833
EDC5: Changes in competitive strategies and competitive intensity.	3.82	1.52	.824
EDC6: Changes in your company's sales volume.	3.92	1.53	.861

TABLE 21: Environmental Dynamism (predictability of changes) Scale Properties

Environmental Dynamism 2 (1= highly unpredictable, 7= highly predictable) Alpha: .86

Items	Mean	Std. Dev	Factor Loadings
EDP1: Changes in products offered by your business unit and your competitors.	4.06	1.58	.832
EDP2: Changes in sales strategies by your business unit and your competitors	4.05	1.45	.787
EDP3: Changes in customer preferences and expectations about product features.	4.10	1.58	.783
EDP4: Changes in distribution arrangements and strategies.	4.13	1.50	.835
EDP5: Changes in competitive strategies and competitive intensity.	4.11	1.58	.856
EDP6: Changes in your company's sales volume.	4.00	1.62	.837

2.1.f. Environmental Munificence

Environmental munificence, the availability and accessibility of environmental resources, was measured by four items adapted from Achrol and Stern (1988) and Kumar et al. (1992). Those four items tap various types of environmental resources, including customer demand and sales growth potential. The coefficient alpha of munificence scale, 0.92 (please see Table 22) assures the reliability of the scale, and since it is higher than the munificence's correlation with other constructs, it indicates discriminant validity. As shown by Table 23 factor analysis results confirm the unidimensionality of the items, one factor explaining 80.7% of the variance.

TABLE 22: Environmental Munificence Scale Properties

Environmental Munificence (1= strongly disagree, 7= strongly agree) Alpha: .92

Items	Mean	Std. Dev.	Factor Loadings
EM1: The demand for your product in your current market is strong and growing.	3.75	1.68	.902
EM2: There is a potential for high sales growth in your market.	3.85	1.48	.871
EM3: There is an abundance of resources (i.e., financial, supplies, human resources, etc) in your market to companies to support growth potential.	3.83	1.56	.895
EM4: There is no shortage of necessary resources in your market.	3.69	1.60	.923

TABLE 23: Unidimensionality of Environmental Munificence Construct

Components	Eigenvalues	% of Variance	Cumulative %
1	3.224	80.607	80.607
2	.327	8.165	88.772
3	.250	6.254	95.026
4	.199	4.974	100.000

2.1.g. Business Strategy

Business strategy items used in this dissertation measured the degree to which the business units emphasized differentiation or cost leadership strategy. For that purpose, two separate sets of items measuring the business units' strategic emphasis, either differentiation or cost leadership, were adopted from Dess and Davis (1984), Homburg, Workman and Krohmer (1999) and Kim and Lim (1988).

Differentiation: Businesses that adopt differentiation strategy aim to create a product that is perceived as uniquely attractive. They emphasize strong marketing capabilities, creative, well-designed products, a reputation for quality, a good corporate image, and strong cooperation from marketing channels (Miller 1986). 10-item differentiation scale includes items that concern different aspects of differentiation strategy, ranging from providing superior value to quality of products, to premium brand image and to innovative marketing techniques. Respondents were asked about the priority of those items in their current business strategy. Factor analysis of differentiation items- one factor solution- supports unidimensionality of the scale, while the high alpha value (.93) assures the reliability of the scale.

TABLE 24: Differentiation Scale Properties

Differentiation (1= low priority , 7= top priority) Alpha: .93

Items	Mean	Std. Dev.	Factor Loadings
DF1: Gaining competitive advantage through superior products.	3.78	1.79	.846
DF2: Creating superior customer value through service quality	4.39	1.45	.819
DF3: Producing high-quality products	4.35	1.42	.803
DF4: Building up a premium product or brand image.	4.03	1.57	.856
DF5: Obtaining high prices for your products.	3.92	1.45	.817
DF6: Having cooperative and supportive channels of distribution	4.46	1.01	.683
DF7: Developing customer-specific products.	3.69	1.48	.794
DF8: Emphasizing advertising and promotion	4.47	1.43	.817
DF9: Developing innovative marketing techniques	3.88	1.45	.779
DF10: Developing innovative products.	3.72	1.37	.720

TABLE 25: Unidimensionality of Differentiation Items

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	6.321	63.207	63.207
2	.732	7.318	70.525
3	.556	5.562	76.087
4	.481	4.805	80.893
5	.417	4.174	85.067
6	.368	3.675	88.742
7	.325	3.253	91.996
8	.307	3.070	95.065
9	.258	2.584	97.649
10	.235	2.351	100.000

Cost Leadership: Cost leadership is a strategy that strives to produce goods and services more cheaply than competitors. (Miller 1986; Porter 1980; Wright 1987). It stresses efficient scale facilities, the pursuit of cost reductions in manufacturing, and the minimization of expenses of product R&D services, selling and advertising. 7-item cost leadership scale, similar to differentiation scale, concerns the priority of cost-leadership items in the firms' business strategy. Again, as shown in Table 27 factor analysis results indicate one-dimensional solution and alpha score (.94) provides support for the reliability of the scale (please see Table 26).

TABLE 26: Cost Leadership Scale Properties

Cost Leadership (1= low priority , 7= top priority) Alpha: .94

Items	Mean	Std. Dev.	Factor Loadings
CL1: Pricing at or below competitive price levels.	4.36	1.54	.843
CL2: Pursuing cost advantages in raw material purchases	4.35	1.46	.872
CL3: Pursuing operating efficiencies	4.35	1.45	.868
CL4: Controlling overhead and variable costs tightly.	4.34	1.53	.875
CL5: Pursuing economies of scale.	4.41	1.44	.832
CL6: Minimizing costs related to channels of distribution	4.24	1.32	.839
CL7: Emphasizing low cost per unit.	4.40	1.45	.847

TABLE 27: Unidimensionality of Cost Leadership Items

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	5.103	72.898	72.898
2	.438	6.253	79.151
3	.362	5.166	84.317
4	.339	4.840	89.157
5	.286	4.092	93.249
6	.250	3.573	96.823
7	.222	3.177	100.000

After examining each strategy dimensions separately, another factor analysis was run to confirm the dimensions of strategy. The factor analysis yielded two-factor solution, explaining cumulative 67.5% of the variance. Also, the cost leadership and differentiation items were loaded on separate factors.

TABLE 28: Business Strategy overall factor loadings

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	10.225	60.144	60.144
2	1.258	7.401	67.546
3	.754	4.436	71.982
4	.556	3.272	75.254
5	.533	3.137	78.391
6	.482	2.833	81.224
7	.431	2.534	83.758
8	.404	2.378	86.136
9	.349	2.052	88.188
10	.336	1.977	90.165
11	.301	1.769	91.934
12	.274	1.614	93.548
13	.258	1.515	95.062
14	.233	1.371	96.433
15	.211	1.243	97.677
16	.210	1.233	98.910
17	.185	1.090	100.000

TABLE 29: STRATEGY FACTOR LOADINGS (after Varimax Rotation)

	Factors	
	Differentiation	**Cost Leadership**
DF1	**.694**	.490
DF2	**.719**	.381
DF3	**.766**	.294
DF4	**.743**	.424
DF5	**.674**	.459
DF6	**.720**	.158
DF7	**.643**	.450
DF8	**.774**	.296
DF9	**.651**	.412
DF10	**.614**	.361
CL1N	.362	**.756**
CL2N	.369	**.784**
CL3N	.369	**.776**
CL4N	.323	**.821**
CL5N	.353	**.750**
CL6N	.320	**.777**
CL7N	.347	**.774**

2.2. Exploratory Factor Analysis

After examining the dimensionality of each construct separately, then an exploratory factor analysis was run to assess the measurement properties of all constructs together. The principal component method was used to extract the factors. The factor analysis after varimax rotation yields 8 factors, explaining cumulatively 70.3% of the variance (please see Table 30). As Table 31 shows, these 8 factors correspond to 8 constructs in the study: Strategy, environmental complexity, environmental dynamism (frequency of changes), environmental dynamism (predictability of changes), environmental munificence, centralization, formalization, and specialization.

TABLE 30: EXPLORATORY FACTOR ANALYSIS Total Variance Explained

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	21.633	41.602	41.602	9.847	18.937	18.937
2	3.023	5.813	47.415	4.691	9.022	27.959
3	2.886	5.551	52.966	4.529	8.709	36.667
4	2.202	4.234	57.200	4.007	7.705	44.373
5	2.036	3.915	61.114	3.948	7.591	51.964
6	1.838	3.534	64.649	3.834	7.372	59.336
7	1.548	2.977	67.626	3.220	6.192	65.528
8	1.396	2.685	70.311	2.487	4.783	70.311
9	.945	2.360	72.671			
10	.824	1.585	74.256			
11	.690	1.327	75.584			
12	.618	1.189	76.773			
13	.586	1.127	77.900			
14	.570	1.096	78.996			
15	.529	1.017	80.013			
16	.508	.977	80.990			
17	.487	.937	81.927			
18	.473	.909	82.836			
19	.472	.908	83.743			
20	.446	.859	84.602			
21	.418	.804	85.406			
22	.406	.782	86.188			
23	.382	.734	86.922			
24	.374	.720	87.642			
25	.370	.711	88.352			
26	.352	.677	89.029			
27	.348	.669	89.698			
28	.327	.628	90.327			
29	.324	.623	90.950			
30	.307	.591	91.541			
31	.299	.574	92.115			
32	.293	.563	92.679			
33	.273	.525	93.204			
34	.263	.506	93.709			
35	.248	.476	94.186			
36	.244	.470	94.656			
37	.237	.456	95.112			
38	.227	.437	95.549			
39	.217	.417	95.966			
40	.213	.409	96.375			
41	.207	.398	96.773			
42	.189	.364	97.136			
43	.187	.359	97.495			

TABLE 30: EXPLORATORY FACTOR ANALYSIS (cont.)

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
44	.180	.346	97.841			
45	.169	.325	98.167			
46	.160	.308	98.475			
47	.156	.300	98.775			
48	.141	.271	99.047			
49	.140	.270	99.317			
50	.133	.257	99.574			
51	.126	.243	99.817			
52	.095	.183	100.000			

Extraction Method: Principal Component Analysis.

TABLE 31: EXPLORATORY FACTOR ANALYSIS FACTOR LOADINGS

	FACTORS							
	Strategy	**Env. Complexity**	**Env. Dyn. Frequency**	**Env.Dyn. Predictab.**	**Central.**	**Formal.**	**Env. Muni.**	**Special.**
DF1	**.723**	.128	.093	.201	.246	-.078	.290	.063
CL1	**-.666**	-.165	-.206	-.265	-.085	.171	-.142	-.058
DF2	**.666**	.198	.089	.102	.217	-.099	.260	.087
DF3	**.651**	.140	.017	.093	.272	-.198	.191	.070
CL2	**-.687**	-.141	-.173	-.298	-.128	.128	-.128	-.156
DF4	**.712**	.135	.115	.167	.211	-.189	.211	.054
CL3	**-.722**	-.186	-.162	-.200	-.100	.149	-.104	-.047
DF5	**.689**	.200	.212	.045	.251	-.115	.147	.094
DF6	**.518**	.067	.057	.053	.267	-.195	.236	.004
CL4	**-.687**	-.216	-.203	-.236	-.074	.151	-.080	-.162
DF7	**.679**	.161	.185	.116	.151	-.134	.071	.182
CL5	**-.646**	-.192	-.180	-.241	-.100	.261	-.075	-.086
DF8	**.673**	.063	.165	.075	.223	-.096	.206	.108
CL6	**-.664**	-.227	-.192	-.195	-.078	.077	-.096	-.201
DF9	**.717**	.149	.187	.013	.068	-.127	.074	.126
CL7	**-.685**	-.214	-.226	-.244	-.082	.141	-.006	-.130
DF10	**.576**	.187	.179	.081	.155	-.213	.051	.125
F1	-.248	-.051	-.189	-.071	-.053	**.801**	-.056	-.141
F2	-.199	-.054	-.012	-.150	-.133	**.725**	-.114	-.066
F3	-.207	-.083	-.142	-.084	-.061	**.777**	-.107	-.117
F4	-.221	-.086	-.185	-.125	-.138	**.760**	-.097	-.077
F5	-.231	-.087	-.070	-.191	-.073	**.777**	-.087	-.144
C1	-.357	-.206	-.098	-.163	**-.753**	.100	-.071	-.065
C2	-.267	-.185	-.073	-.194	**-.777**	.088	-.073	-.159

TABLE 31: EXPLORATORY FACTOR ANALYSIS FACTOR LOADINGS (cont.)

	FACTORS							
	Strategy	Env. Complexity	Env. Dyn. Frequency	Env.Dyn. Predictab.	Central.	Formal.	Env. Muni.	Special.
S1	.238	.096	-.009	.138	.156	-.160	.130	**.804**
C3	-.273	-.212	-.185	-.182	**-.754**	.164	-.104	-.195
S2	.260	.113	.095	.004	.103	-.166	.116	**.810**
C4	-.310	-.219	-.200	-.188	**-.768**	.131	-.122	-.050
C5	-.294	-.234	-.170	-.177	**-.762**	.098	-.150	-.069
S3	.237	.098	.062	.046	.115	-.180	.134	**.816**
EC1	.261	**.778**	.068	.151	.133	-.082	.223	.031
EC2	.219	**.754**	.136	.072	.153	-.130	.082	.069
EC3	.168	**.755**	.085	.143	.167	-.031	.133	.049
EC4	.216	**.757**	.190	.120	.119	-.038	.121	.043
EC5	.258	**.766**	.106	.154	.131	-.075	.040	.108
EC6	.258	**.785**	.117	.145	.199	-.064	.103	.095
EDC1	.245	.077	**.729**	.257	.090	-.087	.222	.011
EDC2	.177	.190	**.757**	.151	.112	-.103	.024	-.061
EDC3	.245	.135	**.657**	.143	.138	-.041	.222	.099
EDC4	.200	.063	**.757**	.240	.097	-.112	.043	.088
EDC5	.232	.091	**.732**	.189	.105	-.178	.082	.054
EDC6	.254	.183	**.719**	.247	.096	-.156	.155	.042
EDP1N	.331	.091	.384	**.626**	.170	-.103	.095	.052
EDP2N	.234	.177	.150	**.663**	.203	-.197	.057	.012
EDP3N	.176	.156	.167	**.699**	.196	-.107	.102	.020
EDP4N	.226	.112	.234	**.697**	.153	-.158	.188	.053
EDP5N	.250	.143	.291	**.720**	.139	-.150	.077	.039
EDP6N	.223	.251	.330	**.671**	.065	-.094	.065	.140
EM1	.264	.113	.169	.143	.114	-.115	**.797**	.163
EM2	.285	.217	.112	.080	.074	-.160	**.752**	.051
EM3	.302	.203	.272	.130	.116	-.118	**.719**	.157
EM4	.305	.178	.145	.136	.149	-.127	**.784**	.121

2.3. Channel number and directness

Channel number in multiple channel systems refers to the total number of different channels used by manufacturers as part of their multiple channels, while multiple channel directness denotes the proportion of integrated (direct) channels to independent (indirect) channels used within the system. Both channel number and directness were measured by giving the respondents different channel system alternatives and asking them to choose the ones used by their firms. Based on the literature review, review of related

trade publications and interviews with the executives, seven alternative channel systems were described. Then respondents were asked which one their firms use to reach to their customers. These channel systems presented to the respondents were as follows:

Company ---Distributor---Customer

Company ---Sales Agent/broker---Customer

Company ---Sales Agent/ broker---Distributor---Customer

Company ---Company sales branch/office---Distributor---Customer

Company ---Company sales force---Customer

Company ---Company catalog---Customer

Company ---Company website---Customer

If these alternatives did not cover the entire range of their channel system respondents were asked to add other configurations.

This method also allowed us to define the direct and indirect channel systems. While the first three alternatives represented indirect channels, the last four were direct channels the firms may use. Therefore, channel directness, the proportion of direct channels to indirect channels, was indirectly calculated from respondents' choice of channel systems using the following formula:

Channel directness: Nd/ (Nt-Nd)

Nt: total number of different channel configurations used by the firm

Nd: number of direct channels used by the firm.

Number of channels ranges from 2 to 7 with mean of 4.05, and channel directness ranges from 0.3 to 4.0, with mean of 1.54 (Please see Table 32).

TABLE 32: Channel number and directness properties

	Mean	Std. Deviation
Number of channels	4.05	1.07
Channel directness	1.54	0.96

2.4. Channel Performance

Following the operationalization of reseller performance with 8 dimensions as developed by Kumar et al. (1992) , in this dissertation channel performance was assessed using 8 dimensions. However, as different from Kumar et al. (1992) case, since the unit of analysis here is the channel system, not a particular reseller or channel member, those dimensions and items were adapted to the entire channel system. The channel performance dimensions used in this study are: 1) contribution to sales, 2) contribution to growth, 3) channel competence, 4) channel compliance, 5) channel adaptation, 6) channel loyalty, 7) contribution to growth and 8) customer satisfaction. 8 facet scales were used to measure those 8 dimensions. The reason for using facet scales is to cover separately the different areas within a more general domain. After those 8 dimensions of channel performance were measured by 8 facet scales, a global performance scale was used to elicit firms' overall impressions and summary evaluations about their channel system (Kumar et al., 1992). In these global scales, the respondents combine their evaluations into integrated responses or global judgments. Total of 24 items were used to measure 8 channel performance dimensions (facet scales) and then 4 items were used as a global scale to measure respondents' channel performance evaluation. All items were adapted from Kumar et al. (1992) (Please see Table 33 to Table 40 for each dimension's scale properties).

Different companies may have different priorities or strategies and therefore not all the performance dimensions listed above have necessarily equal importance for those companies' overall channel performance evaluation. For that reason, as shown in Table 42, the respondents were asked to give importance weights to each dimension by assigning a score (between 1 to 10) to each dimension. Then, for both middle- and top-level managers each dimension score was multiplied by the importance weight given to that dimension and then the respondent's overall performance evaluation was found.

TABLE 33: Contribution to Sales Scale Properties

Contribution to Sales (1= strongly disagree, 7= strongly agree) Alpha*: .92, .89

Items	Mean*	Std. Dev.*
PCS1: Over the past three years, your channel has been successful in generating high sales for your company.	4.05, 4.07	1.32, 1.24
PCS2: Over the past three years, your channel system has generated high sales revenues.	4.05, 4.00	1.32, 1.32
PCS3: Over the past three years, your channel system has enabled your company to achieve high level of market penetration.	4.17, 4.08	1.17, 1.26
PCS4: Over the past three years, your channel system has met the sales target you had set for it.	3.98, 4.02	1.36, 1.39

* two reliability alphas, means and standard deviations refer to middle level executive and top executive respondents respectively.

TABLE 34: Contribution to Profit Scale Properties

Contribution to Profit (1= strongly disagree, 7= strongly agree) Alpha*: .84, .79

Items	Mean*	Std. Dev.*
PCP1: Your company's cost of servicing your channel system is unreasonable.(R)	4.52, 4.49	1.37, 1.36
PCP2: The channel system's demands for support have resulted in inadequate profits for your company. (R)	4.50, 4.51	1.28, 1.26
PCP3: Your company has made inadequate profits from your channel system. (R)	4.40, 4.55	1.42, 1.26

* two reliability alphas, means and standard deviations refer to middle level executive and top executive respondents respectively.

TABLE 35:Channel Competence Scale Properties

Channel Competence (1= strongly disagree, 7= strongly agree) Alpha*: .88, .83

Items	**Mean***	**Std. Dev.***
PCC1: Your channel members have superior business skills to market your products.	4.54, 4.20	1.20, 1.27
PCC2: Your channel members have a great deal of knowledge about the features and attributes of your products.	4.42, 4.28	1.15, 1.23
PCC3: Your channel members are competent in selling your products.	4.49, 4.17	1.12, 1.23

* two reliability alphas, means and standard deviations refer to middle level executive and top executive respondents respectively.

TABLE 36:Channel Compliance Scale Properties

Channel Compliance (1= strongly disagree, 7= strongly agree) Alpha*: .84, .78

Items	**Mean***	**Std. Dev.***
PCM1: Your channel members almost always conform your company's accepted procedures.	4.64, 4.36	1.19, 1.18
PCM2: Your channel members have never violated your company's terms and conditions.	4.68, 4.47	1.24, 1.22
PCM3: In the past your company has often had trouble in getting the channel members' cooperation.(R)	4.80, 4.71	1.14, 1.19

* two reliability alphas, means and standard deviations refer to middle level executive and top executive respondents respectively.

TABLE 37:Channel Adaptation Scale Properties

Channel Adaptation (1= strongly disagree, 7= strongly agree) Alpha*: .85, .81

Items	Mean*	Std. Dev.*
PCA1: Your channel members sense long-term trends in their market areas and frequently adjust their selling practices.	4.28, 4.14	1.19, 1.18
PCA2: Your channel members are very innovative in their marketing of your products and services in their areas.	4.21, 4.10	1.18, 1.25
PCA3: Your channel members make every effort to meet changes in their areas.	4.38, 4.14	1.12, 1.17

* two reliability alphas, means and standard deviations refer to middle level executive and top executive respondents respectively

TABLE 38:Channel Loyalty Scale Properties

Channel Loyalty (1= strongly disagree, 7= strongly agree) Alpha*: .88, .84

Items	Mean*	Std. Dev.*
PCL1: Your channel members want to sell your products and show their desire to do so in a number of positive ways.	4.37, 4.14	1.23, 1.29
PCL2: Your channel members show motivation to further your company's business.	4.27, 4.08	1.14, 1.24
PCL3: Your channel members place higher amount of time and effort behind your products relative to other businesses that they engage in.	4.37, 4.19	1.09, 1.27

* two reliability alphas, means and standard deviations refer to middle level executive and top executive respondents respectively

TABLE 39:Contribution to Growth Scale Properties

Contribution to Growth (1= strongly disagree, 7= strongly agree) Alpha*: .86, .76

Items	Mean*	Std. Dev.*
PCG1: In the past three years, your current channel system has contributed enormously to your company's revenue growth.	3.83, 3.90	1.42, 1.36
PCG2: In the past three years, your current channel system has been very successful in expanding your business.	4.05, 4.03	1.28, 1.30

* two reliability alphas, means and standard deviations refer to middle level executive and top executive respondents respectively

TABLE 40:Customer Satisfaction Scale Properties

Customer Satisfaction (1= strongly disagree, 7= strongly agree) Alpha*: .88, .84

Items	Mean*	Std. Dev.*
PCSa1: You have frequently received complaints from customers regarding your current channel members. (R)	4.83, 4.75	1.42, 1.34
PCSa2: Your channel members make every effort to keep your customers satisfied	4.55, 4.30	1.22, 1.25
PCSa3: Your channel members make every effort to keep your customers satisfied.	4.62, 4.31	1.24, 1.28

* two reliability alphas, means and standard deviations refer to middle level executive and top executive respondents respectively

TABLE 41:Global Performance Scale Properties

Global Performance (1= strongly disagree, 7= strongly agree) Alpha*: .87, .86

Items	Mean*	Std. Dev.*
GP1: Your channel system leaves a lot to be desired from an overall performance standpoint. (R)**	4.33, 4.47	1.41, 1.38
GP2: Overall, the results of your relationship with your channel have exceeded your expectations.**	4.37, 4.17	1.15, 1.30
GP3: If you had to give your channel system a performance appraisal for the past three year it would be ***	4.40, 4.26	1.09, 1.29
GP4: Taking all the different factors into account, your channel's performance has been***	4.40, 4.25	1.16, 1.23

* two reliability alphas, means and standard deviations refer to middle level executive and top executive respondents respectively
** (1=strongly disagree, 7= strongly agree), *** (1= poor, 7= outstanding)

TABLE 42: Importance of Channel Performance Dimensions*

	Minimum	Maximum	Mean	Std. Dev.
Contribution to Sales	6,6	10,10	9.52, 9.44	.80, .72
Contribution to Profit	4,3	10,10	8.87, 9.15	1.05, .87
Channel Competence	1, 1	9,9	4.59, 4.62	1.52, 1.35
Channel Compliance	1,1	9,10	4.82, 5.32	1.80, 1.69
Channel Adaptation	1,1	8,9	4.14, 4.02	1.52, 1.47
Channel Loyalty	1,1	9,8	4.61, 4.95	1.67, 1.64
Contribution to Growth	1,2	10,9	6.51, 6.39	1.87, 1.81
Customer Satisfaction	2,2	10,10	7.07, 7.24	1.51, 1.60

* first value is for middle-level executives, second for top-level executives

2.4.a. Channel Performance Inter-Rater Congruence

Since channel performance data were collected from two executives within each company, the check of the congruence of two respondents' channel performance evaluations was necessary. For each channel performance dimension and global channel evaluation, I assessed the congruence and validity of key informant data by investigating mean scores, correlations and paired t-tests for the middle- level and top-level executive responses (e.g. Hughes and Garrett 1990; Vorhies and Morgan 2003). As seen in Table 43, insignificant mean differences indicated by t-values and significant correlations support the congruence and validity of key informant data.

TABLE 43: TWO KEY INFORMANTS RESPONSE CONGRUENCE

	Middle-Level Executive Mean (s.d.)	Top-Level Executive Mean (s.d.)	Mean Inter-rater Difference*	t-value	Inter-rater Correlation*
Contribution to Sales	4.06 (1.17)	4.03 (1.13)	.03	.432	.82
Contribution to Profit	4.47 (1.18)	4.51 (1.04)	- .04	.815	.74
Channel Competence	4.48 (1.04)	4.22 (1.07)	.26	.479	.77
Channel Compliance	4.80 (1.04)	4.59 (.90)	.21	.395	.75
Channel Adaptation	4.29 (1.05)	4.13 (1.06)	.16	.627	.76
Channel Loyalty	4.34 (1.03)	4.14 (1.10)	.20	.453	.80
Contribution to Growth	3.94 (1.26)	3.97 (1.17)	- .03	.694	.81
Customer Satisfaction	4.67 (1.09)	4.45 (1.02)	.22	.758	.77
Global Performance	4.31 (.99)	4.29 (.98)	.02	.881	.91

* Inter rater difference is Middle-Level mean score less top-level mean score.
** All correlations significant at p<.001 level

2.4.b Total Channel Performance

For each firm the overall channel performance was measured by the two key informants' responses to items of eight channel performance dimensions. Then for each respondent, composite performance measure was obtained by multiplying each item's score with the importance score given to that item by the same informant. This procedure was repeated for both mid-level and top-level executives.

$$\mathbf{CP_{mle}} = \Sigma(\mathbf{Pd_{mle}} * \mathbf{Id_{mle}})$$

$$\mathbf{CP_{mle}} = (Pcs*Ics)+ (Pcp*Icp)+ (Pcc*Icc)+ (Pcm*Icm)+ (Pcl*Icl)+ (Pcg*Icg)+ (Pca*Ica)+ (Pcsa*Icsa)$$

$$\mathbf{CP_{tle}} = \Sigma(\mathbf{Pd_{tle}} * \mathbf{Id_{tle}})$$

$$\mathbf{CP_{tle}} = (Pcs*Ics)+ (Pcp*Icp)+ (Pcc*Icc)+ (Pcm*Icm)+ (Pcl*Icl)+ (Pcg*Icg)+ (Pca*Ica)+ (Pcsa*Icsa)$$

Cp_{mle}: Channel performance score by mid-level executive
Pd_{mle} : Score of a specific performance dimension by mid-level executive
Id_{mle} : Importance of a specific performance dimension by mid-level executive
Cp_{tle}: Channel performance score by mid-level executive
Pd_{tle} : Score of a specific performance dimension by mid-level executive
Id_{tle} : Importance of a specific performance dimension by mid-level executive

At the end, for each company a composite channel performance score was calculated by adding mid-level and top-level executive channel performance scores.

$$\mathbf{CPT} = \mathbf{Cp_{mle}} + \mathbf{CP_{tle}}$$

2.4.c. Convergent validity

Convergent validity is established by indicating that different attempts to measure the same trait through different methods are in agreement. To assess the convergent validity of channel dimension scales, I asked the respondents to evaluate each dimension with one overall item other than dimension scales. For that purpose eight items were developed to evaluate each channel performance dimension. Then, I examined the correlations of each dimension scale with one overall measure. As shown in Table 44, the high correlations between dimension scales and overall one-item measures indicate convergent validity for performance dimension measures.

TABLE 44: Convergent validity of performance dimension items*

Channel Performance Dimension	One-Item Overall Dimension Measure	Means and Standard Deviations of One-Item Overall Dimension Measures	Correlations between dimension scale and one-item overall measure**
Contribution to Sales	How effective has your channel system been in contributing to your business' sales goals?	4.29 (1.22), 4.19 (1.25)	.771, .687
Contribution to Profit	How effective has your channel system been in contributing to your business' profit goals?	4.41 (1.15), 4.22 (1.25)	.639, .531
Channel Competence	How effective has your channel system been in obtaining the required business skills to market your product?	4.26 (1.12), 4.22 (1.29)	.565, .646
Channel Compliance	How effective has your channel system been in cooperating with your company?	4.40 (1.19), 4.14 (1.19)	.554, .482
Channel Adaptation	How effective has your channel system been in adapting to unexpected changes in the market?	4.01 (1.28), 4.16 (1.29)	.669, .666
Channel Loyalty	How effective has your channel system been in engaging in activities on behalf of your company?	4.31 (1.21), 4.24 (1.24)	.631, .609
Contribution to Growth	How effective has your channel system been in contributing to your business' growth goals?	4.22 (1.30), 4.12 (1.22)	.721, .651
Customer Satisfaction	How effective has your channel system been in keeping your end-users (customers) satisfied?	4.32 (1.27), 4.21 (1.30)	.650, .562

*** First value is for middle-level executives, second for top-level executives**
**** All correlations significant at p<.001 level**

To further assess the convergent validity of composite channel performance as calculated by using the formula above, I examined the convergence between the composite channel performance and global performance scale. The high correlation between global performance scale and composite overall performance, both for middle-level and top-level executives, .712 and .678 respectively, give support for the convergent validity for composite channel performance.

2.4.d. Criterion or Predictive Validity

Criterion or predictive validity is established when a measure of an item predicts another important external behavior (i.e. criterion) (Kumar et al., 1992). For that purpose, I included the following item: "How likely is your company to reorganize/rearrange your current channel system in the near future?" (1= very unlikely, 7 very likely).

Each of the performance dimension scales, the composite performance score and global performance scale have a significant negative correlations with the item measuring the firms' likelihood of reorganizing/ rearranging their current channel systems, ranging from. While the correlations range from –0.413 to –0.520 for middle-level executive respondents, they range from –0.352 to –0.463 (Please see Table 45, column 1). Thus, these high negative correlations provide support for criterion validity.

2.4.e. Nomological validity

Nomological validity answers the question of whether the construct behaves the way it is supposed to in relation to other constructs of interest. I assessed the nomological validity of channel performance measures in relation to manufacturer's satisfaction with channel members and manufacturer's perception of the level of conflict with the channel members (e.g. Kumar et al. 1992).

Channel literature indicates that if a channel member contributes to manufacturer's goals, in other words, if a channel member performs well the functions it is supposed to perform, the manufacturer will be more satisfied with that channel member (Anderson and Narus 1990). Also, Frazier, Gill, and Kale (1989) found that higher performance by one channel member is inversely related to the other channel member's perception of conflict. Therefore, based on those findings I expected channel performance to be positively related to manufacturer's satisfaction with the channel and negatively to conflict.

To assess nomological validity of channel performance measures, I measured manufacturer's overall satisfaction with channels by using two items adapted from Anderson and Narus (1990), and the level of conflict by three items adapted from Frazier (1983) and Anderson and Narus (1990). The same items were also used by Kumar et al. (1992) to assess the nomological validity of their channel performance scales. As expected, all performance dimensions and global performance scale were positively correlated with manufacturer's satisfaction with channels (ranging from 0.480 to 0.728 for middle-level executives and from 0.504 to 0.671 for top executives) and negatively correlated with manufacturer's perception of conflict (from -0.476 to –0.600 for middle-level executives and from –0.437 to –0.525 for

top level executives). These significant correlations provide support for nomological validity (Please see Table 45, column 2 and 3).

TABLE 45: Predictive and Nomological Validity of Performance Measures*

	Column 1: Likelihood to reorganize channels (predictive/criterion validity)**	Column 2: Manufacturer's satisfaction (nomological validity)**	Column 3: Manufacturer's perception of conflict (nomological validity)**
Contribution to Sales	-.520, -.429	.728, .671	-.600, -.521
Contribution to Profit	-.409, -.410	.649, .524	-.562, -.510
Channel Competence	-.458, -.375	.611, .645	-.585, -.492
Channel Compliance	-.402, -.352	.480, .538	-.491, -.437
Channel Adaptation	-.463, -.432	.580, .615	-.560, -.504
Channel Loyalty	-.511, -.450	.651, .660	-.551, -.518
Contribution to Growth	-.470, -.463	.669, .656	-.576, -.525
Customer Satisfaction	-.437, -.401	.589, .595	-.554, -.466
Global Performance	-.413, -.427	.596, .573	-.473, -.491

*** First value is for middle-level executives, second for top-level executives**
**** All correlations significant at p<.001 level**

V. ANALYSIS

1. Introduction

Testing the hypotheses defined above included several stages. First, I needed to adopt a taxonomic approach and use cluster analysis to confirm the empirical existence of firms with theoretically derived configurations (OCMC, BSMC). The expectation was to get two clusters, among others, the profiles of which fit into descriptions of two proposed configurations, and thus empirically confirm their existence. Then I needed to show that those firms with the proposed configurations outperform others lacking such configurations in terms of their channel performance. The superior channel performance of firms with ideal configurations would support hypotheses 1 and 2.

Then to test hypothesis 3, i.e. the closer the profile of firms to that of top performers (ideal profile), the higher their channel performance, I empirically defined the ideal profiles of top performers within each cluster. Then, I regressed the profile deviation score – calculated by the Euclidean distance formula- of each firm within that cluster onto their channel performance deviation from top performers. To be able to support that hypothesis, I needed to show that firms' profile deviation has a significant positive relationship with their channel performance deviation, i.e., the higher the deviation from the top performer's ideal profile, the higher the performance deviation implying lower channel performance.

2. TAXONOMIC APPROACH AND CLUSTER ANALYSIS

Cluster analysis is a purely empirical method of classification and as such is primarily an inductive technique. It has been used in marketing mostly for classification and developing taxonomies (e.g. Cannon and Perreault 1999; Furse, Punj, and Stewart 1982; Homburg, Workman, and Jensen 2002). Since I aim to confirm the existence of group of firms with certain configurations of strategic, structural and environmental dimensions, cluster analysis was best suited to that purpose.

The literature warns researchers about two problems associated with cluster analysis (e.g. Punj and Stewart 1983). First, there are many different clustering techniques. These techniques can be categorized as either hierarchical (agglomerative) or nonhierarchical (iterative portioning) techniques (Milligan and Cooper 1985). Then each technique has different methods: while single linkage, complete linkage, average linkage and Ward's minimum variance method are four frequently used hierarchical methods, k-means is one very popular iterative (nonhierarchical) clustering approach. However, although there are some overall guidelines or recommendations to help researchers in their choice of appropriate clustering methods, there are no well-established rules for choosing one method over another (Punj and Stewart 1983).

The second problem is about determining the number of clusters and assigning the observations to clusters (Milligan and Cooper 1985). Despite various attempts there are still no completely satisfactory methods for determining the number of population clusters for any type of cluster analysis (Hartigan 1985; Homburg et al. 2002). In one attempt, Sarle used extensive simulations to develop the cubic clustering criterion (CCC), which can be used for crude hypothesis testing and estimating the number of population clusters. Some other researchers tried to develop some metrics like *pseudo Tt^2* or *pseudo*

F statistic to make judgments about the appropriate number of clusters (Hartigan 1985). However, there is no agreement on those methods or metrics. Milligan and Cooper (1985) compared thirty methods for estimating the number of population clusters using four hierarchical clustering methods. The criteria that performed best in these simulation studies were a pseudo T^2 statistic and the cubic clustering criterion. Therefore they advised researchers to look for consensus among these two statistics, that is, local peaks of the CCC combined with a small value of the pseudo T^2 statistic followed by a larger pseudo T^2 for the next cluster fusion (Milligan and Cooper 1985).

For cluster analysis purposes, I followed the *two-stage clustering procedure* as suggested by Punj and Stewart (1983) and used by Bunn (1993), Cannon and Perrault (1999) and Homburg et al. (2002).

Punj and Stewart (1983) evaluated and compared different clustering methods that have been used with increasing frequency. They found that Ward's minimum variance method and average linkage method appear to outperform all the other methods. Ward's method appears to outperform the average linkage method except in the presence of outliers. On the other hand, if a nonrandom starting point is specified, K-means appears to outperform both Ward's method and the average linkage method (Punj and Stewart 1983). Based on their extensive comparison, Punj and Stewart (1983) proposed a hybrid two-stage procedure that takes advantage of the strengths of those two different clustering approaches.

In my analysis, before following Punj and Stewart's (1983) recommended procedure I first obtained eigenvalues of the correlation matrix and analyzed the plot of principal components as suggested by Johnson (1998) to have a preliminary idea of the

dimensionality of variables. Since different scales were used for different variables, I standardized the clustering variables.

Following Punj and Stewart's (1983) recommendation, I first used the hierarchical clustering algorithm developed by Ward (1963) in combination with Sarle's cubic clustering criterion and pseudo T^2 (Johnson 1998) to determine the appropriate number of clusters. Unlike other hierarchical clustering methods, Ward's method optimizes as an objective statistic: it seeks to minimize *tr* W, where W is the pooled within-clusters sum of squares and cross products matrix. Ward's method is somewhat similar to the average method in that variance is a function of deviations from the mean. It minimizes the average distance within the cluster and seeks at each step to form mutually heterogeneous and internally homogeneous clusters in the sense of the least error sum of squares. (Punj and Stewart 1983). The cubic clustering criterion has been among the top-performing criteria in Milligan and Cooper's (1985) comparative study of 30 methods for estimating the number of clusters.

To reduce the potential influence of sampling variance on the hierarchical solution, I repeated the cluster analysis for 8 sub-samples of the complete set of observations, in which each randomly selected sub-sample included two-thirds of the observations. These analyses supported the initial starting solution.

After obtaining the starting solution using Ward's method, in the second stage I used the k-means approach to assign observations to one of the clusters so that clusters were stable and homogeneous. Simulation studies on the performance of clustering algorithms demonstrate that portioning methods (e.g. k-means) yield better results if given a reasonable starting solution (Milligan and Cooper 1987). Using Ward's method

to compute a starting solution for k-means has been shown to be a powerful combination (Helsen and Green 1991) and has been recommended by Punj and Stewart (1983).

3. RESULTS OF CLUSTER ANALYSIS

Before I used two-stage cluster analysis, I analyzed the eigenvalues of the correlation matrix as suggested by Johnson (1998) to have an idea of dimensionality of measured variables. The correlation matrix has ten variables: strategy, environmental complexity, environmental dynamism (frequency of changes), environmental dynamism (predictability of changes), environmental munificence, formalization, centralization, specialization, number of channels and channel directness.

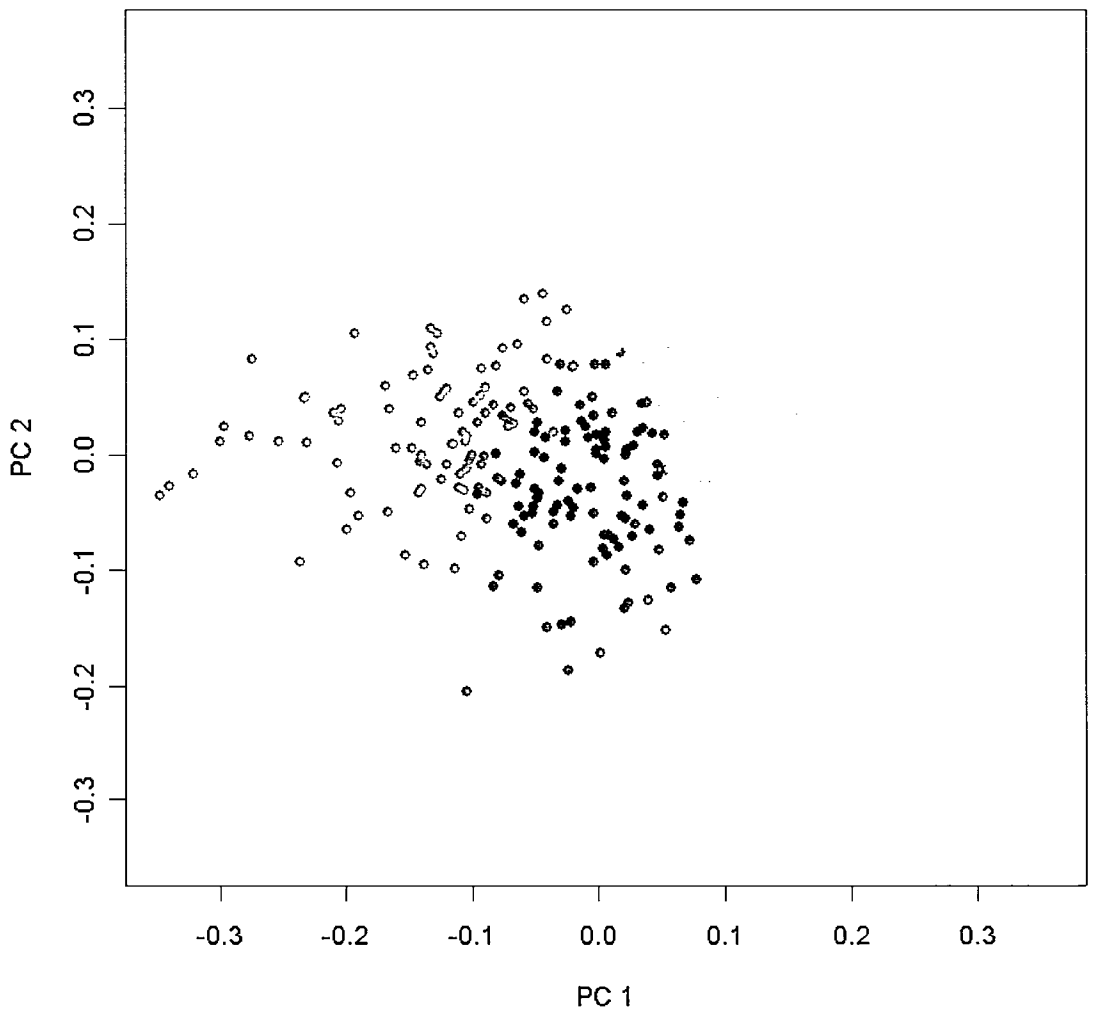
TABLE 46: Eigenvalues of the Correlation Matrix

	Eigenvalue	Difference	Proportion	Cumulative
1	4.39205582	3.38826343	0.6392	0.6392
2	1.00379240	0.18995223	0.1604	0.7996
3	0.81384016	0.04817980	0.0514	0.8510
4	0.76566036	0.09174138	0.0466	0.8976
5	0.67391898	0.02075123	0.0374	0.9350
6	0.65316774	0.11287556	0.0283	0.9633
7	0.54029219	0.05084004	0.0172	0.9805
8	0.48945215	0.08275743	0.0098	0.9903
9	0.40669472	0.14556925	0.0055	0.9958
10	0.26112547		0.0042	1.0000

Table 46 shows that there are two eigenvalues that are greater than one and these two account for 79.9% of the total variability in the measured variables. This finding implies that the measured variables nearly fall within a two-dimensional space of the ten-dimensional space (Johnson 1998). This further implies that a plot of the first two principal component scores should be useful for clustering the data. Such a plot gives

some overall idea about the possible number of clusters in the data and helps researchers verify whether the clusters obtained by cluster analysis are reasonable or not (Johnson 1998). The plot of first two principal component scores (please see Figure 2) has three colored groupings of observations, each color representing a separate cluster. Thus, the plot analysis suggests a three-cluster solution.

FIGURE 2: Plot of Two Principal Component Scores



After examining the plot of principal components that suggested a solution with 3 clusters I turned to cluster analysis. Since different types of statistics are available to SAS users to evaluate and compare various solutions (Johnson 1998), SAS (version 9.0) CLUSTER procedure was used for cluster analysis.

To cluster observations I used Ward's method, a hierarchical clustering method suggested by Punj and Stewart (1993) as being superior to other methods in estimating the number of clusters. Ward's method is an agglomerative clustering procedure seeking to form the partitions $P_n, P_{n-1}, \ldots, P_1$ in a manner that minimizes the loss associated with each grouping and to quantify that loss in a form that is readily interpretable. At each step in the analysis, the union of every possible cluster pair is considered and the two clusters whose fusion results in minimum increase in 'information loss' are combined. The first P_n consists of n single object 'clusters', the last P_1, consists of single group containing all n cases (Johnson 1998). In this dissertation, the clustering procedure started with 291 observations and thus 291 separate clusters were created at the beginning. At each step of the procedure two clusters were joined to minimize the increase in information loss. Table 47 shows final steps of the clustering procedure where number of clusters was reduced from 10 to one.

To estimate the number of clusters I analyzed two statistics, the cubic clustering criterion (CCC) and pseudo T^2 (PST2), as recommended by Johnson (1998). When those two statistics are used, Johnson (1998) recommends starting at the bottom and working upward, since the objective is usually to have as few clusters as might be reasonable. Table 47 shows CCC and PST2 statistics for the last 10 clusters.

TABLE 47: CCC and PST2 Statistics

Number of clusters	Clusters Joined	CCC	PST2
10	CL 17- CL11	8.6	25.3
9	CL12- CL22	8.7	23.2
8	CL14- CL16	7.9	26.5
7	CL10- CL15	7.8	26.9
6	CL9- CL18	8.3	**14.2**
5	CL24- CL7	8.5	29.4
4	CL8- CL25	**9.6**	**10.7**
3	CL5- CL6	9.1	38.3
2	CL3- CL13	7.5	31.5
1	CL2- CL4	7.1	39.6

The investigation of CCC values in Table 47 suggests that since a local peak occurs (9.6) when the number of clusters is equal to 4, the appropriate number of clusters is somewhat around 4 clusters (Johnson 1998; Milligan and Cooper 1985).

The pseudo T^2 statistic (PST2) helps determine whether the two clusters combined should have been combined. If the PST2 value is large, then two cluster should not be combined, but if it is small then two clusters can be safely combined (Johnson 1998). Therefore, one needs to look for a small PST2 value followed by a larger one to determine the appropriate number of clusters (Milligan and Cooper 1985). Table 47 presents two such cases: when the number of clusters is 4, the PST2 value is 10.7 followed by a value of 38.3, which can be considered large when it is compared to other

PST2 values. Hence, the data may have a 4-cluster solution. Another similar case occurs when the program reduces 6 clusters to 5, the PST2 value is 29.4, which is larger than its predecessor, 14.2, suggesting a 6-cluster solution.

Based on the analysis of principal components and two statistics, I concluded that the number of clusters in the data set is likely to be somewhere between 3 and 6. While the plot of principal components supports a solution around 3 clusters, the cubic clustering criteria suggest 4 clusters and pseudo T^2 suggest 4 or 6 clusters. Since Milligan and Cooper (1985) advised researchers to look for consensus between these two statistics, I decided that a 4-cluster solution is the best solution for the data. I repeated the same procedure and clustered eight randomly selected subsamples of the data, each containing two-thirds of the entire sample. According to the CCC statistic, 7 subsamples supported 4 clusters, one supported 3. According to the PST2 statistic, 6 subsamples manifested 4 clusters, one manifested 3 clusters and one manifested 6 clusters.

After I computed the starting solution as a 4-cluster solution using Ward's method, I used the k-means approach in the second stage to assign observations to one of the clusters. Table 48 shows the final cluster centers of 4 clusters.

TABLE 48: Cluster Centers

Variables	Cluster 1	Cluster 2	Cluster 3	Cluster 4
Strategy	-.744220076090	.431772709084	-.295886775763	.626780289581
Formalization	.343719359407	-.009005592947	.557049558202	-.911380692917
Centralization	.171330845771	-.035804473304	.862938596491	-1.047633020344
Specialization	-.643729880012	.515437993379	-.671310629515	.771161281414
Env. Complexity	-.027210103330	.106859806860	-.779622132254	.767677862044
Env. Dynamism 1	.424051616915	-.131561147186	-.958401864035	.771346830986
Env. Dynamism 2	.318521894345	-.219853937411	-.983125753315	.999211554313
Env. Munificence	-.218204750893	.205231388330	-.887509266123	.936024598294
Number of channels	.446226809876	-.112999150382	-.950319724545	.722258786363
Channel Directness	.02	.03	-.8	.9

Table 49 shows the distances between cluster centers. The greatest distance (5.178) between final cluster centers was between cluster 3 and cluster 4, suggesting that those two clusters are the most distant clusters from each other in terms of their characteristics. A moderate distance were found between cluster 2 and cluster 3 (2.759), between cluster 2 and cluster 4 (2.576) and between cluster 1 and cluster 4 (3.219). The shortest distance (2.001) was between cluster 1 and cluster 2.

TABLE 49: Distances between Final Cluster Centers

Cluster	1	2	3	4
1		2.001	2.798	3.219
2	2.001		2.759	2.576
3	2.798	2.759		5.178
4	3.219	2.576	5.178	

TABLE 50: Cluster Means and Standard Deviations

	CLUSTER 1 (n= 67)	*CLUSTER 2* (n= 77)	*CLUSTER 3* (n= 76)	*CLUSTER 4* (n= 71)
STRATEGY	3.87 (.40)	4.36 (.36)	3.94 (.34)	4.41 (.36)
FORMALIZATION	4.42 (1.06)	3.94 (1.22)	4.71 (1.23)	2.75 (1.04)
CENTRALIZATION	4.26 (1.22)	3.96 (1.13)	5.25 (.84)	2.50 (1.00)
SPECIALIZATION	3.09 (1.01)	4.67 (1.15)	3.06 (1.09)	4.99 (.92)
ENV. COMPLEXITY	4.07 (1.03)	4.25 (1.04)	3.09 (1.18)	5.11 (1.09)
ENV. DYNAMISM 1	4.44 (1.05)	3.73 (1.00)	2.67 (.85)	4.88 (.97)
ENV. DYNAMISM 2	4.55 (.90)	3.84 (.95)	2.84 (.89)	5.47 (.84)
ENV. MUNIFICENCE	3.47 (1.07)	4.07 (1.19)	2.52 (.99)	5.10 (.98)
Number of Channels	4.51 (.96)	3.91 (.92)	3.01 (.60)	4.77 (.83)
Channel Directness	1.49 (.81)	1.53 (.72)	.80 (.49)	2.34 (1.04)

Table 50 shows the means and standard deviations of variables and the number of observations within each cluster. The results of this empirical taxonomy suggest not only that there are different clusters in the data that differ in important ways, but also that they are relatively common in occurrence. The clustering procedures I used did not attempt to recover clusters with evenly distributed numbers of observations. Yet in this analysis, the number of firms grouped within each cluster was quite uniform, ranging from 67 to 77.

The last step in the cluster analysis is to validate the recognizability of the clusters, which verifies whether they have meaningful implications .Table 50 shows the cluster means for each of the cluster variables. However, from a technical perspective, statistical tests of differences among means in Table 50 are not appropriate because the clusters vary on the variables in quite different ways (Cannon and Perreault 1999). For example, a cluster that is low in the strategy variable may not be low with respect to another variable, such as formalization. Thus, to facilitate comparison and contrast, as suggested by Cannon and Perreault (1999) and used by Homburg et al. (2002), I used the probability levels associated with Duncan's multiple range test as a heuristic for identifying similarities and differences among the variables within clusters. Based on the interpretation steps suggested by Bunn (1993), I first compared the clusters on the basis of Duncan's multiple range test and then transferred the resulting bands into verbal descriptions of a cluster's position with respect to the cluster variables (Please see Table 51). In this process, using Duncan's test results, I assign the means of cluster variables into different ranges, ranging from low to high to be able to interpret the clusters.

TABLE 51: VERBAL CLUSTER DESCRIPTION BY VARIABLES

Dimensions	Cluster 1 BCMC	Cluster 2 IMMC	Cluster 3 BSMC	Cluster 4 OCMC
Strategy	3.87 (Low)	4.36 (High)	**3.94 (Low)**	**4.41 (High)**
Formalization	4.42 (High)	3.94 (Medium)	**4.71 (High)**	**2.75 (Low)**
Centralization	4.26 (Medium)	3.96 (Medium)	**5.25 (High)**	**2.50 (Low)**
Specialization	3.09 (Low)	4.67 (High)	**3.06 (Low)**	**4.99 (High)**
Env. Complexity	4.07 (Medium)	4.25 (Medium)	**3.09 (Low)**	**5.11 (High)**
Env. Dynamism 1	4.44 (Medium to high)	3.73 (Low to Medium)	**2.67 (Low)**	**4.88 (High)**
Env. Dynamism 2	4.55 (Medium to high)	3.84 (Low to medium)	**2.84 (Low)**	**5.47 (High)**
Env. Munificence	3.47 (Low to medium)	4.07 (Medium to high)	**2.52 (Low)**	**5.10 (High)**
Number of Channels	4.51 (High)	3.91 (Medium)	**3.01 (Low)**	**4.77 (High)**
Channel Directness	1.49 (Medium)	1.53 (Medium)	**.80 (Low)**	**2.34 (High)**

Now I interpret the clusters and assign labels to the clusters. Although using such labels involves a risk of oversimplification (Homburg et al. 2002) they help by highlighting distinct aspects of clusters and facilitate the discussion.

3.1. CLUSTER 1: Firms with Bureaucratic Complex Multiple Channels (BCMC)

The firms in this cluster follow cost leadership strategies to compete in their markets. They have a kind of bureaucratic structure in the sense that they highly formalize their channel decision-making process and there is a little room for specialization of channel members in performing specific functions. However, different from pure bureaucratic structures, their level of centralization of decision-making authority is medium. Therefore, even though channel members follow formal rules and procedures in decision-making, the decisions are not made single-handedly by the manufacturer, giving some room for channel members' involvement in the process.

In terms of the environment, the firms face an "uncertain" environment in terms of environmental uncertainty and munificence. All environmental variables indicate somewhat medium, ranging from low-to-medium to medium-to-high, values, making it difficult to classify their environments as high or low in terms of uncertainty or munificence.

Finally, these firms employ a high number of channels to reach to their customers. The level of directness within this system is medium, implying that the numbers of integrated and independent channels are almost equal, making the management of such a multiple channel system complex.

Based on their bureaucratic structure and the complex nature of their channel management, I refer to these firms as ***firms with bureaucratic complex multiple channel systems*** **(BCMC)**.

3.2. CLUSTER 2: Firms with In-the-Middle Multiple Channels (IMMC)

In this cluster, interestingly the mean scores on most of the variables (except strategy and specialization) are in medium ranges. Even though the high strategy score implies that this cluster is comprised of differentiator firms, other than this it is difficult to make such evaluations about the firms in this cluster.

In terms of their channel decision structure, it is hard to classify their structure as either bureaucratic or organic since both formalization and centralization variables have medium scores. Similarly, the scores for environmental variables are within the range of low-to-medium to medium-to-high. Therefore, as with the structural variables, it is very hard to describe the kind of environment the firms in this cluster face.

Regarding the physical channel structure, the firms have a moderate number of channels with medium level of directness.

I refer to the firms in this cluster as ***firms with in-the-middle multiple channel systems*** **(IMMC)**, reflecting the medium scores on almost all of the variables. As discussed later, the low channel performance of the firms in this cluster – in fact the lowest performance among all four clusters- can be attributed to this "*in-the-middle*" situation. Why these firms follow differentiation strategies given their structures and environments is an interesting question that needs further investigation.

3.3. CLUSTER 3: Firms with Bureaucratic Simple Multiple Channels (BSMC)

This cluster is one of the two clusters that fit into configurations developed theoretically in this dissertation. The strategic, environmental, and structural variables in this cluster fit into each other in the way defined in the first proposed configuration, confirming the empirical existence of that configuration.

In terms of their business strategy, the firms in this cluster are cost-leaders, i.e., firms competing by minimizing their costs and thus offering lower prices than their competitors.

The firms' channel decision-making structure manifests a bureaucratic structure with high centralization and formalization and low specialization. In fact, they have the highest values for centralization and formalization and the lowest values for specialization compared to firms in other clusters. This suggests that these firms use a very formal channel decision-making system in which they centralize the decision-making authority. Also, channel members perform various functions and activities, without much specialization.

The values of all environmental variables in this cluster are low, implying that in contrast to other cost-leader firms in cluster 1, the environment that firms in this cluster face is easily distinguishable by its low uncertainty and scarcity of resources. Finally, as indicated by low channel number and directness values, the firms employ a lower number of channels and those channels are mostly independent.

Due to their bureaucratic decision-making structure and relatively simple physical channel structure I refer to the firms in this cluster as ***firms with bureaucratic simple multiple channel systems*** **(BSMC).**

3.4. CLUSTER 4: Firms with Organic Complex Multiple Channels (OCMC):

This is the second fit cluster having the same coalignment of characteristics as defined in the second proposed configuration in this dissertation. Firms in this cluster are differentiators as suggested by their high strategy score. Among all the other clusters, these firms have the most organic channel decision structure as indicated by lowest formalization and centralization scores and highest specialization scores. This structure implies that the firms do not use formal rules and policies for decision-making and are not much involved in the process. The channel members, mostly specialized in different functions, also highly participate in decisions regarding the channel system.

All of the environmental variables manifest high values in a very consistent way, suggesting that the firms in this cluster operate in rich but very uncertain environments characterized by high complexity and dynamism. Not only are there a lot of different customer groups and competitors in their environments, but also they change very frequently and unpredictably.

In terms of their physical channel structure, these firms employ many different channels to serve their customers, and most of those channels are integrated channels, owned and managed by the firms themselves.

Because of their organic structure and the complexity in terms of management of many different channels, I name these firms within this cluster ***firms with organic complex multiple channel systems.***

Cluster analysis results indicate that there are four clusters in the data and the profiles of two of them exactly fit into my proposed configurations (BSMC and OCMC). Therefore, with these findings I could confirm the existence of the proposed configurations. However, to support the first two hypotheses, I needed to show that those clusters differ from others in terms of channel performance and the channel performance of firms within those two ideal clusters (cluster 3 and 4) is significantly higher than others lacking such configurations, i.e. clusters 1 and 2.

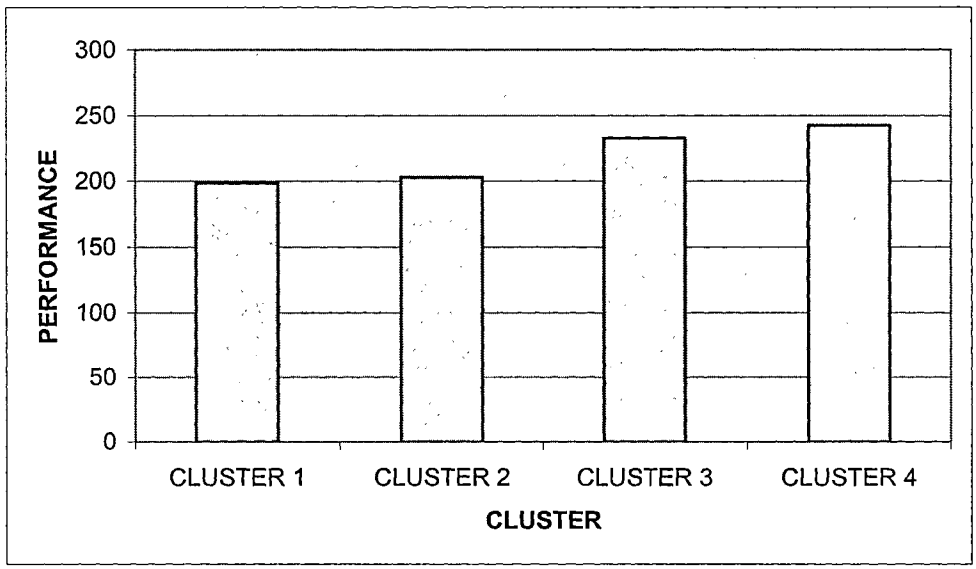
To confirm performance differences among clusters, I used Duncan's multiple-range tests. The results indicate that, as expected, the channel performances of clusters 3 and 4 (firms with proposed configurations) are grouped as "high" performance while that of the firms in clusters 1 and 2 (misfit clusters) are labeled as "low" performance (Please see Table 52).

TABLE 52: Classification of Channel Performance Across Clusters

	Cluster 1 BCMC	Cluster 2 IMMC	Cluster 3 BSMC	Cluster 4 OCMC
Channel Performance	198.71 (Low)	202.99 (Low)	**233.13 (High)**	**242.63 (High)**

The visual representation of the comparison of channel performance across clusters is also provided by Figure 3.

FIGURE 3: Channel Performance Across Clusters



As indicated by Figure 3, the mean of channel performance in cluster 4 (242.63) is higher than that of cluster 1 (198.71) and cluster 2 (202.99). However I needed to show that these differences are also statistically significant. In other words, to support the first hypothesis, I needed to confirm that the channel performance of firms in cluster 4 (fit cluster) is significantly higher than channel performance of those in clusters 1 and 2 (misfit clusters). Similarly, the mean of channel performance in cluster 3 (233.13) is higher than that in cluster 1 (198.71) and cluster 2 (202.99), yet in order to support hypothesis 2, I needed to show that these differences are significant.

The results of analysis of variance (ANOVA) indicate differences across four clusters in terms of channel performance ($F=10.887$, $P<.001$) (Please see Table 53). To test hypotheses 1 and 2, I analyzed pairwise comparisons of clusters 3 and 4 to clusters 1 and 2.

TABLE 53: Pairwise Comparisons of Channel Performance

CLUSTER (X)	CLUSTER (Y)	Mean Difference (X-Y)	Std. Error	Sig.(a)
1	2	-4.279	9.339	.647
	3	-34.418(*)	9.367	.000
	4	-43.920(*)	9.521	.000
2	1	4.279	9.339	.647
	3	-30.139(*)	9.038	.001
	4	-39.641(*)	9.197	.000
3	1	34.418(*)	9.367	.000
	2	30.139(*)	9.038	.001
	4	-9.502	9.226	.304
4	1	43.920(*)	9.521	.000
	2	39.641(*)	9.197	.000
	3	9.502	9.226	.304

* The mean difference is significant at the .05 level.

Table 53 shows that channel performance of firms in cluster 4 is not only higher than (Figure 3), but also significantly different from channel performance of those in clusters 1 and 2 (p=.05).This finding provides support to hypothesis 1. The firms with the ideal configuration where different strategic, structural and economic variables fit into each other in a way described by Configuration 1 (cluster 4) outperform other firms lacking such configurations (clusters 1 and 2).

Similarly, the channel performance of firms in cluster 3 is significantly higher than that of firms in clusters 1 and 2 (p=.05). Therefore, this finding supports hypothesis 2.

Although the cluster analysis creates a stable and parsimonious empirical taxonomy of observations, the validity and insights from the taxonomy can be extended by providing evidence that the observations are associated with some other variables not included in clustering (Cannon and Perreault 1999). For this purpose, I included channel

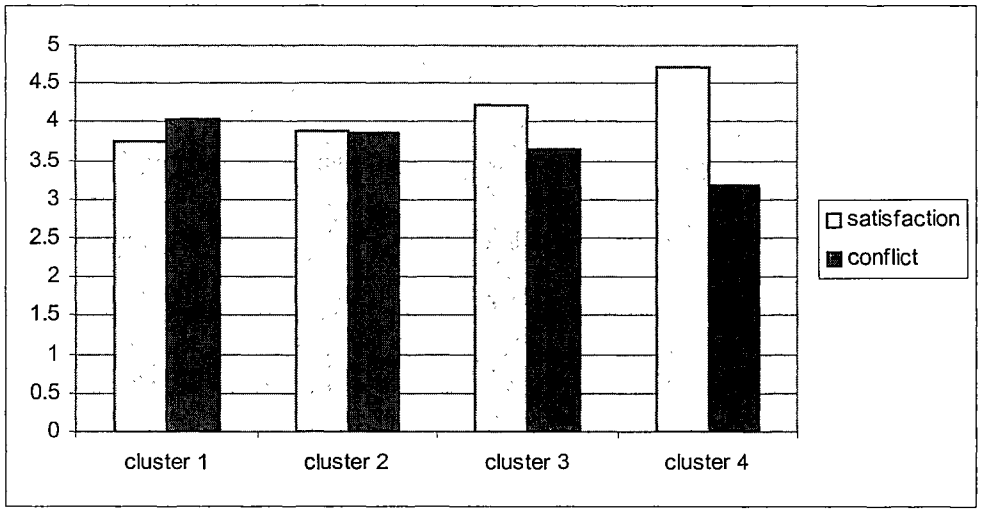
conflict and channel satisfaction variables to validate the findings of clustering. The distribution channel literature indicates a negative relationship between channel conflict and performance (e.g. Gaski 1989; Lusch 1976; Webb and Hogan 2002) and a positive relationship between channel satisfaction and performance (e.g. Webb and Hogan 2002). Therefore, based on that literature I expected to see that conflict is lower in clusters 3 and 4 (ideal clusters with a higher performance) than in clusters 1 and 2 (non-ideal clusters with a lower performance). In a similar vein, I expected satisfaction to be higher in high performing ideal clusters than the non-ideal clusters.

TABLE 54: Channel Conflict and Satisfaction across Clusters

Variables	F-value	Cluster 1 BCMC	Cluster 2 IMMC	Cluster 3 BSMC	Cluster 4 OCMC
Conflict	6.94 (p<.001)	4.03 (High)	3.85 (High)	**3.65 (High)**	**3.19 (Low)**
Satisfaction	10.15 (p<.001)	3.75 (Low)	3.87 (Low)	**4.22 (High)**	**4.71 (High)**

Table 54 provides means, and results of ANOVA and Duncan's multiple-range tests for channel conflict and channel satisfaction. F-values indicate statistically significant differences among the clusters with respect to channel conflict (F-value: 6.94, p<.001) and satisfaction (F-value:10.15, p<.001) (Please see Figure 4).

FIGURE 4: Channel Conflict and Satisfaction Across Clusters



The results of Duncan's multiple-range test for each of these variables mostly confirm my expectations. Both fit clusters (3 and 4) have higher channel satisfaction than misfit clusters (1 and 2), thus confirming my expectation. However, in terms of channel conflict only one ideal cluster (cluster 4) has lower conflict than the others. Even though cluster 3 is an ideal cluster with a high channel performance, still it manifests a high level of conflict. However, Duncan's test results support a significant mean difference among the three high conflict clusters in terms of channel conflict. When compared to cluster 4, cluster 3 is grouped as a high conflict cluster. However, compared to the two non-ideal clusters, the conflict in cluster 3 is lower (in fact cluster 3 is located in the lowest band of high conflict).

This unexpected finding can be related to various factors. One explanation could be the fact that firms in cluster 3 have low channel directness, i.e., having a high number of independent channels. Therefore, tension and eventual conflict within the channel system can be escalated by those independent channel members due to the manufacturer's use of multiple channels to reach to its customers. However, a closer

investigation of firms within this cluster indicated that the level of conflict and directness are positively related (.27, $p<0.05$). Since this cluster is characterized by low channel directness, the high conflict within this cluster cannot be related to channel directness.

Another plausible explanation could be a potential conflict among the independent channel members within this cluster rather than conflict between independent and integrated channels. Given the highly bureaucratic structure of the firms within this cluster, the manufacturers may use their bureaucratic structure to minimize the conflict between independent and integrated channels, hence relatively high level of conflict in this cluster could be attributed to the conflict among independent channel members. However, even though the relationship between the number of independent channel members and the level of conflict was positive, since it was not significant this potential explanation was not supported.

Also firms in this cluster use highly bureaucratic decision-making structures with high formalization and centralization. A possible explanation for the conflict might be the fact that the manufacturers' use of highly formalized structure where tight control over the decision-making authority may offend other channel members' sense of autonomy (Ouchi 1979). Thus this tight control may result in some increased level of tension from channel members even though, there is no problem in terms of performance. However, the findings suggest significantly negative relations between conflict and formalization (-.39, $p<0.01$) and centralization (-.20, <0.01). Hence these findings do not support manufacturer's control-conflict explanation. An interesting finding is that the same negative relations between these variables hold in other clusters as well.

Preliminary analyses did not provide support for explanation attempts for high conflict in a high-performing ideal cluster, i.e. cluster 3. Even though it is still lower than other two non-ideal clusters, conflict in cluster 3 is higher than cluster 4. The further investigation of this quite unexpected finding can be an interesting future research topic.

4. TESTING THE PROFILE DEVIATION – PERFORMANCE HYPOTHESIS

To test the third hypothesis regarding the relationship between firms' channel performance and their profile deviation from top performers having the same configuration I analyzed firms' profile fit with the profile of top performers. Even though there are different approaches to conceptualize fit, the literature suggests that when researchers simultaneously consider the fit among multiple variables (as in a holistic study of the relationship between organization structure, environment and strategy) and assess its impact on dependent variables (e.g. performance), they should conceptualize and assess fit as "profile-deviation" (e.g., Doty, Glick, and Huber 1993; Venkatraman 1990). Following this suggestion, since I investigate the fit among firms' strategic-structural-environmental dimensions and assess its relationship with firms' channel performance I adopt the "*fit as profile deviation*" conceptualization of fit.

I first needed to identify ideal firm profiles against which other firms' fit could be assessed (e.g. Doty et al. 1993; Vorhies and Morgan 2003). Although the ideal profiles can be developed theoretically and empirically (Venkatraman 1990), given the difficulty of deriving ideal points theoretically in marketing (Vorhies and Morgan 2003) I developed ideal profiles empirically. This approach required specifying the ideal profiles through a 'calibration sample' of best-performing businesses within configurations.

I identified the firms with the highest channel performance within each configuration and calibrated their characteristics as the ideal profile (e.g. Doty et al. 1993; Venkatraman 1990; Vorhies and Morgan 2003).

Studies using profile deviation typically select the highest performing 10% of firms in a data set to calibrate ideal profile (e.g. Venkatraman and Prescott 1990). Therefore in this study I selected seven (10% of number of firms in each configuration) highest performers of each configuration to calibrate the ideal firm profiles. Then I computed the mean scores of the top performers for each configuration on each of the variables to form the ideal firm profile (e.g. Venkatraman 1989) (Please see table 55).

TABLE 55: Ideal Firm Profile Mean Scores

	Configuration 1: OCMC (Cluster 4)	Configuration 2: BSMC (Cluster 3)
Strategy	4.60	3.91
Formalization	1.40	6.63
Centralization	1.37	6.35
Specialization	5.76	1.88
Env. Complexity	6.71	1.40
Env. Dynamism 1	6.17	1.52
Env. Dynamism 2	6.62	1.56
Env. Munificence	6.54	1.41
Number of Channels	6.00	2.88
Channel Directness	2.36	0.56
Performance	361.44	367.52

Then, for the other firms having the same configuration I calculated their profile deviation score using the Euclidean distance formula (e.g. Drazin and Van de Ven 1985; Venkatraman 1990), as follows:

$$\textbf{Profile Deviation} = \Sigma(Xsj - Xcj)^2$$

Xsj: the score for a firm in the sample for the jth variable
Xcj: the mean score for the jth variable in the ideal type

This procedure provided a profile deviation score that represents the degree to which a firm's profile is similar or dissimilar to the ideal profile defined for the firms having the same configuration. Then, I regressed the profile deviation score of each firm onto its channel performance deviation score, i.e. the difference between firms channel performance and the mean of top performers' performance.

For hypothesis 3 to be supported, regression analysis results should indicate that firms' deviation from the ideal profile has a significant positive relationship with their channel performance deviation score. i.e., the higher the deviation from top performers' ideal profile, the higher the performance deviation implying lower channel performance.

Configuration theory researchers (e.g. Venkataraman 1989) suggested comparison of regression models of deviations from ideal profiles with regression models of deviations from an alternative "nonideal" baseline model to assess the power of hypothesis test. Therefore, following Venkatraman and Prescott (1990) and Vorhies and Morgan (2003) I randomly selected seven firms from each ideal-cluster and used them to calibrate an alternate nonideal profile against which I calculated the deviation scores of each firm. Then, I used the nonideal profile deviations in new regression models to compare results.

I repeated the same procedure and computations for two misfit clusters to check whether the fit-performance relationship holds in those misfit clusters as well.

5. RESULTS

As shown in Table 56, the results of regression analysis provide support for hypothesis 3, which predicts that the more similar a firm's profile to the profile of top performers having the same configuration, the lower is its channel performance deviation from top performers, thus the higher is its channel performance.

TABLE 56: Profile Deviation- Channel Performance Regression Models

	Dependent Variable: Channel Performance	
	Ideal Profile Models	**Nonideal Models****
Cluster 1 (non-ideal)		
Deviation	.07	.09
Rsq.	.08	.06
F-value	.33	.48
Cluster 2 (non-ideal)		
Deviation	.16	.13
Rsq.	.11	.08
F-value	1.78	1.69
Cluster 3 (ideal) Configuration: BCMC		
Deviation	**.43**	.21
Rsq.	**.19**	.18
F-value	**15.27***	2.78
Cluster 4 (ideal) Configuration: OCMC		
Deviation	**.32**	.18
Rsq.	**.20**	.11
F-value	**7.14***	1.84

* $p < 0.01$, ** based on profile of randomly selected five firms of each cluster

Ideal profile regression models for two ideal clusters (clusters 3 and 4) show significant positive coefficients for deviations from ideal profile for firms in cluster 3 (.43, $p<.01$) and cluster 4 (.32, $p<.01$). The findings provide further confirmation to the fit-performance relationship since the nonideal regression models indicate no significant relationship between deviation from randomly selected non-ideal profiles and channel performance deviation.

The regression models for non-ideal clusters provide non- significant results implying that the profile deviation- performance relationship holds only for ideal clusters as suggested by configuration theory (e.g. Venkatraman 1990).

I also calculated the profile deviation for firms within non-ideal clusters from the ideal profiles in ideal clusters. Since the firms in cluster 1 are cost leaders, their profile deviation from the top performing cost leaders in ideal cluster (cluster 3) was regressed onto their performance deviation. I repeated the same procedure for the differentiator firms in non-ideal cluster 2 and regressed their profile deviation from ideal differentiators in ideal cluster 4 onto their channel performance deviation. The non-significant results (.11, F-value: 1.32 for cluster 1, .19, F-value: 1.89 for cluster 2) provide support for the fit-performance relationship in ideal clusters.

After supporting hypothesis 3 with regression model findings, I also ran regression models to see the individual effects of deviations of strategic, structural and environmental variables on the firms' channel performance deviation in two ideal clusters. As shown in Table 57, neither of the models provides any significant relationship between individual variables' deviation and overall channel performance deviation. Therefore, the performance deviation of clusters is associated with the sum of

all variables' individual deviations rather than their individual deviations. This provides support for the configuration theory's main axiom that the existence or lack of performance comes from the simultaneous fit or misfit among all the variables within the configuration rather than individual variables (Miller 1986). These findings indicate that *the whole is greater than the sum of parts,* supporting the holistic nature of the configurations.

TABLE 57: Regression Models for Individual Variables and Performance Deviation

	CLUSTER 3		CLUSTER 4	
R-sq.	.16		.22	
F-value	1.15*		1.52*	
	Coefficient	Significance*	Coefficient	Significance*
Strategy	.04	.778	.22	.231
Formalization	.10	.499	.16	.232
Centralization	.11	.386	.09	.497
Specialization	.02	.895	.06	.685
Env. Complexity	.19	.134	.11	.484
Env. Dynamism 1	.21	.154	.08	.657
Env. Dynamism 2	.05	.700	.09	.491
Env. Munificence	.03	.843	.20	.183
Number of Channels	.12	.387	.12	.337
Channel Directness	.05	.718	.10	.438

* non-significant

VI. DISCUSSION

Using a configuration theory approach -a complex theoretical and analytical approach that is characterized by a holistic perspective - and drawing on strategic marketing, strategic management and distribution channels literatures, I proposed two configurations of strategic, environmental and structural variables for firms to maximize their channel performance. The empirical findings in this dissertation confirm the existence of four clusters of firms within the industry examined, two "ideal" clusters with higher performance and two "non-ideal" clusters with lower channel performance. Furthermore, the characteristics of those two high-performance "ideal" clusters match with the proposed configurations, therefore providing support for the empirical existence of the theoretically derived configurations.

Firms with bureaucratic-simple multiple channel systems (BSMC) within one such ideal-cluster have the right combination of strategic-environmental-structural variables as proposed in the theoretical section and therefore have higher channel performance compared to firms lacking such combination. BSMC firms are cost-leaders operating in uncertain and less munificent environments, having highly bureaucratic decision-making structures in their multiple channel system composed of fewer numbers of channels most of which are independent. The fit among these variables enables high channel performance for those firms having that specific configuration.

On the other hand, firms within the other ideal-cluster (OCMC) also have a high channel performance even though they have a totally different configuration. These differentiator firms operate in highly uncertain environments with abundant resources and

have a very organic channel decision-making structure in a multiple channel system characterized by many different channels most of which are integrated.

One interesting finding is the existence of two clusters of firms with totally different configurations but still with high channels performance. In fact, this finding is consistent with the concept of "equifinality" emphasized in the configurational approach (Meyer et al. 1993). Firms do not need to have one specific configuration for the ultimate success. As indicated by the findings, there can be more than one equally successful configuration.

Another important finding of this study is the fact that the firms lacking the fit among the variables within their configurations suffer in terms of their channel performance. As shown in the findings section, the channel performances of those firms lacking the fit among the variables (clusters 1 and 2) are significantly lower than those of their counterparts with the ideal configurations. Even though firms from different clusters share some common characteristics in terms of their strategy, environment, or structure, unless they have the fit among all the variables of the configuration still their channel performance is far from being high. This provides support for the holistic characteristic of configurations.

One important and interesting common feature of those two high-performing, fit configurations is the consistency among the different dimensions of the variables. For example, with a closer investigation one can see that all environmental uncertainty dimensions, i.e. dynamism and complexity, are either all low or high within those fit configurations, representing either very uncertain or certain environments. Similarly, these high performers either have "real" bureaucratic or "real" organic structures as

indicated by high or low formalization and centralization scores. As indicated above, even though these variables are not individually responsible for firms' high performance, it is clear that firms in the low-performing non-ideal clusters lack such consistency within their configurations, contributing to their low performance.

Also, empirical results indicate that for firms having the ideal configuration their channel performance depends upon their distance from the top performers having the same configuration. The higher the firms' profile deviation from the ideal profile of those top performers having a specific configuration, i.e. the further the firms to top performers in terms of their characteristics, the lower their channel performance. This finding is interesting because even though the firms may have similar ideal configurations with others, still their performance differs based on their closeness to the ideal profiles of firms having the same configuration. The findings further point out that the firms' performance deviation is explained by the sum of the deviations of all variables but not by the individual variable deviations. The deviation of a single variable has no significant impact on firms' performance deviation. In other words, misfit of individual strategic, environmental or structural variables alone is not significantly associated with low channel performance. Individual variables' fit or misfit with the rest does not explain the high or low performance. Instead the simultaneous fit among all the variables is the reason for the performance level. This is again consistent with the holistic nature of the configuration approach.

VII. CONTRIBUTIONS

1. Theoretical Contributions

From a theoretical standpoint, this dissertation is one of the first attempts to investigate one very important channel management-related construct, i.e. channel performance, in a very complex and holistic way. As an extension to the previous approaches, in this dissertation channel performance was linked to different strategy, environmental, and structural variables simultaneously. Although previous research on channels of distribution has analyzed some relationships among business strategy, environment, channel structure and channel performance and come up with some contingencies (e.g. Dwyer and Oh 1987; Dwyer and Welsh 1985), the findings of this dissertation indicate that to enhance channel performance, firms need to investigate various multidimensional variables that affect performance. Based on the findings of the previous distribution channels, marketing strategy and strategic management studies different ideal configurations of multidimensional variables were theoretically developed and then empirically tested. The findings suggested that those firms with the ideal configurations perform better in terms of their channel performance. Therefore, the ideal combinations of various vital variables to the business practice that result in superior channel performance were presented for the first time. I believe that this holistic investigation of channel performance is an important contribution to the distribution channel literature.

This dissertation is also the first study that applies configuration theory – a complex theoretical and analytical approach developed in the strategic management literature – to the field of marketing channels. Although this approach has been used

extensively in organization theory and strategic management fields, with a few exceptions (e.g. Homburg et al. 2002; Vorhies and Morgan 2003) it has not been used in the marketing literature. Different from the more simplistic, reductionist contingency approach that assesses pair-wise relationships between variables of interest, configuration approach used in this study enables the holistic, simultaneous investigation of multidimensional variables. This approach proved very useful to answer the main research question of this dissertation, i.e. what combinations of a business level strategy (i.e., differentiation or cost-leadership), environmental context (i.e., dynamic, complex, or munificent), channel structure are likely to distinguish channels with high performance from those with low performance? Since all the variables of interest making up business strategy, environmental context, and structure are complex and multidimensional, configuration approach with its complex and holistic nature enabled the investigation of complicated and interrelated relationships among those variables and their impact on channel performance. This dissertation provided further support for the utility of configuration approach to represent and analyze complex constructs like channel performance by firms in the "real world" more realistically (Vorhies and Morgan 2003).

Also, this dissertation is the first attempt to empirically classify the multiple channel systems in terms of their channel design. Although they have been extensively used by firms in various industries and become a common practice (Moriarty and Moran 1990), not much is known about multiple channel systems. With the exception of a few studies (e.g. Coelho, Easingwood, and Coelho 2003), the design of multiple channels or the link between their design and performance has not been addressed in the literature. The issues regarding the number of channels within a multiple channel system or the

level of directness (the number of integrated vs. independent channels) were not addressed in detail, or only been addressed without linking them to channel performance or other strategy, environmental, or structural variables. This dissertation presented four configurations of various multidimensional variables, including the physical channel structure of multiple channels. With these configurations, for the first time, the number of channels and the level of directness within multiple channel systems were combined with different strategy, environmental, and decision-making structure variables and these combinations were linked to channel performance.

2. Methodological Contributions

From a methodological perspective, this dissertation uses an approach that is relatively novel in the marketing field, i.e. a profile deviation approach in assessing fit-performance relationships. The findings support the utility of this approach in marketing research in general and distribution channels research in particular. By enabling a simultaneous assessment of the fit among multidimensional variables, this approach helps researchers investigate complex constructs like channel performance. Even though some more traditional approaches like regression analysis or subgroup analysis could be used to assess the fit-performance relationship, such methods do not prove effective for analyzing various multidimensional variables and multifaceted complex constructs (Vorhies and Morgan 2003). However, the profile deviation approach to fit-performance assessment effectively deals with the complex and holistic investigation of strategy, structure, environment and performance (e.g. Drazin and Van de Ven 1985). This

dissertation provides further confirmation of the utility of the profile deviation approach in marketing to study complex marketing constructs like channel performance.

3. Managerial Implications

From a managerial perspective, the findings of this dissertation highlight the importance of understanding complex relationships among multiple variables that affect channel performance and arranging them in a way to maximize the fit among them and thus enhance firms' channel performance. Different strategic, structural, and environmental characteristics must be configured to maximize the fit within these configurations and thus improve channel performance.

This dissertation presented four such configurations: two are high performing ideal configurations and two are non-ideal configurations with sub optimal performance.

One of the high-performing ideal configurations consists of differentiator firms operating in highly uncertain environments with abundant resources. Those firms have very organic channel decision-making structures in multiple channel systems characterized by many different channels most of which are integrated. Firms that combine strategy, environment, and structural variables in this way can maximize their channel performance.

Those firms try to create competitive advantage and gain customer loyalty through innovative designs or via the uniquely attractive image conferred upon their products by superior marketing. They emphasize strong marketing capabilities, creative, well-designed products, a reputation for quality, a good corporate image, and strong cooperation from marketing channels. These firms operate in highly dynamic and

complex environments characterized by many dissimilar competitors, suppliers, buyers, and other environmental factors that change rapidly and unpredictably. Furthermore, resources are abundant and there is a high growth potential in such markets.

Differentiator firms in this configuration use very informal and decentralized decision-making structures where other channel members participate in making decisions and designing channel strategies. In terms of channel physical structure, these firms have many channels most of which are integrated channels. Their multiple channel system consists of many channels. They use various channels simultaneously.

However, it is important to note that high channel performance can be accomplished through another ideal configuration. The second high-performing configuration consists of firms that emphasize cost reduction as their main business strategy. They exist in very stable environments where resources and growth potential are limited. These firms centralize decision-making authority and use formal guidelines and mechanisms to make decisions. Finally, their multiple channels have few channels and they are mostly independent channels.

The existence of these ideal configurations and their high channel performance implications present a challenge for the firms that want to maximize their channel performance when they use multiple channel systems. When they make their channel design decisions, firms need to consider their business strategy, environmental context and decision-making structure simultaneously with their channel design and combine them in a way as described by these configurations to maximize their channel performance. As suggested by the findings of this dissertation, there are some configurations that perform significantly worse than others. Since the reason for lower

performance appears to be the lack of fit among the variables within configurations, firms need to arrange these variables in a way to maximize the fit among them and thus enhance their channel performance. If firms do not adhere to the ideal configurations as described here, they pay with less-than- optimum performance. Therefore, the message to the firms is not to take a laissez-faire approach to their multiple channel design issues. Given that the lack of fit among variables may result in lower channel performance, firms need to manage their channels and make their channel design decisions carefully.

Although the configuration approach does not specify any causality among the variables within configurations, since firms cannot change their environments or would be difficult to change their overall business strategies in the short run, the ideal configurations presented here offer channel design alternatives for firms. The firms may design their multiple channels to maximize the fit among their channel structure and their business strategy and environment. For example, differentiator firms first need to make sure that they operate in highly dynamic and complex environments and adopt a very organic decision-making structure. Then, in terms of their multiple channel structure, these firms can reach to their customers through as many channels as possible. However, they need to ensure that the majority of those channels are integrated channels owned and managed by the firms themselves. On the other hand, cost-leaders having a more bureaucratic decision-making structure and operating in more stable environments need to adopt a less complex multiple channel system. Their multiple channel system should have fewer channels and most of those channels should be independent channels.

Another interesting managerial implication of the findings of this dissertation is that there is a consistency among the different variables within high-performing ideal

configurations. For example, all environmental uncertainty dimensions, i.e. dynamism and complexity, are either all low or high within those fit configurations, representing either very uncertain or certain environments. Similarly, these high performers either have "real" bureaucratic or "real" organic structures as indicated by high or low formalization and centralization scores. Or, high performing firms are either "high" or "low" in terms of their number of channels or channel directness. As indicated by configuration 2, firms with the variables that fall into medium ranges suffer in terms of their channel performance. Even though these variables are not individually responsible for firms' high performance, it is clear that for firms lacking such consistency within their configurations this inconsistency contributes to their low channel performance.

Another important managerial implication of this dissertation is related to the fit among the variables of configurations. For firms with ideal configurations the level of their channel performance depends upon their distance from the top performers having the same configuration. The closer firms' profiles are to those ideal firms' profiles, the higher their channel performance will be. This finding is interesting because even though the firms may have similar fit configurations with others, still their performance varies based on their closeness to the ideal profiles of top-performer firms having the same configuration.

Finally, as also suggested by Vorhies and Morgan (2003), the profile deviation approach used in this dissertation and the results may serve firms for benchmarking purposes. Following this approach, firms can identify a group of firms with superior channel performance, calibrate those benchmark firms' characteristics and identify the gaps between those ideal characteristics and their own characteristics and thus develop

and execute strategies to move closer to the benchmark characteristics and eventually improve their channel performance. For example, *differentiator* electronic component manufacturers could use the results of this dissertation to benchmark themselves to the top performers within Configuration 1 (OCMC). Since deviation from the profile of those top performers results in lower performance, those firms could first identify these top performers' profiles and then take the necessary steps to close the gap between their profiles and those of the top performers.

VIII. LIMITATIONS and FUTURE RESEARCH

Besides all of the contributions and managerial and theoretical implications, this dissertation has some unavoidable limitations. First, the single industry used in this dissertation limits the generalizability of the findings. Although the use of subjects from a single industry is necessary and represents the standard used by configuration researchers to control for the confounding of industry-related factors, additional studies using different industries may enhance the generalizability of findings.

The configuration approach and profile deviation method to assess fit-performance relationship are relatively new in marketing field. Therefore, due to this novelty, I did not include all possible strategic, environmental and structural dimensions to ensure the robustness of findings. I selected only those dimensions that have been extensively used in the previous marketing strategy and channels literatures, have well-established and supported operationalizations and are highlighted as important by managers in the sample industry. Therefore, additional studies using more dimensions may improve our understanding of different marketing phenomena. For example, in this study, two business strategies in their "pure" forms were included. However, some firms execute both strategies in a hybrid form and in contrast to Porter's (1980) initial predictions they succeed in business. Therefore, a similar approach can be used to develop configurations for those firms using hybrid strategies.

Also, in this dissertation, Porter's generic business strategies were used. In both strategic management and marketing literatures, Miles and Snow's (1978) classification, i.e. defender, analyzer, prospector, and reactor, is a commonly used typology of business

strategies. Additional configuration studies using these business strategies instead of Porter's may further contribute to literature and provide managerial insights.

Finally, some other important, complex and multidimensional constructs within channels literature and their relationships with different sets of variables can be analyzed using the theoretical and methodological approaches used in this dissertation. One such interesting future research topic could be the investigation of the use of various governance mechanisms within distribution channels using configuration approach. Different strategic, environmental and structural variables and various forms of governance mechanisms can be holistically investigated and different configurations and their performance implications can be analyzed.

APPENDIX: QUESTIONNAIRE

BARUCH COLLEGE

CHANNELS OF DISTRIBUTION SURVEY

CONSENT INFORMATION

Sertan Kabadayi
Deparment of Marketing

In this survey, we ask that you answer some questions regarding your company's business strategy, environment, channel structure and channel performance. Our goal is to gain new insights into how firms can maximize the performance of their distribution channels.

Taking part in this survey is completely voluntary. If you feel uncomfortable answering any questions, or if for any reason you do not want to answer, you are free not to answer those questions.

Please be advised that your answers are completely anonymous and confidential. You were selected randomly from a list of marketing professionals. You are not asked to identify yourself on the questionnaire and there is no way that your answers can be linked to you. Also, no piece of survey information will be linked to any particular organization.

If you have any questions or would like a copy of the results, please feel free to contact me at 646- 312 3339 or Sertan_kabadayi@Baruch.cuny.edu. For information about your rights as a participant in this survey, you may call Alan Evelyn, Director of Sponsored Programs and Research at Baruch College at 646 312 2205.

Please sign this form and return it to the investigator in the enclosed letter if you consent to participate in this study.

Thank you very much for your assistance with this important survey.

Date: _____

Signature: _____

DISTRIBUTION CHANNELS SURVEY

INSTRUCTIONS

- Your responses to this questionnaire should be based on **the entire distribution system of your business unit.** A business unit is defined as a division or subsidiary of a corporation that is operated independently. Your company may have different business units for different products or markets. In such case, please refer only to distribution channels you use for the business unit responsible for **the most important market or product** when you answer the questions.

- When you answer the questions in this survey, please refer to **your business unit's entire distribution channel system** as your reference point. Think about all different forms of distribution channels your company uses.

- Please **answer all of the questions** included in this survey. Some of them might sound repetitive, but all are very important. Please consider each item carefully.

- If you wish to comment on or qualify your answer further, feel free to use the space in the margins and at the end of the survey.

- There are **no right or wrong answers**. Please answer the questions **as they apply** to your business unit and not how you would like them to apply.

****

SECTION 1: Business Strategy

Part 1. The following statements concern your current business strategy of your business unit responsible for your most important product or market. Please indicate the extent to which the following are significant parts of your current business strategy, using the scale in which *1* means *very insignificant part*, *7* means *top priority*, and *2,3,4,5 and 6* represent intermediate significance levels.

To what extent are the following parts of your current business strategy?

		Low Priority						Top Priority
1.	**Gaining competitive advantage through superior products.**	1	2	3	4	5	6	7
2.	Pricing at or below competitive price levels	1	2	3	4	5	6	7
3.	Creating superior customer value through service quality	1	2	3	4	5	6	7
4.	Producing high-quality products	1	2	3	4	5	6	7
5.	Pursuing cost advantages in raw material purchases	1	2	3	4	5	6	7

		Low Priority	Top Priority
6.	Building up a premium product or brand image	1-----2------3------4------5------6-----7	
7.	Pursuing operating efficiencies	1-----2------3------4------5------6-----7	
8.	Obtaining high prices for your products	1-----2------3------4------5------6-----7	
9.	Having cooperative and supportive channels of distribution	1-----2------3------4------5------6-----7	
10.	Controlling overhead and variable costs tightly	1-----2------3------4------5------6-----7	
11.	Developing customer-specific products	1-----2------3------4------5------6-----7	
12.	Pursuing economies of scale	1-----2------3------4------5------6-----7	
13.	Emphasizing advertising and promotion	1-----2------3------4------5------6-----7	
14.	Minimizing costs related to channels of distribution	1-----2------3------4------5------6-----7	
15.	Developing innovative marketing techniques	1-----2------3------4------5------6-----7	
16.	Emphasizing low cost per unit	1-----2------3------4------5------6-----7	
17.	Developing innovative products	1-----2------3------4------5------6-----7	

Part 2. Please refer to your business unit responsible for your most important products or markets. What is the position of your business compared to your leading competitors regarding:

		Very high	Very Low
1.	Manufacturing costs	1-----2------3------4------5------6-----7	
2.	Prices	1-----2------3------4------5------6-----7	
3.	Brand image	1-----2------3------4------5------6-----7	
4.	Advertising and promotion	1-----2------3------4------5------6-----7	
5.	Product quality	1-----2------3------4------5------6-----7	
6.	Marketing, distribution costs	1-----2------3------4------5------6-----7	
7.	Quality of marketing channels and service	1-----2------3------4------5------6-----7	

SECTION 2: Decision-Making Structure

This section asks questions about the decision-making structure in your distribution channel organization. Please refer to the channels your company uses for your most important markets or products when answering questions in this section.

Part 1: The following questions concern the use of rules and procedures in decision-making in your distribution channel organization. Please indicate extent to which your dealings with your distribution channels are formalized-based on rules and procedures- using the scale in which *1* means *strong disagreement*, *7* means *strong agreement*, and *2,3,4,5 and 6* represent intermediate agreement levels.

How strongly do you agree or disagree with each of the following statements about your distribution channel organization?

			Strongly Disagree	Strongly Agree
F1	1.	Our relations with our channels are subject to a lot of rules and procedures stating how various aspects of the relationship are to be handled.	1-----2------3------4------5------6-----7	
F2	2.	Our channels follow standard rules and procedures in their relationships with us.	1-----2------3------4------5------6-----7	
F3	3.	Our contacts with our channels are on a formal, preplanned basis.	1-----2------3------4------5------6-----7	
F4	4.	There are standard procedures and rules to be followed by every channel members.	1-----2------3------4------5------6-----7	
F5	5.	Our channel members have to conform to written rules and formal guidelines	1-----2------3------4------5------6-----7	

Part 2: The following questions concern decision-making authority in your distribution channels organization. Please indicate the way decisions are made in your distribution channel organization using the scale in which *1* means *strong disagreement*, *7* means *strong agreement*, and *2,3,4,5 and 6* represent intermediate agreement levels.

How strongly do you agree or disagree with each of the following statements about your distribution channel organization?

		Strongly Disagree	Strongly Agree
1.	There can be little action taken in our distribution organization until we make decisions.	1-----2------3------4------5------6-----7	
2.	Channel members who want to make their decisions concerning our products are discouraged in our distribution organization.	1-----2------3------4------5------6-----7	
3.	Different channel members in our distribution system perform specific functions.	1-----2------3------4------5------6-----7	
4.	In our distribution organization, even small matters have to be referred to us for a final decision.	1-----2------3------4------5------6-----7	
5.	Most channels are responsible for making decisions about functions that require special skills.	1-----2------3------4------5------6-----7	

		Strongly Disagree	Strongly Agree
6.	Any decision a channel member makes regarding our product has to have our approval.	1-----2------3------4------5------6-----7	
7.	Our channel members cannot go ahead with actions without checking with us.	1-----2------3------4------5------6-----7	
8.	Different channels are responsible for making decisions regarding different functions.	1-----2------3------4------5------6-----7	

SECTION 3: Company's Environment

This section is about the environment, i.e., customers, competitors, and resources that your business faces in its markets. Please refer to your most important market when answering questions in this section.

Part 1: The following questions concern the number and diversity of customers, competitors and competing products that you face in the market your company sells its products. Please indicate the diversity in your most important markets using the scale in which *1* means *strong disagreement*, *7* means *strong agreement*, and *2,3,4,5 and 6* represent intermediate agreement levels.

			Strongly Disagree	Strongly Agree
EC1	1.	The number of products/brands sold in our market is very high.	1-----2------3------4------5------6-----7	
EC2	2.	The number of different customer segments in our market is very high.	1-----2------3------4------5------6-----7	
EC3	3.	The number of companies competing in our market is very high.	1-----2------3------4------5------6-----7	
EC 4	4.	Customer requirements vary very much across different customer segments.	1-----2------3------4------5------6-----7	
EC5	5.	There is a lot of variety in products for sale.	1-----2------3------4------5------6-----7	
EC6	6.	There is a lot of variety in terms of customers involved in our market.	1-----2------3------4------5------6-----7	

Part 2: The following questions concern the changes regarding the customers, competitors and competing products that you face in the market your company sells its products. Please indicate the frequency of changes in your most important markets **over the past three years** using the scale in which *1* means *very few (rare) changes*, *7* means *very frequent*, and *2,3,4,5 and 6* represent intermediate frequency levels.

			Very Few Changes	Very Frequent Changes
EDC1	1.	Changes in products offered by your business unit and your competitors.	1-----2------3------4------5------6-----7	
EDC2	2.	Changes in sales strategies by your business unit and your competitors	1-----2------3------4------5------6-----7	
EDC3	3.	Changes in customer preferences and expectations about product features.	1-----2------3------4------5------6-----7	
EDC4	4.	Changes in distribution arrangements and strategies.	1-----2------3------4------5------6-----7	
EDC5	5.	Changes in competitive strategies and competitive intensity.	1-----2------3------4------5------6-----7	
EDC6	6.	Changes in your company's sales volume.	1-----2------3------4------5------6-----7	

Part 3: The following questions concern the changes regarding the customers, competitors and competing products that you face in the market your company sells its products. Please indicate the predictability of changes in your most important markets **over the past three years** using the scale in which *1* means *highly unpredictable changes*, *7* means *highly predictable*, and *2,3,4,5 and 6* represent intermediate predictability levels.

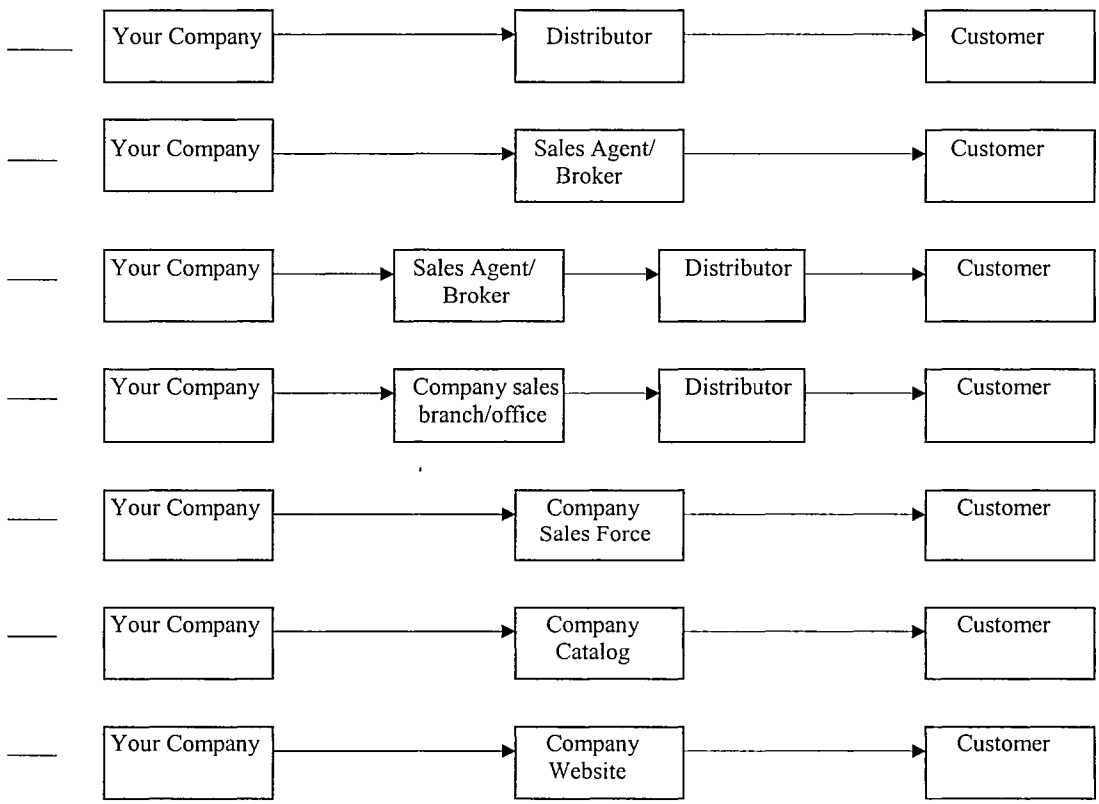
			Highly Unpredictable	Highly Predictable
EDP1	1.	Changes in products offered by your business unit and your competitors.	1-----2------3------4------5------6-----7	
EDP2	2.	Changes in sales strategies by your business unit and your competitors	1-----2------3------4------5------6-----7	
EDP3	3.	Changes in customer preferences and expectations about product features.	1-----2------3------4------5------6-----7	
EDP4	4.	Changes in distribution arrangements and strategies.	1-----2------3------4------5------6-----7	
EDP5	5.	Changes in competitive strategies and competitive intensity.	1-----2------3------4------5------6-----7	
EDP6	6.	Changes in your company's sales volume.	1-----2------3------4------5------6-----7	

Part 4: The following questions concern the resources, growth potential and customer demand that you face in the market your company sells its products. Please indicate the strength of your agreement with each statement, using a scale in which *1* means *strong disagreement*, *6* means *strong agreement*, and *2,3,4, and 5* represent intermediate agreement levels.

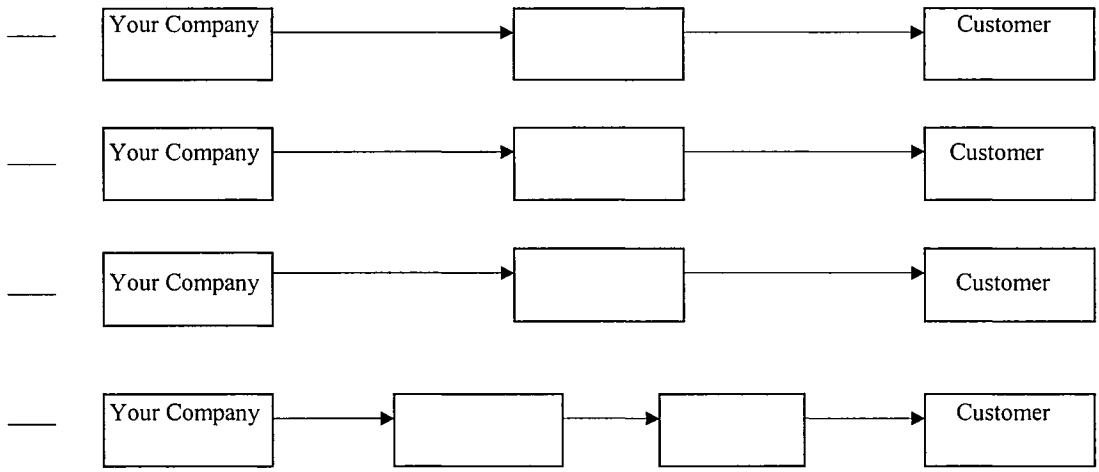
			Strongly Disagree	Strongly Agree
EM1	1.	The demand for your product in your current market is strong and growing.	1-----2------3------4------5------6-----7	
EM2	2.	There is a potential for high sales growth in your market.	1-----2------3------4------5------6-----7	
EM3	3.	There is an abundance of resources (i.e., financial, supplies, human resources, etc) in your market to companies to support growth potential.	1-----2------3------4------5------6-----7	
EM4	4.	There is no shortage of necessary resources in your market.	1-----2------3------4------5------6-----7	

SECTION 4: Channel Systems

This section is about the different types of channel systems your company uses for its most important product or market. Please look at the charts below describing different distribution channel system alternatives and put X next to all alternatives that your company uses for its most important product or market. If you think that some of your distribution channels are not represented below, please feel free to describe them using the empty chart.



Other (please specify) you may add boxes if you need necessary or use the space in the margins to describe different channel alternatives your company uses for its most important product or market.



SECTION 5: Channel Performance

Part 1: This part is about overall performance of your distribution channel system. When you answer the questions please think about the entire distribution channel system, not a specific channel or channel member, concerning your most important product or market and make your assessments accordingly.

			Strongly Disagree	Strongly Agree
GP1	1.	Your channel system leaves a lot to be desired from an overall performance standpoint.	1-----2------3------4------5------6-----7	
GP2	2.	Overall, the results of your relationship with your channel have exceeded your expectations.	1-----2------3------4------5------6-----7	

			Poor	Outstanding
GP3	3.	If you had to give your channel system a performance appraisal for the past three year it would be	1-----2------3------4------5------6-----7	
GP4	4.	Taking all the different factors into account, your channel's performance has been	1-----2------3------4------5------6-----7	

			Not effective at all	Very effective
GP5	5.	How effective has your channel system been in contributing to your business' profit goals?	1-----2------3------4------5------6-----7	
GP6	6.	How effective has your channel system been in contributing to your business' sales goals?	1-----2------3------4------5------6-----7	
GP7	7.	How effective has your channel system been in obtaining the required business skills to market your product?	1-----2------3------4------5------6-----7	
GP8	8.	How effective has your channel system been in engaging in activities on behalf of your company?	1-----2------3------4------5------6-----7	
GP9	9.	How effective has your channel system been in cooperating with your company?	1-----2------3------4------5------6-----7	
GP10	10.	How effective has your channel system been in contributing to your business' growth goals?	1-----2------3------4------5------6-----7	
GP11	11.	How effective has your channel system been in adapting to unexpected changes in the market?	1-----2------3------4------5------6-----7	
GP12	12.	How effective has your channel system been in keeping your end-users (customers) satisfied?	1-----2------3------4------5------6-----7	

Part 2: This part is about your performance evaluation of your distribution channel system regarding more specific areas and objectives. When you answer the questions please consider all different channels and channel members your company uses for your most important product or market and answer questions accordingly.

			Strongly Disagree	Strongly Agree
PCS1	1.	Over the past three years, your channel has been successful in generating high sales for your company.	1-----2------3------4------5------6-----7	
PCP1*	2.	Your company's cost of servicing your channel system is unreasonable.	1-----2------3------4------5------6-----7	
PCC1	3.	Your channel members have superior business skills to market your products.	1-----2------3------4------5------6-----7	
PCM1	4.	Your channel members almost always conform your company's accepted procedures.	1-----2------3------4------5------6-----7	
PCA1	5.	Your channel members sense long-term trends in their market areas and frequently adjust their selling practices.	1-----2------3------4------5------6-----7	
PCL1	6.	Your channel members want to sell your products and show their desire to do so in a number of positive ways.	1-----2------3------4------5------6-----7	

			Strongly Disagree	Strongly Agree
PCG1	7.	In the past three years, your current channel system has contributed enormously to your company's revenue growth.	1-----2------3------4------5------6-----7	
PCSa1	8.	You have frequently received complaints from customers regarding your current channel members.	1-----2------3------4------5------6-----7	
PCS2	9.	Over the past three years, your channel system has generated high sales revenues.	1-----2------3------4------5------6-----7	
PCP2*	10.	The channel system's demands for support have resulted in inadequate profits for your company.	1-----2------3------4------5------6-----7	
PCC2	11.	Your channel members have a great deal of knowledge about the features and attributes of your products.	1-----2------3------4------5------6-----7	
PCM2	12.	Your channel members have never violated your company's terms and conditions.	1-----2------3------4------5------6-----7	
PCA2	13.	Your channel members are very innovative in their marketing of your products and services in their areas.	1-----2------3------4------5------6-----7	
PCL2	14.	Your channel members show motivation to further your company's business.	1-----2------3------4------5------6-----7	
PCG2	15.	In the past three years, your current channel system has been very successful in expanding your business.	1-----2------3------4------5------6-----7	
PCSa2	16.	Your channel members make every effort to keep your customers satisfied.	1-----2------3------4------5------6-----7	
PCS3	17.	Over the past three years, your channel system has enabled your company to achieve high level of market penetration.	1-----2------3------4------5------6-----7	
PCP3*	18.	Your company has made inadequate profits from your channel system.	1-----2------3------4------5------6-----7	
PCC3	19.	Your channel members are competent in selling your products.	1-----2------3------4------5------6-----7	
PCM3	20.	In the past your company has often had trouble in getting the channel members' cooperation.	1-----2------3------4------5------6-----7	
PCA3	21.	Your channel members make every effort to meet changes in their areas.	1-----2------3------4------5------6-----7	
PCL3	22.	Your channel members place higher amount of time and effort behind your products relative to other businesses that they engage in.	1-----2------3------4------5------6-----7	
PCSa3	23.	Your channel members make every effort to keep your customers satisfied.	1-----2------3------4------5------6-----7	
PCS4	24.	Over the past three years, your channel system has met the sales target you had set for it.	1-----2------3------4------5------6-----7	

Part 3: This part is about your company's relationship with your current distribution channel. When you answer the questions please consider all different channels and channel members your company uses for your most important product or market and answer questions accordingly.

			Strongly Disagree	Strongly Agree
CONF1	1.	The relationship between your company and your channel members has been tense.	1-----2------3------4------5------6-----7	
SAT1	2.	Generally, your company is very satisfied with its overall relationship with the channel system.	1-----2------3------4------5------6-----7	
CONF2	3.	Your company and your channel members have significant disagreements in your relationship.	1-----2------3------4------5------6-----7	
SAT2	4.	Your company is very pleased with its working with the channel system.	1-----2------3------4------5------6-----7	
CONF3	5.	Your company and your channel members frequently dispute over issues to business.	1-----2------3------4------5------6-----7	

			Very Unlikely	Very Likely
PREDV	1.	How likely is your company to reorganize/ rearrange your current channel system in the near future?	1-----2------3------4------5------6-----7	

Part 4: Please indicate the importance of each of the following for your business/company when evaluate your channel system's performance. Please assign a value **out of 10** to each item .

			Out of 10
IMP1	1.	Sales the channel members generates for your company	_____
IMP2	2.	Profits the channel members generates for your company	_____
IMP3	3.	Channel members' experience and knowledge about your product	_____
IMP4	4.	Channel members' commitment to and motivation for your company	_____
IMP5	5.	Channel members' compliance with your policies and programs	_____
IMP6	6.	Channel members' contribution to your sales growth	_____
IMP7	7.	Channel members' ability to adapt to environmental changes	_____
IMP8	8.	Channel members' effort to keep your customers satisfied	_____

Part 5: Please Tell Us About Your Company and Yourself

We respect your privacy. Your responses are confidential, and no individual information will ever be reported.

Your Position : _____

Number of years you have worked for this company : _____

Number of years you have worked in your current position in this company : _____

If you were to grade your level of knowledge about your company in general that would be: _____ (out of 10)

If you were to grade your level of knowledge about your company's channels of distribution that would be : _____ (out of 10)

Approximate number of employees in your company (e.g. 50,100, 500, etc) : _____

Zip Code (of company address) : _____

THANKS FOR YOUR PARTICIPATION!

Please select the charity that you would like to receive a $2.00 donation from us in appreciation of your effort.

American Cancer Society _____

American Diabetes Association _____

American Heart Association _____

Other (please specify) _____

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